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Tektronix

TDS 520B Mod CM Digitizing Oscilloscope Component Service Manual

070-9710-03

First Edition: May 30, 1996
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Serial Numbers: **B030000 and above**

Warning
The servicing instructions are for use by qualified personnel only. To avoid personal injury, do not perform any servicing unless you are qualified to do so. Refer to all safety summaries prior to performing service.

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Table of Contents

General Safety Summary . . . . . **v**
Service Safety Summary . . . . . **ix**
Preface . . . . . **xi**

Theory of Operation

Logic Conventions 1–1
Module Overview 1–1
Detailed Circuit Description **1–5**
Acquisition System A10 1–5
Processor System A11 1–17
Display System A11 1–22
Firmface A11 1–27
Front Panel A12 1–27
D1 Bus D14 1–29
Low Voltage Power Supply A16 1–29
Display Driver Board A20 1–31
Memory Maps 1–37

Maintenance

Firmware Reprogramming **2–1**
Minimum Tool & Equipment List 2–1
Instructions 2–1
Storage and Shipment Instructions **2–7**
Instructions 2–7
Specifications 2–8

Replaceable Electrical Parts

Replaceable Electrical Parts **3–1**

Replaceable Mechanical Parts

Replaceable Mechanical parts **4–1**

Diagrams and Circuit Board Illustrations

Diagrams and Circuit Board Illustrations **5–1**
Symbols 5–1
Component Values 5–1
Graphic Items and Special Symbols Used in This Manual 5–1
Component Locator Diagrams 5–1

List of Figures

Figure 1−1: Attenuator hybrid . . . . . 1−5
Figure 1−2: Demultiplexer block diagram . . . . . 1−11
Figure 1−3: Display block diagram . . . . . 1−31
Figure 2–1: PC & TDS Setup 2–1
Figure 2–2: Selecting the I/O system in the Main Menu 2–2
Figure 2–3: Accessing the Protection Switch 2–5
Figure 4–1: Cabinet 4–7
Figure 4–2: Front 4–9
Figure 4–3: Chassis and rear 4–11
Figure 4–4: Circuit boards 4–13
Figure 4–5: LV Power Supply 4–15
Figure 4–6: Accessories 4–17
Figure 5–1: A10 Acquisition board front (section A) 5–2
Figure 5–2: A10 Acquisition board front (section B) 5–3
Figure 5–3: A10 Aquisition board front (section C) 5–4
Figure 5–4: A10 Acquisition board front (section D) 5–5
Figure 5–5: A10 Acquisition board back (section A) 5–6
Figure 5–6: A10 Aquisition board back (section B) 5–7
Figure 5–7: A10 Acquisition board back (section C) 5–8
Figure 5–8: A10 Acquisition board back (section D) 5–9
Figure 5–9: A10 Aquisition component locator 5–10
Figure 5–10: A10 Aquisition component locator (Cont.) 5–11
Figure 5–11: A11 Processor board (section A) 5–66
Figure 5–12: A11 Processor board (section B) 5–67
Figure 5–13: A11 Processor board (section C) 5–68
Figure 5–14: A11 Processor board (section D) 5–69
Figure 5–15: A11 Processor component locator 5–70
Figure 5–16: A11 Processor component locator (Cont.) 5–71
Figure 5–17: A12 Front Panel board front 5–126
Figure 5–18: A12 Front Panel board back 5–127
Figure 5–19: A12 component locator 5–128
Figure 5–20: A14 D1 Bus board 5–136
Figure 5–21: A17 RBL Mother board (sections A, B) 5–138
Figure 5–22: A17 RLB Mother board (sections C, D) 5–139
Figure 5–23: A17 RLB Mother component locator 5–140

Figure 5–24: A18 TBL Secondary Monitor board 5–146
Figure 5–25: A20 CRT Driver board 5–150
Figure 5–26: A20 component locator 5–151

List of Tables

Table 1−1: Relay Driver Control Data (CD) Bit Pattern ..... 1−6
Table 1−2: Bandwidth Limit Selection Bits(Cont.) ..... 1−8
Table 1−3: Gain Set Bits ..... 1−8
Table 1−4: Preamps to Track/Hold Input ..... 1−9
Table 1−5: Track/Hold Outputs to A/D Input ..... 1−9
Table 1−6: Preamps to Track/Hold Input ..... 1−10
Table 1−7: 68020 Memory Map ..... 1−37
Table 1−8: Kernel Memory Map (0000 0000 to 00FF FFFF) All 8 Bits Wide ..... 1−38
Table 1−9: Bus Control Register (0040 0000 R/W) ..... 1−38
Table 1−10: 7 Segment LED (0060 0000 Write Only) ..... 1−39
Table 1−11: DSP Interrupt Mask Register ..... 1−40
Table 1−12: DSP Interrupt Read Register ..... 1−40
Table 1−13: DSP Memory Map ..... 1−41
Table 1−14: D2MMIO Miscellaneous Register ..... 1−42
Table 1−15: 68020 to DSP Instruction Memory Accesses ..... 1−42
Table 1−16: Display Memory Map ..... 1−43
Table 1−17: BDSACK Combinations For 68020 Memory Space ..... 1−45
Table 1−18: A11 DRAM Processor/Display Wait State Generation ..... 1−46
Table 1−19: A11 DRAM Processor/Display DUART Interface Signals ..... 1−47
Table 1−20: A10 Acquisition Demultiplexer DB Memory Map .... 1−48
Table 1−21: Device Interrupt Levels ..... 1−49
Table 1−22: Interrupt Mask Register 0900 0000 (R/W) ..... 1−49
Table 1−23: Miscellaneous Register 0920 0000 (R/W) ..... 1−50
Table 1−24: Interrupt Read Register 1 0940 0000 (Read Only) .... 1−50
Table 1−25: Interrupt Read Register 2 0960 0000 (Read Only) .... 1−51
Table 1−26: Troubleshooting Procedure For LED Display ..... 1−52
Table 1−27: DIP Switch Options ..... 1−53
Table 1−28: A11 DRAM Processor/Display LED (DS1) ..... 1−54
Table 2–1: Characteristics — Environmental 2–8

General Safety Summary

Review the following safety precautions to avoid injury and prevent damage to this product or any products connected to it. To avoid potential hazards, use the product only as specified.

Only qualified personnel should perform service procedures.

Injury Precautions

Use Proper Power Cord To avoid fire hazard, use only the power cord specified for this product.

Avoid Electric Overload To avoid electric shock or fire hazard, do not apply a voltage to a terminal that is outside the range specified for that terminal.

Ground the Product This product is grounded through the grounding conductor of the power cord. To avoid electric shock, the grounding conductor must be connected to earth ground. Before making connections to the input or output terminals of the product, ensure that the product is properly grounded.

Do Not Operate Without Covers To avoid electric shock or fire hazard, do not operate this product with covers or panels removed.

Use Proper Fuse To avoid fire hazard, use only the fuse type and rating specified for this product.

Do Not Operate in Wet/Damp Conditions To avoid electric shock, do not operate this product in wet or damp conditions.

Do Not Operate in Explosive Atmosphere To avoid injury or fire hazard, do not operate this product in an explosive atmosphere.

Keep Probe Surface Clean To avoid electric shock and erroneous readings, keep probe surface clean.

Product Damage Precautions

Use Proper Power Source Do not operate this product from a power source that applies more than the voltage specified.

Use Proper Voltage Setting

Before applying power, ensure that the line selector is in the proper position for the power source being used.

Provide Proper Ventilation

To prevent product overheating, provide proper ventilation.

Do Not Operate With Suspected Failures

If you suspect there is damage to this product, have it inspected by qualified service personnel.

Do Not Immerse in Liquids

Clean the probe using only a damp cloth. Refer to cleaning instructions.

Safety Terms and Symbols

Terms in This Manual

These terms may appear in this manual:



WARNING. *Warning statements identify conditions or practices that could result in injury or loss of life.*



CAUTION. *Caution statements identify conditions or practices that could result in damage to this product or other property.*

Terms on the Product

These terms may appear on the product:

DANGER indicates an injury hazard immediately accessible as you read the marking.

WARNING indicates an injury hazard not immediately accessible as you read the marking.

CAUTION indicates a hazard to property including the product.

Symbols on the Product

The following symbols may appear on the product:



DANGER
High Voltage



Protective Ground
(Earth) Terminal



ATTENTION
Refer to
Manual



Double
Insulated

Certifications and Compliances

CSA Certified Power Cords

CSA Certification includes the products and power cords appropriate for use in the North America power network. All other power cords supplied are approved for the country of use.

Service Safety Summary

Only qualified personnel should perform service procedures. Read this *Service Safety Summary* and the *General Safety Summary* before performing any service procedures.

Do Not Service Alone

Do not perform internal service or adjustments of this product unless another person capable of rendering first aid and resuscitation is present.

Disconnect Power

To avoid electric shock, disconnect the main power by means of the power cord or, if provided, the power switch.

Use Caution When Servicing the CRT

To avoid electric shock or injury, use extreme caution when handling the CRT. Only qualified personnel familiar with CRT servicing procedures and precautions should remove or install the CRT.

CRTs retain hazardous voltages for long periods of time after power is turned off. Before attempting any servicing, discharge the CRT by shorting the anode to chassis ground. When discharging the CRT, connect the discharge path to ground and then the anode. Rough handling may cause the CRT to implode. Do not nick or scratch the glass or subject it to undue pressure when removing or installing it. When handling the CRT, wear safety goggles and heavy gloves for protection.

Use Care When Servicing With Power On

Dangerous voltages or currents may exist in this product. Disconnect power, remove battery (if applicable), and disconnect test leads before removing protective panels, soldering, or replacing components.

To avoid electric shock, do not touch exposed connections.

X-Radiation

To avoid x-radiation exposure, do not modify or otherwise alter the high-voltage circuitry or the CRT enclosure. X-ray emissions generated within this product have been sufficiently shielded.

Preface

This preface contains information needed to properly use this manual to service the TDS 520B Digitizing Oscilloscope, as well as general information critical to safe and effective servicing of this oscilloscope.

Manual Structure

This manual is divided into sections, such as *Theory of Operation* and *Parts Lists*. Further, it is divided into subsections, such as *Product Description* and *Removal and Installation Procedures.*

Sections containing procedures also contain introductions to those procedures. Be sure to read these introductions because they provide information needed to do the service correctly and efficiently. The following is a brief description of each manual section.

- *Theory of Operation* contains circuit descriptions that support general service and fault isolation down to the module level.
- *Electrical Parts List* contains a statement referring you to *Mechanical Replaceable Parts*, where both electrical and mechanical modules are listed.
- *Mechanical Parts List* includes a table of all replaceable modules, their descriptions, and their Tektronix part numbers.
- *Schematics* contains schematic diagrams of the various circuit boards in the TDS 520B.
- Dollies contains diagrams of the various circuit boards in the TDS 520B.

Manual Conventions

This manual uses certain conventions which you should become familiar with before doing service.

Modules

Throughout this manual, any replaceable component, assembly, or part of these Digitizing Oscilloscope is referred to generically as a module. In general, a module is an assembly, like a circuit board, rather than a component, like a resistor or an integrated circuit. Sometimes a single component is a module; for example, each chassis part of the oscilloscope is a module.

Safety Symbols and terms related to safety appear in the Safety Summary found at the beginning of this manual.

Symbols Besides the symbols related to safety, this manual uses the following symbols:

STOP*. The stop labels information which must be read in order to correctly do service and to avoid incorrectly using or applying service procedures.*

The clock icon labels procedure steps which require a pause to wait for the oscilloscope to complete some operation before you can continue.



Various icons such as the example icon at the left are used in procedures to help identify certain readouts and menu functions on screen.

Related Manuals

The TDS 520B Digitizing Oscilloscope, Option CM comes with the following manuals:

TDS 520B, TDS 540B, TDS 620B, TDS 644B, TDS 680B, TDS 684B, TDS 724A, TDS 744A, & 784A User Manual (Tektronix part number 070-9383-XX) contains a tutorial to quickly show you how to operate the TDS 520B Digitizing Oscilloscope and an in depth discussion of how to more completely use their features. Applications are also discussed.

TDS 520B, TDS 540B, TDS 620B, TDS 644B, TDS 680B, TDS 684B, TDS 724A, TDS 744A, & TDS 784A Reference (Tektronix part number 070-9382-XX) contains a brief overview of oscilloscope operation.

TDS Family (400A, 500B, 600B, and 700A) Programmer Manual (Tektronix part number 070-9556-XX) contains information for programmed operation via the GPIB interface. Included are the complete command set, setup information, and programming examples.

TDS 520B, TDS 540B, TDS 620B, TDS 644B, TDS 680B, TDS 684B, TDS 724A, TDS 744A, & TDS 784A Technical Reference (Tektronix part number 070-9384-XX) contains performance verification procedures and specifications.

TDS 520B, TDS 540B, TDS 620B, TDS 644B, TDS 680B, TDS 684B, TDS 724A, TDS 744A, & TDS 784A Service (Tektronix part number 070-9386-XX) contains repair procedures to the modular level.

Theory of Operation

Theory of Operation

This section describes the electrical operation of the TDS 520B Digitizing Oscilloscope. First, an overview discussion, based on the block diagram, gives an overall view of the module design. Next, a detailed circuit description, based on the schematic diagrams in Section 5, gives a more detailed view. These descriptions, together with the troubleshooting information in the TDS 500B, 600B, and 700A Service Manual, Tektronix part number 070-9386-01, should enable a qualified technician with the appropriate test equipment to isolate a problem to the appropriate level.

This section has three main parts:

- *Logic Conventions* describes how logic functions are discussed and represented in this manual.
- *Module Overview* describes circuit operation from a functional-circuit block perspective.
- *Detailed Circuit Description* provides detailed information about TDS 520B Digitizing Oscilloscope hardware with reference to the numbered schematics in Section 3.

Logic Conventions

The Digitizing Oscilloscope contain many digital logic circuits. This manual refers to these circuits with standard logic symbols and terms. Unless otherwise stated, all logic functions are described using the positive-logic convention: the more positive of the two logic levels is the high (1) state, and the more negative level is the low (0) state. Signal states may also be described as “true” meaning their active state or “false” meaning their nonactive state. The specific voltages that constitute a high or low state vary among the electronic devices.

Active-low signals are indicated by a tilde prefixed to the signal name (~RESET). Signal names are considered to be either active-high, active-low, or to have both active-high and active-low states.

Module Overview

This module overview describes the basic operation of each functional circuit block as shown in Diagram ◇0◇. Figure 5-2.

General

The TDS 520B Digitizing Oscilloscope is a portable two-channel instrument. Each channel provides a calibrated vertical scale factor.

Input Signal Path

A signal enters the oscilloscope through a probe connected to a BNC on the A10 Attenuator/Acquisition board.

Attenuators. Circuitry in the attenuator selects the input coupling, termination, and the attenuation factor. The processor system, by way of the acquisition system, controls the attenuators. For example, if 50 Ω input termination is selected and the input is overloaded, the processor system switches the input to the 1 MΩ position.

Probe Coding Interface. Probe coding interface signals pass through the attenuator portion of the A10 Attenuator/Acquisition to the acquisition system, where they are sensed and controlled.

Acquisition System. The acquisition system amplifies the input signals, samples them, converts them to digital signals, and controls the acquisition process under direction of the processor system. The acquisition system includes the trigger, acquisition timing, and acquisition mode generation and control circuitry.

D1 Bus. The acquisition system passes the digital values representing the acquired waveform through the A14 D1 Bus to the A11 DRAM Processor/Display board. This happens after a waveform acquisition is complete if the digital signal processor in the processor system requests the waveform.

Processor System. The processor system contains a 68020 microprocessor that controls the entire instrument. This system also includes the firmware and a GPIB interface. You can reprogram the firmware from a remote controller using the GPIB and an external software package.

The processor also includes a digital signal processor. This signal processor processes each waveform as directed by the system processor. Waveforms and any text to be displayed are passed on to the display system. The A11 DRAM Processor/Display board contains both the processor and display systems.

Display System. Text and waveforms are processed by different parts of the display circuitry. The display system sends the text and waveform information to the tube assembly as a video signal. The display system also generates and sends vertical (VSYNC) and horizontal (HSYNC) sync signals to the tube assembly. A VGA-compatible video output is at the rear of the TDS 520B.

Tube Assembly

All information (waveforms, text, graticules, and pictographs) is displayed by the A20 Display system. The A20 generates the high voltages necessary to drive the display tube. It also contains the video amplifier, horizontal oscillator, and the vertical and horizontal yoke driver circuitry.

Front Panel

The processor system sends instructions to and receives information from the Front Panel Processor on the A12 Front Panel board. The Front Panel Processor reads the front-panel switches and potentiometers. Any changes in their settings are reported to the processor system. The Front Panel Processor also turns the LEDs on and off and generates the bell signal.

Front-panel menu switches are also read by the Front Panel Processor. The processor sends any changes in menu selections to the processor system. The **ON/STBY** switch is one of the menu switches. However, it is not read by the Front Panel Processor, but passes through the A12 Front Panel board and the A11 DRAM Processor/Display board to the low voltage power supply.

The front panel also generates the probe compensation signals **SIGNAL** and **GND**.

Rear Panel

The **GPIB** connector provides access to stored waveforms, and allows external control of the oscilloscope. Other rear panel connectors are the **AUX TRIGGER INPUT**, **MAIN** and **DELAYED TRIGGER OUTPUT**, and a **CHANNEL 3 SIGNAL OUTPUT**.

You can make hardcopies on the GPIB port. If your TDS 520B has the optional RS-232 and Centronics ports, you can also use those.

Low Voltage Power Supply

The low voltage power supply is a switching power converter with active power factor control. It supplies power to all of the circuitry in the oscilloscope.

The principal **POWER** switch, located on the rear panel, controls all power to the oscilloscope including the Low Voltage Power Supply. The **ON/STBY** switch, located on the front panel, also controls all of the power to the oscilloscope except for part of the circuitry in the Low Voltage Power Supply.

The power supply sends a power fail (~PF) warning to the processor system if the power is going down.

Fan

The fan provides forced air cooling for the oscilloscope. It connects to +25 V from the Low Voltage Power Supply by way of the A11 DRAM Processor/Display module.

Detailed Circuit Description

This detailed circuit description describes the operation of the oscilloscope circuitry shown in schematic diagrams in the *Diagrams* section. While reading this description, refer to the block diagrams and the schematic diagrams in the *Diagrams* section.

Acquisition System A10 ◇1

The A10 Acquisition board amplifies, via the attenuator assembly, and acquires the analog signal. The acquisition system converts the signal to digital and stores it in acquisition memory. Acquisition and trigger control circuitry controls the acquisition process. DSP and the 68020 monitor and control the overall system, and transfer the acquired waveform to the display system.

Attenuators A10 ◇3 ◇4 ◇5 ◇6

The attenuator assembly contains four attenuator hybrids, see Figure 1–1, and four probe connectors. Each attenuator hybrid contains resistive dividers, an AC coupling capacitor, relays, a 50 Ω terminator, a buffer amplifier, and a preamp. The outputs of the attenuator assembly (the preamp output) drive the track and hold.

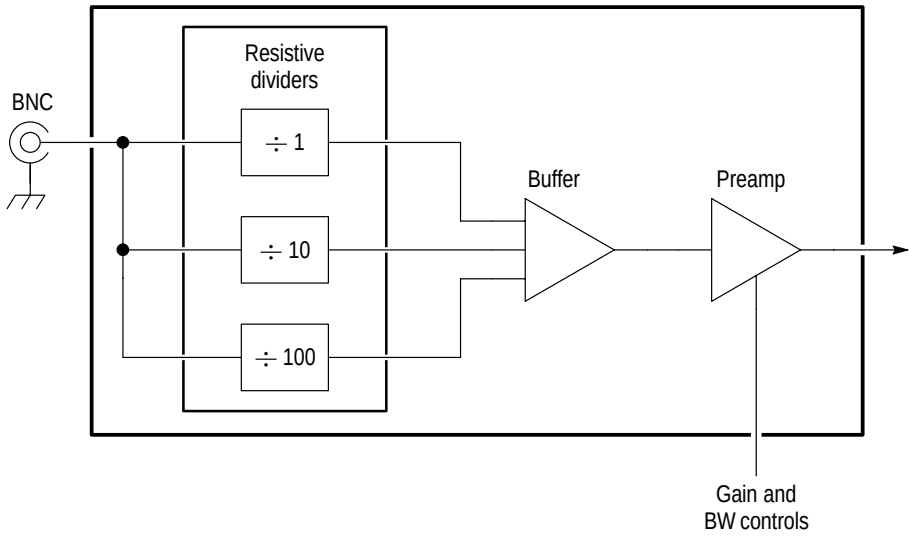


Figure 1–1: Attenuator hybrid

From here on the theory refers only to Ch4. The other channels work in similar ways.

The 68020 interprets user commands and initiates changes to the settings. The Acquisition Processor monitors the input overload sense (OVLS1–OVLS4) and the probe data (PRDATA1–PRDATA4) communication lines.

Each attenuator hybrid has five relays. One or more of the relays must be turned on if a signal is to pass from the BNC to the output of the attenuator.

The AC/DC coupling relay couples the output of the BNC to the other relays in the attenuator hybrid. For AC signals, the AC/DC coupling relay inserts a coupling capacitor into the input signal path.

When active, the 1 M/50 Ω relay terminates the input in 50 Ω.

A relay driver (U1102, sheet 6) selects an attenuator's attenuation factor by connecting one of its relays to the input BNC, and connecting all of its other relays to the ATTNCAL adjustment signal.

When ATTENSTB goes high, all attenuators enter their inactive state. Attenuator clock CCATTN clocks control data (DIN, U1102, pin 3) from the processor system into the attenuator Relay Driver. With a new pattern in the Relay Driver, the processor system sets ATTENSTB low, enabling the attenuators.

The serial data line (DIN, U1102, pin 3) comes from sheet 21, U1050, pin 27. The strobe (ATTENSTB, U1102, pin 8) comes from sheet 21, U1050 pin 11 (SCLK2). The DOUT line (U1102, pin 6) feeds the shifted data to the Ch3 relay driver, where it becomes DIN for Ch3 (U1202, pin 3). This continues until Ch1. After Ch1, the DOUT pin (sheet 3, U1402, pin 6) is sent back to sheet 21, U1050, pin 6. By feeding the serial data back to the control IC (U1050), the system can perform diagnostics on the serial data path.

Table 1–1: Relay Driver Control Data (CD) Bit Pattern

	Bit							
Mode	**7**	**6**	**2**	**8**	**5**	**4**	**1**	**3**
AC	1	NC[1]	NC[1]	NC[1]	NC[1]	NC[1]	NC[1]	NC[1]
DC	0	NC[1]	NC[1]	NC[1]	NC[1]	NC[1]	NC[1]	NC[1]
50 Ω	NC[1]	1	NC[1]	NC[1]	NC[1]	NC[1]	NC[1]	NC[1]
1 MΩ	NC[1]	0	NC[1]	NC[1]	NC[1]	NC[1]	NC[1]	NC[1]
1X BNC	NC[1]	NC[1]	1	0	0	1	0	0
10X BNC	NC[1]	NC[1]	0	1	0	0	1	0
100X BNC	NC[1]	NC[1]	0	0	1	0	0	1
OFF	0	0	0	0	0	0	0	1
1XCAL	NC[1]	NC[1]	0	0	0	1	0	0
10XCAL	NC[1]	NC[1]	0	0	0	0	1	0

Table 1–1: Relay Driver Control Data (CD) Bit Pattern (Cont.)

	Bit							
Mode	**7**	**6**	**2**	**8**	**5**	**4**	**1**	**3**
100XCAL	NC[1]	NC[1]	0	0	0	0	0	1
INACTIVE	0	0	0	0	0	0	0	0

[1] **NC equals no change.**

Preamps A10



Since the preamp circuitry for each preamp is similar, only the circuitry for Preamp 4 is described. Preamp 4 provides gain switching, bandwidth limit filters, and outputs for the display, trigger, and other signal paths.

The system processor controls the Preamp 4 functions. It sends commands over serial data line.

The Analog DAC Control system provides DC voltage signals that set the Preamp offset. The Acquisition Processor (U600) stores the digital values of each of the voltage levels in digital-to-analog converter (DAC) U900. The Acquisition Processor transfers each voltage through DAC Multiplexer U934 to Preamp 4. Preamp variable gain, HF adjust, fine offset and balance controls are controlled by the daculator (U904) which is controlled by the GTL (U1050) via the serial data bus (SDOUT U1050).

Preamp 4 Control Buffers. (sheet 6) The Preamp 4 Control Buffers provide offset, balance, variable gain, and high frequency compensation voltages for the preamp.

The offset control voltage is sampled by U934 (sheet 26) and held on capacitor C1101. U1405 buffers the hold voltage so it can be fed into the attenuator hybrid and then to the preamp. Fine offset and balance controls do not need a hold cap because they come from the daculator (U904) which internally holds the voltages. Fine offset and balance are buffered by U1101 and then summed together with offset. HF adjust and var gain are fed directly to the preamp from the daculator (U904).

Preamp Control 4. U1403 and U1404 (sheet 7) are the serial in, parallel out shift registers that load the preamp control bits. Serial data flows into U1403 pin 1 (from sheet 21, U1050, pin 27). The data is shifted into the registers by SCLK3 (U1403 and U1404, pin 8). SCLK3 comes from sheet 21, U1050, pin 12. Data flows from the last bit of U1043 to the serial input pin of U1404 and then from the last bit of U1404 back to sheet 21, U1050, pin 7 for diagnostic purposes. There are three steps in the process of programming the preamps. First, 16 bits are shifted into the two registers (U1403 and U1404) – only QA, QB, QC, QD, and QE of each register will be used. The Ch1/Ch3 preamp strobe (sheet 3,

JP1400, pin 112 and sheet 5, JP1200, pin 112) is strobed to latch the gain and bandwidth bits into Ch1 and Ch3. This strobe pin comes from sheet 21, U1050, pin 17. Next, 16 more bits are shifted in and again only the 10 bits mentioned above are used. However, this time, the Ch2/Ch4 preamp strobe (sheet 4, JP1400, pin 212 and sheet 6, JP1200, pin 212) is strobed to latch the gain and bandwidth bits into Ch2 and Ch4. Finally, 16 more data bits are shifted in. These are left there to set the output controls of all four channels.

Preamp 4. The preamps amplify the input voltage. Input signals come from the attenuator. The nominal gain of each preamp is 1.05 (at 50 mV per division); the gain of the attenuator is 0.95 (in 1X attenuation). The combined gain from BNC connector to A/D Converter D is 1.00.

Preamp 4 is an integrated circuit containing:

- Two four-pole bandwidth-limit filters: 20 MHz and 250 MHz. Inputs B0–B1 control the bandwidth of Preamp 4. See Table 1–2.
- Six gain settings of 1 mV, 2 mV, 5 mV, 10 mV, 20 mV, and 50 mV per division (see Table 1–3). Inputs G0–G2 control the gain of Preamp 4.
- High-frequency adjust inputs.
- A variable gain control input which linearly adjusts the overall gain. The gain is zero at –1 V and maximum at +1 V.
- Three separate differential outputs that can be turned on or off using the output enable control signals (out1en, out2en, out3en). The inv controls are left at 0.

Table 1–2: Bandwidth Limit Selection Bits(Cont.)

Bandwidth	B1	B0
20 MHz	0	0
250 MHz	0	1
Maximum	1	X

Table 1–3: Gain Set Bits

Gain Setting	G2	G1	G0
1 mV	0	0	0
2 mV	0	0	1
5 mV	0	1	0
10 mV	0	1	1

Table 1–3: Gain Set Bits (Cont.)

Gain Setting	G2	G1	G0
20 mV	1	0	X
50 mV	1	1	X

Track/Hold A10 ◇8

The track/hold IC (U1250) samples the differential analog signals coming from the preamps before sending them to the A/D converters. The A/D clocks are also provided by the track/hold. The track/hold IC also provides all channel switching necessary to facilitate 2–way and 4–way interleaving. There are 8 control bits that are serially shifted into U1251 and parallel fed to the track/hold. The data line (SDATA, U1251 pin 1) comes from sheet 21, U1050, pin 27. The data is fed back (SDIAG1, U1251, pin 13) to U1050, pin 5 for diagnostic purposes). The data is clocked in by U1251, pin 8 (which comes from sheet 21, U1050 pin 10.) The differential analog signals coming from the preamps are labelled DISP1+/DISP1– thru DISP4+/DISP4–. The differential clocks going to the A/D converters are labelled CLKAH/CLKAL thru CLKDH/CLKDI. The differential analog sampled signals going to the A/D converters are labelled AP+/AP– through DP+/DP–. Note, from the top level block diagram, that the signals going from the preamps to the A/D converters get crossed (see Tables 1–4, 1–5, and 1–6 to verify this).

Table 1–4: Preamps to Track/Hold Input

Preamps	Track/Hold Input	Comments
Ch1	DISP1	
Ch2	DISP2	
Ch3	DISP4	Ch3 and Ch4 cross here
Ch4	DISP3	

Table 1–5: Track/Hold Outputs to A/D Input

Track/Hold Outputs	A/D Input	Comments
AP	SIGB	AP and BP cross here
BP	SIGA	
CP	SIGC	CP and DP are inactive on the TDS 520B and TDS 724A
DP	SIGD	

Table 1–6: Preamps to Track/Hold Input

Track/Hold Clock Outputs	A/D Clock Input	Comments
CLKA	CLKB	
CLKB	CLKA	
CLKC	CLKC	CLKC and CLKD are inactive on the TDS 520B and TDS 724A
CLKD	CLKD	

In order to provide interleave capability, the Track/Hold must independently adjust the delays of each of the sample clocks going to the A/D converters. These are controlled by PHSA, PHSB, PHSC, and PHSD (pins 10, 111, 31, and 90 respectively of U1250) analog control voltages from the daculator (sheet 24, U906). A three phase version of the 1GHz timebase clock is fed in through the PHS1, PHS2, and PHS3 signals.

A/D Converters A10

9 10 11 12

***NOTE**. The TDS 520B and 724A only have A/D converts A and B. C and D are not placed.*

Since each A/D converter is similar, only the circuitry for A/D Converter D is described. A/D Converter D (U700) converts the selected differential analog input voltage to an 8-bit binary number. The analog input sensitivity is 2 mV per digitizing level. Conversions occur at the 1 GHz clock rate (CLKD U700, pins 53 and 55). Even though conversions occur at this rate, data is output as two differential 8-bit words (D0H/D0L–D7H/D7L and A0H/A0L–A7H/A7L) at a 500 MHz rate.

Pipes C and D (sheets 11 and 12) are not placed in the TDS 520B and TDS 724A.

Inputs. The A/D converter has one differential input (pins 60 and 62) fed from the track/hold. Tables 1–4, 1–5, and 1–6 show which track/hold output connects to which A/D converter. The 1 GHz differential input clocks from the track/hold are fed into pins 53 and 55. Each side of the differential clock is 250 mV p–p swing with the high level at 0 V.

Outputs. Outputs from the A/D Converter are differential, 500 mV digital swings (peak to peak on each side.) The output resistance is 65 ohms. The two 8–bit 500

MS/s streams become valid on alternate edges of the clock cycle (D is valid on the rising edge, A is valid on the falling edge.)

Control. The A/D converter has two DC analog controls: OFFSET, which sets the A/D offset, and VREF, which adjusts the gain. These controls come from a daculator IC (U906, sheet 24). The VREF control voltage is preconditioned by U701 so that it ranges from 1.56 V to 3.44 V.

Sampling of the analog input voltage occurs on the positive going transition of convert clock (CLK0, pins 53 and 55). Digitized value is available after the 11th subsequent clock cycle.

DMUX & Acquisition Memory A10

13 14 15 16

***NOTE**. The TDS 520B and 724A only have pipes A and B placed. They do not use C and D.*

Since the circuitry for each demultiplexer and acquisition memory is similar, only the circuitry for pipe D Acquisition Memory is described. The demultiplexer is the time base and memory control system for the output of an A/D converter. Each demultiplexer has an A/D data input (Ch4D and Ch4A), acquisition memory output, DSP bus interface, and a trigger interface (see Figure 1–2).

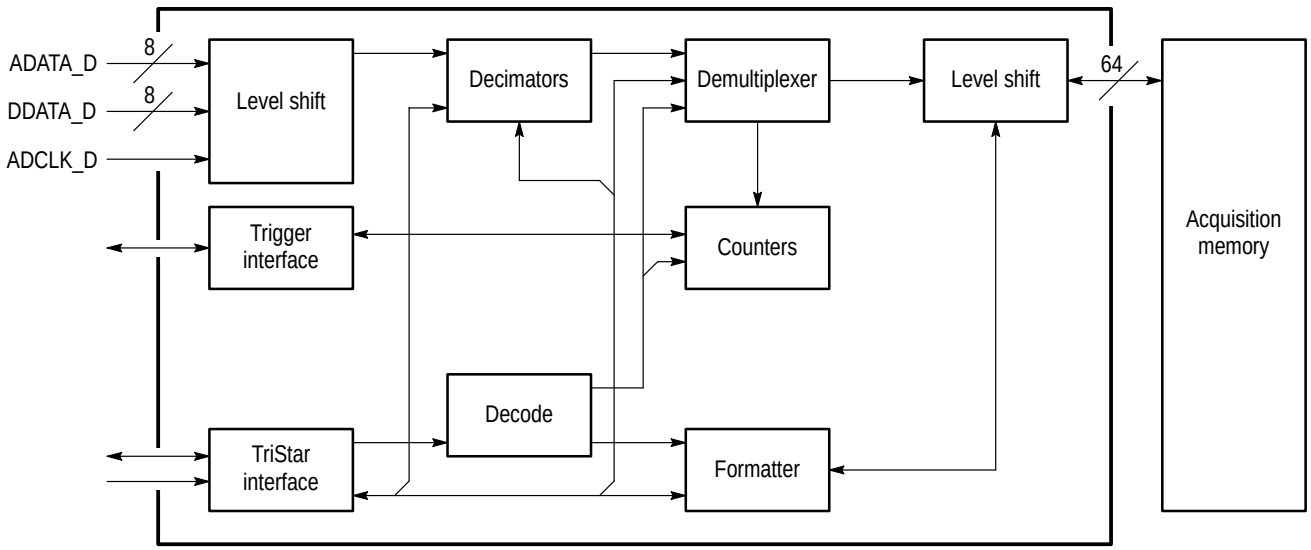


Figure 1–2: Demultiplexer Block Diagram

Demultiplexer D. Demultiplexer D has two operating modes. In acquire mode, Demultiplexer D (U100) collects data from an A/D converter and writes the data into Acquisition Memory D. In save mode, the DSP reads the acquired data from Acquisition Memory D. The display system then processes and displays the data.

In acquire mode, Demultiplexer D (U100) gets its data (ADATA_DH0/ADATA_DL0 – ADATA_DH7/ADATA_DL7 and DDATA_DH0/DDATA_DL0 – DDATA_DH7/DDATA_DL7) from A/D Converter D (U700) at a rate of two new 8-bit samples every 2 ns. The input data sample is a 500 mV swing with Von ≈ 4.2V. It latches the data on the falling edge of clock ADCLK_D and converts it to CMOS levels. Data then passes to a demultiplexer at full speed, or is decimated under program control.

The decimation mode determines the sample-rate. When the digital trigger is the source of the trigger, the state of the decimators is latched at the trigger to assist in point placement.

There are three decimation modes: normal, min/max, *and* hires*:*

- Normal (sub-sample) mode throws away samples between saved sample points.
- Min/max mode saves the maximum and minimum samples over the decimation interval.
- Hires mode gives extra resolution by averaging the samples, on a single-shot basis, over the decimation interval.

An internal demultiplexer splits the two 8-bit data streams coming out of the decimators into 16 8-bit data streams. The data streams are 2–way interleaved resulting in a 64–bit data bus, with two memory chips on each byte. This results in a 64-bit wide data word.

Demultiplexer D has three programmable counters that keep track of the number of samples before the trigger, the number of samples after the trigger, and the location in Acquisition Memory D where the trigger occurred. Before a trigger occurs, the RUNM signal is asserted by the trigger logic (U1001, pin 146, sheet 20). After the trigger when the proper number of post–trigger samples have been taken, RUNM is deasserted which stops the DMUX and causes it to interrupt the processor.

During save mode, the DSP can access Acquisition Memory D. Memory mapped I/O select MMIO accesses pin 74, the internal programming and status registers. To further decode the MMIO select, the middle address bits are used as sub-system selects.

Input MMIOA (U100, pin 73) acts as the sub-system selector for the memory mapped I/O in the demultiplexers. To address the internal registers, DSP asserts both MMIO and MMIOA.

During DSP writes to Acquisition Memory D, circuitry in Demultiplexer D aligns the byte-wide data for byte writes into Acquisition Memory D.

DSP can clock Demultiplexer D for test purposes. Diagnostics can switch in a counter instead of A/D Converter D so that Demultiplexer D acquires a predictable pseudorandom sequence.

Acquisition Memory D. During acquire mode, Demultiplexer D writes to Acquisition Memory D when eight samples accumulate. The full 64 bits are always written in parallel. Two address buses allow two sets of memory to share the 64-bit data bus on alternate 8ns cycles.

Phase lock loop/clock generator A10 17

The 1 GHz system timebase is generated from a VCO (centered around Q531) that is phase locked to a 25 ppm, 25 MHz reference crystal oscillator. U510 is the phase/frequency detector. The integrator is made from U502 and surrounding components. The single–ended 1 GHz VCO output is converted to differential (via delay lines) and fed to the trigger logic (U1001, sheet 20, pins 140 and 142). The trigger logic divides the clock down to 25 MHz and feeds it back to the PLL (from U1001, pins 12 and 13).

Analog Triggers A10 18

The analog triggers are free-running analog comparators with channel switching.

The following is described in terms of the Ch1 and Ch2 analog triggers:

The analog trigger comparator (U1551, sheet 18) is a channel switch and analog comparator combination. Ch1 is differentially fed into IN1(H/L) (pin 5,4), CH2 is fed into IN2(H/L) (pin 41,41). The main trigger output is OUT11(H/L) (pins 20, 21) and the delay trigger output is OUT21(H/L) (pins 26, 25). The channel switch allows either Ch1 or Ch2 to be the main or delay trigger event or both. The comparators are after the channel switch, so the trigger level and hysteresis controls are associated with the main delay trigger rather than Ch1 or Ch2 trigger. Trigger coupling is generated with U1560/U1561 filter circuits. Referring to Ch1, AC coupled trigger occurs when C1556 is connected to ground via U1556 and the analog trigger (U1551) is programmed to subtract this filter output from the Ch1 trigger input signal. LF reject is achieved similarly except C1556 is disconnected from ground. HF reject is like LF reject except that rather than subtracting the CP1 input signal (pin 7) from the Ch1 trigger signal, the CP1 input signal itself is used as the input. Noise reject is done by increasing the trigger hysteresis via those analog control voltages (pins 11 and 35 for main and delay hysteresis respectively).

U1552 does the same thing for Ch3 and Ch4. The EVNT1–4 outputs from U1551 and U1552 are fed to the trigger logic IC (U1001, sheet 20), The trigger logic chooses between Ch1/2 and Ch3/4 for main and delay trigger events.

U1551 and U1552 contain built–in shift registers for programming of the channel switch and coupling modes. The serial data SDATA comes from U1050,

sheet 21, pin 27. The data is fed serially into U1551, then U1552, and then back to U1050, pin 91. The data is clocked into the shift registers with SCLK0 (U1551/U1552, pin 13) from sheet 21, U1050, pin 92. Once the shift registers are loaded, the data is latched in by strobing DSTR0 (U1551/1552, pin 33). DSTRB0 comes from sheet 21, U1050, pin 93.

Trigger Logic A10 

Trigger Logic is the digital part of the trigger system. It is composed of two IC's referred to as U1001 and U1050. The circuitry has many clock generation and triggering functions:

- Divides the 1 GHz VCOH/VCOL by 4 to get 250 MHz. The 250 MHz is used to drive the time interpolators. It is further divided to operate the trigger logic. It is also divided by 10 to generate the 25 MHz used by the scope's timebase PLL.
- Provides proper timing on the two resets (ACQRST1 and ACQRST2).
- Selects the trigger event.
- Puts the oscilloscope into posttrigger mode when the trigger is detected.
- Places the trigger point with respect to the data in memory.
- Provides trigger measurement functions.
- Provides part of the trigger holdoff and time interpolator functions.

Extended Trigger A10 

The Extended Trigger (EXTL) is primarily used to trigger on the end of an event pulse, qualified by the width of that pulse in time. Extended Trigger also allows the trigger system to act as a flip-flop, as in state trigger.

The Extended Trigger responds to digital signals or "events" provided by the Analog Triggers and the Trigger Logic. When a trigger condition is satisfied, the Extended Trigger, (U1703, sheet 22) generates EEVNT.

A combination of analog ramps and the Trigger Logic define the reference pulse widths. The analog ramps cover fast timing settings, while the Trigger Logic counts pulse widths greater than 1 microsecond. For time references less than or equal to this (where only the ramp is used), the Trigger Logic counter is disabled and the outputs are set high.

Daculator-derived ramp currents at pins 10,11,12, 34, 35, and 36 define the analog ramp times. The pins should always be within 25 mV of ground.

Each pulse width timer has two DAC/resistor networks. The slow range uses a 150 kΩ resistor for 30 ns to 1 μs. The fast range uses 4.75 kΩ for 2 ns to 28 ns.

Time Interpolators A10 ◇23◇

There are two time interpolators. One is for the main trigger, and the other is for the delay trigger. The time interpolator allows the trigger system to determine the time of occurence of a trigger event to the sub clock cycle resolution needed at fast time/div settings.

A triple ramp technique is employed to perform the interpolation. When the trigger event occurs, a large current is injected onto a capacitor generating what is called the fast ramp. When the second subsequent clock occurs, the fast current stops and the capacitor has a voltage that is proportional to the amount of time from the trigger event to the next clock cycle plus a fixed offset. After the fast current shuts off, a medium current starts to discharge the capacitor generating what is called the medium ramp. This drains off most of the fixed offset. At the end of the medium ramp, the medium current shuts off and is replaced by a small current which slowly discharges the capacitor generating the slow ramp. The time taken by the slow ramp to finish discharging the capacitor is proportional to the initial time interval between the trigger event and following clock edge. This system measures this much slower slow ramp time to obtain the measurement.

For the main time interpolator (U1600, sheet 23), the fast ramp is set by R1640 and R1641. The slow and medium ramp currents are set by the control voltages ISMAIN and IMMAIN respectively during SPC. The control voltages are buffered by U1601 before being applied to the current setting resistors (R1639 and R1638).

The trigger event is fed differentially into pins 10 and 11 of U1600 (MAUTH/L). The differential clock is fed into pins 4 and 3 (TICLKMH/L). The timing ramps are all internal to U1600 – an internal clock is generated that clocks a five-bit counter for the duration of the slow timing ramp. The MSB of this counter (CNTENMP/N, pins 44, 43 of U1600) is fed to U1050, sheet 21 where it clocks a larger counter in that chip thus effectively concatenating the two counters to make one counter. When the clock in U1600 stops, the counter is left with a number proportional to the time from the trigger event to the next clock edge. Once the system stores the trigger measurement, the trigger event line MAUT/L is set low which resets the time interpolator.

The time interpolator also synchronizes the trigger event (U1600, pins 28, 27) and returns it to U1001, sheet 20, pins 18 and 19. Operation for the delay time interpolator is identical except it is in U1650, sheet 23 and operates on delay trigger events.

Daculators A10 ◇24◇

Most of the analog control voltages are generated from the daculator ICs (U904, U905, and U906). The daculators contain an internal 12–bit DAC, 1:16 analog multiplexing circuit, and buffers. Serial data SDATA is shifted into the three daculators (starting with U904) which are strung together daisy chain style. The data serially shifts out of U906 (SDIAG4) back to U1050, sheet 21, pin 8. SCLK4 clocks the serial shift registers (it comes from U1050, sheet 21, pin 14).

DSTRB6 (from U1050, sheet 21, pin 25) causes the shifted data to take effect. The data contains information on which daculator voltage to change and what voltage to change it to. This is a total of 16 bits per daculator or 48 bits total.

Calibrator A10 

U962, U963, and U950 along with the supporting circuitry on that sheet form the circuitry that generates the calibration voltages for Signal path Compensation (SPC). U962 samples VDAC10 and stores that voltage on C956. VDAC10 comes from the DAC on sheet 26 (U900, pin 9). U963 selects an attenuated version of this stored voltage for 1x, 10x, or 100x calibration. It can also select ground for offset calibration. U962 and U963 are controlled from the trigger logic (sheet 21, U1050, CVR0–6). The percent error of VDAC10 is characterized at factory cal and stored along with all other calibration constants in NVRAM (U1052 and U1055, sheet 21).

Acq Processor A10 

The system processor communicates commands to the Acquisition Processor (U600) via the D1 Bus. The Acquisition Processor in turn controls the acquisition process. It controls the DAC and analog multiplexers that send control voltages to the preamps. The Acquisition Processor also controls the probe interface and senses internal temperature and timebase PLL lock.

DAC and analog MUXs A10 

U900 is a 12-bit DAC that is controlled by the acquisition processor. The analog MUX (U934) stores the DAC output on hold capacitors. As the acquisition processor changes the DAC output through a sequence of output voltages, the analog multiplexor switches in sync with the DAC to store each voltage on a different hold cap. There are 8 hold caps connected to U934 – four of them (C939 C942) control probe offset, the other four (C1401, C1301, C1201, C1101 on sheets 3, 4, 5, and 6 respectively) control offset to the preamps. The output of the DAC is reduced by a factor of four to ±2.5 V before being fed to U934. The full ±10 V output of the DAC is also fed to U962 in the calibrator system on sheet 25 where its held value is used for calibration voltage generation. The acquisition processor controls the cycling of both the DAC and the analog MUX.

Processor System A11 ◇1

The processor system includes two processors: the 68020 (U1155) and U1097 the Digital Signal Processor (TriStar). The 68020 processor coordinates all oscilloscope activities. It also directs the activities of the Acquisition Processor and the Front Panel Processor via a parallel to serial interface using DUART U1317. The Digital Signal Processor (DSP) manipulates acquisitions. It performs tasks as directed by the 68020 processor and reports results back either through interrupts or by using the FIFO (U1074). The 68020 has access to everything on the DSP bus, allowing it to run diagnostics, retrieve waveforms, pass data, and load DSP instruction memory.

Processor/Display Board Connectors A11 ◇2 ◇3

All connectors for the A11 DRAM Processor/Display board are grouped together on these schematics. Regulator U12 supplies power for the NVRAM write enable circuitry. Connector J20 connects power to the fan.

Decode A11 ◇4 ◇5

The Decode circuitry decodes the 68020 memory space (U1055, U1056), generates wait states, data transfer and size acknowledge signals U2001, byte enables U2001, and the system ON/STBY signal.

Main Decode. The Main Decode. circuitry decodes the 68020 address space into 16 blocks of 16 Megabytes each. Table 1–7 shows the memory map for the Processor System.

Wait State ◇5. Dynamic bus sizing allows the 68020 to automatically determine the size of a port on each access by using DSACK signals.

Wait states are generated either from the device or port being accessed.

Data transfer and size acknowledge signals ~DSACK0 and ~DSACK1 control bus speed (by adding wait states) and dynamic bus sizing for circuitry that does not generate its own data transfer and size acknowledge signals.

Byte Enable Decode ◇5. Byte Enable Decoder prevents the 68020 from overwriting data during writes to word and long-word ports.

68020 Interrupts, Kernel Registers, and Decode A11 ◇5

The 68020 supports seven levels of auto-vectored interrupts. Level seven auto-vector (non-maskable) interrupts are reserved for ~PF, an interrupt indicating that power failure is imminent, and ~50OHMOVERLOAD, an interrupt indicating an overload in the A15 Attenuator. Interrupts from other modules are shared on the other 6 interrupt levels. Table 1–21 lists the device assigned to each interrupt level, and the name of the interrupt signals.

Interrupt Decode. Interrupt circuitry in U2000 decodes interrupts into the three signals that notify the 68020 of an interrupt. The ENABLEINT from the Bus Control Register in U2000 determines if only level seven and Kernel interrupts are enabled, or if all interrupts are enabled. Because the Interrupt Read Registers are outside the Kernel, in Kernel operation the 68020 must read from the interrupting device itself to determine the source of the interrupt.

Interrupt Mask and Miscellaneous Registers. All interrupts other than level 7 are maskable. By asserting the appropriate mask bit in the Interrupt Mask register (see Table 1–22) for an interrupt, the 68020 can ignore that interrupt. The 68020 can still read the status of the interrupt using Interrupt Read Registers.

The 68020 processor writes to Miscellaneous Register to control system circuitry and one interrupt mask (see Table 1–22). By reading Miscellaneous Registers, the 68020 processor determines the status of the interrupt masks.

Clock Logic. Clock logic uses a 25 MHz clock to generate clocks for buss error logic, GPIB, DUART.

DRAM Logic. DRAM logic generate address and control signals for DRAM.

Interrupt Read Registers. Since there is usually more than one interrupt per priority level, the 68020 processor reads the Interrupt Read Registers to determine which device caused the interrupt (see Tables 1–24 and 1–25).

Kernel CPU and Control A11 ◇5◇6

At the start of power-up, the 68020 (U1155) disables as many subsystem buffers as possible. This allows the 68020 processor to start execution with as small a system as possible (the Kernel). As diagnostics progress, subsystems are turned on and diagnosed one at a time.

CPU and Control. After the Kernel passes its power-up diagnostics, the firmware enables the control bus buffer U1135. Gates U1001C, U1082B, and U1082D generate the DSP read and write control signals ~ERDS and ~EWRS.

U2001 ◇5◇ combine all data transfer and size acknowledge signals (DSACKs) from circuitry throughout the system, and generate the actual data transfer and size acknowledge signals.

Kernel Address Decode and Kernel Wait States ◇5◇. To isolate the Kernel from the rest of the system, the Kernel decodes its own address space using decoders inside U2000. The DSACKS control bus speed and allow for dynamic bus sizing (byte, word, or long word).

Bus Control Register ◇5◇**.** The Bus Control Register contains system control bits. They include interrupt mask and enable bits, main bus enables, power down initiation, and other control bits.

Bus Error Logic ◇5◇**.** A “watchdog timer” inside U2001 of approximately 2 milliseconds monitors 68020 cycle times. If any cycle exceeds 2 milliseconds, then it generates a bus error (~BERR). Bus error can also be asserted when the 68020 tries to write to the Boot ROM. .

Reset. The 68020 processor resets both at power-up and power-down using the reset signal into U1155 pin C1. Reset controller U1175 controls system reset. Power-on reset asserts for a minimum of 400 milliseconds after the +5 V supply stabilizes. Power-off reset asserts when the supply falls below a usable threshold or when the 68020 asserts PWRDWN.

Kernel Memory, IO and Buffers A11 ◇7◇

Kernel resident memory, IO, and buffers allow diagnostics to run while isolated from the rest of the oscilloscope.

Kernel RAM. Kernel RAM. (U1336) runs internal diagnostics and flash EPROM burn routines. It can also run down-loaded diagnostics.

Boot ROM. The Boot ROM. contains the 68020 power-up instructions. The instructions begin with diagnostics. In addition, the Boot ROM. has the software for operating the GPIB and programming the system flash EPROMS.

Address Buffers and Data Buffers. These buffers isolate the kernel address and data lines from the rest of the system. The Bus Control Register enables or disables these buffers.

7 Segment LED. Power-up diagnostics use this seven segment LED to communicate the pass or fail status of kernel diagnostics.

DIP Switch ◇5◇**.** The 68020 reads this switch at power-up to determine which diagnostic or firmware routines to run.

GPIB. The circuitry is made up of GPIB controller U1305, with transceivers U1302 and U1311 buffering signals to and from the GPIB.

ID Register ◇5◇**.** Two ID Registers inside U2000 determines the A11 DRAM Processor/Display board type and revision number.

Memory A11 ◇8◇

The Memory subsystem includes NVRAM for power-off storage and Dynamic RAM for the main system RAM.

NVRAM. The NVRAM. consists of non-volatile memory IC. This RAM provides long-term power-off storage of calibration constants, front-panel settings, waveforms, and hardware write-protected calibration constants.

NVRAM Write Protect. NVRAM Write Protect. circuitry can prevent a write to portions of the NVRAM. that are reserved for calibration constants.

DRAM. Dynamic RAM is organized as 512K long words of memory for a total of 2 Megabyte. The circuitry includes the DRAM ICs, a dynamic RAM controller/driver U2001.

DRAM Controller ◇5◇. DRAM Controller automatically refreshes the DRAM..

During a normal 68020 access the dynamic RAM controller multiplexes the address (on A2 to A21) onto the UMA0 to UMA8 address lines.

Clocks, FPP, ACQP, and Display Interface A11 ◇9◇

Clocks for the Processor System and the Display System are shared and are derived from 25 MHz and 32 MHz oscillators Y1, Y2. The clock circuitry divides the 25MHz_OSC signal by varying amounts to produce the clocks needed by oscilloscope circuitry.

The Bus Control Register buffers and enables the Clocks, FPP, ACQP, and Display Interface subsystem prior to 68020 access. Devices on the Clocks, FPP, ACQP, and Display Interface subsystem (SP bus) are the DUART and the 68020 port into the Display system.

SP Data Buffers. The SP Data Buffers. buffer the main system data bus (D16 to D31) to the SP data bus (SPD16 to SPD31).

Clocks. Y1 (25 MHz), and Y2 (32 MHz) crystal oscillators generate required clocks for processor and display circuits.

DUART (Front Panel and Acquisition Processor Interface). The DUART (U1317) is the 68020's parallel-to-serial interface for both the Front Panel Processor and the Acquisition Processor.

Table 1–19 lists the serial port interface signals to both the Front Panel Processor and the Acquisition Processor.

68020 to DSP Buffers and Latches A11 ◇10◇

The 68020 to DSP Buffers and Latches buffer the 68020 address and data buses to the DSP address and data buses.

DSP and Instruction Memory A11 ◇11◇

Digital Signal Processor U1097 (DSP) provides fast waveform processing. The processor uses prefetched instructions, from DSP Instruction Memory, and two data memories. DSP Instruction Memory is loaded at power-on by the 68020. The memory is 24 bits wide, fetched twice per DSP cycle, for an effective 48-bit instruction word.

Buffers U1084 and U1083B buffer the DSP's read and write signals to its three buses. When BUSGRANT goes high, the outputs enter their high impedance state, so that the 68020 can use the DSP's buses. Table 1–13 lists the memory map for the DSP Memory.

DSP D1 Buffers, Latches and Memory A11 ◇12◇

In general, the acquisition system uses the D1 Memory. The buffers and latches buffer and demultiplex the X bus from the DSP to create the D1 bus. When the bus is granted to the 68020 (BUSGRANT is high), the outputs of the buffers and latches enter their high impedance state.

DSP D2 Buffers, Latches and Memory A11 ◇13◇

In general, the display system uses the D2 Memory. The buffers and latches buffer and demultiplex the Y bus from the DSP to create the D2 bus. When the bus is granted to the 68020 (BUSGRANT is high), the outputs of the buffers and latches enter their high-impedance state.

DSP Bus Arbitration Interrupts D2MMIO and FIFO A11 ◇14◇

D2MMIO Decoding decodes the address space and generates chip selects for all registers on the A11 DRAM Processor/Display board accessible by the DSP.

The DSP D2MMIO Misc Register inside U2111 controls 68020 interrupts and tells both the DSP and the 68020 whether or not the FIFO is full. Table 1–14 describes the contents the D2MMIO Misc Register.

The DSP performs tasks as directed by the 68020 processor and reports results back either through interrupts or by using the FIFO (U1074). The DSP can pass data back to the 68020 through the FIFO without having to halt DSP processing. Interrupt ~FIFOINT, to the 68020, is generated when any data is in the FIFO, and ~FIFOFULL internal to U2111 tells the DSP not to write to it or data will be lost.

DSP Bus Arbitration and Interrupts A11 ◇14◇

Many buses in the oscilloscope are accessed by more than one processor. The bus arbitration circuitry inside U2111 ensures that only one processor at one time may access a bus.

Bus Arbitration. The 68020 has access to all of the DSP's address space on the D1 Memory, the D2 Memory, and the DSP Instruction Memory buses (see Table 1–7, 68020 Memory Map).

DSP Interrupts. The DSP has only one interrupt level. The interrupt circuitry is similar to the 68020 interrupt circuitry. Interrupt mask (see Table 1–11) and status (see Table 1–12) registers allow the interrupt routine to determine which device(s) have interrupts pending and allow the masking of each interrupt. Table 1–12 lists the interrupt signals.

Display System A11

The Display System drives a 60 Hz non-interlaced, raster-scan CRT.

The display circuit's primary function is writing waveforms into a waveform plane. The circuitry provides several different display modes. These modes include the Vector (Raster), Dot, XY, and YT modes.

There are four main blocks in the display circuit: the Pixel Processor, the Vector Lists, the Address Counter, and the Rasterizer. These blocks are connected together in different ways for different display modes.

The Display System is a graphics system with two bit maps: the text plane and the waveform plane. All information displayed is first written to one of these two planes. The information is sent at regular intervals to the RAMDAC, which converts it into an analog video signal. The contents of the bit maps are modified through two different paths. The waveform display circuit, which is on the DSP D2 bus, normally modifies the waveform plane, and the 68020 modifies the text plane. The Video System Controller. and Video Timing blocks inside U2100 generate signals which affect the display system.

To maximize the waveform update rate, only waveforms are written to the waveform plane. All other displayable information such as the graticule, readout, cursors, and menus is written to the text plane. Both planes may be updated at the same time.

The waveform display circuit takes a list of sample points, translates them into bit pattern, writes those bit pattern in the proper location, and interrupts the DSP when it is done.

D2 Interface and Display Control Register A11 ◇14

The DSP D2 Interface connects the Rasterizer, Pixel Processor, Vector Lists, RAMDAC, Display Control Register, and part of the Video Timing to the DSP. It also generates two interrupts and a wait signal to the DSP system.

Display Control Register inside U2111 is an 8-bit register whose data lines are connected to D2D8–D2D15.

Vector List 0 and Vlist Address Counter A11 16

A vector list stores waveform sample data. Before starting a normal display mode, the DSP writes data to a vector list. After the DSP starts the Pixel Processor, the Pixel Processor reads the waveform sample data from the vector list.

The Pixel Processor controls the Vector List Address Counter which addresses the vector lists during waveform display modes. It is an 11-bit counter (U28, U29, U30) with three control lines: *PIPEN*, *CLKOUT*, and *~LINEND*.

Vector List 1 A11 17

This circuitry performs the same function as Vector List 0.

Rasterizer A11 18

The primary function of the Rasterizer is to "draw" vectors between sample points. It also generates waveform display control signals.

To rasterize waveforms, the Rasterizer generates an intensity for every point in the waveform plane. It generates points from left-to-right top-to-bottom, in the same way a raster scan CRT scans the phosphor. The Rasterizer outputs the intensities to the Pixel Processor on LV3–LV6.

Rasterizer U59 has internal registers and lookup tables that the DSP can access. During internal accesses the Rasterizer uses address inputs *D2A0-D2A8* to determine which register or memory is being accessed. Signal ~VFVIEN is low during an internal access.

Pixel Processor and 020/WFM Data Buffers A11 19

The PP Data Buffers and the 020/WFM Data Buffers buffer and multiplex the Pixel Processor data bus onto both the 68020 data bus and the SP data bus. The PP Address Mux's multiplex the DSP D2 address bus and the vector lists data outputs onto the Pixel Processor address bus.

Like the Rasterizer, Pixel Processor U60 has both internal registers and lookup tables that can be accessed from the DSP.

The DSP D2 Interface asserts ~MEMACC or ~INTACCP during accesses to internal registers. The Pixel Processor asserts WAITP whenever it is in a display cycle. A DSP access to Pixel Processor address space with WAITP asserted causes a XWAIT (U2111 pin 37) signal to the DSP.

Pixel Processor U60 contains the display circuit state machine, the control interface to the waveform planes, and hardware for implementing many of the display modes. The display modes are selected from a register inside the Pixel Processor.

A memory refresh or display update cycle forces the current display mode to be temporarily suspended.

For each display mode, except system processor access mode, the following steps are taken to start the Pixel Processor state machine:

1. Select the desired mode.
2. Write to the X register.
3. Write to the Y register.

The Pixel Processor then asserts WAITP and starts the desired mode. When finished, the Pixel Processor deasserts WAITP and asserts ~DISPINTTS, which interrupts the DSP. (Random dot mode does not generate a ~DISPINTTS interrupt.)

Waveform plane refresh cycles and 68020 access occur through the Pixel Processor.

The Pixel Processor also performs the top and bottom clip display functions on waveforms.

- Top Clip will not display points whose vertical coordinate is above the value stored in the Pixel Processor's top register. A vertical coordinate of 0 is considered the top of the screen.
- Bottom Clip will not display points whose vertical coordinate is below the value stored in the Pixel Processor's bottom register.

Waveform Plane 0 and 1 A11 

The waveform planes are 512 by 512 bit maps. Only the upper 480 lines are displayed.

The Pixel Processor has exclusive control of all waveform plane control lines with two exceptions:

- The Video System Controller. can access the waveform planes during control cycles such as DRAM. refresh cycles.
- The 68020 can access the plane in diagnostic mode.

Either the Pixel Processor or the 68020 can supply the data for the waveform plane.

In system processor access mode, VRAM control signals from the Video System Controller. (U2100) control the waveform plane control lines through the Pixel Processor.

WFM Address Multiplexers. The WFM Address Multiplexers. multiplex the VSC's VRAM address lines, VA0–VA7, to the waveform planes address inputs when ~VADEN is low. ~VADEN goes low only if the *SPACC* bit in the Rasterizer mode register is high.

The 020/WFM Data Buffers allow 68020 data onto the waveform plane data bus.

Waveform 0, 1 Memory. Waveform 0, 1 Memory. stores the actual waveform data that will be displayed.

Text Planes and Display A11 ◇21◇

The Video System Controller. refreshes the text and waveform planes and generates video control signals. The 020/VSC Interface. controls communication with the Video System Controller..

020/VSC Interface. The major functions of the 020/VSC Interface. inside U2100 are to communicate with the Video System Controller. and the 68020 (during 68020 accesses to the display). This interface circuitry also generates control signals ~VADEN and ~WBFEN for 68020 access to the waveform plane.

020/VSC interface determines whether the Video System Controller. can execute a 68020 requested cycle. If not, it waits until the Video System Controller. is ready and then tells it to start.

Video System Controller. Both the text plane and the waveform plane are made up of dynamic VRAMs. Video System Controller. inside U2100 refreshes both of these memory planes in one refresh cycle. The Video System Controller. executes one DRAM refresh cycle for every scan line (every 31.25 μs).

The Video System Controller. also generates 3 video control signals, vertical sync (~VSYNC), horizontal sync (~HSYNC), and blank (~BLANK). Horizontal and vertical sync are sent to the A20 CRT Driver along with VIDEO_OUT. Blank signal ~BLANK blanks the VIDEO_OUT signal during vertical and horizontal retrace periods.

A display update cycle runs once for every horizontal blanking interval. During the cycle, the Video System Controller. transfers one row from both the text and the waveform plane memories (VRAMs) to shift registers located inside the VRAMs. Once the data is in the shift registers it is shifted out of the VRAMs serially, thereby leaving the VRAMs' random access port free.

Video System Controller. internal registers control how often, on what rows, and at what points the Video System Controller. executes display update cycles.

Text Planes. Text Planes 0, 1, 2, 3 store all non-waveform data. Circuit operation resembles that of waveform plane 0. The text planes do not need an address multiplexer because, with the exception of the Video System Controller., the 68020 has exclusive access to the text planes. The Video System Controller. accesses the text plane only on control cycles such as DRAM refresh cycles.

Each text plane is a 1024 × 512 bit map with one bit per pixel. The upper left-hand corner of the bit map, a 640 × 480 section, is sent to the RAMDAC.

VGA RAMDAC

22

The VGA RAMDAC (U199) converts the VGA signals from U2011 into 3 analog video signals, red, green, and blue. The RAMDAC and its internal registers and memory are addressed from Dsp D2 memory space.

Video data and ~Blankout are latched into the RAMDAC on the rising edge of 25 MHz. The RAMDAC sets the VIDEO_OUT signal levels to 0 Volts upon receiving ~Blankout.

Color RAM DAC and Frame Buffers A11

23

The Color RAMDAC (U193) receives digital video signals from frame buffers and convert them into an analog video signal. The Color RAMDAC and its internal registers and memory are addressed from DSP D2 memory space.

Video data, (FS0–FS19) presented at the inputs are latched at the rising edge of SCLK (20 MHz). VCLK is used to clock and synchronize ~LCS_BLANK. The RAMDAC sets the VIDEO_OUT signal level to 0 volts upon receiving ~BLANKOUT.

Video Timing, Save on Delta and Color Interface A11

24

Video Timing. The Video Timing circuitry inside U2011 generates control and timing signals used throughout the display system.

Save On Delta. Save On Delta. and the Pixel Processor recognize that a trigger has occurred. When it occurs, the DSP reads WFM_SAVE in the D2MMIO Misc Register. Once WFM_SAVE has been activated, it remains active until cleared by ~MEMACC.

Color Interface. 16 bits of waveform data and 8 bits of text data are multiplexed inside U2101 to generate 5 bits of VGA data. U2011 converts these data to 24 bits of information for frame buffers.

Firmface A11

Firmface section holds the Flash ROM, and allows 4 Meg of space for software code.

Flash ROM Buffers, Decoding, and Version ID

This circuitry contains address and data buffers, address decoding, and Flash ROM version identification circuitry.

Flash ROM A11

27

The oscilloscope makes use of flash memories for its Flash ROM. This allows the Flash ROM to be programmed while it is in the oscilloscope. With +12 V supplied to the Firmface, the Flash ROM can be programmed via programs running in Kernel RAM. , programs which are downloaded via the GPIB.

Flash Fundamentals. Programming Flash ROM involves three steps. In step one, if the Flash ROM is not fully erased (erased byte = $FF), then it is programmed to the zero-state. In step two, if step one was necessary, every cell is erased to the one-state. Step three sequentially programs each long word with the desired data. Only those cells that are zero bits are programmed. Bits that are ones are simply left alone, in the erase state.

Writes to the Flash ROM are possible only when +12 V is supplied. The A11 DRAM Processor/Display board has a switch (S1002) that turns this programming voltage on and off. Switch forward = programming voltage on. *This switch should only be toggled forward or back as directed by the firmware update program.*

The program queries the A11 DRAM Processor/Display board and the Firmface board for their ID numbers, so it can determine how to configure registers on the A11 DRAM Processor/Display board and how to program the DRAM Controller to enable the DRAM..

Front Panel A12

The front panel is the operator's interface for controlling the user-selectable scope functions. All front panel controls are "soft" controls in that they are not connected directly into the signal path.

Pots and FPP A12

1

The Front Panel Processor monitors the front-panel controls. It consists of a single-chip microprocessor with built-in RAM, ROM, A-to-D converter (for digitizing the potentiometer wiper voltages), a programmable timer (for generating the outputs for the bell and probe compensator signal), and a serial communications interface (for data transfer to and from the 68020).

The knob scanning circuitry, working with the A-to-D converter internal to the Front Panel Processor, produces digital values for the wiper voltages of the front panel knobs. Analog multiplexers U8 and U9 select one of 12 possible pot inputs to read. Although there are only six knobs on the front panel, each is a continuous-rotation potentiometer made up of two wipers, separated by 180 degrees, which contact a single resistive arc.

Three control lines to multiplexers U8 and U9 select the pot input or wiper voltage to be read. The analog voltage at the wiper of the pot selected is applied to the Front Panel Processor. This voltage is digitized, and the amount and direction of change from the previously stored value is calculated. The change information is sent to the 68020.

Switches A12 ◇2

The Front Panel Switches and Menu Switches are arranged in an array of eight rows and columns. When a switch is closed, one row line is connected to one column line through an isolation diode. A complete scan of the Front Panel Switches consists of setting all eight row lines low, in sequence, and performing an eight-column scan to check for a change from the state stored in the Front Panel Processor. Low bits in the column-line data tell the Front Panel Processor that a switch is closed.

LEDS A12 ◇3

The LEDs (light-emitting diodes) are arranged in groups of eight. They are connected between the emitters of PNP transistors and a pull-up resistor to VCC. The base inputs of the PNPs are connected to the outputs of 8-bit LED latches U5, U6, and U7. The PNPs provide adequate electrical current, so that the LEDs are bright enough. When the 68020 needs to turn a particular LED on or off, it sends a command to the FPP indicating what to do to the LED, and which one to change. The FPP converts the LED identification number to the LED address within one of the three latches (U5, U6, or U7).

Bell, Calibrator, and Power Supply A12 ◇4

The Bell circuit gates an oscillating signal through output speaker LS1. As long as Q of U3A (U3 pin 6) is low, transistors Q2, Q4, Q5, and Q6 are off, and current is cut off to speaker LS1. When the Q output of U3A is high, LS1 produces a tone.

Flip-flop U3B of the Probe Compensator divides the 2 kHz signal from TCMP1 (U1 pin 2) by 2. Therefore, CALCLK is a 1 kHz square wave. When Q1 is on, CALSIG is a positive voltage (approximately 500 mV). When Q1 is off, CALSIG is at ground.

D1 Bus D14

The A14 D1 Bus board connects the DSP D1 Bus from the A11 DRAM Processor/Display board to other boards in the instrument.

Low Voltage Power Supply A16

The low voltage power supply generates voltages used throughout the oscilloscope. It is a switching power converter with active power factor control.

Primay Power Stages, Load Channel Regulators, Mains Trigger Filter A17



The AC Input includes an EMI filter (C5–C7, C11, L2, L3, and L7) and bleeder resistor. Also, thermistors and varistors protect against excessive current (RT1), voltage (RV1), and temperature (RT7).

The Standby Supply is a flyback converter. When an integral transistor in U12 is on, the voltage on C12 is applied to T7. This voltage (at C22) is monitored to provide the power fail warning signal ~PF (W4 pin 1).

The Boost Converter provides a pre-regulated bulk supply for the Main Converter. Two parallel FETs (Q5 and 6) form the boost converter switch. When pulsed on, energy is stored in boost inductor L1. When the FETs turn off, the inductor energy is delivered to bulk cap C12. The U10 Power Factor Control controls the on-time of the FETs to regulate the bulk voltage. The control circuit also provides for near unity power factor at the mains input.

The PWM Control (A18 ) references the secondary of T6 (+5.1 V FEED BACK). It turns Main Converter switching FETs Q7 and Q8 (A17 ) on and off by way of gate drive transformer T4. With Q7 and Q8 on, the bulk cap voltage is applied to the primary winding of transformer T6.

The Pulse Width Modulator (A18 ) width-regulates the GATE DRIVE pulse (Q10/Q11 base) regulating the main output voltage (+5.1 V).

The +24 output voltage is regulated from +5.1 through T6 turns ratio. The other four outputs are series pass regulated by VR10, VR11, Q14, and Q15. An output voltage summing comparator (U5) starts hiccup mode if one of these four outputs go outside of the 50% voltage window.

PWM Control , Fault Signal Conditioning A18



Pulse Width Modulator U5 is the heart of the PWM Control . Resistor R20 and capacitor C4 set the switching frequency. R41, VR3, and C15 provide a 1% reference. Capacitor C5 is a soft-start capacitor that slowly starts up the Boost Converter.

Pin 10 of U5 is a shutdown input, and it is also a pulse-by-pulse current limit. Pulling pin 10 high stops the output pulse within 200 ns. If pulled high for a

short time, the soft-start cap (pin 8) will not be discharged. If the soft-start cap discharges, it causes a normal soft-start when the voltage at pin 10 is removed.

Six signals are ORed together into the ONE-SHOT TRIG signal. They are the 24 V current limit, 24 V over voltage, the main 5.1 V over voltage, main 5.1 V current limit, and the output voltage summing comparator. Any of these faults will start hiccup mode. In hiccup mode the power supply cycles on and off at a low repetition rate until the fault is removed.

The On/Standby Control debounces the switch. Relay K1 ensures that the power supply powers up in the same state (On or Standby) it was in when the oscilloscope powered down.

The low bulk fault circuit monitors the bulk voltage by way of the peak detector on the Standby Supply. It warns the processor system and shuts down the Main Converter when the bulk voltage drops to about 300 V.

Display Driver Board A20

The TDS 520B uses a 640 × 480 pixel raster scan display. Scan rates are 60 Hz frame rate × 32 kHz line rate.

Display Block Diagram A20

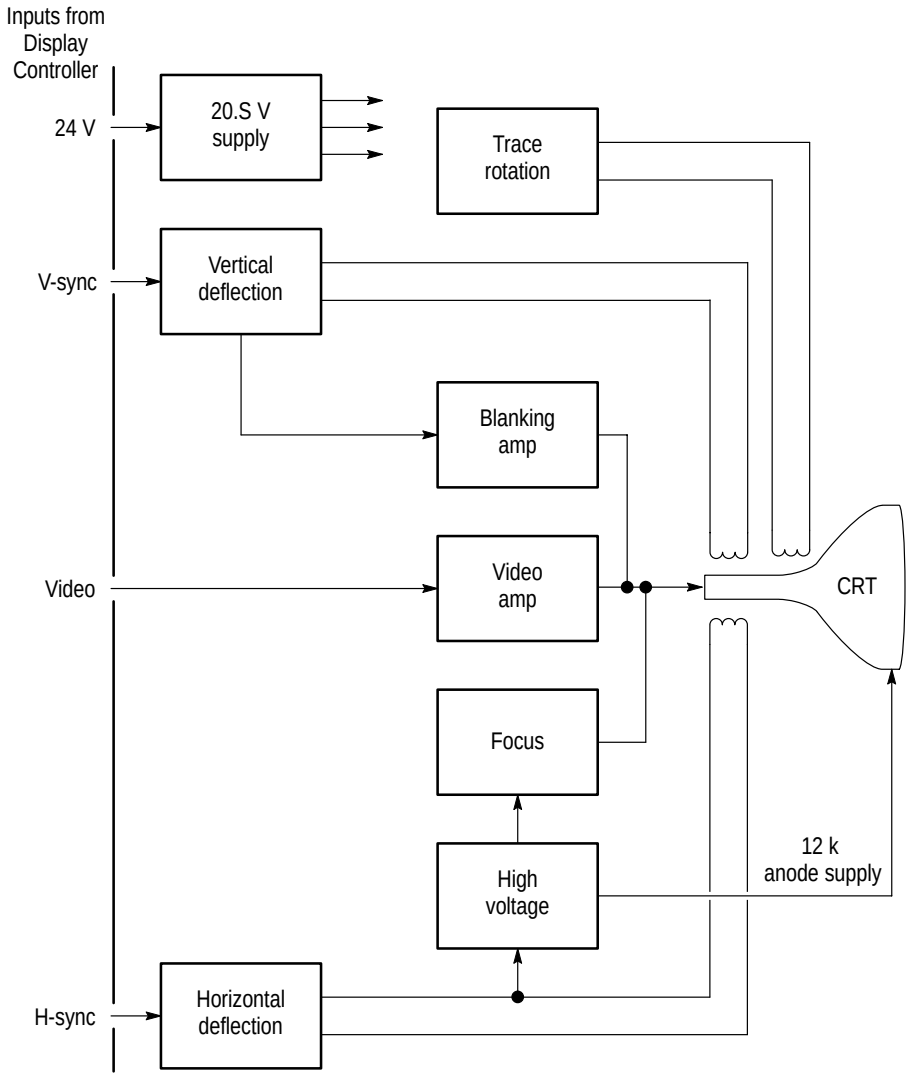


Figure 1–3: Display block diagram

The display circuit board, CRT, and deflection yoke all form a basic raster scanned picture monitor. Operating theory of this unit is very similar to most such displays and the display portions of television receivers.

All inputs are made to the display through a 2 × 16 pin connector. The inputs required are a video signal which produces the picture detail and horizontal and

vertical sync signals. The power for the display is provided by a single 24 volt DC source at an operating current of about one amp. The video amplifier is DC coupled and the signal must include a blanking pedestal to allow total extinction of the CRT beam during retrace and to provide for good “black” level. Sync signals are TTL compatible levels with the negative edge active.

The individual major sections are shown in the block diagram drawing. The CRT beam is scanned in the X and Y axis by the Horizontal and Vertical deflection circuits, which provide the scan currents for the deflection yoke. The “yoke” is made up of the two sets of deflection coils and several fixed and adjustable permanent magnets which allow for geometry correction and vertical and horizontal positioning. This assembly is mounted on the CRT neck at the transition to the funnel portion of the tube.

Several other calibration adjustments are provided to match the electronics to the individual yoke and CRT characteristics. The Horizontal deflection circuit also provides a large voltage pulse which is further increased by the high voltage circuit to supply the 12 kV for the CRT anode and also to provide the other internal supplies for the various circuits. CRT bias voltages for the CRT gun elements and dynamic focus correction signals are developed in the block marked “CRT Circuitry.” The Video Amplifier amplifies the video signal to some 25–30 volts peak which them drives the CRT cathode to produce the Z axis picture detail.

The three-terminal regulator provides a stable supply for the scan circuits to minimize changes in picture size due to any variations in the power input voltage.

Display Block Diagram Vertical Deflection Circuit A20 ◇1

This circuit provides the scan current for the vertical (field) deflection coil. The ramp of current moves the CRT beam from top to bottom of the CRT screen during each field and returns to the top for the next field at approximately a 60 Hz rate. All of the active components are included in a single monolithic IC, which is heat sunk to dissipate substantial power. Peak-to-peak currents of between one and one half and two amps are needed to deflect the beam over the required area. The output of the circuit is a current ramp, modified in shape to correct for geometric error in the CRT and for deflection coil anomalities.

A negative pulse at the deflection rate is introduced to the sync input of the circuit. This input may be either negative or positive; the sync circuit will recognize either, and causes the ramp to “retrace” to the top of the screen. The negative edge is the “active” edge in this application.

The retrace portion of the ramp signal occurs in relatively short time (less than 400 μsec) and to overcome a rather large inductance of the deflection coil, a “boost” voltage is applied to the output amplifier power supply rail. This larger voltage allows the current in the yoke winding to change rapidly. Once the retrace is complete, the supply rail returns to the normal voltage (21 V) to conserve power in the output amplifier. At the same time, the Ramp generator

portion of the IC has returned to the starting point of the ramp and will produce a voltage ramp at the rate set by the R?C timing components until another sync signal occurs. (in the absence of sync, the generator will reset itself at a predetermined level and the scan will “free-run” at a slightly lower frequency). An external component network modifies the ramp shape, resulting in a scan waveform which will produce a “linear” movement of the CRT beam across the face of the CRT. This correction causes the resulting ramp of voltage to acquire a slight “S” shape, hence the majority of the correction is called “S” correction. The center of the “S” may be moved about by the linearity adjustment to accommodate non-uniformity of the deflection coil and other coil losses.

The modified ramp is fed to the input of the output amplifier. This voltage is applied against a negative feedback signal which results from the deflection coil current flowing in a small “current sampling” resistor. The output amplifier signal is A–C coupled to the coil so that no D–C current will flow in the windings. Such current would cause an undesirable “position” effect that would vary with changes in the current. Some D–C voltage feedback is provided directly from the amplifier output to stabilize the amplifier operating conditions. An external compensation network insures the amplifier’s operating stability in the presence of a highly reactive load and large amounts of negative feedback.

The vertical size adjustment controls the amplitude of the ramp generator signal and allows for precise vertical display size adjustment. Vertical positioning of the rastered area is adjusted by movable permanent ring magnets mounted on the back of the deflection yoke assembly.

Horizontal Deflection Circuit A20



The horizontal deflection signal is produced by applying a voltage across the inductance of the deflection coil and allowing the current to build with time. At a point in time the voltage is switched off and the retrace current is produced by a resonant circuit which produces a large voltage across the inductance in the opposite direction, allowing rapid return of the current to the starting point.

If we start with the CRT beam at the center of the screen, applying a voltage across the coil will cause current to build in the coil at a rate linear with time. As this current builds, the beam will be deflected across the screen. By convention, it will be deflected to the righthand side. Suddenly opening the switch which provides this current would cause the voltage at the coil terminals to increase towards infinity in an effort to maintain the current flow (basic inductor theory). Attaching a capacitor across the coil would allow this voltage to charge the capacitor, resulting in a resonant circuit. Now, instead of the coil current trying to remain steady, it reverses as the stored energy flows to charge the capacitor, and this reversal of current direction move the beam back to the left extreme of the scanned area. If the resonant circuit were allowed to “ring”, the current would alternate in direction at the resonant frequency until losses in the circuit dissipate the stored energy. The voltage will reverse in polarity across the capacitor and when it does, a diode (:damper” diode) conducts the current back into the coil in the same direction it was flowing when the switch was first turned on, though the

current starts from a more negative point. It flows towards the zero point. Before it reaches zero, the switch is turned back on, and the current continues to flow past the zero point in the positive direction until the switch once again is turned off, repeating the cycle.

This switching of voltages and the resonant action during retrace will produce the linear change in current necessary to move the beam across the screen rapidly to cause the beam to return to the starting position.

Horizontal Control and Base Drive A20 ◇1

This circuitry generates the "switch" controlling signal and synchronizes the scan action to the horizontal sync signal. The horizontal control block is a monolithic IC which include a horizontal oscillator that is voltage controlled, a phase detector, and an output shaper. The output provides the square voltage waveform to ultimately drive the switch transistor which provides the deflection coil currents

Two signals are compared in phase to provide an error signal which will control the oscillator frequency, in and a "phased locked loop" configuration. The differentiated sync pulse is the reference signal, and a ramp of voltage derived from the retrace or "flyback" pulse is the feedback signal to be "locked" to the sync signal.

The phase detector output controls the frequency of the horizontal oscillator, maintaining close phase relationship between the scanning current and the sync signal. The oscillator output is shaped to provide a square wave output to the switch base drive transistor. This transistor is a saturated switch coupled to the yoke driver switch transistor by the base drive transformer. Substantial drive current is required by the yoke driver to provide fast switching action.

The center of the oscillator operating frequency range is adjustable by the Horizontal "hold" adjustment. The horizontal phase adjustment slightly alters the phase relationship of the sync to the scan currents. This allows optimization of the timing of the horizontal scan to the sync pulse, and allows centering of the video information within the rastered area.

Horizontal Deflection Driver and Coil Circuit A20 ◇1

The base of the deflection driver (Q203) is driven by the base drive transformer. This transistor operates as a saturated switch, providing the current for the deflection coil. The initial voltage is provided by the high voltage transformer primary. The R/C network in the base of Q203 aids in fast turn-off of the transistor. When Q203 is turned off and all the stored charge in the transistor junctions is depleted, the energy stored in the deflection coil inductance flows into the "retrace capacitor" C208. This resonant circuit "rings" positive to form a large positive pulse (flyback pulse). As the voltage swings negative, CR205 (damper diode) conducts and clamps the voltage at ground. The energy stored causes current to flow into the coil which deflects the beam from the left edge towards center of the screen. before the current crosses over the zero point, Q203 is once again turned on, starting the cycle over.

Additional inductors are series with the deflection coil. The horizontal size adjust coil limits the maximum current that will flow in the deflection coil and thus the scan size. The linearity coil is a non-linear inductor whose inductance changes with current amplitude and polarity. This introduces nonlinearity with complements that caused by losses in the deflection coil. In addition, "S" correction is required (similar to the need in the vertical scan). This is provided by the series capacitor, C320. A parabola of voltage appears across this capacitor due to the deflection current flow, and the result is an "S" shaped error in the linear current which complements the error caused by the CRT change as the beam length changes from center to edge.

High Voltage, Internal Power Supplies, and CRT Circuitry A20 ◇1

The CRT high voltage is generated from the large pulse of voltage which occurs during horizontal retrace (flyback pulse). This approximately 350 V pulse is stepped up to the 12 KV peak by the high voltage transformer and rectified by an internal diode. The conductive coatings on both sides of the CRT envelope act as a filter capacitor for the anode voltage which is connected to the CRT by the high voltage lead and connector. A large value internal resistor in the transformer bleeds off the high voltage charge when the power is turned off.

Other secondary voltages are derived from the flyback pulse and used internally by the display circuitry. They are rectified and filtered as shown in the block. Focus potential for the CRT gun is derived from an adjustable divider spread between the –170 V and the 500 V supply. Bias voltage for the CRT control grid (G1) is developed from a divider between –170 and 50 volts, and is made adjustable to set the black level or "brightness" level for the tube. This adjustment is normally set to just extinguish the CRT beam during "black" portions of the video signal.

Vertical Retrace Blanking A20 ◇1

In the event that the black or background level is visable, the horizontal scan lines may be visable during the rapid vertical retrace period. This produces slanted, bright interfering lines in the picture background. A signal which drives the display further into the black (further into CRT "cutoff") is provided to blank the beam during this period, even though the background is visable. This is called vertical retrace blanking, or internal blanking and is independent from the blanking portion of the video signal.

A large pulse is generated by the vertical deflection circuit during vertical retrace. A portion of this signal is fed to Q442 where it is inverted and A–C coupled to the CRT G1. This signal drives the grid some 50 V more negative than normal during the retrace period, preventing the scan lines from being unblanked, even when the background is visable.

Dynamic Focus A20 ◇1

There is normally some defocus of the CRT beam as it leaves the center area of the CRT screen because the path the beam must travel lengthens as it moves to the outer edges of the screen. By changing the focus voltage dynamically, this

effect can be reduced and overall focus improved somewhat. (There are other causes for edge defocus also; not all of the errors can be corrected).

In this display, a parabolic voltage waveform is developed which is synchronized to the horizontal scan. This waveform is added to the D–C focus voltage and is adjustable in amplitude to improve focus at the CRT edges. An LC network is fed the negative pulse from the –170 V winding of the high voltage transformer. By tuning the resonant circuit below the resonant frequency, a high voltage parabola is generated. its amplitude is typically set for about 250 volts peak by adjusting the inductor core.

Video Amplifier A20 ◇1

The video amplifier consists of two stages, the input emitter follower which provides current gain to drive the second voltage gain stage. The second stage is a “Cascade” configuration which provides a voltage gain of approximately 40X at a bandwidth in excess of 30 MHz. The amplifier is D–C coupled and depends on the input signal being referenced to ground (blank level). There is a “peaking” network in the collector of the output stage to optimize transient response of the amplifier. The amplified video is directly coupled to the CRT cathode. Spark gaps are built into the CRT socket assembly and a gas-filled gap is present in the output of the amplifier to absorb high energy pulses which will occur if there is an internal high voltage arc in the CRT.

The input signal amplitude is adjustable over a limited range by the “contrast” control, and is used to normalize the amplifier gain and set the display peak white intensity.

Trace Rotation A20 ◇1

Trace rotation is accomplished by applying DC voltage to a coil wound onto the front of the deflection yoke. This creates a magnetic field that offsets the deflection field and thereby “tilts” the display. The driving circuitry is a simple DC amplifier configured to reverse current in the rotator coil and provide about three degrees of tilt in each direction. The rotation adjustment is located so it can be accessed from the front left side of the instrument by slipping the cover back a few inches.

Memory Maps

Since the memory map is not fully decoded, unused addresses may actually map into real memory somewhere. Unfilled address space may cause a bus error when accessed or it may overlay some other address space.

Table 1–7: 68020 Memory Map

Base Address	Chip Select	Description	Port Size
0000 0000–00FF FFFF	~KERNEL	Kernel address space, see “Kernel Addr Decode”	Byte
0100 0000–01FF FFFF	~SYSROM	System ROM address space. The firmface buffer enable bit in the Bus Control Register must be set. The number of wait states for system ROM must be set in Miscellaneous Register inside U2000.	Long
0200 0000–02FF FFFF	~OPTION1CS	Reserved for options	B,W,L
0300 0000–03FF FFFF	~OPTION2CS	Reserved for options	B,W,L
0400 0000–040F FFFF	~NVRAM	Non-volatile memory for calibration constants, front panel setups, waveform storage, and 2 kilobytes of hardware write protected calibration constants.	Byte
0500 0000–051F FFFF	~DRAM	System dynamic RAM	Long
0600 0000–06FF FFFF	~FLOPPY	Floppy chip select	B
0700 0000–07FF FFFF	~TRISTAR	DSP (U1097) space	Word only
0800 0000–08FF FFFF	~DISPLAY	Display address space	Word
0900 0000–09FF FFFF	~SYSMMIO	System memory mapped I/O	Byte
0900 0000	~IMSKREG	Interrupt Mask Register	Byte
0920 0000	~MISCREG	Miscellaneous Register	Byte
0940 0000	~INTREG1	Interrupt Read Register 1 (R)	Byte
0960 0000	~INTREG2	Interrupt Read Register 2 (R)	Byte
0980 0000	~CLRTIMER	Clear Timer (6.5 ms timer) (R)	Byte
09A0 0000	~RDFIFO	Read FIFO (R)	Byte
09C0 0002	~Shutdown		
09E0 0000	~SCOPELOOP	Scope Trigger (R)	Byte
0A00 0000–0AFF FFFF	~XPANDRAM	Reserved for development	Long
0B00 0000–0BFF FFFF	~SYSROMII	Second ROM address space	——
0C00 0000–0CFF FFFF	Unused		——
0D00 0000–0DFF FFFF	~DUARTCS	Dual parallel-to-serial interface to the Front Panel and Acquisition Processors	Byte
0E00 0000–0EFF FFFF	~IOCS	Chip select for I/O option bus	Byte
0F00 0000–0FFF FFFF	Reserved	Reserved for test fixture. An interrupt acknowledge cycle generates a low strobe at this location.	——

Table 1–8: Kernel Memory Map (0000 0000 to 00FF FFFF) All 8 Bits Wide

Start Addr	Size	Description
0000 0000	256 K by 8	Boot ROM
0020 0000	32 K by 8	Kernel RAM
0040 0000	Single Register R/W	Bus Control Register
0060 0000	Single Register W only	7 Segment LED
0080 0000	Single Register R only	Configuration Dip Switch
00A0 0000	Depends on Console	Console
00C0 0000	8 R, 8 W Registers	GPIB IC
00E0 0000	Register (read only)	ID Register 1
00E0 0001	Register (read only)	ID Register 2

Table 1–9: Bus Control Register (0040 0000 R/W)

680020 Data Bit	Signal Name	Description
D31	PWRDWN	System power down, asserting this bit resets the Processor System
D30	ENABLEBUS	Enable buffers to rest of system outside Kernel
D29	FFBUFEN	Enable buffers to get to system ROM
D28	–	Unused
D27	~ENABLESP	Enable SP bus to the Display and DUART
D26	ENABLEINT	Enable all interrupts outside the Kernel (These interrupts still have their respective mask bits)
D25	MSKGPIB	Masks the GPIB interrupt
D24	MSKCONSOLE	Masks the console interrupt

Table 1–10: 7 Segment LED (0060 0000 Write Only)

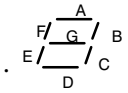
680020 Data Bit	Signal Name	Description 
D31	~DEC POINT	7 Segment LED decimal point
D30	~SEGMENT G	7 Segment LED segment G
D29	~SEGMENT F	7 Segment LED segment F
D28	~SEGMENT E	7 Segment LED segment E
D27	~SEGMENT D	7 Segment LED segment D
D26	~SEGMENT C	7 Segment LED segment C
D25	~SEGMENT B	7 Segment LED segment B
D24	~SEGMENT A	7 Segment LED segment A

Table 1–11: DSP Interrupt Mask Register

DSP Data Bit	680020 Data Bit	Signal Name	Description
D15	D31	M020INTTS	Masks the 68020 interrupt to DSP
D14	D30	MPTAVAIL	Masks the point-available interrupt from the acquisition system
D13	D29	MACQDN	Masks the done interrupt from the acquisition system
D12	D28	MDISPINTTS	Masks the display system's interrupt
D11	D27	MACQINTTS	Unused
D10	D26	M0.4MSINT	Masks the 0.4 ms periodic interrupt
D9	D25	MVERTINT	Masks the display system's vertical-blanking interrupt
D8	D24	MTSOPINT	Masks an option interrupt

Table 1–12: DSP Interrupt Read Register

DSP Data Bit	680020 Data Bit	Signal Name	Description
D15	D31	~020INTTS	Asserted when a 68020 interrupt to DSP is pending
D14	D30	~PTAVAIL	Asserted when a point-available interrupt is pending
D13	D29	~ACQDN	Asserted when an acquisition-done interrupt is pending
D12	D28	~DISPINTTS	Asserted when a display interrupt is pending
D11	D27	Unused	Unused
D10	D26	~0.4MSINT	Asserted when a 0.4 ms interrupt is pending
D9	D25	~VERTINT	Asserted when synchronizing the waveform planes with vertical blanking
D8	D24	~TSOPTINT	Asserted when a D2 bus option interrupt is pending

Table 1–13: DSP Memory Map

DSP D1 Address	68020 Address	Description
00000–07FFF 00000–1FFFF	0720 0000–0720 FFFF 0720 0000–0727 FFFF	D1 Memory 32K by 16 256K by 16
60000–7FFFF	072C 0000–072E 00XX	D1 Memory Mapped I/O (on the A10 Acquisition board)
601XX	072C 02XX	SETHW
602XX	072C 04XX	Unused
604XX	072C 08XX	LSTL, HSTL
608XX	072C 10XX	ACQP
610XX	072C 20XX	DSP/DMUX CH1
620XX	072C 40XX	DSP/DMUX CH2
640XX	072C 80XX	DSP/DMUX CH3
680XX	072D 00XX	DSP/DMUX CH4
700XX	072E 00XX	Unused
80000–FFFFF	0730 0000–073F FFFF	Acquisition Memory (on the A10 Acquisition board)
DSP D2 Address	**68020 Address**	**Description**
00000–17FFF 00000–5FFFF	0740 0000–0747 FFFF 0740 0000–075B FFFF	D2 Memory 256K by 16 896K by 16
F0000–F3800	075E 0000–075E 7FFF	D2MMIO
F0000	075E 0000	DSP Interrupt Mask Register
F0800	075E 1000	DSP Interrupt Read Register
F1800	075E 3000	D2 Miscellaneous Register
F2000	075E 4000	Clear DSP Periodic Interrupt
F7000	075E E000	Write FIFO Data
80000–FFFFF	075C 0000–075F FFFF	Display
DSP Instruction Memory Address	**68020 Address**	**Description**
00000–0FFFF	0700 0000–0701 FFFF	DSP Instruction Memory

Table 1–14: D2MMIO Miscellaneous Register

DSP Data Bit	680020 Data Bit	Signal Name	Description
D15	D31	~TSINT020	Asserted when DSP wants to interrupt the 68020
D14	D30	Unused	
D13	D29	Unused	
D12	D28	Unused	
D11	D27	WFMSAVE (read only)	
D10	D26	Unused	
D9	D25	~FIFOFULL	Asserted when the FIFO is full. In this condition further writes to the FIFO result in lost data.
D8	D24	TMSKFIFOINT	Masks the interrupt from the FIFO to the 68020

Table 1–15: 68020 to DSP Instruction Memory Accesses

68020 Address	D31 – D24	D23 – D16
0700 0000	TSID23–TSID16	TSID15–TSID8
0700 0002	TSID7–TSID0	
0700 0004	TSID23–TSID16	TSID15–TSID8
0700 0006	TSID7–TSID0	
0700 0008	TSID23–TSID16	TSID15–TSID8
0700 000A	TSID7–TSID0	

Since the memory map is not fully decoded, unused addresses may map into real memory somewhere. Accessing unfilled address space can cause a bus error or over-write decoded address space.

Table 1–16: Display Memory Map

68020 Address	Description	Port Size
	PIXEL PROCESSOR	
075C0 000	Y Register	word
075C0 002	X Register	word
075F0 000 – 075F0 1FF	ALU Table	word
075F4 000 – 075F401F	Decay Table	word
075F8 000	Control Register 1	word
075F 8002	Intensity Register	word
075F 8004	Top Register	word
075F 8006	Bottom Register	word
075F 8008	Data Register	word
	RASTERIZER	
075E 8000	Register 1	word
075E 8002	Register 2	word
075E 8004	Mode Register	word
075E 8006	Window Register 1	word
075E 8008	Window Register 2	word
075E 800A	Line Count Register	word
075E 800C	Diagnostic Register	word
075E 800E	Start Line Saturated Pixel Count Register	word
075E 8010	End Line Saturated Pixel Count Register	word
075E 8012	Saturated Pixel Count Register	word
075E 8100 – 075E 811F	Bright Table	word
075E 8200 – 075E 83FF	Sum Table	word
	VECTOR LIST MEMORIES	
075E 9000 – 075E 9FFF	Vector List Memory 0	word
075E A000 – 075E AFFF	Vector List Memory 1	word
	MISCELLANEOUS	
075E C800 – 075E C80E	VGA RAMDAC	word
075E D000 – 075E D01E	LCS RAMDAC	word
075E D800 – 075E D383	LCS Controller	word
075E E000	FIFO write	

Table 1–16: Display Memory Map (Cont.)

68020 Address	Description	Port Size
075E B000	Display Control Register	word
0807 0018	VSC Base Address	word
0800 0000 – 0801 FFFF	Waveform Plane	word
0802 0000 – 0805 FFFF	Text Plane	byte
0806 0000 – 0806 FFFF	BIT – BLT plane	
0807 0000 – 0807 0010	BIT – BLT register	

Table 1–17: BDSACK Combinations For 68020 Memory Space

68020 Address	Memory Space Description	Bdsack
0000 0000–00FF FFFF	Kernel	~Bdsack0
0100 0000–01FF FFFF	System ROM	~Bdsack0 & ~Bdsack1
0400 0000–04FF FFFF	NVRAM	~Bdsack0
0500 0000–050F FFFF	System dynamic RAM	~Bdsack0 & ~Bdsack1
0600 0000–06FF FFFF	Floppy	~Bdsack0
0700 0000–07FF FFFF	DSP space	~Bdsack1
0800 0000–08FF FFFF	Display address space	~Bdsack0 or ~Bdsack1
0900 0000–09FF FFFF (except for 09C0 0000–09DF FFFF)	System memory mapped I/O	~Bdsack0
0D00 0000–0DFF FFFF	Dual parallel-to-serial interface to the Front Panel and Acquisition Processors	~Bdsack0

Table 1–18: A11 DRAM Processor/Display Wait State Generation

Name	a27	a26	a25	a24	# of wait states	size	enablebus
KERNEL	0	0	0	0	3	byte	no
SYS ROM	0	0	0	1	var	long	yes
OPTION1	0	0	1	0	n/a	n/a	n/a
OPTION2	0	0	1	1	n/a	n/a	n/a
NVRAM	0	1	0	0	1	byte	yes
SYSRAM	0	1	0	1	0 or 1	n/a	n/a
FLOPPY	0	1	1	0	9	byte	yes
DSP	0	1	1	1	n/a	word	yes
DISPLAY	1	0	0	0	n/a	word/byte	yes
SYSMMIO	1	0	0	1	0	byte	yes
XPANDRAM	1	0	1	0	n/a	n/a	n/a
SYS ROM II	1	0	1	1	VAR	LONG	YES SPARE
NA1	1	1	0	0	n/a	n/a	n/a
DUART	1	1	0	1	3	BYTE	YES
IOCUS	1	1	1	0	n/a	n/a	n/a
NA2	1	1	1	1	n/a	n/a	n/a

n/a = not applicable

var = depends on sysromwts0–1 (00 – 0 wait states, 01 – 1, 10 – 2, 11 – 3)

Table 1–19: A11 DRAM Processor/Display DUART Interface Signals

Signal	Serial Port	U1317 Pin	Definition
FPPRXD	Front Panel Processor	33	Received Data (transmitted by the 68020, received by the Front Panel Processor)
FPPTXD	Front Panel Processor	35	Transmit Data (by the Front Panel Processor)
ACQRXD	Acquisition Processor	13	Received Data (by the Acquisition Processor)
ACQTXD	Acquisition Processor	11	Transmit Data (by the Acquisition Processor)
FPPRXRDY	Front Panel Processor	8	Receive Ready (Front Panel Processor is ready to receive data)
ACQRXRDY	Acquisition Processor	5	Receive Ready
FPPTXRDY	Front Panel Processor	30	Transmit Ready (DUART is ready to receive from the Front Panel Processor)
ACQTXRDY	Acquisition Processor	16	Transmit Ready
TP49		15	Timer Frequency square wave
TP50		31	Receiver Clock

Table 1–20: A10 Acquisition Demultiplexer DB Memory Map

Address	R/W	Initialized	Use
0	R/W	Zero at power-up	Acquisition Memory DB addressing control
1	R/W	Zero at power-up	Acquisition done and point available control
2	R/W	—	Data for programmable inverter
3	R/W	—	Data for clip detector inverter
4	R/W	—	Trigger control
5	R/W	—	Pre-trigger count
6	R/W	—	Post-trigger count
7	R/W	—	Start value for address counter
8	R/W	—	Stop value for address counter
9	R/W	—	Decimator control
A	R/W	—	Decimator divider count
B	R/W	—	Hi-res decimator shift count
C	R	—	Roll data register
D	R	—	Status register 1
E	R	—	Status register 2
F	R	—	Value of address counter at acquisition done
10	R	—	Value of address counter at trigger
11	R	—	Value of trigger time (least significant word) at trigger
12	R	—	Value of trigger time (middle word) at trigger
13	R	—	Value of trigger time (most significant word) at trigger
14	R	—	Value of trigger synchronizer counter at trigger
15	R	—	Current pre-trigger count
16	R	—	Current post-trigger count
17	R/W	Zero at power-up	Input control / diagnostic counter
18	R/W	—	Hi-res decimator 20-bit incrementer and diagnostic control register 1
19	R/W	—	Hi-res decimator 20-bit incrementer and diagnostic control register 2

Table 1–21: Device Interrupt Levels

Interrupt Level	Device	Interrupt Signal
Level 0	None	
Level 1	Floppy	Floppy
Level 2	Duart Interrupt (Acquisition and Front Panel Processor Communications)	DUART
Level 3	FIFO Interrupt and DSP Interrupt	FIFO and TRISTAR
Level 4	GPIB Interrupt	GPIB
Level 5	Option 1 Interrupt, Option 2 Interrupt, and I/O Option Bus Interrupt	OPTION1, OPTION2, and IOBUS
Level 6	Display Interrupt to System Processor, Console Interrupt, and Timer (6.5536 ms periodic interrupt)	DISPLAY, CONSOLE, and TIMER
Level 7	50 Ω overload interrupt, and PFBAR Interrupt (power is going away in ~10 ms)	50OHMINT, POWERFAIL

Table 1–22: Interrupt Mask Register 0900 0000 (R/W)

68020 Data Bit	Signal Name	Description
D31	MSKFLOPPYINT	Masks floppy interrupt
D30	MSKOPTION2INT	Masks option board 2 interrupt
D29	MSKFIFO	Masks FIFO interrupt
D28	MSKIOINT	Masks I/O bus interrupt
D27	MSKDUART	Masks Duart interrupt
D26	MSKOPTION1INT	Masks option board 1 interrupt
D25	MSKTIMER	Masks timer interrupt
D24	MSKDISP	Masks display interrupt

Table 1–23: Miscellaneous Register 0920 0000 (R/W)

680020 Data Bit	Signal Name	Description
D31	~RESETACQP	Resets acquisition processor (not an interrupt mask)
D30	~020INTTS	If asserted, interrupts Tristar (not an interrupt mask)
D29	~TSRESET	Resets the DSP. Can be asserted to forcibly take the DSP bus. Deasserting restarts the DSP
D28	SYSROMWTS1	Most significant bit of the number of system ROM wait states
D27	SYSROMWTS0	Least significant bit of the number of system ROM wait states
D26	MASKTSINT020	Masks the DSP interrupts to the CPU
D25	BUSREQ	Requests the DSP bus (the nice mode of operation)
D24	TSPP = Write TSFO = Read	Bits for the DSP diagnostic testing

Table 1–24: Interrupt Read Register 1 0940 0000 (Read Only)

680020 Data Bit	Signal Name	Description
D31	~FLOPPYINT	Application memory card interrupt
D30	~OPTION2INT	Interrupt from option compartment number 2
D29	~FIFOINT	FIFO interrupt (the DSP has placed something in FIFO)
D28	~IOINTERRUPT	I/O bus interrupt
D27	~DUARTINT	DUART interrupt
D26	~OPTION1INT	Interrupt from option compartment number 1
D25	~TIMERINT	6.5536 ms timer interrupt
D24	~DISPINT020	Display interrupt 68020

Table 1–25: Interrupt Read Register 2 0960 0000 (Read Only)

680020 Data Bit	Signal Name	Description
D31	LOW	
D30	BUSGRANT	The DSP has relinquished the D1, D2, and IM busses. Automatically asserted during ~TSRESET.
D29	~PF	First indication that power is going away, in 10 ms
D28	~50OHMINT	50 Ω attenuator overload interrupt
D27	~CONSOLEINT	Interrupt from cardedge console port
D26	~TSINT020	DSP interrupt to the CPU
D25	~GPIBINT	GPIB interrupt
D24	~LOW	

Table 1–26: Troubleshooting Procedure For LED Display

Test Name	LED Display (a failed test is preceded by a flashing decimal)	A11 DRAM Processor/Display Troubleshooting Procedure
Bus Control Read	1	Bus Control Register
Kernel RAM 1	2	Kernel RAM
Kernel RAM 2	3	Kernel RAM
Kernel RAM 3	4	Kernel RAM
BootROM Check Sum	5	BootROM Control
Bus Error Timeout	6	CPU Bus Error
Write Bus Control	7	Bus Control Register
CPU Interrupt Mask Register	8	CPU Interrupt
CPU Miscellaneous Register	9	CPU Interrupt
Timer Interrupt	a	Timer Interrupt
NV Ram Dsacks	b	Bdsack
FlashROM programming voltage is applied. NVRam is write protected.	c	On the A11 DRAM Processor/Display board press S1002 towards the back of the oscilloscope and cycle power.
FlashROM DSACKS	d	Bdsack
FlashROM Check Sum	e	FlashROM
ID Register The LED displays the A11 DRAM Processor/Display ID in hex: the most significant nibble (4 bits) first and then the least significant nibble.		ID Register

The Columbia primitive input is an eight bit dip switch (S1001) on the A11 DRAM Processor/Display board. When the system powers up the system processor honors any special requests made by the dip switch. The eight switches are active in the open position.

Table 1–27: DIP Switch Options

DIP Selection (8–1)	Action
0010 0000	Enter SDM Monitor via the GPIB
0011 0000	Enter SDM Monitor via Console RS-232
0110 0000	Expand error log and increase diag messages
0101 0000	Do not attach the ethernet
0100 1000	Do not add extra ram to pool
0100 0100	Do not execute diagnostics
0100 0010	Do not execute higher level code
0100 0001	Do not execute system ram test
1X00 0000	Loop or Skip ALL bootrom Tests
1X00 0001	Bus Control Read
1X00 0010	Kernel Ram Test 1
1X00 0011	Kernel Ram Test 2
1X00 0100	Kernel Ram Test 3
1X00 0101	Bootrom Check Sum
1X00 0110	Bus Error Timeout Test
1X00 0111	Write Bus Control (open)
1X00 1000	Interrupt Mask Register 1
1X00 1001	Miscellaneous Register
1X00 1010	Timer Interrupt (Auto-Vector)
1X00 1011	NV Ram DSACKS
1X00 1100	Flashrom prog. voltage applied. NV Ram is write protected.
1X00 1101	Flashrom DSACKS
1X00 1110	Flashrom Check Sum
1X10 0000	Loop or Skip ALL Kernel Ram Tests
1X10 0001	Loop or Skip ALL Kernel Tests
1X10 0010	*Walk 7 Segment LED
1X10 0011	*Display Processor Version Number

If X = 1 (open) – *skip* (do not execute) test(s).

If X = 0 (closed) – *loop* on test(s).

*** executes forever – power must be cycled to stop test**

The Columbia primitive output consists of a 7 segment LED (DS1) on the A11 DRAM Processor/Display board.

Table 1–28: A11 DRAM Processor/Display LED (DS1)

LED Display	Explanation
Decimal Point (DP)	When this precedes one of the hex numbers, the particular test the number represents has failed.
.E	This indicates an exception
.11	This indicates an interrupt
.P	This indicates a non maskable interrupt
.8	Displayed at power-up or reset
0	First displayed after power up
1	Bus Control Read diagnostic
2	Kernel RAM 1 diagnostic
3	Kernel RAM 2 diagnostic
4	Kernel RAM 3 diagnostic
5	BootROM Check Sum diagnostic
6	Bus Error Timeout diagnostic
7	Write Bus Control diagnostic
8	CPU Interrupt Mask Register diagnostic
9	CPU Miscellaneous Register diagnostic
a	Timer Interrupt diagnostic
b	NV RAM Dsacks diagnostic
c	FlashROM programming voltage is applied. The NV RAM is write protected.
d	FlashROM Dsacks
e	FlashROM Checksum

Maintenance

Firmware Reprogramming

Minimum Tool & Equipment List

- TDS 7U01 Upgrade Kit
- IBM Compatible PC
- GPIB card (such as the National Instruments PCII (Tek GURU), PCIIA (Tek GURU II), PCII/IIA (Tek S3FG210) cards)
- GPIB cable (such as Tektronix part number 012-0991-00)
- GPIB driver software appropriate to the GPIB card (such as NI-488.2 software)
- TDS 520B model oscilloscope

Instructions

Setting Up PC & TDS

The following instructions will guide you through setting up your PC and TDS oscilloscope

Attach an IEEE Std 488.1-1987 GPIB cable (available from Tektronix as part number 012-0991-00) to the 24-pin GPIB connector on the rear panel of the TDS, as shown in Figure 2–1.

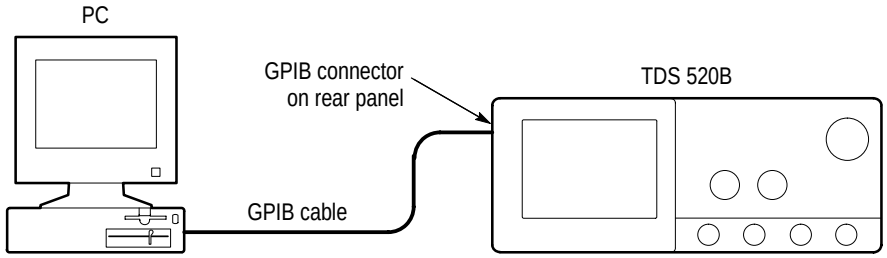


Figure 2–1: PC & TDS setup

Setting the GPIB Parameters

You need to set the GPIB parameters of the digitizing oscilloscope to match the configuration of the bus. Once you have set these parameters, you can control the digitizing oscilloscope through the GPIB interface.

1. Press the **UTILITY** (**SHIFT DISPLAY**) button to display the Utility menu.
2. Press the **System** button in the main menu until it highlights the **I/O** selection in the pop-up menu (See Figure 2–2).

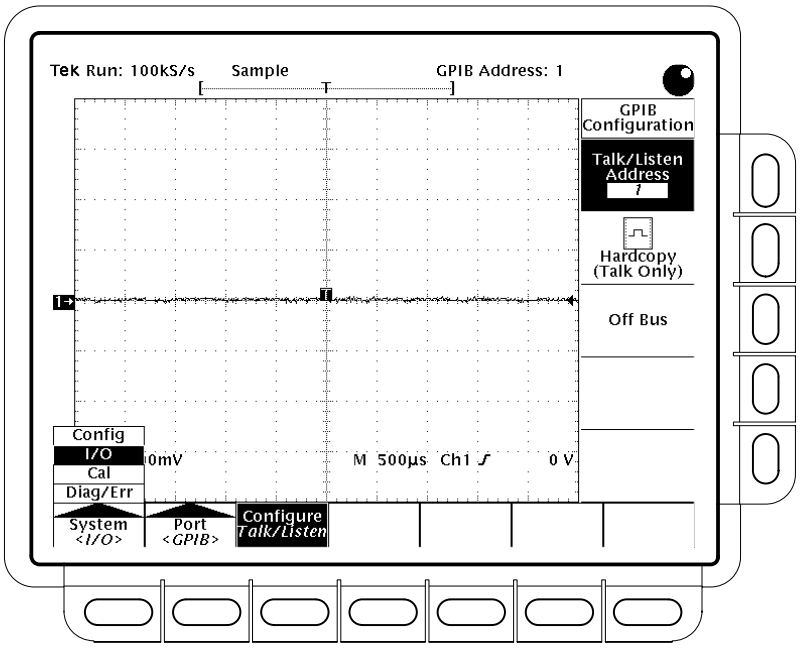


Figure 2–2: Selecting the I/O System in the Main Menu

3. Press the **Port** button in the main menu until it highlights the **GPIB** selection in the pop-up menu (See Figure 2–2).
4. Press the **Configure** button in the main menu to display the GPIB Configuration side menu (See Figure 2–2).
5. Press the **Talk/Listen Address** side menu button, and set the GPIB address using either the general purpose knob or, if available, the keypad.

Setting Up GPIB Card

The following instructions will guide you through setting up your PC with an approved GPIB card. The card works with the Firmware Upgrade disk (TDS500).

Instructions for installing an approved card (such as the National Instruments PCII (Tek GURU), PCIIA (Tek GURU II), PCII/IIA (Tek S3FG210) cards) and

accompanying driver software (such as NI-488.2 software) come with your card. The following hints will help you set up the card if your GPIB installation instructions are not readily available.

1. For National Instruments PCII (Tek GURU) card setup:
   - **a.** Remove PCII IRQ jumper.
   - **b.** Set PCII DMA jumpers to DRQ1 and Dack1.
   - **c.** Set DIP switch to: OFF = 1,2,3,5,6,7; ON = 4
   - **d.** Add to autoexec.bat file the command: SET GPIB0 = PC2 1 0 87
   - **e.** Add to autoexec.bat file the command: SET GPIB1 = PC2 1 0 87
2. For National Instruments PCIIA (Tek GURU II) card setup:
   - **a.** Remove PCIIA IRQ jumper.
   - **b.** Set PCIIA DMA jumpers to R1 and A1.
   - **c.** Set dip switch to: OFF = 1,2,3; ON = 4,5
   - **d.** Add to autoexec.bat file the command: SET GPIB0 = PC2A 1 0 0
   - **e.** Add to autoexec.bat file the command: SET GPIB1 = PC2A 1 0 0
3. For National Instruments PCII/IIA (Tek S3FG210) (8 Bit Bus) card setup:
   - **a.** Set DIP switch #9 to: OFF = PCII or ON = PCIIA.
   - **b.** Set the first 7 DIP switches (if emulating a PCII) or first 5 DIP switches (if emulating a PCIIA) according to the information outlined for those cards in step 1 and 2 above.
   - **c.** In either case, set DIP switch 8 to OFF. This uses 7210 handshake protocol.
   - **d.** Remove PCII/IIA IRQ jumper.
   - **e.** Set PCII/IIA DMA jumpers to DRQ1 and Dack1.
   - **f.** Add lines to the autoexec.bat file to mirror the ones used for the cards you wish to emulate — as documented above.

4. RIC 386 setup:

   The RIC 386 has a built-in GPIB board. It emulates the National Instruments PCII card. The default settings of this card are different from the stand-alone cards mentioned above. To use a RIC 386 with factory default configurations:

   a. Add to autoexec.bat file the command: SET GPIB0 = PC2 1 5 87

   b. Add to autoexec.bat file the command: SET GPIB1 = PC2 1 5 87

Installation on Hard Disk

The following instructions will guide you through installing the TDS firmware upgrade software on your PC.

1. Insert the new firmware disk into the PC's floppy disk drive.
2. Move to the floppy drive containing the disk (typically A drive).

   Type `A:`

   Press **RETURN**.

3. From the DOS prompt:

   Type `hdinstal` <space><drive>\<instrument type.firmware>

   Press return.

   Example: `hdinstal c:\loadfw`

Loading Firmware

The following instructions will guide you through installing the firmware on your oscilloscope.

1. Turn oscilloscope power OFF.
2. Insert a small, non-conductive object (adjustment tool) into the front access hole located on the right side of the oscilloscope near the front panel. Push the non-conductive object inward to position the NVRAM protection rocker switch in the Unprotected (write-enable position). See Figure 2–3.
3. Turn oscilloscope power ON.

***NOTE**. With the NVRAM protection rocker switch in the Unprotected (write-enable) position, the oscilloscope will NOT power up to normal operation.*

4. Move to the disk and directory containing the firmware. On the PC:

   Type `loadfw`

   Press **RETURN**

   This starts the program.

5. In the PC, highlight the **Load Firmware** window and press **RETURN**.

6. Highlight the **Load TDS<Model, Version>**window and press **RETURN**. The <Model, Version> stands for the actual TDS model and version that appears in your software. For example, if you were loading version 4.0 firmware on a TDS 520, the menu item might read:

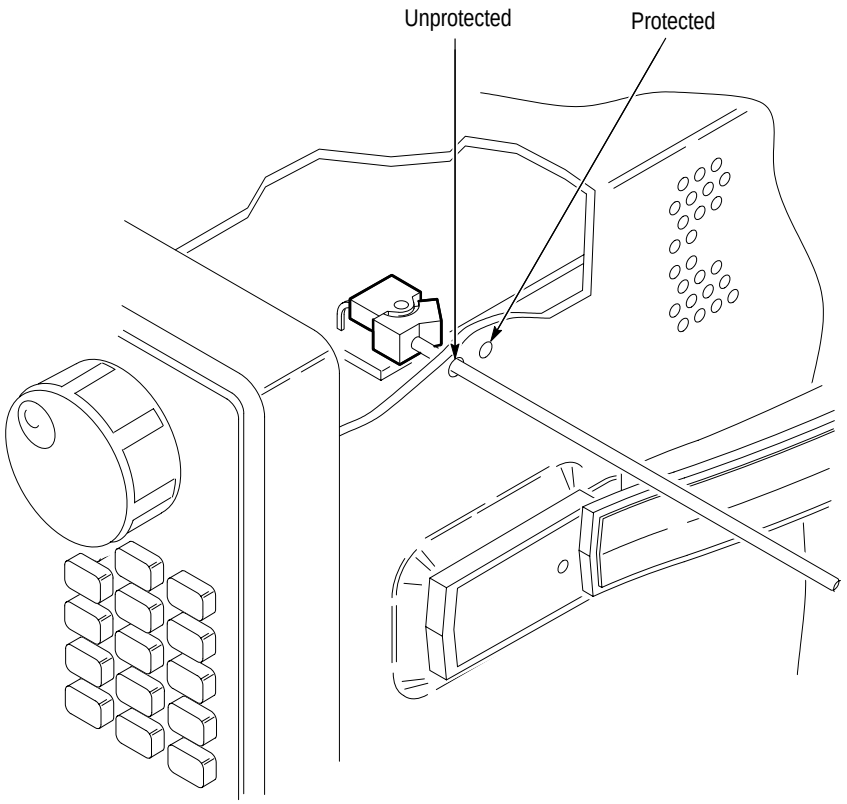


Figure 2–3: Accessing the Protection Switch

   Load TDS520B ver x.x.

7. To exit, highlight **Quit**, press **RETURN**, highlight **Exit**, press **RETURN**.

8. Turn the oscilloscope power OFF.

9. Insert a small, non-conductive object (adjustment tool) into the rear access hole located on the right side of the oscilloscope near the front panel. Push the non-conductive object inward to position the NVRAM protection rocker switch in the Protected (write-protect) position. See Figure 2–3.

10. Refer to Section 4 *Performance Verification* and Section 5 *Adjustment Procedures* in the TDS 520B Service Manual and calibrate as required.

Verify Installation

Press SHIFT and STATUS buttons. Verify that the version number shown of the screen is correct.

Storage and Shipment Instructions

Instructions

If you ship the oscilloscope, pack it in the original shipping carton and packing material. If the original packing material is not available, package the instrument as follows:

1. Obtain a corrugated cardboard shipping carton with inside dimensions at least 15 cm (6 inches) taller, wider, and deeper than the oscilloscope. The carton must be constructed of cardboard with 170 kg (375 pound test strength).
2. If you are shipping the oscilloscope to a Tektronix field office for repair, attach a tag to the oscilloscope showing the instrument owner and address, the name of the person to contact about the instrument, the instrument type, and the serial number.
3. Wrap the oscilloscope with polyethylene sheeting or equivalent material to protect the finish.
4. Cushion the oscilloscope in the carton by tightly packing dunnage or urethane foam on all sides between the carton and the oscilloscope. Allow 7.5 cm (3 inches) on all sides, top, and bottom.
5. Seal the carton with shipping tape or an industrial stapler.

Specifications

Table 2–1: Characteristics — Environmental

Name	Description
Atmospherics	Temperature (no diskette in floppy drive): TDS 520B: Operating: +4° C to +50° C Nonoperating: –22° C to +60° C Relative humidity (no diskette in floppy drive): Operating: 20% to 80%, at or below +32° C, upper limit derates to 30% relative humidity at +45° C Nonoperating: 5% to 90%, at or below +41° C, upper limit derates to 30% relative humidity at 60° C Altitude: To 4570 m (15,000 ft.), operating To 12190 m (40,000 ft.), nonoperating
Dynamics	Random vibration (optional floppy diskette not installed): 0.31 g rms, from 5 to 500 Hz, 10 minutes each axis, operating 3.07 g rms, from 5 to 500 Hz, 10 minutes each axis, nonoperating
Storage	Warehouse Stacking (uncontrolled warehouse climate): Up to 5 units high. Storage Shelf-Life: Performance can only be checked by actual field use. Component selection during design is made with the objective of meeting or exceeding the following Storage Shelf–life specification: $\geq$ 6 months if desiccant is included inside normal package, and normal package is placed inside a vacuum sealed bag and additional outer package.

Replaceable Electrical Parts

Replaceable Electrical Parts

Parts Ordering Information

Replacement parts are available from or through your local Tektronix, Inc. Field Office or representative.

When ordering parts, include the following information in your order: part number, instrument type or number, serial number, and modification number if applicable.

If a part you have ordered has been replaced with a new or improved part, your local Tektronix, Inc. Field Office or representative will contact you concerning any change in part number.

Change information, if any, is located at the rear of this manual.

List of Assemblies

A list of assemblies can be found at the beginning of the electrical parts list. The assemblies are listed in numerical order. When the complete component number of a part is known, this list will identify the assembly in which the part is located.

Cross Index-Mfr. Code Number to Manufacturer

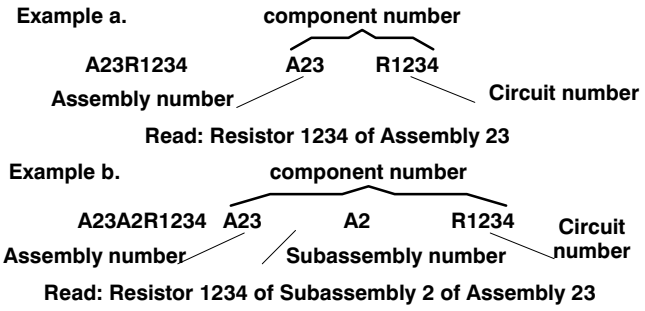
The Mfg. Code Number to Manufacturer Cross Index for the electrical parts list is located immediately after this page. The cross index provides codes, names, and addresses of manufacturers of components listed in the electrical parts list.

Abbreviations

Abbreviations conform to American National Standard Y1.1.

Component Number

(column 1 of the parts list)



The circuit component's number appears on the diagrams and circuit board illustrations. Each diagram and circuit board illustration is clearly marked with the assembly number. Assembly numbers are also marked on the mechanical exploded views located in the mechanical parts list. The component number is obtained by adding the assembly number prefix to the circuit number.

The electrical parts list is divided and arranged by assemblies in numerical sequence (e.g., assembly A1 with its subassemblies and parts, precedes assembly A2 with its subassemblies and parts).

Chassis-mounted parts have no assembly number prefix and are located at the end of the electrical parts list.

Tektronix Part No.

(column 2 of the parts list)

Indicates part number to be used when ordering replacement part from Tektronix.

Serial No.

(columns 3 & 4 of the parts list)

Column three (3) indicates the serial number at which the part was first used. Column four (4) indicates the serial number at which the part was removed. No serial number entered indicates part is good for all serial numbers.

Name & Description

(column five of the parts list)

In the parts list, an item name is separated from the description by a colon (:). Because of space limitations, an item name may sometimes appear as incomplete. For further item name identification, the U.S. Federal Catalog handbook H6-1 can be utilized where possible.

Mfr. Code

(column 6 of the parts list)

Indicates the code number of the actual manufacturer of the part. (Code to name and address cross reference can be found immediately after this page.)

Mfr. Part No.

(column 7 of the parts list)

Indicates actual manufacturer’s part number.

Manufacturers Cross Index

Mfr. Code	Manufacturer	Address	City, State, Zip Code
00779	AMP INC.	CUSTOMER SERVICE DEPT PO BOX 3608	HARRISBURG, PA 17105–3608
01295	TEXAS INSTRUMENTS INC	SEMICONDUCTOR GROUP 13500 N CENTRAL EXPRESSWAY PO BOX 655303	DALLAS, TX 75272–5303
02113	COILCRAFT, INC.	1102 SILVER LAKE RD.	CARY, IL 60013
04222	AVX/KYOCERA	PO BOX 867	MYRTLE BEACH, SC 29577
04713	MOTOROLA INC	SEMICONDUCTOR PRODUCTS SECTOR 5005 E MCDOWELL ROAD	PHOENIX, AZ 85008–4229
06090	RAYCHEM CORP	300 CONSTITUTION DR	MENLO PARK, CA 94025–1111
08111	MF ELECTRONICS CORP	10 COMMERCE DRIVE	NEW ROCHELLE, NY 10801
09353	C & K COMPONENTS CORP	15 RIVERDALE AVENUE	NEWTON, MA 02158
09969	DALE ELECTRONIC COMPONENTS	EAST HWY 50 P.O. BOX 180	YANKTON, SD 57078
0B0A9	DALLAS SEMICONDUCTOR	4350 BELTWOOD PKWY S	DALLAS, TX 75244
0CVK3	ALLEGRO MICROSYSTEMS INC	115 NE CUTOFF PO BOX 2036	WORCHESTER, MA 01613–2036
0J9P9	GEROME MFG CO INC	PO BOX 737 403 NORTH MAIN	NEWBERG, OR 97132
0JR04	TOSHIBA AMERICA INC.	ELECTRONICS COMPONENTS DIV 9775 TOLEDO WAY	IRVINE, CA 92718
0K6N4	PARADIGM TECHNOLOGY INC	71 VISTA MONTANA	SAN JOSE, CA 95134
0KB01	STAUFFER SUPPLY CO	810 SE SHERMAN	PORTLAND, OR 97214–4657
0KB05	NORTH STAR NAMEPLATE INC	5750 NE MOORE COURT	HILLSBORO, OR 97124–6474
0LUA3	PHILIPS COMPONENTS	100 PROVIDENCE PIKE	SLATERSVILLE, RI 02876
0MS63	QUALITY TECHNOLOGIES CORP	610 N MARY AVENUE	SUNNYVALE, CA 94086
14301	ANDERSON ELECTRONICS INC	PO BOX 89	HOLLIDAYSBURG, PA 16648–0089
17856	TEMIC NORTH AMERICA	(SILICONIX & MATRA MHS) 2201 LAURELWOOD RD	SANTA CLARA, CA 95954–1516
18796	MURATA ELECTRONICS N AMERICA	1900 WEST COLLEGE AVE.	STATE COLLEGE, PA 16801–2723
1CH66	PHILIPS SEMICONDUCTORS	811 E ARQUES AVE PO BOX 3409	SUNNYVALE, CA 94086–3409
22526	BERG ELECTRONICS INC	857 OLD TRAIL ROAD	ETTERS, PA 17319
24355	ANALOG DEVICES	1 TECHNOLOGY DRIVE	NORWOOD, MA 02062
27014	NATIONAL SEMICONDUCTOR CORP	2900 SEMICONDUCTOR DR PO BOX 58090 MS 30–115	SANTA CLARA, CA 95051–0606
27264	MOLEX PRODUCTS COMPANY	2222 WELLINGTON CT.	LISLE, IL 60532
31918	ITT SWITCH PRODUCTS	8081 WALLACE RD	EDEN PRAIRIE, MN 55344–8798
32997	BOURNS INC	TRIMPOT DIVISION 1200 COLUMBIA AVE	RIVERSIDE, CA 92507–2114
34335	ADVANCED MICRO DEVICES INC	ONE AMD PLACE PO BOX 3453	SUNNYVALE, CA 94088–3453

Manufacturers Cross Index (Cont.)

Mfr. Code	Manufacturer	Address	City, State, Zip Code
34649	INTEL CORPORATION	3065 BOWERS PO BOX 58130	SANTA CLARA, CA 95051–8130
50139	ALLEN–BRADLEY COMPANY INC	ELECTRONIC COMPONENTS DIVISION 1414 ALLEN BRADLEY DRIVE	EL PASO, TX 79936
50434	HEWLETT PACKARD	370 W TRIMBLE ROAD	SAN JOSE, CA 95131–1008
52814	TECH–ETCH INC	45 ALDRIN ROAD	PLYMOUTH, MA 023604886
52961	NORTHWEST STAMPING INC.	86365 COLLEGE VIEW RD.	EUGENE, OR 97405
53387	3M COMPANY	ELECTRONICS PRODUCTS DIV 3M AUSTIN CENTER	AUSTIN, TX 78769–2963
56235	STATE OF THE ART INC	2470 FOX HILL ROAD	STATE COLLEGE, PA 16803179
56845	DALE ELECTRONIC COMPONENTS	2300 RIVERSIDE BLVD PO BOX 74	NORFOLK, NE 68701
57489	OHMTEK	2160 LIBERTY DR	NIAGRA FALLS, NY 14304
59124	KOA SPEER ELECTRONICS INC	BOLIVAR DRIVE PO BOX 547	BRADFORD, PA 16701
5Y475	BEAVERTON PARTS MFG CO INC	1800 NW 216TH AVE	HILLSBORO, OR 97124–6629
60395	XICOR INC	851 BUCKEYE CT	MILPITAS, CA 95035–7408
61429	FOX ELECTRONICS	DIV OF FOX ENTERPRIXED INC 5842 CORPORATION CIRCLE	FORT MEYERS, FL 33905
62104	CALIFORNIA EASTERN LABS INC	4590 PATRICK HENRY DR	SANTA CLARA, CA 95054–3309
62643	UNITED CHEMI–CON INC	9801 W HIGGINS RD	ROSEMONT, IL 60018–4771
62786	HITACHI AMERICA LTD	HITACHI PLAZA 2000 SIERRA POINT PKWY	BRISBAINE, CA 94005
64155	LINEAR TECHNOLOGY CORP.	1630 MCCARTHY BOULEVARD	MILPITAS, CA 950357487
64667	NATIONAL INSTRUMENT	6504 BRIDGEPOINT PKWY	AUSTIN, TX 78730–5039
66302	VLSI TECHNOLOGY INC	1109 MCKAY DR.	SAN JOSE, CA 95131
71785	CINCH CONNECTORS	1501 MORSE AVE.	ELK GROVE VILLAGE, IL 60007
80009	TEKTRONIX INC	14150 SW KARL BRAUN DR PO BOX 500	BEAVERTON, OR 97077–0001
82567	REEVES–HOFFMAN	DIV. DYNAMICS CORP. AMERICA 400 W. NORTH STREET	CARLISLE, PA 17013
85480	BRADY USA	NAMEPLATE DIVISION P O BOX 571 346 ELIZABETH BRADY RD	HILLSBOROUGH, NC 27278
91637	DALE ELECTRONIC COMPONENTS	1122 23RD ST	COLUMBUS, NE 68601
TK0588	UNIVERSAL PRECISION PRODUCT	1775 NW CORNELIUS PASS RD	HILLSBORO, OR 97124
TK1163	POLYCAST INC	9898 SW TIGARD ST	TIGARD, OR 97223
TK1920	TOKIN AMERICA INC	155 NICHOLSON LANE	SAN JOSE, CA 95134
TK2058	TDK CORPORATION OF AMERICA	1600 FEEHANVILLE DRIVE	MOUNT PROSPECT, IL 60056
TK2441	INTERNATIONAL MICROELECTRONIC PRODUCTS	2830 NORTH 1ST ST	SAN JOSE, CA 95134
TK2469	UNITREK CORPORATION	3000 LEWIS & CLARK HWY SUITE 2	VANCOUVER, WA 98661

Manufacturers Cross Index (Cont.)

Mfr. Code	Manufacturer	Address	City, State, Zip Code
TK2519	ALLIANCE SEMICONDUCTOR CORP	3099 N FIRST ST	SAN JOSE, CA 95134–2006
TK2597	MERIX CORP	1521 POPLAR LANE	FOREST GROVE, OR 97116
TK2598	MAXIM – ASICS	14150 SW KARL BRAUN DRIVE M/S 59–420	BEAVERTON, OR 97077
TK2617	MODERN METALS	HONG KONG LTD 8/F, NAPPIN HOUSE 98 TEXACO RD, TSUEN WAN,	HONG KONG, CHINA
TK6051	CITIZEN ELECTRONICS CO LTD	4126 E LA PALMA	ANAHEIM, CA 92807–1814

Manufacturers Cross Index , A17 and A18 Low Voltage Power Supply

Mfr. Code	Manufacturer	Address	City, State, Zip Code
D5243	Roederstein Ernst GMBH	Ludmillastrasse 23	8300 Landshut Germany
K1196	Zetex PLC	Fields New Road	Chadderton Oldhan Lancs OL9 8NP United Kingdom
TK1913	WIMA The Inter–Technical Group Ind	2269 Saw Mill River Road P. O. Box 127	Elmsford, NY 10523
0DBE5	IRC Inc.	6114 LaSalle Ave. No. 291	Piedmont, CA 94611
0Y5T9	Datatronics	2026 Nickerson Blvd	Hampton, VA 23663
00199	Marcon Electronic		Kearny, NJ 07032
00779	Amp Inc.	2800 Fulling Mill Rd P.O. Box 3608	Harrisburg, PA 17105–3608
01295	Texas Instruments Semiconductor Group	8330 LBJ Expy	Dallas, TX 75265–5303
01961	Pulse Engineering	12220 World Trade Dr. P.O. Box 12235	San Diego, CA 92112–2235
02113	Coilcraft	1102 Silver Lake Rd.	Cary, IL 60013–1658
1GB45	Plessey Semiconductor	1717 E. 116th St. Suite 210	Carmel, IN 46032–3572
1GM54	Zytec	7575 Market Pl Dr.	Eden Prairie, MN 55344–3637
15238	ITT Semiconductors	500 Broadway P. O. Box 168	Lawrence, MA 01841–3002
16299	AVX Corp.	3900 Electronics Dr.	Raleigh, NC 27604–1620
18796	Murata Electronics America	1900 West College Ave.	State College, PA 16801–2723
19701	North American Philips Corp Philips Components	1440 W Indiantown Rd.	Jupiter, FL 33458
27014	National Semiconductor	2900 Semiconductor Drive	Santa Clara, CA 95051–0606
27264	Molex	2222 Wellington Ct.	Lisle, IL 60532–1613
31433	Kemet Electronics	2835 Kemet Way	Simpsonville, SC 29681
49588	S B Electronics Inc.	131 S Main	Barre, VT 05641
50088	SGS–Thomson Microelectronics	1310 Electronics Dr.	Carrollton, TX 75006–6905
54648	Microsemi Corp.	23201 S Normandie Ave.	Torrance, CA 90501

Manufacturers Cross Index (Cont.), A17 and A18 Low Voltage Power Supply

Mfr. Code	Manufacturer	Address	City, State, Zip Code
54937	DeYoung Mfg. Inc.	12920 NE 125th Way	Kirkland, WA 98034–7716
55464	Central Semiconductor	145 Adams Ave.	Hauppauge, NY 11788–3603
55680	Nichicon America	927 E. State Pky	Schaumburg, IL 60195–4526
56289	Spraque Electric	267 Lowell Rd.	Hudson, NH 03051–4900
57222	Nano Pulse Industries	440 Nibus St.	Brea, CA 92621–3204
59124	KOA Speer Electronics	Bolivar Dr. P. O. Box 547	Bradford, PA. 16701
59993	International Rectifier Semiconductor Div.	233 Kansas St.	El Segundo, CA 90245–4316
6AX52	Philips Discrete Products Div.	2001 W. Blue Heron Blvd. P.O. Box 10330	West Palm Beach, Fl. 33404
60705	Cera–Mite Corp.	1327 6th Ave.	Grafton, WI 53024–1831
61058	Matsushita Electric Corp. of America Panasonic Industrial Co. Div.	Two Panasonic Way	Secaucus, NJ 07094
61529	Aromat Corp.	629 Central Ave.	New Providence, NJ 07974
62643	United Chemi–con Inc	9801 W Higgins Rd.	Rosemont, IL 60018–4771
64155	Linear Technology	1630 McCarthy Blvd.	Milpitas, CA 95035–7487
65964	Evox–Rifa Inc.	100 Tri–State Intl. Suite 290	Lincolnshire, IL 60069
7J069	TDK Corp. of America	4015 W. Vincennes Rd.	Indianapolis, IN 46268–3008
7K104	World Products	19654 8th St. E P. O. Box 517	Sonoma, CA 95476
72699	General Instrument Corp.	767 5th Ave.	New York, NY 10153–0082
75263	Keystone Carbon	1935 State St.	Saint Marys, PA 15857
76978	Motorola Component Div.	4800 Alameda Blvd. NE	Albuquerque, NM 87113
8Z573	J S Terminal Corp. of America	1380 Brummel Ave.	Elk Grove Village, IL 60007–2109
86845	Marquardt Co.	16621 Saticoy St. P. O. Box 10200	Van Nuys, CA 91409
91637	Dale Electronics	1122 23rd St. P. O. Box 609	Columbus, NE 68601–3632
97520	Basler Electric	Rt. 143 P. O. Box 269	Highland, IL 62249–9101

Replaceable Electrical Parts List, A10 Acquisition Board

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10	671–4494–00			CIRCUIT BD ASSY:ACQUISITION,TDS520BCM	80009	671–4494–00
A10C189	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C301	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C302	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C303	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C304	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C305	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C306	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C307	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C308	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C309	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C310	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C311	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C312	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C313	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C314	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C315	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C316	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C317	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C318	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C319	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C320	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C321	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10C322	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C401	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C402	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C403	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C404	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C405	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C406	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C407	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C408	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C409	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C410	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C411	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C412	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C413	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C414	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C415	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C416	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C417	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C418	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C419	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C420	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C421	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C422	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10C500	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C501	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C502	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C503	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C510	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C511	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C520	283–5188–00			CAP,FXD,CERAMIC:MLC,100PF,5%,100V,NPO,1206,SM D,8MM T&R	04222	12061A101JAT1A
A10C521	283–5188–00			CAP,FXD,CERAMIC:MLC,100PF,5%,100V,NPO,1206,SM D,8MM T&R	04222	12061A101JAT1A
A10C524	283–5211–00			CAP,FXD,CERAMIC:MLC,4700PF,10%,50V,X7R,1206,8M M T&R	04222	12065C472KAT2A
A10C526	283–5211–00			CAP,FXD,CERAMIC:MLC,4700PF,10%,50V,X7R,1206,8M M T&R	04222	12065C472KAT2A
A10C527	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C528	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C530	283–5197–00			CAP,FXD,CERAMIC:MLC,330PF,5%,100V,NPO,1206,SM D,8MM T&R	04222	12061A331JAT1A
A10C533	283–5006–00			CAP,FXD,CERAMIC:MLC,5PF,+/–0.25PF,50V,NPO,1206, SMD,8MM T&R	04222	12065A5R0CAT1A
A10C534	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C535	283–5203–00			CAP,FXD,CERAMIC:MLC,1000PF,10%,100V,X7R,1206,S MD,8MM T&R	04222	12061C102KAT1A
A10C536	283–5203–00			CAP,FXD,CERAMIC:MLC,1000PF,10%,100V,X7R,1206,S MD,8MM T&R	04222	12061C102KAT1A
A10C540	283–5203–00			CAP,FXD,CERAMIC:MLC,1000PF,10%,100V,X7R,1206,S MD,8MM T&R	04222	12061C102KAT1A
A10C544	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C555	283–5203–00			CAP,FXD,CERAMIC:MLC,1000PF,10%,100V,X7R,1206,S MD,8MM T&R	04222	12061C102KAT1A
A10C644	283–5203–00			CAP,FXD,CERAMIC:MLC,1000PF,10%,100V,X7R,1206,S MD,8MM T&R	04222	12061C102KAT1A
A10C650	283–5203–00			CAP,FXD,CERAMIC:MLC,1000PF,10%,100V,X7R,1206,S MD,8MM T&R	04222	12061C102KAT1A
A10C651	283–5203–00			CAP,FXD,CERAMIC:MLC,1000PF,10%,100V,X7R,1206,S MD,8MM T&R	04222	12061C102KAT1A

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10C652	283–5203–00			CAP,FXD,CERAMIC:MLC,1000PF,10%,100V,X7R,1206,SMD,8MM T&R	04222	12061C102KAT1A
A10C653	283–5203–00			CAP,FXD,CERAMIC:MLC,1000PF,10%,100V,X7R,1206,SMD,8MM T&R	04222	12061C102KAT1A
A10C700	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A
A10C705	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A
A10C706	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A
A10C707	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A
A10C708	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A
A10C709	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A
A10C755	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A
A10C756	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A
A10C757	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A
A10C758	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A
A10C759	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A
A10C769	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A
A10C801	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C802	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C810	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A
A10C811	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A
A10C812	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A
A10C813	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A
A10C814	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A
A10C815	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A
A10C816	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10C817	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C818	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C819	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C851	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C852	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C860	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C861	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C862	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C863	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C864	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C865	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C866	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C867	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C868	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C869	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C900	283–5195–00			CAP,FXD,CERAMIC:MLC,10PF,5%,100V ,NPO,1206,SMD,8MM T&R	04222	12061A100JAT1A
A10C901	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C902	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C904	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C905	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C906	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C907	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C908	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10C909	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C935	283–5003–00			CAP,FXD,CERAMIC:MLC,0.01UF,10%,50V,X7R,1206,SM D,8MM T&R	04222	12065C103KAT060R
A10C936	283–5003–00			CAP,FXD,CERAMIC:MLC,0.01UF,10%,50V,X7R,1206,SM D,8MM T&R	04222	12065C103KAT060R
A10C937	283–5003–00			CAP,FXD,CERAMIC:MLC,0.01UF,10%,50V,X7R,1206,SM D,8MM T&R	04222	12065C103KAT060R
A10C938	283–5003–00			CAP,FXD,CERAMIC:MLC,0.01UF,10%,50V,X7R,1206,SM D,8MM T&R	04222	12065C103KAT060R
A10C939	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C940	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C941	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C942	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C945	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C946	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C948	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C949	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C950	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C951	283–5005–00			CAP,FXD,CERAMIC:MLC,4PF,+/–0.25PF,50V,NPO,1206, SMD,8MM T&R	04222	12065A4R0CAT1A
A10C952	283–5107–00			CAP,FXD,CERAMIC:MLC,22PF,5%,200V,NPO,1206,SMD, 8MM T&R	18796	GRM42–6–COG 220J200V PT
A10C953	283–5195–00			CAP,FXD,CERAMIC:MLC,10PF,5%,100V ,NPO,1206,SMD,8MM T&R	04222	12061A100JAT1A
A10C954	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C955	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C956	283–5003–00			CAP,FXD,CERAMIC:MLC,0.01UF,10%,50V,X7R,1206,SM D,8MM T&R	04222	12065C103KAT060R
A10C957	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C958	283–5197–00			CAP,FXD,CERAMIC:MLC,330PF,5%,100V,NPO,1206,SM D,8MM T&R	04222	12061A331JAT1A
A10C959	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10C1000	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1001	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1002	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1003	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1004	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1005	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1006	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1024	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1036	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1037	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1047	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1050	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1051	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1052	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1053	283–5260–00			CAP,FXD,CERAMIC:MLC,10UF,+80–20%,25V,Z5U,5.9X2. 7MM,SM2210,SMD,T&R	TK1920	1E106ZY5U–C205M–T
A10C1055	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1056	283–5211–00			CAP,FXD,CERAMIC:MLC,4700PF,10%,50V,X7R,1206,8M M T&R	04222	12065C472KAT2A
A10C1057	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1100	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1101	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1102	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1103	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1104	283–5260–00			CAP,FXD,CERAMIC:MLC,10UF,+80–20%,25V,Z5U,5.9X2. 7MM,SM2210,SMD,T&R	TK1920	1E106ZY5U–C205M–T

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10C1105	283–5260–00			CAP,FXD,CERAMIC:MLC,10UF,+80–20%,25V,Z5U,5.9X2.7MM,SM2210,SMD,T&R	TK1920	1E106ZY5U–C205M–T
A10C1106	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A
A10C1107	283–5260–00			CAP,FXD,CERAMIC:MLC,10UF,+80–20%,25V,Z5U,5.9X2.7MM,SM2210,SMD,T&R	TK1920	1E106ZY5U–C205M–T
A10C1108	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A
A10C1109	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1110	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1111	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1112	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1125	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1126	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1200	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A
A10C1201	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1202	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A
A10C1203	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1204	283–5260–00			CAP,FXD,CERAMIC:MLC,10UF,+80–20%,25V,Z5U,5.9X2.7MM,SM2210,SMD,T&R	TK1920	1E106ZY5U–C205M–T
A10C1205	283–5260–00			CAP,FXD,CERAMIC:MLC,10UF,+80–20%,25V,Z5U,5.9X2.7MM,SM2210,SMD,T&R	TK1920	1E106ZY5U–C205M–T
A10C1206	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A
A10C1207	283–5260–00			CAP,FXD,CERAMIC:MLC,10UF,+80–20%,25V,Z5U,5.9X2.7MM,SM2210,SMD,T&R	TK1920	1E106ZY5U–C205M–T
A10C1208	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A
A10C1209	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1210	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1211	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1212	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD,8MM T&R	04222	12065C104KAT(1A OR 3A)

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10C1225	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1226	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1250	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1251	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1252	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1253	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1254	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1255	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1260	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1261	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1262	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1263	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1264	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1265	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1266	283–5236–00			CAP,FXD,CERAMIC:MLC,3.0PF,+/–0.25PF,100V,NPO,120 6,SMD,8MM T&R	04222	12061A3R0CAT1A
A10C1267	283–5236–00			CAP,FXD,CERAMIC:MLC,3.0PF,+/–0.25PF,100V,NPO,120 6,SMD,8MM T&R	04222	12061A3R0CAT1A
A10C1268	283–5236–00			CAP,FXD,CERAMIC:MLC,3.0PF,+/–0.25PF,100V,NPO,120 6,SMD,8MM T&R	04222	12061A3R0CAT1A
A10C1269	283–5236–00			CAP,FXD,CERAMIC:MLC,3.0PF,+/–0.25PF,100V,NPO,120 6,SMD,8MM T&R	04222	12061A3R0CAT1A
A10C1270	283–5203–00			CAP,FXD,CERAMIC:MLC,1000PF,10%,100V,X7R,1206,S MD,8MM T&R	04222	12061C102KAT1A
A10C1271	283–5203–00			CAP,FXD,CERAMIC:MLC,1000PF,10%,100V,X7R,1206,S MD,8MM T&R	04222	12061C102KAT1A
A10C1272	283–5203–00			CAP,FXD,CERAMIC:MLC,1000PF,10%,100V,X7R,1206,S MD,8MM T&R	04222	12061C102KAT1A
A10C1273	283–5203–00			CAP,FXD,CERAMIC:MLC,1000PF,10%,100V,X7R,SMD	04222	12061C102KAT1A
A10C1290	283–5012–00			CAP,FXD,CERAMIC:MLC,1PF,+/–0.25PF,100V,NPO,8MM	04222	08051A1R0CAT1A
A10C1292	283–5012–00			CAP,FXD,CERAMIC:MLC,1PF,+/–0.25PF,100V,NPO,8MM	04222	08051A1R0CAT1A

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10C1294	321–5417–00			RES,FXD,FILM:100 OHM,1%,50V,62MW,0603,SMD	59124	RK73H1J1000FT
A10C1296	321–5417–00			RES,FXD,FILM:100 OHM,1%,50V,62MW,0603,SMD	59124	RK73H1J1000FT
A10C1300	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1301	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1302	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1303	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1304	283–5260–00			CAP,FXD,CERAMIC:MLC,10UF,+80–20%,25V,Z5U,5.9X2. 7MM,SM2210,SMD,T&R	TK1920	1E106ZY5U–C205M–T
A10C1305	283–5260–00			CAP,FXD,CERAMIC:MLC,10UF,+80–20%,25V,Z5U,5.9X2. 7MM,SM2210,SMD,T&R	TK1920	1E106ZY5U–C205M–T
A10C1306	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1307	283–5260–00			CAP,FXD,CERAMIC:MLC,10UF,+80–20%,25V,Z5U,5.9X2. 7MM,SM2210,SMD,T&R	TK1920	1E106ZY5U–C205M–T
A10C1308	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1309	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1310	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1311	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1312	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1325	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1326	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1400	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1401	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1402	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1403	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1404	283–5260–00			CAP,FXD,CERAMIC:MLC,10UF,+80–20%,25V,Z5U,5.9X2. 7MM,SM2210,SMD,T&R	TK1920	1E106ZY5U–C205M–T
A10C1405	283–5260–00			CAP,FXD,CERAMIC:MLC,10UF,+80–20%,25V,Z5U,5.9X2. 7MM,SM2210,SMD,T&R	TK1920	1E106ZY5U–C205M–T
A10C1406	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10C1407	283–5260–00			CAP,FXD,CERAMIC:MLC,10UF,+80–20%,25V,Z5U,5.9X2.7MM,SM2210,SMD,T&R	TK1920	1E106ZY5U–C205M–T
A10C1408	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A
A10C1409	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1410	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1411	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1412	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1413	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A
A10C1414	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1415	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1416	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1417	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1418	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A
A10C1419	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A
A10C1420	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A
A10C1421	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A
A10C1422	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206,SMD,T&R	04222	12063G105ZAT4A
A10C1423	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1425	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1426	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1501	283–5195–00			CAP,FXD,CERAMIC:MLC,10PF,5%,100V,NPO,1206,SMD,8MM T&R	04222	12061A100JAT1A
A10C1502	283–5195–00			CAP,FXD,CERAMIC:MLC,10PF,5%,100V,NPO,1206,SMD,8MM T&R	04222	12061A100JAT1A
A10C1503	283–5195–00			CAP,FXD,CERAMIC:MLC,10PF,5%,100V,NPO,1206,SMD,8MM T&R	04222	12061A100JAT1A
A10C1504	283–5195–00			CAP,FXD,CERAMIC:MLC,10PF,5%,100V,NPO,1206,SMD,8MM T&R	04222	12061A100JAT1A

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10C1550	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1551	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1552	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1553	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1556	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1557	283–5107–00			CAP,FXD,CERAMIC:MLC,22PF,5%,200V,NPO,1206,SMD, 8MM T&R	18796	GRM42–6–COG 220J200V PT
A10C1558	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1561	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1562	283–5107–00			CAP,FXD,CERAMIC:MLC,22PF,5%,200V,NPO,1206,SMD, 8MM T&R	18796	GRM42–6–COG 220J200V PT
A10C1563	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1566	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1567	283–5042–00			CAP,FXD,CERAMIC:MLC,27PF,5%,200V,NPO,1206,SMD, 8MM T&R	TK2058	C3216C0G1H270J–T
A10C1571	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1572	283–5107–00			CAP,FXD,CERAMIC:MLC,22PF,5%,200V,NPO,1206,SMD, 8MM T&R	18796	GRM42–6–COG 220J200V PT
A10C1582	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1583	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1584	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1585	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1586	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1587	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1600	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1602	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1603	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10C1604	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1640	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1642	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1643	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1644	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1645	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1650	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1652	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1653	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1654	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1690	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1701	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1702	283–5267–00			CAP,FXD,CERAMIC:MLC,1UF,+80%–20%,25V,Y5V,1206, SMD,T&R	04222	12063G105ZAT4A
A10C1710	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1713	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1715	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1716	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1720	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1723	283–5114–00			CAP,FXD,CERAMIC:MLC,0.1UF,10%,50V,X7R,1206,SMD ,8MM T&R	04222	12065C104KAT(1A OR 3A)
A10C1730	283–5203–00			CAP,FXD,CERAMIC:MLC,1000PF,10%,100V,X7R,1206,S MD,8MM T&R	04222	12061C102KAT1A
A10C1731	283–5203–00			CAP,FXD,CERAMIC:MLC,1000PF,10%,100V,X7R,1206,S MD,8MM T&R	04222	12061C102KAT1A
A10CR533	152–5057–00			DIODE,SIG:VVC,30V,2.3PF @ 25V,MMBV105GL,SOT–23,8MM T&R	04713	MMBV105GLT1

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10CR605	152–5018–00			DIODE,SIG:ULTRA FAST,100V,0.74VF,4NS,2.0PF,SER–PAIR,MMBD1203,SOT–23,8MM T&R	27014	MMBD1203
A10CR606	152–5018–00			DIODE,SIG:ULTRA FAST,100V,0.74VF,4NS,2.0PF,SER–PAIR,MMBD1203,SOT–23,8MM T&R	27014	MMBD1203
A10CR607	152–5018–00			DIODE,SIG:ULTRA FAST,100V,0.74VF,4NS,2.0PF,SER–PAIR,MMBD1203,SOT–23,8MM T&R	27014	MMBD1203
A10CR608	152–5018–00			DIODE,SIG:ULTRA FAST,100V,0.74VF,4NS,2.0PF,SER–PAIR,MMBD1203,SOT–23,8MM T&R	27014	MMBD1203
A10CR1004	152–5018–00			DIODE,SIG:ULTRA FAST,100V,0.74VF,4NS,2.0PF,SER–PAIR,MMBD1203,SOT–23,8MM T&R	27014	MMBD1203
A10CR1005	152–5018–00			DIODE,SIG:ULTRA FAST,100V,0.74VF,4NS,2.0PF,SER–PAIR,MMBD1203,SOT–23,8MM T&R	27014	MMBD1203
A10CR1025	152–5018–00			DIODE,SIG:ULTRA FAST,100V,0.74VF,4NS,2.0PF,SER–PAIR,MMBD1203,SOT–23,8MM T&R	27014	MMBD1203
A10CR1033	152–5018–00			DIODE,SIG:ULTRA FAST,100V,0.74VF,4NS,2.0PF,SER–PAIR,MMBD1203,SOT–23,8MM T&R	27014	MMBD1203
A10CR1043	152–5018–00			DIODE,SIG:ULTRA FAST,100V,0.74VF,4NS,2.0PF,SER–PAIR,MMBD1203,SOT–23,8MM T&R	27014	MMBD1203
A10CR1055	152–5018–00			DIODE,SIG:ULTRA FAST,100V,0.74VF,4NS,2.0PF,SER–PAIR,MMBD1203,SOT–23,8MM T&R	27014	MMBD1203
A10CR1211	152–5018–00			DIODE,SIG:ULTRA FAST,100V,0.74VF,4NS,2.0PF,SER–PAIR,MMBD1203,SOT–23,8MM T&R	27014	MMBD1203
A10CR1420	152–5018–00			DIODE,SIG:ULTRA FAST,100V,0.74VF,4NS,2.0PF,SER–PAIR,MMBD1203,SOT–23,8MM T&R	27014	MMBD1203
A10CR1713	152–5018–00			DIODE,SIG:ULTRA FAST,100V,0.74VF,4NS,2.0PF,SER–PAIR,MMBD1203,SOT–23,8MM T&R	27014	MMBD1203
A10CR1723	152–5018–00			DIODE,SIG:ULTRA FAST,100V,0.74VF,4NS,2.0PF,SER–PAIR,MMBD1203,SOT–23,8MM T&R	27014	MMBD1203
A10E500	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E501	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E503	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10E504	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E765	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E810	276–0848–00			EMI,SUPPRESSION:FERRITE BEAD,90 OHM@10MHZ,150 OHM@100MHZ,DCR=0.04 OHM,IMAX=3 A,CHIP,T&R	TK2058	HF70ACC575018(T OR TL)
A10E815	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E860	276–0848–00			EMI,SUPPRESSION:FERRITE BEAD,90 OHM@10MHZ,150 OHM@100MHZ,DCR=0.04 OHM,IMAX=3 A,CHIP,T&R	TK2058	HF70ACC575018(T OR TL)
A10E865	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E934	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E935	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E936	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E937	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1000	276–0848–00			EMI,SUPPRESSION:FERRITE BEAD,90 OHM@10MHZ,150 OHM@100MHZ,DCR=0.04 OHM,IMAX=3 A,CHIP,T&R	TK2058	HF70ACC575018(T OR TL)
A10E1053	276–0848–00			EMI,SUPPRESSION:FERRITE BEAD,90 OHM@10MHZ,150 OHM@100MHZ,DCR=0.04 OHM,IMAX=3 A,CHIP,T&R	TK2058	HF70ACC575018(T OR TL)
A10E1101	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1102	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1103	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1104	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1105	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10E1112	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1113	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1201	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1202	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1203	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1204	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1205	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1212	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1213	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1250	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1251	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1252	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1253	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1254	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1301	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1302	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1303	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10E1304	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1305	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1312	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1313	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1401	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1402	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1403	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1404	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1405	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1406	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1407	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1408	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1409	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1410	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1411	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1412	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1413	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10E1550	276–0848–00			EMI,SUPPRESSION:FERRITE BEAD,90 OHM@10MHZ,150 OHM@100MHZ,DCR=0.04 OHM,IMAX=3 A,CHIP,T&R	TK2058	HF70ACC575018(T OR TL)
A10E1551	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1552	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1600	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1602	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1650	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1652	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10E1740	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A10F1406	159–5003–00			FUSE,THRM,CHIP:SELF RESETTING FUSE,1.1A HOLD,2.2A TRIP AT 20 DEG C,20V MAX	06090	SMD100–2
A10F1407	159–5003–00			FUSE,THRM,CHIP:SELF RESETTING FUSE,1.1A HOLD,2.2A TRIP AT 20 DEG C,20V MAX	06090	SMD100–2
A10F1408	159–5003–00			FUSE,THRM,CHIP:SELF RESETTING FUSE,1.1A HOLD,2.2A TRIP AT 20 DEG C,20V MAX	06090	SMD100–2
A10F1409	159–5003–00			FUSE,THRM,CHIP:SELF RESETTING FUSE,1.1A HOLD,2.2A TRIP AT 20 DEG C,20V MAX	06090	SMD100–2
A10ID1	389–2300–00			CIRCUIT BOARD:ACQUISTION	80009	389–2300–00
A10J100	131–4619–00			CONN,RIBBON:PCB,MALE,RTANG,100 POS,0.050 CTR,0.307 MLG X 0.110 TAIL,4 X 25 STAGGERED PCB,2	53387	91100–1201BP
A10J101	131–3181–00			CONN,HDR:PCB,MALE,RTANG,2 X 20,0.1 CTR,0.330 H X 0.112 TAIL,SHRD/4 SIDES,CTR PLZ,30 GOLD	22526	69155–440R
A10J700	131–3182–00			CONN,HDR:PCB,MALE,RTANG,2 X 25,0.1CTR,0.390 MLG X 0.112 TAIL,0.33 H,SHRD/4 SIDES,CTR PLZ	22526	75867–008
A10J1000	131–1003–00			CONN,RCPT,ELEC:PCB,PELTOLA,FEMALE,STR,0.277 H X 0.094 TAIL,3 POS IN PCB, SHIELD,USE WITH 136–02	52961	131–1003–00
A10J1001	131–1003–00			CONN,RCPT,ELEC:PCB,PELTOLA,FEMALE,STR,0.277 H X 0.094 TAIL,3 POS IN PCB, SHIELD,USE WITH 136–02	52961	131–1003–00
A10J1153	131–5658–00			CONN,BOX:PCB,FFC/ZIF,FEMALE,RTANG,1 X 15,0.039 CTR,(1MM),0.197 H X 0.126 TAIL,TIN,ACCOM,0	27264	52207–1590
A10J1201	131–1003–00			CONN,RCPT,ELEC:PCB,PELTOLA,FEMALE,STR,0.277 H X 0.094 TAIL,3 POS IN PCB, SHIELD,USE WITH 136–02	52961	131–1003–00

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10J1500	131–1003–00			CONN,RCPT,ELEC:PCB,PELTOLA,FEMALE,STR,0.277 H X 0.094 TAIL,3 POS IN PCB, SHIELD,USE WITH 136–02	52961	131–1003–00
A10J1550	131–1003–00			CONN,RCPT,ELEC:PCB,PELTOLA,FEMALE,STR,0.277 H X 0.094 TAIL,3 POS IN PCB, SHIELD,USE WITH 136–02	52961	131–1003–00
A10JP1200	165–2462–12			HYBRID ATTEN:THICK FILM HYBRID ATTEN,1GHZ 1M/50 OHM ATTEN ASSY	TK2601	165–2462–12
A10JP1400	165–2462–12			HYBRID ATTEN:THICK FILM HYBRID ATTEN,1GHZ 1M/50 OHM ATTEN ASSY	TK2601	165–2462–12
A10L533	108–5090–00			INDUCTOR,FXD:SIGNAL,47NH,5%,IDC<450 MA,RDC<0.3 OHM,Q>26,SRF>1.2 GHZ,NL322522T–047,1210,8MM T&	TK2058	NL322522T–047J
A10L950	108–5080–00			INDUCTOR,FXD:SIGNAL,560NH,10%,IDC<450 MA,RDC<0.55 OHM,Q>30,SRF>180 MHZ,NL322522T–R56,1210,8MM	TK2058	NL322522T–R56K–03
A10L951	108–5095–00			INDUCTOR,FXD:SIGNAL,27NH,10%,IDC<450 MA,RDC<0.22 OHM,Q>23,SRF>1.5 GHZ,NL322522–027,1210,8MM T	TK2058	NL322522T–27M
A10L1266	108–5072–00			INDUCTOR,FXD:SIGNAL,1UH,5%,IDC<460 MA,RDC<1.75 OHM,Q>33,SRF>290 MHZ,1008CS–102,1208,8MM T&R	02113	1008CS–102XJB(A OR C)
A10L1267	108–5072–00			INDUCTOR,FXD:SIGNAL,1UH,5%,IDC<460 MA,RDC<1.75 OHM,Q>33,SRF>290 MHZ,1008CS–102,1208,8MM T&R	02113	1008CS–102XJB(A OR C)
A10L1268	108–5072–00			INDUCTOR,FXD:SIGNAL,1UH,5%,IDC<460 MA,RDC<1.75 OHM,Q>33,SRF>290 MHZ,1008CS–102,1208,8MM T&R	02113	1008CS–102XJB(A OR C)
A10L1269	108–5072–00			INDUCTOR,FXD:SIGNAL,1UH,5%,IDC<460 MA,RDC<1.75 OHM,Q>33,SRF>290 MHZ,1008CS–102,1208,8MM T&R	02113	1008CS–102XJB(A OR C)
A10Q504	151–5000–00			TRANSISTOR,SIG:BIPOLAR,PNP,40V,200MA,250MHZ,A MPLIFIER,MMBT3906L,TO–236/SOT–23,8MM T&R	04713	MMBT3906LT1
A10Q505	151–5000–00			TRANSISTOR,SIG:BIPOLAR,PNP,40V,200MA,250MHZ,A MPLIFIER,MMBT3906L,TO–236/SOT–23,8MM T&R	04713	MMBT3906LT1
A10Q531	151–5010–00			TRANSISTOR,SIG:BIPOLAR,NPN,12V,200MA,6.5GHZ,A MPLIFIER,NE85634/2SC3357,SOT–89,12MM T/R	62104	NE85634–T2(D)
A10Q961	151–5021–00			TRANSISTOR,SIG:BIPOLAR,NPN,40V,600MA,300MHZ,A MPLIFIER,MMBT2222AL,TO–236/SOT–23,8MM T&R	04713	MMBT2222ALT1
A10R105	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A10R106	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A10R107	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A10R108	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A10R109	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10R112	321–5044–00			RES,FXD:THICK FILM,56.2 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD56R2FT
A10R113	321–5044–00			RES,FXD:THICK FILM,56.2 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD56R2FT
A10R114	321–5008–00			RES,FXD:THICK FILM,150 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1500FT
A10R130	321–5051–00			RES,FXD:THICK FILM,0 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD0JUMPERT
A10R189	321–5022–00			RES,FXD:THICK FILM,2.21K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2211FT
A10R300	321–5004–00			RES,FXD:THICK FILM,22.1 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD22R1FT
A10R301	321–5005–00			RES,FXD:THICK FILM,27.4 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD27R4JT
A10R302	321–5005–00			RES,FXD:THICK FILM,27.4 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD27R4JT
A10R303	321–5005–00			RES,FXD:THICK FILM,27.4 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD27R4JT
A10R304	321–5005–00			RES,FXD:THICK FILM,27.4 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD27R4JT
A10R310	321–5008–00			RES,FXD:THICK FILM,150 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1500FT
A10R311	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A10R400	321–5004–00			RES,FXD:THICK FILM,22.1 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD22R1FT
A10R401	321–5005–00			RES,FXD:THICK FILM,27.4 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD27R4JT
A10R402	321–5005–00			RES,FXD:THICK FILM,27.4 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD27R4JT
A10R403	321–5005–00			RES,FXD:THICK FILM,27.4 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD27R4JT
A10R404	321–5005–00			RES,FXD:THICK FILM,27.4 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD27R4JT
A10R410	321–5008–00			RES,FXD:THICK FILM,150 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1500FT
A10R411	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A10R500	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A10R501	321–5113–00			RES,FXD:THICK FILM,75 OHM,1%,0.125W,TC=100 PPM,1206,T&R	56845	CRCW1206–75ROFT
A10R502	321–5113–00			RES,FXD:THICK FILM,75 OHM,1%,0.125W,TC=100 PPM,1206,T&R	56845	CRCW1206–75ROFT
A10R503	321–5010–00			RES,FXD:THICK FILM,221 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK221FT

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10R504	321–5000–00			RES,FXD:THICK FILM,10 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD10R0FT
A10R505	321–5000–00			RES,FXD:THICK FILM,10 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD10R0FT
A10R506	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A10R507	321–5008–00			RES,FXD:THICK FILM,150 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1500FT
A10R508	321–5011–00			RES,FXD:THICK FILM,274 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2740FT
A10R510	321–5017–00			RES,FXD:THICK FILM,825 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK8250FT
A10R511	321–5013–00			RES,FXD:THICK FILM,392 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK3920FT
A10R512	321–5014–00			RES,FXD:THICK FILM,475 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4750FT
A10R513	321–5014–00			RES,FXD:THICK FILM,475 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4750FT
A10R514	321–5014–00			RES,FXD:THICK FILM,475 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4750FT
A10R515	321–5014–00			RES,FXD:THICK FILM,475 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4750FT
A10R516	321–5014–00			RES,FXD:THICK FILM,475 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4750FT
A10R520	321–5014–00			RES,FXD:THICK FILM,475 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4750FT
A10R521	321–5014–00			RES,FXD:THICK FILM,475 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4750FT
A10R522	321–5020–00			RES,FXD:THICK FILM,1.5K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1501FT
A10R523	321–5020–00			RES,FXD:THICK FILM,1.5K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1501FT
A10R524	321–5026–00			RES,FXD:THICK FILM,4.75K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4751FT
A10R525	321–5026–00			RES,FXD:THICK FILM,4.75K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4751FT
A10R527	321–5014–00			RES,FXD:THICK FILM,475 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4750FT
A10R530	321–5047–00			RES,FXD:THICK FILM,100K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1003FT
A10R531	321–5037–00			RES,FXD:THICK FILM,39.2K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK3922FT
A10R532	321–5017–00			RES,FXD:THICK FILM,825 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK8250FT
A10R533	321–5017–00			RES,FXD:THICK FILM,825 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK8250FT

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10R534	321–5037–00			RES,FXD:THICK FILM,39.2K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK3922FT
A10R535	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R538	321–5022–00			RES,FXD:THICK FILM,2.21K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2211FT
A10R539	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R540	321–5000–00			RES,FXD:THICK FILM,10 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD10R0FT
A10R541	321–5043–00			RES,FXD:THICK FILM,47.5 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD47R5FT
A10R544	321–5045–00			RES,FXD:THICK FILM,68.1 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD68R1FT
A10R545	321–5050–00			RES,FXD:THICK FILM,33.2 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD33R2FT
A10R547	321–5044–00			RES,FXD:THICK FILM,56.2 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD56R2FT
A10R550	321–5044–00			RES,FXD:THICK FILM,56.2 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD56R2FT
A10R551	321–5044–00			RES,FXD:THICK FILM,56.2 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD56R2FT
A10R552	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R554	321–5021–00			RES,FXD:THICK FILM,1.82K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1821FT
A10R601	321–5000–00			RES,FXD:THICK FILM,10 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD10R0FT
A10R602	321–5000–00			RES,FXD:THICK FILM,10 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD10R0FT
A10R603	321–5000–00			RES,FXD:THICK FILM,10 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD10R0FT
A10R604	321–5000–00			RES,FXD:THICK FILM,10 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD10R0FT
A10R605	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R606	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R607	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R608	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R610	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R615	321–5022–00			RES,FXD:THICK FILM,2.21K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2211FT

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10R617	321–5026–00			RES,FXD:THICK FILM,4.75K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4751FT
A10R620	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R621	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R622	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R623	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R624	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R625	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R630	321–5167–00			RES,FXD:THICK FILM,221K OHM,1%,0.125W,TC=100 PPM,1206,T&R	59124	RK73H2B2213FT
A10R631	321–5167–00			RES,FXD:THICK FILM,221K OHM,1%,0.125W,TC=100 PPM,1206,T&R	59124	RK73H2B2213FT
A10R632	321–5167–00			RES,FXD:THICK FILM,221K OHM,1%,0.125W,TC=100 PPM,1206,T&R	59124	RK73H2B2213FT
A10R633	321–5167–00			RES,FXD:THICK FILM,221K OHM,1%,0.125W,TC=100 PPM,1206,T&R	59124	RK73H2B2213FT
A10R639	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A10R701	321–5032–00			RES,FXD:THICK FILM,15.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1502FT
A10R702	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R703	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R704	321–5011–00			RES,FXD:THICK FILM,274 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2740FT
A10R751	321–5032–00			RES,FXD:THICK FILM,15.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1502FT
A10R752	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R753	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R754	321–5011–00			RES,FXD:THICK FILM,274 OHM,1%,0.125W,TC=100 PPM,1206	50139	BCK2740FT
A10R801	321–5032–00			RES,FXD:THICK FILM,15.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1502FT
A10R802	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R803	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10R804	321–5011–00			RES,FXD:THICK FILM,274 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2740FT
A10R851	321–5032–00			RES,FXD:THICK FILM,15.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1502FT
A10R852	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R853	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R854	321–5011–00			RES,FXD:THICK FILM,274 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2740FT
A10R900	321–5011–00			RES,FXD:THICK FILM,274 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2740FT
A10R901	321–5113–00			RES,FXD:THICK FILM,75 OHM,1%,0.125W,TC=100 PPM,1206,T&R	56845	CRCW1206–75ROFT
A10R902	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A10R903	321–5266–00			RES,FXD:THICK FILM,11K OHM,1%,0.125W,TC=100 PPM,1206,T&R	59124	RK73H2B1102FT
A10R904	321–5022–00			RES,FXD:THICK FILM,2.21K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2211FT
A10R905	321–5023–00			RES,FXD:THICK FILM,2.74K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2741FT
A10R906	321–5266–00			RES,FXD:THICK FILM,11K OHM,1%,0.125W,TC=100 PPM,1206,T&R	59124	RK73H2B1102FT
A10R910	321–5049–00			RES,FXD:THICK FILM,1M OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCA1004FT
A10R911	321–5049–00			RES,FXD:THICK FILM,1M OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCA1004FT
A10R912	321–5049–00			RES,FXD:THICK FILM,1M OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCA1004FT
A10R913	321–5049–00			RES,FXD:THICK FILM,1M OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCA1004FT
A10R914	321–5049–00			RES,FXD:THICK FILM,1M OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCA1004FT
A10R915	321–5049–00			RES,FXD:THICK FILM,1M OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCA1004FT
A10R917	321–5011–00			RES,FXD:THICK FILM,274 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2740FT
A10R918	321–5023–00			RES,FXD:THICK FILM,2.74K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2741FT
A10R919	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A10R920	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A10R921	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10R922	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A10R925	321–5011–00			RES,FXD:THICK FILM,274 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2740FT
A10R926	321–5023–00			RES,FXD:THICK FILM,2.74K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2741FT
A10R927	321–5011–00			RES,FXD:THICK FILM,274 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2740FT
A10R928	321–5023–00			RES,FXD:THICK FILM,2.74K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2741FT
A10R935	321–5266–00			RES,FXD:THICK FILM,11K OHM,1%,0.125W,TC=100 PPM,1206,T&R	59124	RK73H2B1102FT
A10R936	321–5266–00			RES,FXD:THICK FILM,11K OHM,1%,0.125W,TC=100 PPM,1206,T&R	59124	RK73H2B1102FT
A10R937	321–5266–00			RES,FXD:THICK FILM,11K OHM,1%,0.125W,TC=100 PPM,1206,T&R	59124	RK73H2B1102FT
A10R938	321–5266–00			RES,FXD:THICK FILM,11K OHM,1%,0.125W,TC=100 PPM,1206,T&R	59124	RK73H2B1102FT
A10R955	321–5090–00			RES,FXD:THICK FILM, 20K OHM,1%,0.125W,100 PPM,1206,T&R	50139	BCK2002FT
A10R956	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R957	321–5012–00			RES,FXD:THICK FILM,332 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK3320FT
A10R958	321–5014–00			RES,FXD:THICK FILM,475 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4750FT
A10R961	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R964	321–5012–00			RES,FXD:THICK FILM,332 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK3320FT
A10R965	321–5025–00			RES,FXD:THICK FILM,3.92K OHM,1%,0.125W,TC=100 PPM,1206,T&R,	50139	BCK3921FT
A10R966	321–5015–00			RES,FXD:THICK FILM,562 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK5620FT
A10R967	321–5017–00			RES,FXD:THICK FILM,825 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK8250FT
A10R1000	321–5007–00			RES,FXD:THICK FILM,121 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1210FT
A10R1001	321–5007–00			RES,FXD:THICK FILM,121 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1210FT
A10R1002	321–5016–00			RES,FXD:THICK FILM,681 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK6810FT
A10R1003	321–5016–00			RES,FXD:THICK FILM,681 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK6810FT
A10R1004	321–5022–00			RES,FXD:THICK FILM,2.21K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2211FT

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10R1005	321–5016–00			RES,FXD:THICK FILM,681 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK6810FT
A10R1006	321–5016–00			RES,FXD:THICK FILM,681 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK6810FT
A10R1010	321–5009–00			RES,FXD:THICK FILM,182 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1820FT
A10R1011	321–5009–00			RES,FXD:THICK FILM,182 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1820FT
A10R1019	321–5042–00			RES,FXD:THICK FILM,39.2 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD39R2FT
A10R1020	321–5042–00			RES,FXD:THICK FILM,39.2 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD39R2FT
A10R1021	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R1022	321–5008–00			RES,FXD:THICK FILM,150 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1500FT
A10R1023	321–5023–00			RES,FXD:THICK FILM,2.74K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2741FT
A10R1024	321–5090–00			RES,FXD:THICK FILM, 20K OHM,1%,0.125W,100 PPM,1206,T&R	50139	BCK2002FT
A10R1025	321–5023–00			RES,FXD:THICK FILM,2.74K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2741FT
A10R1026	321–5090–00			RES,FXD:THICK FILM, 20K OHM,1%,0.125W,100 PPM,1206,T&R	50139	BCK2002FT
A10R1027	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R1028	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R1030	321–5010–00			RES,FXD:THICK FILM,221 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK221FT
A10R1032	321–5034–00			RES,FXD:THICK FILM,22.1K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2212FT
A10R1033	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R1034	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R1035	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A10R1037	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R1042	321–5090–00			RES,FXD:THICK FILM, 20K OHM,1%,0.125W,100 PPM,1206,T&R	50139	BCK2002FT
A10R1043	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R1044	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10R1047	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R1051	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R1052	321–5090–00			RES,FXD:THICK FILM, 20K OHM,1%,0.125W,100 PPM,1206,T&R	50139	BCK2002FT
A10R1053	321–5047–00			RES,FXD:THICK FILM,100K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1003FT
A10R1054	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A10R1055	321–5064–00			RES,FXD:THICK FILM,200K OHM,1%,0.125W,TC=100 PPM,1206,T&R	91637	CRCW1206–2003FT
A10R1056	321–5000–00			RES,FXD:THICK FILM,10 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD10R0FT
A10R1058	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R1059	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R1060	321–5167–00			RES,FXD:THICK FILM,221K OHM,1%,0.125W,TC=100 PPM,1206,T&R	59124	RK73H2B2213FT
A10R1062	321–5051–00			RES,FXD:THICK FILM,0 OHM,1%,0.125W,TC=100 PPM,1206,T&R	09969	CRCW1206 JUMPER
A10R1064	321–5051–00			RES,FXD:THICK FILM,0 OHM,1%,0.125W,TC=100 PPM,1206,T&R	09969	CRCW1206 JUMPER
A10R1065	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R1066	321–5051–00			RES,FXD:THICK FILM,0 OHM,1%,0.125W,TC=100 PPM,1206,T&R	09969	CRCW1206 JUMPER
A10R1070	321–5026–00			RES,FXD:THICK FILM,4.75K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4751FT
A10R1071	321–5026–00			RES,FXD:THICK FILM,4.75K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4751FT
A10R1072	321–5026–00			RES,FXD:THICK FILM,4.75K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4751FT
A10R1073	321–5026–00			RES,FXD:THICK FILM,4.75K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4751FT
A10R1074	321–5026–00			RES,FXD:THICK FILM,4.75K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4751FT
A10R1075	321–5014–00			RES,FXD:THICK FILM,475 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4750FT
A10R1076	321–5014–00			RES,FXD:THICK FILM,475 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4750FT
A10R1077	321–5014–00			RES,FXD:THICK FILM,475 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4750FT
A10R1078	321–5014–00			RES,FXD:THICK FILM,475 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4750FT

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10R1079	321–5014–00			RES,FXD:THICK FILM,475 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4750FT
A10R1080	321–5014–00			RES,FXD:THICK FILM,475 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4750FT
A10R1081	321–5014–00			RES,FXD:THICK FILM,475 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4750FT
A10R1082	321–5014–00			RES,FXD:THICK FILM,475 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4750FT
A10R1083	321–5014–00			RES,FXD:THICK FILM,475 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4750FT
A10R1084	321–5014–00			RES,FXD:THICK FILM,475 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4750FT
A10R1085	321–5014–00			RES,FXD:THICK FILM,475 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4750FT
A10R1086	321–5014–00			RES,FXD:THICK FILM,475 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4750FT
A10R1087	321–5014–00			RES,FXD:THICK FILM,475 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4750FT
A10R1088	321–5014–00			RES,FXD:THICK FILM,475 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4750FT
A10R1095	321–5015–00			RES,FXD:THICK FILM,562 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK5620FT
A10R1096	321–5015–00			RES,FXD:THICK FILM,562 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK5620FT
A10R1101	321–5044–00			RES,FXD:THICK FILM,56.2 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD56R2FT
A10R1102	321–5020–00			RES,FXD:THICK FILM,1.5K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1501FT
A10R1103	321–5019–00			RES,FXD:THICK FILM,1.21K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1211FT
A10R1105	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R1106	321–5019–00			RES,FXD:THICK FILM,1.21K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1211FT
A10R1110	321–5194–00			RES,FXD:THICK FILM,49.9 OHM,1%,0.125W,TC=100 PPM,1206,T&R	91637	CRCW–1206–49R–90 –FT
A10R1114	321–5000–00			RES,FXD,FILM:10 OHM,1%,0.125W,TC=100 PPM,100V,1206,SMD	50139	BCD10R0FT
A10R1115	321–5000–00			RES,FXD,FILM:10 OHM,1%,0.125W,TC=100 PPM,100V,1206,SMD,T&R	50139	BCD10R0FT
A10R1201	321–5044–00			RES,FXD:THICK FILM,56.2 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD56R2FT
A10R1202	321–5020–00			RES,FXD:THICK FILM,1.5K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1501FT
A10R1203	321–5019–00			RES,FXD:THICK FILM,1.21K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1211FT

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10R1205	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R1206	321–5019–00			RES,FXD:THICK FILM,1.21K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1211FT
A10R1211	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A10R1212	321–5045–00			RES,FXD:THICK FILM,68.1 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD68R1FT
A10R1213	321–5046–00			RES,FXD:THICK FILM,82.5 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK82R5FT
A10R1214	321–5000–00			RES,FXD,FILM:10 OHM,1%,0.125W,TC=100 PPM,100V,1206,SMD,T&R	50139	BCD10R0FT
A10R1215	321–5000–00			RES,FXD,FILM:10 OHM,1%,0.125W,TC=100 PPM,100V,1206,SMD,T&R	50139	BCD10R0FT
A10R1251	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R1252	321–5020–00			RES,FXD:THICK FILM,1.5K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1501FT
A10R1260	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R1261	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R1262	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R1263	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R1264	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R1265	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R1266	321–5015–00			RES,FXD:THICK FILM,562 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK5620FT
A10R1267	321–5015–00			RES,FXD:THICK FILM,562 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK5620FT
A10R1268	321–5015–00			RES,FXD:THICK FILM,562 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK5620FT
A10R1269	321–5015–00			RES,FXD:THICK FILM,562 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK5620FT
A10R1270	321–5014–00			RES,FXD:THICK FILM,475 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4750FT
A10R1271	321–5014–00			RES,FXD:THICK FILM,475 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4750FT
A10R1272	321–5014–00			RES,FXD:THICK FILM,475 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4750FT
A10R1273	321–5014–00			RES,FXD:THICK FILM,475 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4750FT

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10R1280	321–5427–00			RES,FXD,FILM:10.0K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J1002FT
A10R1281	321–5427–00			RES,FXD,FILM:10.0K,1%,50V,62.5MW,100PPM,0603,SMD,T&R	59124	RK73H1J1002FT
A10R1282	321–5427–00			RES,FXD,FILM:10.0K,1%,50V,62.5MW,0603,SMD,T&R	59124	RK73H1J1002FT
A10R1283	321–5427–00			RES,FXD,FILM:10.0K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J1002FT
A10R1290	321–5416–00			RES,FXD,FILM:10 OHM,1%,100V,62MW,0603,SMD,T&R	59124	RK73H1J10R0FT
A10R1291	321–5416–00			RES,FXD,FILM:10 OHM,1%,100V,62MW,0603,SMD,T&R	59124	RK73H1J10R0FT
A10R1292	321–5416–00			RES,FXD,FILM:10 OHM,1%,100V,62MW,0603,SMD,T&R	59124	RK73H1J10R0FT
A10R1293	321–5416–00			RES,FXD,FILM:10 OHM,1%,100V,62MW,0603,SMD,T&R	59124	RK73H1J10R0FT
A10R1294	321–5416–00			RES,FXD,FILM:10.0 OHM,1%,50V,62MW,0603,SMD,T&R	59124	RK73H1J10R0FT
A10R1295	321–5416–00			RES,FXD,FILM:10.0 OHM,1%,50V,62MW,0603,SMD,T&R	59124	RK73H1J10R0FT
A10R1296	321–5416–00			RES,FXD,FILM:10.0 OHM,1%,50V,62MW,0603,SMD,T&R	59124	RK73H1J10R0FT
A10R1297	321–5416–00			RES,FXD,FILM:10.0 OHM,1%,50V,62MW,0603,SMD,T&R	59124	RK73H1J10R0FT
A10R1301	321–5044–00			RES,FXD:THICK FILM,56.2 OHM,1%,0.125W,T&R	50139	BCD56R2FT
A10R1302	321–5020–00			RES,FXD:THICK FILM,1.5K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1501FT
A10R1303	321–5019–00			RES,FXD:THICK FILM,1.21K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1211FT
A10R1305	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R1306	321–5019–00			RES,FXD:THICK FILM,1.21K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1211FT
A10R1310	321–5194–00			RES,FXD:THICK FILM,49.9 OHM,1%,0.125W,TC=100 PPM,1206,T&R	91637	CRCW–1206–49R–90 –FT
A10R1314	321–5000–00			RES,FXD,FILM:10 OHM,1%,0.125W,TC=100 PPM,100V,1206,SMD,T&R	50139	BCD10R0FT
A10R1315	321–5000–00			RES,FXD,FILM:10 OHM,1%,0.125W,TC=100 PPM,100V,1206,SMD,T&R	50139	BCD10R0FT
A10R1401	321–5044–00			RES,FXD:THICK FILM,56.2 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD56R2FT
A10R1402	321–5020–00			RES,FXD:THICK FILM,1.5K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1501FT
A10R1403	321–5019–00			RES,FXD:THICK FILM,1.21K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1211FT
A10R1405	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R1406	321–5019–00			RES,FXD:THICK FILM,1.21K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1211FT
A10R1410	321–5194–00			RES,FXD:THICK FILM,49.9 OHM,1%,0.125W,TC=100 PPM,1206,T&R	91637	CRCW–1206–49R–90 –FT
A10R1414	321–5000–00			RES,FXD,FILM:10 OHM,1%,0.125W,TC=100 PPM,100V,1206,SMD,T&R	50139	BCD10R0FT
A10R1415	321–5000–00			RES,FXD,FILM:10 OHM,1%,0.125W,TC=100 PPM,100V,1206,SMD,T&R	50139	BCD10R0FT

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10R1420	321–5101–00			RES,FXD,FILM:2.7 OHM,5%,0.125W,1206,TC=T0 SMD	56235	S1206CPX2R7J20
A10R1500	321–5004–00			RES,FXD:THICK FILM,22.1 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD22R1FT
A10R1501	321–5194–00			RES,FXD:THICK FILM,49.9 OHM,1%,0.125W,TC=100 PPM,1206,T&R	91637	CRCW–1206–49R–90 –FT
A10R1502	321–5194–00			RES,FXD:THICK FILM,49.9 OHM,1%,0.125W,TC=100 PPM,1206,T&R	91637	CRCW–1206–49R–90 –FT
A10R1503	321–5194–00			RES,FXD:THICK FILM,49.9 OHM,1%,0.125W,TC=100 PPM,1206,T&R	91637	CRCW–1206–49R–90 –FT
A10R1504	321–5194–00			RES,FXD:THICK FILM,49.9 OHM,1%,0.125W,TC=100 PPM,1206,T&R	91637	CRCW–1206–49R–90 –FT
A10R1535	321–5051–00			RES,FXD:THICK FILM,0 OHM,1%,0.125W,TC=100 PPM,1206,T&R	09969	CRCW1206 JUMPER
A10R1536	321–5051–00			RES,FXD:THICK FILM,0 OHM,1%,0.125W,TC=100 PPM,1206,T&R	09969	CRCW1206 JUMPER
A10R1537	321–5051–00			RES,FXD:THICK FILM,0 OHM,1%,0.125W,TC=100 PPM,1206,T&R	09969	CRCW1206 JUMPER
A10R1538	321–5051–00			RES,FXD:THICK FILM,0 OHM,1%,0.125W,TC=100 PPM,1206,T&R	09969	CRCW1206 JUMPER
A10R1545	321–5051–00			RES,FXD:THICK FILM,0 OHM,1%,0.125W,TC=100 PPM,1206,T&R	09969	CRCW1206 JUMPER
A10R1546	321–5051–00			RES,FXD:THICK FILM,0 OHM,1%,0.125W,TC=100 PPM,1206,T&R	09969	CRCW1206 JUMPER
A10R1547	321–5051–00			RES,FXD:THICK FILM,0 OHM,1%,0.125W,TC=100 PPM,1206,T&R	09969	CRCW1206 JUMPER
A10R1548	321–5051–00			RES,FXD:THICK FILM,0 OHM,1%,0.125W,TC=100 PPM,1206,T&R	09969	CRCW1206 JUMPER
A10R1555	321–5047–00			RES,FXD:THICK FILM,100K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1003FT
A10R1556	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R1557	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R1558	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R1559	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R1560	321–5047–00			RES,FXD:THICK FILM,100K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1003FT
A10R1561	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R1562	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R1563	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10R1564	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R1565	321–5047–00			RES,FXD:THICK FILM,100K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1003FT
A10R1566	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R1567	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R1568	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R1569	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R1570	321–5047–00			RES,FXD:THICK FILM,100K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1003FT
A10R1571	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R1572	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R1573	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R1574	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R1581	321–5021–00			RES,FXD:THICK FILM,1.82K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1821FT
A10R1582	321–5021–00			RES,FXD:THICK FILM,1.82K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1821FT
A10R1583	321–5021–00			RES,FXD:THICK FILM,1.82K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1821FT
A10R1584	321–5011–00			RES,FXD:THICK FILM,274 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2740FT
A10R1585	321–5011–00			RES,FXD:THICK FILM,274 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2740FT
A10R1586	321–5011–00			RES,FXD:THICK FILM,274 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2740FT
A10R1587	321–5011–00			RES,FXD:THICK FILM,274 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2740FT
A10R1588	321–5021–00			RES,FXD:THICK FILM,1.82K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1821FT
A10R1590	321–5019–00			RES,FXD:THICK FILM,1.21K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1211FT
A10R1591	321–5019–00			RES,FXD:THICK FILM,1.21K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1211FT
A10R1592	321–5019–00			RES,FXD:THICK FILM,1.21K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1211FT
A10R1593	321–5019–00			RES,FXD:THICK FILM,1.21K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1211FT

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10R1601	321–5022–00			RES,FXD:THICK FILM,2.21K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2211FT
A10R1602	321–5113–00			RES,FXD:THICK FILM,75 OHM,1%,0.125W,TC=100 PPM,1206,T&R	56845	CRCW1206–75ROFT
A10R1603	321–5113–00			RES,FXD:THICK FILM,75 OHM,1%,0.125W,TC=100 PPM,1206,T&R	56845	CRCW1206–75ROFT
A10R1604	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R1605	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R1606	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R1607	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R1608	321–5010–00			RES,FXD:THICK FILM,221 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK221FT
A10R1638	321–5033–00			RES,FXD:THICK FILM,18.2K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1822FT
A10R1639	321–5167–00			RES,FXD:THICK FILM,221K OHM,1%,0.125W,TC=100 PPM,1206,T&R	59124	RK73H2B2213FT
A10R1640	321–5037–00			RES,FXD:THICK FILM,39.2K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK3922FT
A10R1641	321–5037–00			RES,FXD:THICK FILM,39.2K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK3922FT
A10R1642	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R1643	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R1644	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R1645	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A10R1651	321–5022–00			RES,FXD:THICK FILM,2.21K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2211FT
A10R1652	321–5113–00			RES,FXD:THICK FILM,75 OHM,1%,0.125W,TC=100 PPM,1206,T&R	56845	CRCW1206–75ROFT
A10R1653	321–5113–00			RES,FXD:THICK FILM,75 OHM,1%,0.125W,TC=100 PPM,1206,T&R	56845	CRCW1206–75ROFT
A10R1654	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R1655	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R1656	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A10R1657	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10R1658	321–5010–00			RES,FXD:THICK FILM,221 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK221FT
A10R1688	321–5033–00			RES,FXD:THICK FILM,18.2K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1822FT
A10R1689	321–5167–00			RES,FXD:THICK FILM,221K OHM,1%,0.125W,TC=100 PPM,1206,T&R	59124	RK73H2B2213FT
A10R1690	321–5037–00			RES,FXD:THICK FILM,39.2K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK3922FT
A10R1691	321–5037–00			RES,FXD:THICK FILM,39.2K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK3922FT
A10R1700	321–5008–00			RES,FXD:THICK FILM,150 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1500FT
A10R1702	321–5008–00			RES,FXD:THICK FILM,150 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1500FT
A10R1704	321–5008–00			RES,FXD:THICK FILM,150 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1500FT
A10R1708	321–5036–00			RES,FXD:THICK FILM,33.2K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK3322FT
A10R1709	321–5266–00			RES,FXD:THICK FILM,11K OHM,1%,0.125W,TC=100 PPM,1206,T&R	59124	RK73H2B1102FT
A10R1710	321–5035–00			RES,FXD:THICK FILM,27.4K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2742FT
A10R1711	321–5032–00			RES,FXD:THICK FILM,15.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1502FT
A10R1712	321–5034–00			RES,FXD:THICK FILM,22.1K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2212FT
A10R1713	321–5026–00			RES,FXD:THICK FILM,4.75K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4751FT
A10R1714	321–5026–00			RES,FXD:THICK FILM,4.75K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4751FT
A10R1715	321–5026–00			RES,FXD:THICK FILM,4.75K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4751FT
A10R1716	321–5166–00			RES,FXD:THICK FILM,150K OHM,1%,0.125W,TC=100 PPM,1206,T&R	91637	CRCW1206–1503FT
A10R1717	321–5166–00			RES,FXD:THICK FILM,150K OHM,1%,0.125W,TC=100 PPM,1206,T&R	91637	CRCW1206–1503FT
A10R1718	321–5166–00			RES,FXD:THICK FILM,150K OHM,1%,0.125W,TC=100 PPM,1206,T&R	91637	CRCW1206–1503FT
A10R1720	321–5035–00			RES,FXD:THICK FILM,27.4K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2742FT
A10R1721	321–5032–00			RES,FXD:THICK FILM,15.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1502FT
A10R1722	321–5034–00			RES,FXD:THICK FILM,22.1K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2212FT
A10R1723	321–5166–00			RES,FXD:THICK FILM,150K OHM,1%,0.125W,TC=100 PPM,1206,T&R	91637	CRCW1206–1503FT

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10R1724	321–5166–00			RES,FXD:THICK FILM,150K OHM,1%,0.125W,TC=100 PPM,1206,T&R	91637	CRCW1206–1503FT
A10R1725	321–5166–00			RES,FXD:THICK FILM,150K OHM,1%,0.125W,TC=100 PPM,1206,T&R	91637	CRCW1206–1503FT
A10R1726	321–5026–00			RES,FXD:THICK FILM,4.75K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4751FT
A10R1727	321–5026–00			RES,FXD:THICK FILM,4.75K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4751FT
A10R1728	321–5026–00			RES,FXD:THICK FILM,4.75K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4751FT
A10R1729	321–5036–00			RES,FXD:THICK FILM,33.2K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK3322FT
A10R1730	321–5266–00			RES,FXD:THICK FILM,11K OHM,1%,0.125W,TC=100 PPM,1206,T&R	59124	RK73H2B1102FT
A10R1735	321–5014–00			RES,FXD:THICK FILM,475 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4750FT
A10R1736	321–5014–00			RES,FXD:THICK FILM,475 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4750FT
A10R1737	321–5045–00			RES,FXD:THICK FILM,68.1 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD68R1FT
A10R1738	321–5045–00			RES,FXD:THICK FILM,68.1 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD68R1FT
A10R1751	321–5011–00			RES,FXD:THICK FILM,274 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2740FT
A10R1752	321–5011–00			RES,FXD:THICK FILM,274 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2740FT
A10R1753	321–5011–00			RES,FXD:THICK FILM,274 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2740FT
A10R1754	321–5011–00			RES,FXD:THICK FILM,274 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2740FT
A10RP911	307–5066–01			RES,NTWK,FXD,FI:(2) 9K,1K,1.111K,0.25%,8PIN SOIC,SMD	57489	307–5066–01
A10RT617	307–5084–00			RES,THERMAL:4.7K OHM +/–10%,NTC,SMD 1206 PKG	TK2058	NTCCS32163JH472K C
A10U300	156–6938–00			IC,ASIC:CMOS,CUSTOM,DEMUX WITH PEAK DETECT,500 MHZ,ADG299G,MM9443,MQFP304	27014	MM9443–AYC
A10U301	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR
A10U302	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR
A10U303	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR
A10U304	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR
A10U305	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10U306	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR
A10U307	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR
A10U308	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR
A10U309	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR
A10U310	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR
A10U311	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR
A10U312	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR
A10U313	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR
A10U314	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR
A10U315	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR
A10U316	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR
A10U400	156–6938–00			IC,ASIC:CMOS,CUSTOM,DEMUX WITH PEAK DETECT,500 MHZ,ADG299G,MM9443,MQFP304	27014	MM9443–AYC
A10U401	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR
A10U402	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR
A10U403	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR
A10U404	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR
A10U405	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR
A10U406	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR
A10U407	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR
A10U408	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR
A10U409	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR
A10U410	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR
A10U411	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10U412	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR
A10U413	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR
A10U414	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR
A10U415	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR
A10U416	156–6795–01			IC,MEMORY:CMOS,SRAM,8K X 8,12NS,7C164–12,SOJ28.300,T&R	TK2519	AS7C164–12JCTR
A10U502	156–5138–01			IC,LINEAR:BIFET,OP–AMP,DUAL,MC34002/TL072,SO8.150,12MM T&R	01295	TL072CDR
A10U510	156–5976–01			IC,LINEAR:ECL,MISC,PHASE–FREQUENCY DETECTOR,MC12040FN,PLCC20,16MM T&R	04713	MC12040FNR2
A10U600	160–7851–03			IC,PROCESSOR:CMOS,MICROCOMPUTER,8–BIT,PRGM 156–6124–00,OPT,68HC705B5,PLCC52	80009	160–7851–03
A10U601	156–5142–01			IC,DIGITAL:HCTCMOS,DECODER,DUAL 1–OF–4,ACTIVE LOW,74HCT139,SO16.150,16MM T&R	01295	SN74HCT139DR
A10U604	156–5262–01			IC,LINEAR:BIPOLAR,COMPARATOR,QUAD,SINGLE SUPPLY,LM339D,SO14.150,16MM T&R	01295	LM339DR
A10U606	156–5024–01			IC,DIGITAL:LSTTL,GATE,HEX INVERTER,OPEN–COLLECTOR,74LS05,SO14.150,16MM T&R	01295	SN74LS05DR
A10U701	156–2051–01			MICROCKT,LINEAR:OPERATIONAL AMPLIFIER,QUAD,JET INPUT MC34004,SO14NTAPE & REEL	01295	LF347DR
A10U800	156–7359–00			IC,ASIC:BIPOLAR,CUSTOM,8–BIT,1 GS/S, A/D CONVERTER,M721,MQUAD160	80009	156–7359–00
A10U850	156–7359–00			IC,ASIC:BIPOLAR,CUSTOM,8–BIT,1 GS/S, A/D CONVERTER,M721,MQUAD160	80009	156–7359–00
A10U900	156–5832–01			IC,CONVERTER:BIPOLAR,D/A,12 BIT,3US,VOLTAGE OUT,MPU COMPATIBLE,REFERENCE,AD667JP,PLCC28–1,24M	24355	AD667JP–REEL
A10U901	156–5088–01			IC,DIGITAL:HCTCMOS,DECODER,1–OF–8,ACTIVE LOW,74HCT138,SO16.150,16MM T&R	01295	SN74HCT138DR
A10U902	156–5088–01			IC,DIGITAL:HCTCMOS,DECODER,1–OF–8,ACTIVE LOW,74HCT138,SO16.150,16MM T&R	01295	SN74HCT138DR
A10U903	156–2051–01			MICROCKT,LINEAR:OPERATIONAL AMPLIFIER,QUAD,JET INPUT MC34004,SO14NTAPE & REEL	01295	LF347DR
A10U904	156–6224–01			IC,CONVERTER:CMOS,D/A,12–BIT,VOLTAGE OUT,16 CHANNELS,SERIAL INPUT,DACULATOR,I10412,SO28.300,2	TK2441	I10412–04
A10U905	156–6224–01			IC,CONVERTER:CMOS,D/A,12–BIT,VOLTAGE OUT,16 CHANNELS,SERIAL INPUT,DACULATOR,I10412,SO28.300,2	TK2441	I10412–04

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10U906	156–6224–01			IC,CONVERTER:CMOS,D/A,12–BIT,VOLTAGE OUT,16 CHANNELS,SERIAL INPUT,DACULATOR,I10412,SO28.300,2	TK2441	I10412–04
A10U934	156–5097–01			IC,MISC:CMOS,ANALOG MUX,8 CHANNEL,CD4051,SO16.150,16MM T&R	04713	MC14051BDR2
A10U935	156–2051–01			MICROCKT,LINEAR:OPERATIONAL AMPLIFIER,QUAD,JET INPUT MC34004,SO14NTAPE & REEL	01295	LF347DR
A10U950	156–5138–01			IC,LINEAR:BIFET,OP–AMP,DUAL,MC34002/TL072,SO8.150,12MM T&R	01295	TL072CDR
A10U962	156–6059–01			IC,MISC:CMOS,ANALOG SWITCH,QUAD,DG444DY,SO16.150,16MM T&R	17856	DG444DY–T1
A10U963	156–6059–01			IC,MISC:CMOS,ANALOG SWITCH,QUAD,DG444DY,SO16.150,16MM T&R	17856	DG444DY–T1
A10U1001	156–7361–00			IC,ASIC:BIPOLAR,CUSTOM,BIG TRIGGER LOGIC,BTL,M521,MQUAD160	80009	156–7361–00
A10U1002	156–6032–01			IC,MISC:TTL,INTERFACE,DUAL DIFFERENTIAL LINE DRIVER,MEETS RS–422A STANDARD,9638,SO8.150,	01295	UA9638CDR
A10U1021	156–2051–01			MICROCKT,LINEAR:OPERATIONAL AMPLIFIER,QUAD,JET INPUT MC34004,SO14NTAPE & REEL	01295	LF347DR
A10U1050	156–6635–00			IC,ASIC:CMOS,STANDARD CELL,GARBAGE TRIGGER LOGIC,ADG308,MM9385,MQFP160 TRAY	27014	MM9385–VUL
A10U1052	156–6272–01			IC,MEMORY:CMOS,EEPROM,256 X 8,SERIAL,24C02,SO8.15,T&R	60395	X24C02S8 TL
A10U1053	156–5190–01			IC,DIGITAL:FTTL,DECODER,1–OF–8,ACTIVE LOW,74F138,SO16.150,16MM T&R	01295	SN74F138DR
A10U1054	156–5051–01			IC,DIGITAL:FTTL,GATE,QUAD 2–INPUT NOR,74F02,SO14.150,16MM T&R	01295	SN74F02DR
A10U1055	156–6272–01			IC,MEMORY:CMOS,EEPROM,256 X 8,SERIAL,24C02,SO8.15,T&R	60395	X24C02S8 TL
A10U1101	156–5138–01			IC,LINEAR:BIFET,OP–AMP,DUAL,MC34002/TL072,SO8.150,12MM T&R	01295	TL072CDR
A10U1102	156–6071–01			IC,LINEAR:BICMOS,POWER DRIVER,8 CHANNEL,SERIAL INPUT W/LATCHES,CURRENT SINK OUTPUT,UCN5841	0CVK3	UCN5841LW/TR
A10U1201	156–5138–01			IC,LINEAR:BIFET,OP–AMP,DUAL,MC34002/TL072,SO8.150,12MM T&R	01295	TL072CDR
A10U1202	156–6071–01			IC,LINEAR:BICMOS,POWER DRIVER,8 CHANNEL,SERIAL INPUT W/LATCHES,CURRENT SINK OUTPUT,UCN5841	0CVK3	UCN5841LW/TR
A10U1250	156–7360–00			IC,ASIC:BIPOLAR,CUSTOM,MISC OCTAL T/H,M738,MQUAD160	80009	156–7360–00
A10U1251	156–5135–01			IC,DIGITAL:HCTCMOS,REGISTER,8–BIT SIPO SHIFT,74HCT164,SO16.150,16MM T&R	1CH66	74HCT164DT
A10U1301	156–5138–01			IC,LINEAR:BIFET,OP–AMP,DUAL,MC34002/TL072,SO8.150,12MM T&R	01295	TL072CDR

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10U1302	156–6071–01			IC,LINEAR:BICMOS,POWER DRIVER,8 CHANNEL,SERIAL INPUT W/LATCHES,CURRENT SINK OUTPUT,UCN5841	0CVK3	UCN5841LW/TR
A10U1401	156–5138–01			IC,LINEAR:BIFET,OP–AMP,DUAL,MC34002/TL072,SO8.150,12MM T&R	01295	TL072CDR
A10U1402	156–6071–01			IC,LINEAR:BICMOS,POWER DRIVER,8 CHANNEL,SERIAL INPUT W/LATCHES,CURRENT SINK OUTPUT,UCN5841	0CVK3	UCN5841LW/TR
A10U1403	156–5356–01			IC,DIGITAL:HCMOS,REGISTER,8–BIT SIPO SHIFT,74HC164,SO14.150,16MM T&R	01295	SN74HC164DR
A10U1404	156–5356–01			IC,DIGITAL:HCMOS,REGISTER,8–BIT SIPO SHIFT,74HC164,SO14.150,16MM T&R	01295	SN74HC164DR
A10U1405	156–2051–01			MICROCKT,LINEAR:OPERATIONAL AMPLIFIER,QUAD,JET INPUT MC34004,SO14NTAPE & REEL	01295	LF347DR
A10U1420	156–5674–01			IC,LINEAR:BIPOLAR,VOLTAGE REGULATOR,NEGATIVE,–12V,500MA,5%,MC79M12CDT ,TO–252/DPAK,16MM T&R	04713	MC79M12CDTRK
A10U1551	155–0401–00			IC,ASIC:BIPOLAR,DUAL TRACE COMPARATOR,FULL CUSTOM,M748,100 CUSTOM,BOX	TK2598	155–0401–00
A10U1552	155–0401–00			IC,ASIC:BIPOLAR,DUAL TRACE COMPARATOR,FULL CUSTOM,M748,100 CUSTOM,BOX	TK2598	155–0401–00
A10U1556	156–6059–01			IC,MISC:CMOS,ANALOG SWITCH,QUAD,DG444DY,SO16.150,16MM T&R	17856	DG444DY–T1
A10U1560	156–2051–01			MICROCKT,LINEAR:OPERATIONAL AMPLIFIER,QUAD,JET INPUT MC34004,SO14NTAPE & REEL	01295	LF347DR
A10U1561	156–2051–01			MICROCKT,LINEAR:OPERATIONAL AMPLIFIER,QUAD,JET INPUT MC34004,SO14NTAPE & REEL	01295	LF347DR
A10U1600	234–1106–20			IC,ASIC:BIPOLAR,TIME INTERPOLATOR,QC6–120,M652–006,44TEQ,BOX	TK2598	234–1106–20
A10U1601	156–5138–01			IC,LINEAR:BIFET,OP–AMP,DUAL,MC34002/TL072,SO8.150,12MM T&R	01295	TL072CDR
A10U1602	156–5138–01			IC,LINEAR:BIFET,OP–AMP,DUAL,MC34002/TL072,SO8.150,12MM T&R	01295	TL072CDR
A10U1650	234–1106–20			IC,ASIC:BIPOLAR,TIME INTERPOLATOR,QC6–120,M652–006,44TEQ,BOX	TK2598	234–1106–20
A10U1701	156–5135–01			IC,DIGITAL:HCTCMOS,REGISTER,8–BIT SIPO SHIFT,74HCT164,SO16.150,16MM T&R	1CH66	74HCT164DT
A10U1703	234–1101–22			IC,ASIC:BIPOLAR,EXTENDED TRIGGER,QC6–120,M652–001,TEQ1D44,BOX	TK2598	234–1101–22
A10U1710	156–2051–01			MICROCKT,LINEAR:OPERATIONAL AMPLIFIER,QUAD,JET INPUT MC34004,SO14NTAPE & REEL	01295	LF347DR
A10U1721	156–5198–01			IC,DIGITAL:HCTCMOS,GATE,QUAD 2–INPUT XOR,74HCT86,SO14.150,16MM T&R	1CH66	74HCT86DT

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10X1A1000	211–0730–00			SCR,ASSEM WSHR:6–32 X 0.375,PNH,STL,CDPL,T–15,TORX DR,MACHINE, DUBL WAX COAT	0KB01	ORDER BY DESCRIPTION
A10X2A1000	211–0730–00			SCR,ASSEM WSHR:6–32 X 0.375,PNH,STL,CDPL,T–15,TORX DR,MACHINE, DUBL WAX COAT	0KB01	ORDER BY DESCRIPTION
A10X2JP1200	131–5361–00			CONN,RF JACK:BNC,50 OHM,FEMALE,STR,SLDR CUP/FRONT PNL,GOLD/NICKEL,0.573 MLG X 0.525 TAIL,0.	24931	28JR472–1
A10X2JP1400	131–5361–00			CONN,RF JACK:BNC,50 OHM,FEMALE,STR,SLDR CUP/FRONT PNL,GOLD/NICKEL,0.573 MLG X 0.525 TAIL,0.	24931	28JR472–1
A10X3A1000	211–0730–00			SCR,ASSEM WSHR:6–32 X 0.375,PNH,STL,CDPL,T–15,TORX DR,MACHINE, DUBL WAX COAT	0KB01	ORDER BY DESCRIPTION
A10X3JP1200	131–5614–00			INPUT,LEAD:STRAP,ELEC CONDUCTOR,0.006THK BRASS ALLOY C26000,TINPLATED	TK194	131–5614–00
A10X3JP1400	131–5614–00			INPUT,LEAD:STRAP,ELEC CONDUCTOR,0.006THK BRASS ALLOY C26000,TINPLATED	TK194	131–5614–00
A10X4A1000	211–0730–00			SCR,ASSEM WSHR:6–32 X 0.375,PNH,STL,CDPL,T–15,TORX DR,MACHINE, DUBL WAX COAT	0KB01	ORDER BY DESCRIPTION
A10X4JP1200	213–0006–00			SETSCREW:8–32 X 0.188,STL CD PL,HEX SKT,CUP PT	3M099	ORDER BY DESCRIPTION
A10X4JP1400	213–0006–00			SETSCREW:8–32 X 0.188,STL CD PL,HEX SKT,CUP PT	3M099	ORDER BY DESCRIPTION
A10X5A1000	211–0730–00			SCR,ASSEM WSHR:6–32 X 0.375,PNH,STL,CDPL,T–15,TORX DR,MACHINE, DUBL WAX COAT	0KB01	ORDER BY DESCRIPTION
A10X6A1000	211–0730–00			SCR,ASSEM WSHR:6–32 X 0.375,PNH,STL,CDPL,T–15,TORX DR,MACHINE, DUBL WAX COAT	0KB01	ORDER BY DESCRIPTION
A10X6JP1200	131–5361–00			CONN,RF JACK:BNC,50 OHM,FEMALE,STR,SLDR CUP/FRONT PNL,GOLD/NICKEL,0.573 MLG X 0.525 TAIL,0.	24931	28JR472–1
A10X6JP1400	131–5361–00			CONN,RF JACK:BNC,50 OHM,FEMALE,STR,SLDR CUP/FRONT PNL,GOLD/NICKEL,0.573 MLG X 0.525 TAIL,0.	24931	28JR472–1
A10X7A1000	211–0730–00			SCR,ASSEM WSHR:6–32 X 0.375,PNH,STL,CDPL,T–15,TORX DR,MACHINE, DUBL WAX COAT	0KB01	ORDER BY DESCRIPTION
A10X7JP1200	131–5614–00			INPUT,LEAD:STRAP,ELEC CONDUCTOR,0.006THK BRASS ALLOY C26000,TINPLATED	TK194	131–5614–00
A10X7JP1400	131–5614–00			INPUT,LEAD:STRAP,ELEC CONDUCTOR,0.006THK BRASS ALLOY C26000,TINPLATED	TK194	131–5614–00
A10X8A1000	211–0730–00			SCR,ASSEM WSHR:6–32 X 0.375,PNH,STL,CDPL,T–15,TORX DR,MACHINE, DUBL WAX COAT	0KB01	ORDER BY DESCRIPTION
A10X8JP1200	213–0006–00			SETSCREW:8–32 X 0.188,STL CD PL,HEX SKT,CUP PT	3M099	ORDER BY DESCRIPTION

Replaceable Electrical Parts List, A10 Acquisition Board (Cont.)

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A10X8JP1400	213–0006–00			SETSCREW:8–32 X 0.188,STL CD PL,HEX SKT,CUP PT	3M099	ORDER BY DESCRIPTION
A10X9A1000	211–0730–00			SCR,ASSEM WSHR:6–32 X 0.375,PNH,STL,CDPL,T–15,TORX DR,MACHINE, DUBL WAX COAT	0KB01	ORDER BY DESCRIPTION
A10X10A1000	211–0730–00			SCR,ASSEM WSHR:6–32 X 0.375,PNH,STL,CDPL,T–15,TORX DR,MACHINE	0KB01	ORDER BY DESCRIPTION
A10XIJP1200	119–4576–00			INTERCON ASSY:PLASTIC FRAME	71785	380–02–20–049
A10XIJP1400	119–4576–00			INTERCON ASSY:PLASTIC FRAME	71785	380–02–20–049
A10XJ1000	136–0252–07			SOCKET,PIN CONN:SINGLE,PCB,T/G,0.030 H,0.054 DIA PTH,0.012–0.22 PIN SIZE,W/O DIMPLE,25000/REEL	22526	75060–012
A10XJ1001	136–0252–07			SOCKET,PIN CONN:SINGLE,PCB,T/G,0.030 H,0.054 DIA PTH,0.012–0.22 PIN SIZE,W/O DIMPLE,25000/REEL	22526	75060–012
A10XJ1201	136–0252–07			SOCKET,PIN CONN:SINGLE,PCB,T/G,0.030 H,0.054 DIA PTH,0.012–0.22 PIN SIZE,W/O DIMPLE,25000/REEL	22526	75060–012
A10XJ1500	136–0252–07			SOCKET,PIN CONN:SINGLE,PCB,T/G,0.030 H,0.054 DIA PTH,0.012–0.22 PIN SIZE,W/O DIMPLE,25000/REEL	22526	75060–012
A10XJ1550	136–0252–07			SOCKET,PIN CONN:SINGLE,PCB,T/G,0.030 H,0.054 DIA PTH,0.012–0.22 PIN SIZE,W/O DIMPLE,25000/REEL	22526	75060–012
A10Y501	158–5036–00			OSCILLATOR:25.00 MHZ,25 PPM,ENABLE/DISABLE,CMOS,SMD,6.4 X 11.0 MM,F3171	61429	F3171 25.0MHZ
A10XIU800	214–4771–00			HEAT SINK,SEMIC:IC,PGA 11X11/MQUAD,1.1" X 1.105" X 0.60" H,PIN FIN,ALUMINUM,BLACK ANODIZE	13103	2327B
A10XIU850	214–4771–00			HEAT SINK,SEMIC:IC,PGA 11X11/MQUAD,1.1" X 1.105" X 0.60" H,PIN FIN,ALUMINUM,BLACK ANODIZE	13103	2327B
A10XIU1001	214–4771–00			HEAT SINK,SEMIC:IC,PGA 11X11/MQUAD,1.1" X 1.105" X 0.60" H,PIN FIN,ALUMINUM,BLACK ANODIZE	13103	2327B
A10XIU1250	214–4771–00			HEAT SINK,SEMIC:IC,PGA 11X11/MQUAD,1.1" X 1.105" X 0.60" H,PIN FIN,ALUMINUM,BLACK ANODIZE	13103	2327B

Replaceable Electrical Parts List , A11 Monochrome Processor Board

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A11	671–3693–01			CIRCUIT BD ASSY:MONO PROCESSOR DISPLAY	80009	671369301
A11C1	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C2	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C3	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C4	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C5	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C6	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C7	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C8	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C9	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C10	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C11	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C12	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C13	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C14	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C15	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C16	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C17	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C18	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C19	283–5108–00			CAP,FXD,CERAMIC:MLC,68PF,5%,100V,NPO,1206,SMD,8MM T&R	04222	12061A680JAT1A
A11C20	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C21	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C22	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A

Replaceable Electrical Parts List (Cont.), A11 Monochrome Processor Board

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A11C23	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C24	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C25	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C26	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C27	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C28	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C29	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C30	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C31	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C32	283–5108–00			CAP,FXD,CERAMIC:MLC,68PF,5%,100V,NPO,1206,SMD,8MM T&R	04222	12061A680JAT1A
A11C33	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C34	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C35	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C36	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C37	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C38	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C39	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C40	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C41	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C42	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C43	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C44	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C45	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A

Replaceable Electrical Parts List (Cont.), A11 Monochrome Processor Board

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A11C46	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C47	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C48	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C49	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C50	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C51	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C52	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C53	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C54	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C55	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C56	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C57	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C58	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C59	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C60	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C61	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C62	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C63	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C64	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C65	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C66	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C67	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C68	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A

Replaceable Electrical Parts List (Cont.), A11 Monochrome Processor Board

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A11C69	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C70	283–5108–00			CAP,FXD,CERAMIC:MLC,68PF,5%,100V,NPO,1206,SMD,8MM T&R	04222	12061A680JAT1A
A11C71	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C72	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C73	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C74	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C75	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C76	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C77	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C78	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C79	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C80	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C81	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C82	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C83	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C84	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C85	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C86	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C87	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C88	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C89	283–5188–00			CAP,FXD,CERAMIC:MLC,100PF,5%,100V,NPO,1206,SMD,8MM T&R	04222	12061A101JAT1A
A11C90	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C91	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A

Replaceable Electrical Parts List (Cont.), A11 Monochrome Processor Board

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A11C92	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C93	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C94	283–5108–00			CAP,FXD,CERAMIC:MLC,68PF,5%,100V,NPO,1206,SMD,8MM T&R	04222	12061A680JAT1A
A11C95	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C96	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C97	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C98	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C99	290–5034–01			CAP,FXD,ALUM:33UF,20%,10V,5.7MM(0.224),SMD,T&R	62643	MVK10VC33RME60TPX (13")
A11C100	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C101	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C102	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C103	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C104	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C105	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C106	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C107	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C108	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C109	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C110	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C111	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C112	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C113	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C114	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A

Replaceable Electrical Parts List (Cont.), A11 Monochrome Processor Board

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A11C115	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C116	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C117	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C118	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C119	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C120	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C121	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C122	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C123	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C124	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C125	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C126	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C131	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C132	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C133	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C134	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C140	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C141	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C150	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C151	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C152	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C153	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C154	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A

Replaceable Electrical Parts List (Cont.), A11 Monochrome Processor Board

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A11C160	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C161	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C162	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C163	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C201	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C209	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C232	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C233	290–5037–01			CAP,FXD,ALUM:10UF,20%,35V,5.7 H X 5 DIA MM,SMD,T&R	62643	MVK35VC10RME60T PX (13")
A11C237	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C250	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C251	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C252	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C253	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C254	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C300	290–5034–01			CAP,FXD,ALUM:33UF,20%,10V,5.7MM(0.224),SMD,T&R	62643	MVK10VC33RME60T PX (13")
A11C330	290–5034–01			CAP,FXD,ALUM:33UF,20%,10V,5.7MM(0.224),SMD,T&R	62643	MVK10VC33RME60T PX (13")
A11C331	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C332	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C333	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C600	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C601	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C602	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C603	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A

Replaceable Electrical Parts List (Cont.), A11 Monochrome Processor Board

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A11C604	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C605	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C606	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C607	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C608	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C609	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C610	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C620	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C621	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C622	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C623	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C624	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C625	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C626	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C627	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C1001	290–5034–01			CAP,FXD,ALUM:33UF,20%,10V,5.7MM(0.224),SMD,T&R	62643	MVK10VC33RME60TPX (13")
A11C1002	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C1005	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C1007	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C1008	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C1017	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C1019	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C1021	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A

Replaceable Electrical Parts List (Cont.), A11 Monochrome Processor Board

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A11C1024	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C1041	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C1064	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C1097	283–5188–00			CAP,FXD,CERAMIC:MLC,100PF,5%,100V,NPO,1206,SMD,8MM T&R	04222	12061A101JAT1A
A11C1099	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C1103	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C1121	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C1125	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C1147	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C1149	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C1150	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C1151	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C1152	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C1153	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C1154	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C1155	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C1156	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C1165	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C1175	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C1197	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C1220	290–5034–01			CAP,FXD,ALUM:33UF,20%,10V,5.7MM(0.224),SMD,T&R	62643	MVK10VC33RME60TPX (13")
A11C1221	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A11C1225	290–5034–01			CAP,FXD,ALUM:33UF,20%,10V,5.7MM(0.224),SMD,T&R	62643	MVK10VC33RME60TPX (13")

Replaceable Electrical Parts List (Cont.), A11 Monochrome Processor Board

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A11C1233	290–5034–01			CAP,FXD,ALUM:33UF,20%,10V,5.7MM(0.224),SMD,T&R	62643	MVK10VC33RME60T PX (13")
A11C1241	290–5034–01			CAP,FXD,ALUM:33UF,20%,10V,5.7MM(0.224),SMD,T&R	62643	MVK10VC33RME60T PX (13")
A11C1248	290–5034–01			CAP,FXD,ALUM:33UF,20%,10V,5.7MM(0.224),SMD,T&R	62643	MVK10VC33RME60T PX (13")
A11C1249	290–5034–01			CAP,FXD,ALUM:33UF,20%,10V,5.7MM(0.224),SMD,T&R	62643	MVK10VC33RME60T PX (13")
A11C1255	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,120 6,SMD,8MM T&R	04222	12065E104ZAT3A
A11C1256	290–5037–01			CAP,FXD,ALUM:10UF,20%,35V,5.7 H X 5 DIA MM,SMD,T&R	62643	MVK35VC10RME60T PX (13")
A11C1258	283–5322–00			CAP,FXD,CERAMIC:MLC,0.027UF,5%,50V,X7R,0.12 X 0.06,1206,SMD,8MM T&R	04222	12065C273JAT1A
A11C1259	283–5113–00			CAP,FXD,CERAMIC:MLC,0.047UF,10%,50V,X7R,1206,S MD,8MM T&R	04222	12065C473KAT1A
A11C1260	283–5203–00			CAP,FXD,CERAMIC:MLC,1000PF,10%,100V,X7R,1206,S MD,8MM T&R	04222	12061C102KAT1A
A11CR1	152–5062–00			DIODE,SIG:ULTRA FAST,100V,0.74VF,4NS,2.0PF,COM–ANODE,MMBD1205, SOT–23,8MM T&R	27014	MMBD1205
A11CR10	152–5018–00			DIODE,SIG:ULTRA FAST,100V,0.74VF,4NS,2.0PF,SER–PAIR,MMBD1203,SO T–23,8MM T&R	27014	MMBD1203
A11CR11	152–5018–00			DIODE,SIG:ULTRA FAST,100V,0.74VF,4NS,2.0PF,SER–PAIR,MMBD1203,SO T–23,8MM T&R	27014	MMBD1203
A11CR12	152–5018–00			DIODE,SIG:ULTRA FAST,100V,0.74VF,4NS,2.0PF,SER–PAIR,MMBD1203,SO T–23,8MM T&R	27014	MMBD1203
A11DS1	150–1022–00			DISPLAY,OPTO:LED,RED,660NM,7SEG,0.3" DISPLAY,125UCD PER SEGMENT AT10MA,COMMON ANODE,LEFT HAN	0MS63	MAN72A
A11ID1	389–2043–01			CIRCUIT BOARD:INTERFACE,PROCESSOR,TDS600B,TDS700A	TK2597	389–2043–01
A11J1	131–2919–01			CONN,HDR:PCB,MALE,STR,1 X 4,0.1 CTR,0.235 MLG X 0.112 TAIL,30 GOLD,0.035 DIA PCB,SAFETY	53387	2404–6112TB
A11J2	131–3361–00			CONN,HDR:PCB,MALE,RTANG,2 X 13,0.1CTR,0.33 H X 0.112 TAIL,SHRD/4 SIDES,CTR PLZ,30 GOLD,	53387	2526–5002UB
A11J5	131–5354–00			CONN,HDR:PCB,MALE,RTANG,2 X 8,0.1 CTR,0.340 H X 0.610 TAIL,SHRD/4 SIDES,CTR PLZ,SHORT LA	53387	3408–5202
A11J12	131–4530–00			CONN,HDR:PCB,MALE,STR,1 X 3,0.1 CTR,0.230 MLG X 0.120 TAIL,30 GOLD,BD RETENTION,	00779	104344–1
A11J14	131–4530–00			CONN,HDR:PCB,MALE,STR,1 X 3,0.1 CTR,0.230 MLG X 0.120 TAIL,30 GOLD,BD RETENTION,	00779	104344–1
A11J18	131–4530–00			CONN,HDR:PCB,MALE,STR,1 X 3,0.1 CTR,0.230 MLG X 0.120 TAIL,30 GOLD,BD RETENTION,	00779	104344–1

Replaceable Electrical Parts List (Cont.), A11 Monochrome Processor Board

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A11J20	131–4799–00			CONN,HDR::PCB,MALE,RTANG,1 X 2,0.1 CTR,0.3 H X 0.130 TAIL,SHRD/4 SIDES,CTR PLZ,LATCHING,3	00779	103904–1
A11J23	131–5160–00			CONN,HDR:PCB,MALE,STR,2 X 4,0.1 CTR,0.230 MLG X 0.120 TAIL,15GOLD,BD RETENTION,	00779	104351–4
A11J26	131–3181–00			CONN,HDR:PCB,MALE,RTANG,2 X 20,0.1 CTR,0.330 H X 0.112 TAIL,SHRD/4 SIDES,CTR PLZ,30 GOLD	22526	69155–440R
A11J27	131–3181–00			CONN,HDR:PCB,MALE,RTANG,2 X 20,0.1 CTR,0.330 H X 0.112 TAIL,SHRD/4 SIDES,CTR PLZ,30 GOLD	22526	69155–440R
A11J28	131–4619–00			CONN,RIBBON:PCB,MALE,RTANG,100 POS,0.050 CTR,0.307 MLG X 0.110 TAIL,4 X 25 STAGGERED PCB,2	53387	91100–1201BP
A11J35	131–3361–00			CONN,HDR:PCB,MALE,RTANG,2 X 13,0.1CTR,0.33 H X 0.112 TAIL,SHRD/4 SIDES,CTR PLZ,30 GOLD,	53387	2526–5002UB
A11J37	131–3361–00			CONN,HDR:PCB,MALE,RTANG,2 X 13,0.1CTR,0.33 H X 0.112 TAIL,SHRD/4 SIDES,CTR PLZ,30 GOLD,	53387	2526–5002UB
A11J38	131–5501–00			CONN,BOX:PCB,FFC/ZIF,FEMALE,STR,1 X 26,0.039 CTR,0.396 H X 0.138 TAIL,TIN,ACCOM 0.012 THK	27264	52030–2610
A11J39	131–4619–00			CONN,RIBBON:PCB,MALE,RTANG,100 POS,0.050 CTR,0.307 MLG X 0.110 TAIL,4 X 25 STAGGERED PCB,2	53387	91100–1201BP
A11J46	131–4917–00			CONN,HDR:PCB,MALE,STR,1 X 2,0.1 CTR,0.235 MLG X 0.110 TAIL,30 GOLD,TUBE,HIGH TEMP,	00779	104350–1
A11J51	131–3453–00			CONN,HDR:PCB,MALE,RTANG,2 X 8,0.1 CTR,0.390 MLG X 0.112 TAIL,0.33 H,SHRD/4 SIDES,30 GOLD	53387	2516–5002UB
A11J88	131–1857–00			CONN,HDR:PCB,MALE,STR,1 X 36,0.1 CTR,0.230 MLG X 0.100 TAIL,GOLD,	22526	65507–136
A11J501	131–4917–00			CONN,HDR:PCB,MALE,STR,1 X 2,0.1 CTR,0.235 MLG X 0.110 TAIL,30 GOLD,TUBE,HIGH TEMP,	00779	104350–1
A11J502	131–4917–00			CONN,HDR:PCB,MALE,STR,1 X 2,0.1 CTR,0.235 MLG X 0.110 TAIL,30 GOLD,TUBE,HIGH TEMP,	00779	104350–1
A11J503	131–4917–00			CONN,HDR:PCB,MALE,STR,1 X 2,0.1 CTR,0.235 MLG X 0.110 TAIL,30 GOLD,TUBE,HIGH TEMP,	00779	104350–1
A11J504	131–4917–00			CONN,HDR:PCB,MALE,STR,1 X 2,0.1 CTR,0.235 MLG X 0.110 TAIL,30 GOLD,TUBE,HIGH TEMP,	00779	104350–1
A11J505	131–4917–00			CONN,HDR:PCB,MALE,STR,1 X 2,0.1 CTR,0.235 MLG X 0.110 TAIL,30 GOLD,TUBE,HIGH TEMP,	00779	104350–1
A11J506	131–4917–00			CONN,HDR:PCB,MALE,STR,1 X 2,0.1 CTR,0.235 MLG X 0.110 TAIL,30 GOLD,TUBE,HIGH TEMP,	00779	104350–1
A11J507	131–4917–00			CONN,HDR:PCB,MALE,STR,1 X 2,0.1 CTR,0.235 MLG X 0.110 TAIL,30 GOLD,TUBE,HIGH TEMP,	00779	104350–1
A11J508	131–4917–00			CONN,HDR:PCB,MALE,STR,1 X 2,0.1 CTR,0.235 MLG X 0.110 TAIL,30 GOLD,TUBE,HIGH TEMP,	00779	104350–1
A11J509	131–4917–00			CONN,HDR:PCB,MALE,STR,1 X 2,0.1 CTR,0.235 MLG X 0.110 TAIL,30 GOLD,TUBE,HIGH TEMP,	00779	104350–1
A11L1	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T

Replaceable Electrical Parts List (Cont.), A11 Monochrome Processor Board

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A11L3	108–5084–00			EMI,SUPPRESSION:FERRITE BEAD,52 OHM,+/–25%@100MHZ,DCR=0.3 OHM,IMAX=400 MA,CHIP,8MM T&R	TK2058	HF70ACB322513T
A11Q1	151–5066–00			TRANSISTOR,SIG:MOS,N–CH,60V,0.115A,7.5 OHM,2N7002,TO–236/SOT–23,8MM T&R	04713	2N7002LT1
A11Q2	151–5001–00			TRANSISTOR,SIG:BIPOLAR,NPN,40V,200MA,300MHZ,AMPLIFIER,MMBT3904L,TO–236/SOT–23,8MM T&R	04713	MMBT3904LT1
A11Q3	151–5001–00			TRANSISTOR,SIG:BIPOLAR,NPN,40V,200MA,300MHZ,AMPLIFIER,MMBT3904L,TO–236/SOT–23,8MM T&R	04713	MMBT3904LT1
A11R1	321–5042–00			RES,FXD:THICK FILM,39.2 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD39R2FT
A11R2	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A11R3	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A11R4	321–5042–00			RES,FXD:THICK FILM,39.2 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD39R2FT
A11R5	321–5443–00			RES,FXD,FILM:39.2 OHM,1%,100V,62.5MW,0603,SMD,T&R	91637	CRCW060339R2FRT–1
A11R6	321–5051–00			RES,FXD:THICK FILM,0 OHM,1%,0.125W,TC=100 PPM,1206,T&R	09969	CRCW1206 JUMPER
A11R7	321–5051–00			RES,FXD:THICK FILM,0 OHM,1%,0.125W,TC=100 PPM,1206,T&R	09969	CRCW1206 JUMPER
A11R8	321–5443–00			RES,FXD,FILM:39.2 OHM,1%,100V,62.5MW,0603,SMD,T&R	91637	CRCW060339R2FRT–1
A11R9	321–5051–00			RES,FXD:THICK FILM,0 OHM,1%,0.125W,TC=100 PPM,1206,T&R	09969	CRCW1206 JUMPER
A11R10	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A11R12	321–5051–00			RES,FXD:THICK FILM,0 OHM,1%,0.125W,TC=100 PPM,1206,T&R	09969	CRCW1206 JUMPER
A11R14	321–5443–00			RES,FXD,FILM:39.2 OHM,1%,100V,62.5MW,0603,SMD,T&R	91637	CRCW060339R2FRT–1
A11R16	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A11R17	321–5051–00			RES,FXD:THICK FILM,0 OHM,1%,0.125W,TC=100 PPM,1206,T&R	09969	CRCW1206 JUMPER
A11R18	321–5443–00			RES,FXD,FILM:39.2 OHM,1%,100V,62.5MW,0603,SMD,T&R	91637	CRCW060339R2FRT–1
A11R19	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A11R20	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R21	321–5443–00			RES,FXD,FILM:39.2 OHM,1%,100V,62.5MW,0603,SMD,T&R	91637	CRCW060339R2FRT–1

Replaceable Electrical Parts List (Cont.), A11 Monochrome Processor Board

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A11R22	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A11R23	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R24	321–5045–00			RES,FXD:THICK FILM,68.1 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD68R1FT
A11R25	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R26	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R27	321–5007–00			RES,FXD:THICK FILM,121 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1210FT
A11R28	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A11R29	321–5014–00			RES,FXD:THICK FILM,475 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4750FT
A11R30	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A11R31	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A11R32	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A11R33	321–5443–00			RES,FXD,FILM:39.2 OHM,1%,100V,62.5MW,0603,SMD,T&R	91637	CRCW060339R2FRT–1
A11R34	321–5443–00			RES,FXD,FILM:39.2 OHM,1%,100V,62.5MW,0603,SMD,T&R	91637	CRCW060339R2FRT–1
A11R35	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT
A11R36	321–5443–00			RES,FXD,FILM:39.2 OHM,1%,100V,62.5MW,0603,SMD,T&R	91637	CRCW060339R2FRT–1
A11R37	321–5445–00			RES,FXD,FILM:49.9 OHM,1%,50V,62.5MW,0603,SMD,T&R	59124	RK73H1JT49R9F
A11R39	321–5445–00			RES,FXD,FILM:49.9 OHM,1%,50V,62.5MW,0603,SMD,T&R	59124	RK73H1JT49R9F
A11R40	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT
A11R41	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT
A11R42	321–5445–00			RES,FXD,FILM:49.9 OHM,1%,50V,62.5MW,0603,SMD,T&R	59124	RK73H1JT49R9F
A11R43	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT
A11R44	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R46	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R50	321–5051–00			RES,FXD:THICK FILM,0 OHM,1%,0.125W,TC=100 PPM,1206,T&R	09969	CRCW1206 JUMPER

Replaceable Electrical Parts List (Cont.), A11 Monochrome Processor Board

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A11R51	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R54	321–5051–00			RES,FXD:THICK FILM,0 OHM,1%,0.125W,TC=100 PPM,1206,T&R	09969	CRCW1206 JUMPER
A11R56	321–5051–00			RES,FXD:THICK FILM,0 OHM,1%,0.125W,TC=100 PPM,1206,T&R	09969	CRCW1206 JUMPER
A11R57	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R59	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A11R60	321–5027–00			RES,FXD:THICK FILM,5.62K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK5621FT
A11R61	321–5026–00			RES,FXD:THICK FILM,4.75K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4751FT
A11R64	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT
A11R66	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT
A11R67	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT
A11R70	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A11R71	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A11R72	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT
A11R73	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT
A11R74	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT
A11R76	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT
A11R77	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT
A11R81	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT
A11R82	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT
A11R83	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT
A11R85	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT
A11R86	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT
A11R88	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT
A11R89	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT
A11R91	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT
A11R92	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT
A11R94	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT
A11R95	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT
A11R96	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT
A11R99	321–5046–00			RES,FXD:THICK FILM,82.5 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK82R5FT
A11R100	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT

Replaceable Electrical Parts List (Cont.), A11 Monochrome Processor Board

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A11R102	321–5051–00			RES,FXD:THICK FILM,0 OHM,1%,0.125W,TC=100 PPM,1206,T&R	09969	CRCW1206 JUMPER
A11R104	321–5051–00			RES,FXD:THICK FILM,0 OHM,1%,0.125W,TC=100 PPM,1206,T&R	09969	CRCW1206 JUMPER
A11R105	321–5051–00			RES,FXD:THICK FILM,0 OHM,1%,0.125W,TC=100 PPM,1206,T&R	09969	CRCW1206 JUMPER
A11R108	321–5051–00			RES,FXD:THICK FILM,0 OHM,1%,0.125W,TC=100 PPM,1206,T&R	09969	CRCW1206 JUMPER
A11R110	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT
A11R111	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT
A11R114	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT
A11R116	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT
A11R117	321–5051–00			RES,FXD:THICK FILM,0 OHM,1%,0.125W,TC=100 PPM,1206,T&R	09969	CRCW1206 JUMPER
A11R118	321–5051–00			RES,FXD:THICK FILM,0 OHM,1%,0.125W,TC=100 PPM,1206,T&R	09969	CRCW1206 JUMPER
A11R119	321–5051–00			RES,FXD:THICK FILM,0 OHM,1%,0.125W,TC=100 PPM,1206,T&R	09969	CRCW1206 JUMPER
A11R122	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT
A11R124	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT
A11R127	321–5428–00			RES,FXD,FILM:22.1K,1%,100V,62.5MW,0603,SMD,T&R	59124	RK73H1J2212FT
A11R130	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R131	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R132	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R133	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R134	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R135	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R136	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R137	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R150	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A11R151	321–5043–00			RES,FXD:THICK FILM,47.5 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD47R5FT
A11R152	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A11R153	321–5113–00			RES,FXD:THICK FILM,75 OHM,1%,0.125W,TC=100 PPM,1206,T&R	56845	CRCW1206–75ROFT

Replaceable Electrical Parts List (Cont.), A11 Monochrome Processor Board

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A11R251	321–5043–00			RES,FXD:THICK FILM,47.5 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD47R5FT
A11R252	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A11R253	321–5113–00			RES,FXD:THICK FILM,75 OHM,1%,0.125W,TC=100 PPM,1206,T&R	56845	CRCW1206–75ROFT
A11R254	321–5113–00			RES,FXD:THICK FILM,75 OHM,1%,0.125W,TC=100 PPM,1206,T&R	56845	CRCW1206–75ROFT
A11R255	321–5113–00			RES,FXD:THICK FILM,75 OHM,1%,0.125W,TC=100 PPM,1206,T&R	56845	CRCW1206–75ROFT
A11R456	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R1006	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A11R1007	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A11R1020	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A11R1022	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A11R1028	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R1042	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A11R1043	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A11R1044	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A11R1045	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A11R1046	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A11R1047	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A11R1048	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A11R1049	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A11R1053	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R1069	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R1071	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A11R1072	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT

Replaceable Electrical Parts List (Cont.), A11 Monochrome Processor Board

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A11R1073	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R1074	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R1075	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R1078	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R1079	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R1080	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R1081	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A11R1097	321–5113–00			RES,FXD:THICK FILM,75 OHM,1%,0.125W,TC=100 PPM,1206,T&R	56845	CRCW1206–75ROFT
A11R1100	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R1300	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R1317	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A11R2001	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R2006	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R2007	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R2008	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R2009	321–5026–00			RES,FXD:THICK FILM,4.75K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK4751FT
A11R2010	321–5008–00			RES,FXD:THICK FILM,150 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1500FT
A11R2012	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A11R2013	321–5011–00			RES,FXD:THICK FILM,274 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2740FT
A11R2014	321–5024–00			RES,FXD:THICK FILM,3.32K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK3321FT
A11R2015	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R2016	321–5011–00			RES,FXD:THICK FILM,274 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2740FT
A11R2017	321–5011–00			RES,FXD:THICK FILM,274 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2740FT

Replaceable Electrical Parts List (Cont.), A11 Monochrome Processor Board

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A11R2018	321–5011–00			RES,FXD:THICK FILM,274 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2740FT
A11R2019	321–5011–00			RES,FXD:THICK FILM,274 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2740FT
A11R2020	321–5011–00			RES,FXD:THICK FILM,274 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2740FT
A11R2021	321–5011–00			RES,FXD:THICK FILM,274 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2740FT
A11R2022	321–5011–00			RES,FXD:THICK FILM,274 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2740FT
A11R2023	321–5011–00			RES,FXD:THICK FILM,274 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2740FT
A11R2026	321–5015–00			RES,FXD:THICK FILM,562 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK5620FT
A11R2027	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R2028	321–5027–00			RES,FXD:THICK FILM,5.62K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK5621FT
A11R2033	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R2034	321–5030–00			RES,FXD:THICK FILM,10.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1002FT
A11R2038	321–5015–00			RES,FXD:THICK FILM,562 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK5620FT
A11R2041	321–5015–00			RES,FXD:THICK FILM,562 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK5620FT
A11S1	260–2280–00			SWITCH,SIG:SPST,MOM,NO,W/OUT GND TERM,MANUAL INSERT,300 GRAMS,SILVER,SEALED,KSA0411	31918	KSA0M411
A11S1001	260–1721–00			SWITCH,ROCKER:8,SPST,125MA,30VDC	00779	5–435166–3
A11S1002	260–2529–00			SWITCH,LOW PWR:SPDT,ROCKER,PC MNT,RIGHT ANGLE,COPPER–NICKEL–GOLD,BLK,PROCESS SEALED,E101J1ABE2	09353	E101J1ABE2
A11U12	156–6183–01			IC,LINEAR:BIPOLAR,VOLTAGE REGULATOR,POSITIVE ADJUSTABLE,500MA,4%,LM317M,TO–252/D–PAK,16MM	04713	LM317MDTRK
A11U28	156–5468–01			IC,DIGITAL:FTTL,COUNTER,SYNCH 4 BIT BINARY,PRESET,ASYNCH CLEAR,74F161,SO16.150,16MM T&R	01295	SN74F161ADR
A11U29	156–5468–01			IC,DIGITAL:FTTL,COUNTER,SYNCH 4 BIT BINARY,PRESET,ASYNCH CLEAR,74F161,SO16.150,16MM T&R	01295	SN74F161ADR
A11U30	156–5468–01			IC,DIGITAL:FTTL,COUNTER,SYNCH 4 BIT BINARY,PRESET,ASYNCH CLEAR,74F161,SO16.150,16MM T&R	01295	SN74F161ADR
A11U33	156–5192–01			IC,DIGITAL:FTTL,MUX,QUAD 2–TO–1,ENABLE,74F157A,SO16.150,16MM T&R	01295	SN74F157ADR

Replaceable Electrical Parts List (Cont.), A11 Monochrome Processor Board

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A11U34	156–5192–01			IC,DIGITAL:FTTL,MUX,QUAD 2–TO–1,ENABLE,74F157A,SO16.150,16MM T&R	01295	SN74F157ADR
A11U35	156–5192–01			IC,DIGITAL:FTTL,MUX,QUAD 2–TO–1,ENABLE,74F157A,SO16.150,16MM T&R	01295	SN74F157ADR
A11U36	156–5192–01			IC,DIGITAL:FTTL,MUX,QUAD 2–TO–1,ENABLE,74F157A,SO16.150,16MM T&R	01295	SN74F157ADR
A11U37	156–5192–01			IC,DIGITAL:FTTL,MUX,QUAD 2–TO–1,ENABLE,74F157A,SO16.150,16MM T&R	01295	SN74F157ADR
A11U38	156–5192–01			IC,DIGITAL:FTTL,MUX,QUAD 2–TO–1,ENABLE,74F157A,SO16.150,16MM T&R	01295	SN74F157ADR
A11U43	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U44	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U45	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U46	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U47	156–5168–01			IC,DIGITAL:FTTL,FLIP FLOP,OCTAL D–TYPE,3–STATE,74F374,SO20.300,24MM T&R	01295	SN74F374DWR
A11U48	156–5168–01			IC,DIGITAL:FTTL,FLIP FLOP,OCTAL D–TYPE,3–STATE,74F374,SO20.300,24MM T&R	01295	SN74F374DWR
A11U51	156–5168–01			IC,DIGITAL:FTTL,FLIP FLOP,OCTAL D–TYPE,3–STATE,74F374,SO20.300,24MM T&R	01295	SN74F374DWR
A11U52	156–5168–01			IC,DIGITAL:FTTL,FLIP FLOP,OCTAL D–TYPE,3–STATE,74F374,SO20.300,24MM T&R	01295	SN74F374DWR
A11U55	156–5192–01			IC,DIGITAL:FTTL,MUX,QUAD 2–TO–1,ENABLE,74F157A,SO16.150,16MM T&R	01295	SN74F157ADR
A11U56	156–5192–01			IC,DIGITAL:FTTL,MUX,QUAD 2–TO–1,ENABLE,74F157A,SO16.150,16MM T&R	01295	SN74F157ADR
A11U57	156–5192–01			IC,DIGITAL:FTTL,MUX,QUAD 2–TO–1,ENABLE,74F157A,SO16.150,16MM T&R	01295	SN74F157ADR
A11U58	156–5192–01			IC,DIGITAL:FTTL,MUX,QUAD 2–TO–1,ENABLE,74F157A,SO16.150,16MM T&R	01295	SN74F157ADR
A11U59	156–5927–01			IC,ASIC:CMOS,CUSTOM,RASTERIZER IC,ADG222,PLCC84,T&R	66302	VY04649–2
A11U60	156–5926–01			IC,ASIC:CMOS,CUSTOM,PIXEL PROCESSOR,ADG221,PLCC84,T&R	66302	VYO4648–2
A11U61	156–5071–01			IC,DIGITAL:HCTCMOS,TRANSCEIVER,OCTAL,3–STATE,74HCT245,SO20.300,24MM T&R	01295	SN74HCT245DWR
A11U62	156–5071–01			IC,DIGITAL:HCTCMOS,TRANSCEIVER,OCTAL,3–STATE,74HCT245,SO20.300,24MM T&R	01295	SN74HCT245DWR
A11U63	156–5192–01			IC,DIGITAL:FTTL,MUX,QUAD 2–TO–1,ENABLE,74F157A,SO16.150,16MM T&R	01295	SN74F157ADR
A11U66	156–5192–01			IC,DIGITAL:FTTL,MUX,QUAD 2–TO–1,ENABLE,74F157A,SO16.150,16MM T&R	01295	SN74F157ADR

Replaceable Electrical Parts List (Cont.), A11 Monochrome Processor Board

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A11U68	156–5054–01			IC,DIGITAL:FTTL,GATE,QUAD 2–INPUT OR,74F32,SO14.150,16MM T&R	01295	SN74F32DR
A11U79	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U80	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U84	156–5054–01			IC,DIGITAL:FTTL,GATE,QUAD 2–INPUT OR,74F32,SO14.150,16MM T&R	01295	SN74F32DR
A11U100	156–5054–01			IC,DIGITAL:FTTL,GATE,QUAD 2–INPUT OR,74F32,SO14.150,16MM T&R	01295	SN74F32DR
A11U101	156–5053–01			IC,DIGITAL:FTTL,GATE,QUAD 2–INPUT AND,74F08,SO14.150,16MM T&R	01295	SN74F08DR
A11U102	156–5054–01			IC,DIGITAL:FTTL,GATE,QUAD 2–INPUT OR,74F32,SO14.150,16MM T&R	01295	SN74F32DR
A11U118	156–5247–01			IC,DIGITAL:FTTL,GATE,TRIPLE 3–INPUT AND,74F11,SO14.150,16MM T&R	01295	SN74F11DR
A11U150	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U151	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U152	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U153	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U157	156–5055–01			IC,DIGITAL:FTTL,FLIP FLOP,DUAL D–TYPE,SET,CLEAR,74F74,SO14.150,16MM T&R	01295	SN74F74DR
A11U160	156–5452–01			IC,DIGITAL:FTTL,BUFFER,OCTAL,FLOW THRU,3–STATE,74F541,SO20.300,24MM T&R	01295	SN74F541DWR
A11U161	156–5452–01			IC,DIGITAL:FTTL,BUFFER,OCTAL,FLOW THRU,3–STATE,74F541,SO20.300,24MM T&R	01295	SN74F541DWR
A11U162	156–5452–01			IC,DIGITAL:FTTL,BUFFER,OCTAL,FLOW THRU,3–STATE,74F541,SO20.300,24MM T&R	01295	SN74F541DWR
A11U166	156–5464–01			IC,DIGITAL:ACTCMOS,GATE,QUAD 2–INPUT NAND,74ACT00,SO14.150,16MM T&R	04713	MC74ACT00DR2
A11U168	156–5054–01			IC,DIGITAL:FTTL,GATE,QUAD 2–INPUT OR,74F32,SO14.150,16MM T&R	01295	SN74F32DR
A11U169	156–5054–01			IC,DIGITAL:FTTL,GATE,QUAD 2–INPUT OR,74F32,SO14.150,16MM T&R	01295	SN74F32DR
A11U190	156–6167–01			IC,CONVERTER:CMOS,D/A,TRIPLE 6–BIT,35MHZ,256 X 18 COLOR PALETTE MEMORY,OVERLAY REGISTERS,BT47	34335	AM81C471–35JC
A11U191	156–5055–01			IC,DIGITAL:FTTL,FLIP FLOP,DUAL D–TYPE,SET,CLEAR,74F74,SO14.150,16MM T&R	01295	SN74F74DR
A11U195	156–5051–01			IC,DIGITAL:FTTL,GATE,QUAD 2–INPUT NOR,74F02,SO14.150,16MM T&R	01295	SN74F02DR

Replaceable Electrical Parts List (Cont.), A11 Monochrome Processor Board

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A11U199	156–6167–01			IC,CONVERTER:CMOS,D/A,TRIPLE 6–BIT,35MHZ,256 X 18 COLOR PALETTE MEMORY,OVERLAY REGISTERS,BT47	34335	AM81C471–35JC
A11U208	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U220	156–5190–01			IC,DIGITAL:FTTL,DECODER,1–OF–8,ACTIVE LOW,74F138,SO16.150,16MM T&R	01295	SN74F138DR
A11U221	156–5190–01			IC,DIGITAL:FTTL,DECODER,1–OF–8,ACTIVE LOW,74F138,SO16.150,16MM T&R	01295	SN74F138DR
A11U234	156–5499–01			IC,DIGITAL:FTTL,GATE,TRIPLE 3–INPUT NOR,74F27,SO14.150,T&R	01295	SN74F27DR
A11U251	156–5052–01			IC,DIGITAL:FTTL,GATE,HEX INVERTER,74F04,SO14.150,16MM T&R	01295	SN74F04DR
A11U253	156–5052–01			IC,DIGITAL:FTTL,GATE,HEX INVERTER,74F04,SO14.150,16MM T&R	01295	SN74F04DR
A11U255	156–5502–01			IC,DIGITAL:FTTL,BUFFER,QUAD,3–STATE,74F125,SO14.150,16MM T&R	01295	SN74F125DR
A11U256	156–5054–01			IC,DIGITAL:FTTL,GATE,QUAD 2–INPUT OR,74F32,SO14.150,16MM T&R	01295	SN74F32DR
A11U268	156–5052–01			IC,DIGITAL:FTTL,GATE,HEX INVERTER,74F04,SO14.150,16MM T&R	01295	SN74F04DR
A11U320	156–5247–01			IC,DIGITAL:FTTL,GATE,TRIPLE 3–INPUT AND,74F11,SO14.150,16MM T&R	01295	SN74F11DR
A11U700	156–5220–01			IC,DIGITAL:HCTCMOS,BUFFER,OCTAL,FLOW THRU,3–STATE,74HCT541,SO20.300,24MM T&R	01295	SN74HCT541DWR
A11U800	156–6553–00			IC,MEMORY:CMOS,EPROM,1MEG X 8,120NS,FLASH,E28F008SA,TSOP40	34649	E28F008SA–120
A11U801	156–6553–00			IC,MEMORY:CMOS,EPROM,1MEG X 8,120NS,FLASH,E28F008SA,TSOP40	34649	E28F008SA–120
A11U802	156–6553–00			IC,MEMORY:CMOS,EPROM,1MEG X 8,120NS,FLASH,E28F008SA,TSOP40	34649	E28F008SA–120
A11U803	156–6553–00			IC,MEMORY:CMOS,EPROM,1MEG X 8,120NS,FLASH,E28F008SA,TSOP40	34649	E28F008SA–120
A11U810	156–6689–00			IC,MEMORY:CMOS,VDRAM,256K X 8,80NS,DUAL PORTS,TC528257,SOJ40.400	0JR04	TC528257J–80
A11U830	156–6689–00			IC,MEMORY:CMOS,VDRAM,256K X 8,80NS,DUAL PORTS,TC528257,SOJ40.400	0JR04	TC528257J–80
A11U831	156–6689–00			IC,MEMORY:CMOS,VDRAM,256K X 8,80NS,DUAL PORTS,TC528257,SOJ40.400	0JR04	TC528257J–80
A11U832	156–6689–00			IC,MEMORY:CMOS,VDRAM,256K X 8,80NS,DUAL PORTS,TC528257,SOJ40.400	0JR04	TC528257J–80
A11U833	156–6689–00			IC,MEMORY:CMOS,VDRAM,256K X 8,80NS,DUAL PORTS,TC528257,SOJ40.400	0JR04	TC528257J–80
A11U840	156–6794–00			IC,MEMORY:CMOS,SRAM,32K X 8,15NS,5C2568,SOJ28.300	TK2519	AS7C256–15JC

Replaceable Electrical Parts List (Cont.), A11 Monochrome Processor Board

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A11U841	156–6794–00			IC,MEMORY:CMOS,SRAM,32K X 8,15NS,5C2568,SOJ28.300	TK2519	AS7C256–15JC
A11U842	156–6794–00			IC,MEMORY:CMOS,SRAM,32K X 8,15NS,5C2568,SOJ28.300	TK2519	AS7C256–15JC
A11U843	156–6794–00			IC,MEMORY:CMOS,SRAM,32K X 8,15NS,5C2568,SOJ28.300	TK2519	AS7C256–15JC
A11U844	156–6794–00			IC,MEMORY:CMOS,SRAM,32K X 8,15NS,5C2568,SOJ28.300	TK2519	AS7C256–15JC
A11U845	156–6794–00			IC,MEMORY:CMOS,SRAM,32K X 8,15NS,5C2568,SOJ28.300	TK2519	AS7C256–15JC
A11U870	156–6502–01			IC,MEMORY:CMOS,SRAM,128K X 8,25NS,NARROW PACKAGE,41024,SOJ32–30,32MM T&R	0K6N4	PDM41024S25TSO
A11U871	156–6502–01			IC,MEMORY:CMOS,SRAM,128K X 8,25NS,NARROW PACKAGE,41024,SOJ32–30,32MM T&R	0K6N4	PDM41024S25TSO
A11U872	156–6502–01			IC,MEMORY:CMOS,SRAM,128K X 8,25NS,NARROW PACKAGE,41024,SOJ32–30,32MM T&R	0K6N4	PDM41024S25TSO
A11U880	156–6582–00			IC,MEMORY:CMOS,DRAM,256K X 16,70NS,FAST PAGE MODE,SELF–REFRESH,42S4260,SOJ40.400	0JR04	TC514260BJLL–70
A11U881	156–6582–00			IC,MEMORY:CMOS,DRAM,256K X 16,70NS,FAST PAGE MODE,SELF–REFRESH,42S4260,SOJ40.400	0JR04	TC514260BJLL–70
A11U882	156–6582–00			IC,MEMORY:CMOS,DRAM,256K X 16,70NS,FAST PAGE MODE,SELF–REFRESH,42S4260,SOJ40.400	0JR04	TC514260BJLL–70
A11U883	156–6582–00			IC,MEMORY:CMOS,DRAM,256K X 16,70NS,FAST PAGE MODE,SELF–REFRESH,42S4260,SOJ40.400	0JR04	TC514260BJLL–70
A11U885	163–0518–00			IC,DIGITAL:CMOS,PLD,EEPLD,16V8,7.5NS,PRGM 156–6548–00,130MA,16V8–7,PLCC20,TUBE	80009	163–0518–00
A11U890	156–4349–00			IC,MEMORY:CMOS,NVRAM,512K X 8,100NS,W/BATTERY,DS1650,DIP32.6,	0B0A9	DS1650Y–100
A11U1001	156–5052–01			IC,DIGITAL:FTTL,GATE,HEX INVERTER,74F04,SO14.150,16MM T&R	01295	SN74F04DR
A11U1002	156–5053–01			IC,DIGITAL:FTTL,GATE,QUAD 2–INPUT AND,74F08,SO14.150,16MM T&R	01295	SN74F08DR
A11U1003	156–5192–01			IC,DIGITAL:FTTL,MUX,QUAD 2–TO–1,ENABLE,74F157A,SO16.150,16MM T&R	01295	SN74F157ADR
A11U1008	156–6151–01			IC,MEMORY:CMOS,SRAM,128K X 8,100NS,15UA,OE,431000,SO32.440,T&R	62786	HM628128LFP–10SL
A11U1009	156–6151–01			IC,MEMORY:CMOS,SRAM,128K X 8,100NS,15UA,OE,431000,SO32.440,T&R	62786	HM628128LFP–10SL
A11U1015	156–5190–01			IC,DIGITAL:FTTL,DECODER,1–OF–8,ACTIVE LOW,74F138,SO16.150,16MM T&R	01295	SN74F138DR
A11U1017	156–5054–01			IC,DIGITAL:FTTL,GATE,QUAD 2–INPUT OR,74F32,SO14.150,16MM T&R	01295	SN74F32DR
A11U1034	156–6421–01			IC,MEMORY:CMOS,DRAM,1MEG X 4,70NS,424400,SOJ26.300,T&R	01295	TMS44400–70R
A11U1035	156–6421–01			IC,MEMORY:CMOS,DRAM,1MEG X 4,70NS,424400,SOJ26.300,T&R	01295	TMS44400–70R

Replaceable Electrical Parts List (Cont.), A11 Monochrome Processor Board

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A11U1036	156–6421–01			IC,MEMORY:CMOS,DRAM,1MEG X 4,70NS,424400,SOJ26.300,T&R	01295	TMS44400–70R
A11U1037	156–6421–01			IC,MEMORY:CMOS,DRAM,1MEG X 4,70NS,424400,SOJ26.300,T&R	01295	TMS44400–70R
A11U1042	156–5192–01			IC,DIGITAL:FTTL,MUX,QUAD 2–TO–1,ENABLE,74F157A,SO16.150,16MM T&R	01295	SN74F157ADR
A11U1043	156–5192–01			IC,DIGITAL:FTTL,MUX,QUAD 2–TO–1,ENABLE,74F157A,SO16.150,16MM T&R	01295	SN74F157ADR
A11U1044	156–5192–01			IC,DIGITAL:FTTL,MUX,QUAD 2–TO–1,ENABLE,74F157A,SO16.150,16MM T&R	01295	SN74F157ADR
A11U1055	156–5190–01			IC,DIGITAL:FTTL,DECODER,1–OF–8,ACTIVE LOW,74F138,SO16.150,16MM T&R	01295	SN74F138DR
A11U1056	156–5190–01			IC,DIGITAL:FTTL,DECODER,1–OF–8,ACTIVE LOW,74F138,SO16.150,16MM T&R	01295	SN74F138DR
A11U1065	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U1066	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U1067	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U1068	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U1071	156–5190–01			IC,DIGITAL:FTTL,DECODER,1–OF–8,ACTIVE LOW,74F138,SO16.150,16MM T&R	01295	SN74F138DR
A11U1072	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U1073	156–5052–01			IC,DIGITAL:FTTL,GATE,HEX INVERTER,74F04,SO14.150,16MM T&R	01295	SN74F04DR
A11U1074	156–5446–01			IC,MEMORY:CMOS,FIFO,512 X 9,65NS,7201,PLCC32,T&R	0B0A9	DS2009R–65
A11U1075	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U1076	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U1077	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U1081	156–5054–01			IC,DIGITAL:FTTL,GATE,QUAD 2–INPUT OR,74F32,SO14.150,16MM T&R	01295	SN74F32DR
A11U1082	156–5054–01			IC,DIGITAL:FTTL,GATE,QUAD 2–INPUT OR,74F32,SO14.150,16MM T&R	01295	SN74F32DR
A11U1083	156–5056–01			IC,DIGITAL:FTTL,BUFFER,OCTAL INVERT,3–STATE,74F240,SO20.300,24MM T&R	01295	SN74F240DWR
A11U1084	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U1085	156–6134–01			IC,DIGITAL:FCTCMOS,LATCH,10–BIT D–TYPE,3–STATE,29C841A,SO24.300,24MM T&R	34335	AM29C841ASCTR

Replaceable Electrical Parts List (Cont.), A11 Monochrome Processor Board

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A11U1086	156–6134–01			IC,DIGITAL:FCTCMOS,LATCH,10–BIT D–TYPE,3–STATE,29C841A,SO24.300,24MM T&R	34335	AM29C841ASCTR
A11U1087	156–6134–01			IC,DIGITAL:FCTCMOS,LATCH,10–BIT D–TYPE,3–STATE,29C841A,SO24.300,24MM T&R	34335	AM29C841ASCTR
A11U1088	156–6134–01			IC,DIGITAL:FCTCMOS,LATCH,10–BIT D–TYPE,3–STATE,29C841A,SO24.300,24MM T&R	34335	AM29C841ASCTR
A11U1089	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U1090	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U1091	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U1092	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U1097	156–6030–00			IC,ASIC:CMOS,CUSTOM,TRISTAR DIGITAL SIGNAL PROCESSOR,BIG PINOUT,ADG500B,VF4651,QFP132	27014	MM9260–VF8–SZ107668
A11U1107	156–4347–00			IC,MEMORY:CMOS,NVRAM,128K X 8,RTC,CLOCK CALENDAR,INTERNAL BATTERY,DS1486–12,DIP32.6	0B0A9	DS1486–12
A11U1109	156–5504–01			IC,DIGITAL:FTTL,GATE,DUAL 4–INPUT NAND,74F20,SO14.150,16MM T&R	01295	SN74F20DR
A11U1115	156–5052–01			IC,DIGITAL:FTTL,GATE,HEX INVERTER,74F04,SO14.150,16MM T&R	01295	SN74F04DR
A11U1135	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U1136	156–5147–01			IC,DIGITAL:HCTCMOS,FLIP FLOP,OCTAL D–TYPE,CLEAR,74HCT273,SO20.300,24MM T&R	01295	SN74HCT273DWR
A11U1151	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U1152	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U1155	156–2515–04			IC,PROCESSOR:CMOS,MICROPROCESSOR,32–BIT,16MHZ,68020,PPGA114	04713	MC68020RP16E
A11U1157	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U1158	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U1159	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U1160	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U1161	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U1162	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U1163	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D

Replaceable Electrical Parts List (Cont.), A11 Monochrome Processor Board

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A11U1164	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U1165	156–5053–01			IC,DIGITAL:FTTL,GATE,QUAD 2–INPUT AND,74F08,SO14.150,16MM T&R	01295	SN74F08DR
A11U1166	156–5058–01			IC,DIGITAL:FTTL,TRANSCEIVER,OCTAL,3–STATE,74F245,SO20.300,24MM T&R	1CH66	N74F245D
A11U1175	156–5489–01			IC,MISC:BIPOLAR,PWR SUPPLY SUPERVISOR,MPU RESET GENERATOR,5V SUPPLY SENSING,TL7705ACD,SO	01295	TL7705ACDR
A11U1178	156–5054–01			IC,DIGITAL:FTTL,GATE,QUAD 2–INPUT OR,74F32,SO14.150,16MM T&R	01295	SN74F32DR
A11U1302	156–5581–01			IC,DIGITAL:TTL,BUS TRANSCEIVER,OCTAL GPIB,BUS MANAGEMENT,75161,SO20.300,24MM T&R	01295	SN75161BDWR
A11U1305	156–6223–02			IC,PROCESSOR:CMOS,CONTROLLER,GPID ADAPTER,NAT9914L,PLCC44,T&R	64667	NAT9914APL
A11U1311	156–5580–01			IC,DIGITAL:TTL,OCTAL GPIB TRANSCEIVER,DATA BUS,75160,SO20.300,24MM T&R	01295	SN75160BDWR
A11U1317	156–6031–01			IC,PROCESSOR:NMOS,PERIPHERAL,DUAL ASYNCH RECEIVER/TRANSMITTER, DUART,68681,PLCC44,32MM T&R	04713	MC68681FNR2
A11U1324	156–6134–01			IC,DIGITAL:FCTCMOS,LATCH,10–BIT D–TYPE,3–STATE,29C841A,SO24.300,24MM T&R	34335	AM29C841ASCTR
A11U1325	156–6134–01			IC,DIGITAL:FCTCMOS,LATCH,10–BIT D–TYPE,3–STATE,29C841A,SO24.300,24MM T&R	34335	AM29C841ASCTR
A11U1326	156–6134–01			IC,DIGITAL:FCTCMOS,LATCH,10–BIT D–TYPE,3–STATE,29C841A,SO24.300,24MM T&R	34335	AM29C841ASCTR
A11U1327	156–6134–01			IC,DIGITAL:FCTCMOS,LATCH,10–BIT D–TYPE,3–STATE,29C841A,SO24.300,24MM T&R	34335	AM29C841ASCTR
A11U1328	156–5220–01			IC,DIGITAL:HCTCMOS,BUFFER,OCTAL,FLOW THRU,3–STATE,74HCT541,SO20.300,24MM T&R	01295	SN74HCT541DWR
A11U1329	156–5220–01			IC,DIGITAL:HCTCMOS,BUFFER,OCTAL,FLOW THRU,3–STATE,74HCT541,SO20.300,24MM T&R	01295	SN74HCT541DWR
A11U1330	156–5220–01			IC,DIGITAL:HCTCMOS,BUFFER,OCTAL,FLOW THRU,3–STATE,74HCT541,SO20.300,24MM T&R	01295	SN74HCT541DWR
A11U1331	160–9335–00			IC,MEMORY:CMOS,EPROM,128K X 8,200NS,10%VCC,PRGM 156–4025–00,27C010,DIP32.6	80009	160–9335–00
A11U1334	156–5452–01			IC,DIGITAL:FTTL,BUFFER,OCTAL,FLOW THRU,3–STATE,74F541,SO20.300,24MM T&R	01295	SN74F541DWR
A11U1341	156–5053–01			IC,DIGITAL:FTTL,GATE,QUAD 2–INPUT AND,74F08,SO14.150,16MM T&R	01295	SN74F08DR
A11U2000	156–6492–00			IC,ASIC:CMOS,CUSTOM,LOGIC REPLACEMENT IC,ADG281,MM9351A,PQFP100	27014	MM9351–VCE
A11U2001	156–6492–00			IC,ASIC:CMOS,CUSTOM,LOGIC REPLACEMENT IC,ADG281,MM9351A,PQFP100	27014	MM9351–VCE
A11U2100	156–6492–00			IC,ASIC:CMOS,CUSTOM,LOGIC REPLACEMENT IC,ADG281,MM9351A,PQFP100	27014	MM9351–VCE

Replaceable Electrical Parts List (Cont.), A11 Monochrome Processor Board

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A11U2101	156–6492–00			IC,ASIC:CMOS,CUSTOM,LOGIC REPLACEMENT IC,ADG281,MM9351A,PQFP100	27014	MM9351–VCE
A11U2110	156–6492–00			IC,ASIC:CMOS,CUSTOM,LOGIC REPLACEMENT IC,ADG281,MM9351A,PQFP100	27014	MM9351–VCE
A11U2111	156–6492–00			IC,ASIC:CMOS,CUSTOM,LOGIC REPLACEMENT IC,ADG281,MM9351A,PQFP100	27014	MM9351–VCE
A11U2118	156–6242–00			IC,PROCESSOR:CMOS,CONTROLLER,FLOPPY DISK,8473,PLCC52,TUBE	27014	DP8473AV
A11U2119	156–5298–01			IC,LINEAR:BIPOLAR,VOLTAGE REGULATOR,POSITIVE,5V,100MA,5%,MC78L05ACD,SO 8.150,12MM T&R	01295	UA78L05ACDR
A11VR1	156–6175–01			IC,LINEAR:BIPOLAR,VOLTAGE REFERENCE,FIXED,1.2V,1%,150PPM,SHUNT, MICROPOWER,LM385BM–1.2,SO8	27014	LM385BMX–1.2
A11VR2	152–5002–00			DIODE,ZENER:3.6V,5%,225MW,MMBZ5227BL,SOT–23,8 MM T&R	04713	MMBZ5227BLT1
A11Y1	119–1953–00			OSC,XTAL CLOCK:TTL,25 MHZ,0.01%,0–70 DEG C,14 PIN DIP COMPATABLE,0.110 L 0.020 DIA LEADS	08111	M1280–25M
A11Y2	119–2603–00			OSCILLATOR,RF:XTAL CONT,32MHZ,0.01%,CMOS/TTL, 4 PIN 14 PIN DIP COMPATIABLE	82567	03–02181–XXX
A11Y4	119–1329–00			OSCILLATOR,RF:CRYSTAL CONTROLLED,24MHZ	14301	AE 404

Replaceable Electrical Parts List , A12 Front Panel

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A12	614–0934–00			FNT PANEL ASSY:TDS 520B	80009	614093400
A12C1	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A12C2	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A12C3	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A12C4	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A12C5	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A12C6	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A12C7	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A12C8	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A12C9	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A12C10	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A12C11	290–5034–01			CAP,FXD,ALUM:33UF,20%,10V,5.7MM(0.224),SMD,T&R	62643	MVK10VC33RME60TPX (13")
A12C12	290–5034–01			CAP,FXD,ALUM:33UF,20%,10V,5.7MM(0.224),SMD,T&R	62643	MVK10VC33RME60TPX (13")
A12C13	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A12C14	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A12C15	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A12C16	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A12C17	290–5034–01			CAP,FXD,ALUM:33UF,20%,10V,5.7MM(0.224),SMD,T&R	62643	MVK10VC33RME60TPX (13")
A12C18	290–5034–01			CAP,FXD,ALUM:33UF,20%,10V,5.7MM(0.224),SMD,T&R	62643	MVK10VC33RME60TPX (13")
A12C19	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A12C20	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A12C21	283–5188–00			CAP,FXD,CERAMIC:MLC,100PF,5%,100V,NPO,1206,SMD,8MM T&R	04222	12061A101JAT1A
A12C22	290–5034–01			CAP,FXD,ALUM:33UF,20%,10V,5.7MM(0.224),SMD,T&R	62643	MVK10VC33RME60TPX (13")

Replaceable Electrical Parts List (Cont.), A12 Front Panel

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A12C23	290–5034–01			CAP,FXD,ALUM:33UF,20%,10V,5.7MM(0.224),SMD,T&R	62643	MVK10VC33RME60T PX (13")
A12C27	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A12C28	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A12C29	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A12C30	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A12C31	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A12C32	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A12C76	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A12C77	283–5098–00			CAP,FXD,CERAMIC:MLC,0.1UF,+80%–20%,50V,Z5U,1206,SMD,8MM T&R	04222	12065E104ZAT3A
A12CR100	152–5018–00			DIODE,SIG:ULTRA FAST,100V,0.74VF,4NS,2.0PF,SER–PAIR,MMBD1203,SOT–23,8MM T&R	27014	MMBD1203
A12CR101	152–5018–00			DIODE,SIG:ULTRA FAST,100V,0.74VF,4NS,2.0PF,SER–PAIR,MMBD1203,SOT–23,8MM T&R	27014	MMBD1203
A12CR102	152–5018–00			DIODE,SIG:ULTRA FAST,100V,0.74VF,4NS,2.0PF,SER–PAIR,MMBD1203,SOT–23,8MM T&R	27014	MMBD1203
A12CR103	152–5018–00			DIODE,SIG:ULTRA FAST,100V,0.74VF,4NS,2.0PF,SER–PAIR,MMBD1203,SOT–23,8MM T&R	27014	MMBD1203
A12CR104	152–5018–00			DIODE,SIG:ULTRA FAST,100V,0.74VF,4NS,2.0PF,SER–PAIR,MMBD1203,SOT–23,8MM T&R	27014	MMBD1203
A12CR105	152–5018–00			DIODE,SIG:ULTRA FAST,100V,0.74VF,4NS,2.0PF,SER–PAIR,MMBD1203,SOT–23,8MM T&R	27014	MMBD1203
A12CR106	152–5018–00			DIODE,SIG:ULTRA FAST,100V,0.74VF,4NS,2.0PF,SER–PAIR,MMBD1203,SOT–23,8MM T&R	27014	MMBD1203
A12CR107	152–5018–00			DIODE,SIG:ULTRA FAST,100V,0.74VF,4NS,2.0PF,SER–PAIR,MMBD1203,SOT–23,8MM T&R	27014	MMBD1203
A12CR108	152–5018–00			DIODE,SIG:ULTRA FAST,100V,0.74VF,4NS,2.0PF,SER–PAIR,MMBD1203,SOT–23,8MM T&R	27014	MMBD1203
A12CR109	152–5018–00			DIODE,SIG:ULTRA FAST,100V,0.74VF,4NS,2.0PF,SER–PAIR,MMBD1203,SOT–23,8MM T&R	27014	MMBD1203

Replaceable Electrical Parts List (Cont.), A12 Front Panel

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A12CR110	152–5018–00			DIODE,SIG:ULTRA FAST,100V,0.74VF,4NS,2.0PF,SER–PAIR,MMBD1203,SOT–23,8MM T&R	27014	MMBD1203
A12CR111	152–5018–00			DIODE,SIG:ULTRA FAST,100V,0.74VF,4NS,2.0PF,SER–PAIR,MMBD1203,SOT–23,8MM T&R	27014	MMBD1203
A12DS1	150–5008–00			DIODE,OPTO:LED,GRN,569NM,4.2MCD AT 10MA,28 DEG VIEW ANGL,YOKE LEAD BEND,HLMP–6505–021,12MM	50434	HLMP–6505–021
A12DS2	150–5008–00			DIODE,OPTO:LED,GRN,569NM,4.2MCD AT 10MA,28 DEG VIEW ANGL,YOKE LEAD BEND,HLMP–6505–021,12MM	50434	HLMP–6505–021
A12DS3	150–5008–00			DIODE,OPTO:LED,GRN,569NM,4.2MCD AT 10MA,28 DEG VIEW ANGL,YOKE LEAD BEND,HLMP–6505–021,12MM	50434	HLMP–6505–021
A12DS4	150–5008–00			DIODE,OPTO:LED,GRN,569NM,4.2MCD AT 10MA,28 DEG VIEW ANGL,YOKE LEAD BEND,HLMP–6505–021,12MM	50434	HLMP–6505–021
A12DS5	150–5008–00			DIODE,OPTO:LED,GRN,569NM,4.2MCD AT 10MA,28 DEG VIEW ANGL,YOKE LEAD BEND,HLMP–6505–021,12MM	50434	HLMP–6505–021
A12DS6	150–5008–00			DIODE,OPTO:LED,GRN,569NM,4.2MCD AT 10MA,28 DEG VIEW ANGL,YOKE LEAD BEND,HLMP–6505–021,12MM	50434	HLMP–6505–021
A12DS7	150–5008–00			DIODE,OPTO:LED,GRN,569NM,4.2MCD AT 10MA,28 DEG VIEW ANGL,YOKE LEAD BEND,HLMP–6505–021,12MM	50434	HLMP–6505–021
A12DS8	150–5008–00			DIODE,OPTO:LED,GRN,569NM,4.2MCD AT 10MA,28 DEG VIEW ANGL,YOKE LEAD BEND,HLMP–6505–021,12MM	50434	HLMP–6505–021
A12DS9	150–5008–00			DIODE,OPTO:LED,GRN,569NM,4.2MCD AT 10MA,28 DEG VIEW ANGL,YOKE LEAD BEND,HLMP–6505–021,12MM	50434	HLMP–6505–021
A12DS21	150–5008–00			DIODE,OPTO:LED,GRN,569NM,4.2MCD AT 10MA,28 DEG VIEW ANGL,YOKE LEAD BEND,HLMP–6505–021,12MM	50434	HLMP–6505–021
A12ID1	389–1398–02			CIRCUIT BOARD:FRONT PANEL,TDS500/600/820	TK2597	389–1398–02
A12J48	131–5452–00			CONN,HDR:PCB,MALE,STR,1 X 4,0.1 CTR,0.535 H X 0.130 TAIL,SHRD/ 4 SIDES,CTR PLZ,LATCHING,	00779	103908–3
A12LS1	119–1427–01			TRANSDUCER:AUDIO,MAGNETIC,2048HZ RESONANCE FREQUENCY,1–4.2KHZ RANGE,30MA,6V,CB–16BP–06B	TK6051	CB–16BP06B
A12P2	174–1728–00			CA ASSY,SP:RIBBON,IDC,26,28 AWG,6.0 L,2X13,0.1 CTR,RCPT,CTR PLZ,MLD STRAIN RELIEF X 2X13,0	53387	ORDER BY DESCRIPTION
A12P3	136–1157–00			SOCKET,SIP:PCB,FEMALE,STR,1 X 10,0.1 CTR,0.21 H X 0.125 TAIL,TIN	00779	643642–1
A12Q1	151–5001–00			TRANSISTOR,SIG:BIPOLAR,NPN,40V,200MA,300MHZ,AMPLIFIER,MMBT3904L,TO–236/SOT–23,8MM T&R	04713	MMBT3904LT1
A12Q2	151–5001–00			TRANSISTOR,SIG:BIPOLAR,NPN,40V,200MA,300MHZ,AMPLIFIER,MMBT3904L,TO–236/SOT–23,8MM T&R	04713	MMBT3904LT1

Replaceable Electrical Parts List (Cont.), A12 Front Panel

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A12Q3	151–5001–00			TRANSISTOR,SIG:BIPOLAR,NPN,40V,200MA,300MHZ,AMPLIFIER,MMBT3904L,TO–236/SOT–23,8MM T&R	04713	MMBT3904LT1
A12Q4	151–5000–00			TRANSISTOR,SIG:BIPOLAR,PNP,40V,200MA,250MHZ,AMPLIFIER,MMBT3906L,TO–236/SOT–23,8MM T&R	04713	MMBT3906LT1
A12Q5	151–5001–00			TRANSISTOR,SIG:BIPOLAR,NPN,40V,200MA,300MHZ,AMPLIFIER,MMBT3904L,TO–236/SOT–23,8MM T&R	04713	MMBT3904LT1
A12Q6	151–5001–00			TRANSISTOR,SIG:BIPOLAR,NPN,40V,200MA,300MHZ,AMPLIFIER,MMBT3904L,TO–236/SOT–23,8MM T&R	04713	MMBT3904LT1
A12Q7	151–5058–00			TRANSISTOR,SIG:BIPOLAR,PNP,12V,80MA,SWITCHING,MMBT3640L,TO–236/SOT–23,8MM T&R	04713	MMBT3640LT1
A12Q8	151–5058–00			TRANSISTOR,SIG:BIPOLAR,PNP,12V,80MA,SWITCHING,MMBT3640L,TO–236/SOT–23,8MM T&R	04713	MMBT3640LT1
A12Q9	151–5058–00			TRANSISTOR,SIG:BIPOLAR,PNP,12V,80MA,SWITCHING,MMBT3640L,TO–236/SOT–23,8MM T&R	04713	MMBT3640LT1
A12Q11	151–5000–00			TRANSISTOR,SIG:BIPOLAR,PNP,40V,200MA,250MHZ,AMPLIFIER,MMBT3906L,TO–236/SOT–23,8MM T&R	04713	MMBT3906LT1
A12Q12	151–5000–00			TRANSISTOR,SIG:BIPOLAR,PNP,40V,200MA,250MHZ,AMPLIFIER,MMBT3906L,TO–236/SOT–23,8MM T&R	04713	MMBT3906LT1
A12Q13	151–5000–00			TRANSISTOR,SIG:BIPOLAR,PNP,40V,200MA,250MHZ,AMPLIFIER,MMBT3906L,TO–236/SOT–23,8MM T&R	04713	MMBT3906LT1
A12Q14	151–5000–00			TRANSISTOR,SIG:BIPOLAR,PNP,40V,200MA,250MHZ,AMPLIFIER,MMBT3906L,TO–236/SOT–23,8MM T&R	04713	MMBT3906LT1
A12Q15	151–5000–00			TRANSISTOR,SIG:BIPOLAR,PNP,40V,200MA,250MHZ,AMPLIFIER,MMBT3906L,TO–236/SOT–23,8MM T&R	04713	MMBT3906LT1
A12Q16	151–5000–00			TRANSISTOR,SIG:BIPOLAR,PNP,40V,200MA,250MHZ,AMPLIFIER,MMBT3906L,TO–236/SOT–23,8MM T&R	04713	MMBT3906LT1
A12Q17	151–5000–00			TRANSISTOR,SIG:BIPOLAR,PNP,40V,200MA,250MHZ,AMPLIFIER,MMBT3906L,TO–236/SOT–23,8MM T&R	04713	MMBT3906LT1
A12Q18	151–5000–00			TRANSISTOR,SIG:BIPOLAR,PNP,40V,200MA,250MHZ,AMPLIFIER,MMBT3906L,TO–236/SOT–23,8MM T&R	04713	MMBT3906LT1
A12Q19	151–5000–00			TRANSISTOR,SIG:BIPOLAR,PNP,40V,200MA,250MHZ,AMPLIFIER,MMBT3906L,TO–236/SOT–23,8MM T&R	04713	MMBT3906LT1
A12Q31	151–5000–00			TRANSISTOR,SIG:BIPOLAR,PNP,40V,200MA,250MHZ,AMPLIFIER,MMBT3906L,TO–236/SOT–23,8MM T&R	04713	MMBT3906LT1
A12R1	321–5034–00			RES,FXD:THICK FILM,22.1K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2212FT
A12R2	321–5034–00			RES,FXD:THICK FILM,22.1K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2212FT
A12R3	321–5034–00			RES,FXD:THICK FILM,22.1K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2212FT
A12R4	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A12R5	321–5034–00			RES,FXD:THICK FILM,22.1K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2212FT
A12R6	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT

Replaceable Electrical Parts List (Cont.), A12 Front Panel

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A12R7	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A12R8	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A12R9	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A12R10	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A12R11	321–5034–00			RES,FXD:THICK FILM,22.1K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2212FT
A12R16	321–5034–00			RES,FXD:THICK FILM,22.1K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2212FT
A12R17	321–5034–00			RES,FXD:THICK FILM,22.1K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2212FT
A12R18	321–5034–00			RES,FXD:THICK FILM,22.1K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2212FT
A12R19	321–5034–00			RES,FXD:THICK FILM,22.1K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2212FT
A12R20	321–5034–00			RES,FXD:THICK FILM,22.1K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2212FT
A12R21	321–5034–00			RES,FXD:THICK FILM,22.1K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2212FT
A12R22	321–5034–00			RES,FXD:THICK FILM,22.1K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2212FT
A12R23	321–5034–00			RES,FXD:THICK FILM,22.1K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2212FT
A12R24	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A12R25	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A12R26	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A12R27	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A12R28	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A12R29	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A12R30	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A12R31	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A12R32	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A12R44	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT

Replaceable Electrical Parts List (Cont.), A12 Front Panel

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A12R48	311–2486–00			RES,VAR,PANEL:5K OHM, +/– 1%,1.5W,1.312D X 0.648L,0.375–32 X 0.375L BUSHING,0.250 X 0.875L SHA	32997	6657S–457–502
A12R50	311–2448–00			RES,VAR,NONWW:NON DETENTED,5K	32997	PCZIJ–J20–SLO/004
A12R52	311–2448–00			RES,VAR,NONWW:NON DETENTED,5K	32997	PCZIJ–J20–SLO/004
A12R60	321–5017–00			RES,FXD:THICK FILM,825 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK8250FT
A12R61	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A12R62	321–5010–00			RES,FXD:THICK FILM,221 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK221FT
A12R63	321–5043–00			RES,FXD:THICK FILM,47.5 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD47R5FT
A12R64	321–5013–00			RES,FXD:THICK FILM,392 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK3920FT
A12R65	321–5016–00			RES,FXD:THICK FILM,681 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK6810FT
A12R66	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A12R67	321–5004–00			RES,FXD:THICK FILM,22.1 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD22R1FT
A12R68	321–5305–00			RES,FXD,FILM:2K OHM,0.1%,25PPM,0.125W,1206 PKG,TAPE & REEL	91637	TNPW1206–2001BT
A12R69	321–5337–00			RES,FXD,FILM:100 OHM,0.1%,0.125 W,TC=25PPM,SMD,1206 PKG,T&R	91637	TNPW12061000BT
A12R70	321–5194–00			RES,FXD:THICK FILM,49.9 OHM,1%,0.125W,TC=100 PPM,1206,T&R	91637	CRCW–1206–49R–90 –FT
A12R71	321–5008–00			RES,FXD:THICK FILM,150 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1500FT
A12R72	321–5004–00			RES,FXD:THICK FILM,22.1 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD22R1FT
A12R73	321–5004–00			RES,FXD:THICK FILM,22.1 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD22R1FT
A12R74	321–5004–00			RES,FXD:THICK FILM,22.1 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD22R1FT
A12R75	321–5004–00			RES,FXD:THICK FILM,22.1 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD22R1FT
A12R76	321–5000–00			RES,FXD:THICK FILM,10 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCD10R0FT
A12R80	311–2448–00			RES,VAR,NONWW:NON DETENTED,5K	32997	PCZIJ–J20–SLO/004
A12R82	311–2449–00			RES,VAR,NONWW:DETENTED,5K	32997	PCZIJ–J20–SLO/005
A12R84	311–2449–00			RES,VAR,NONWW:DETENTED,5K	32997	PCZIJ–J20–SLO/005
A12R90	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A12R91	321–5034–00			RES,FXD:THICK FILM,22.1K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2212FT

Replaceable Electrical Parts List (Cont.), A12 Front Panel

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A12R92	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A12R93	321–5028–00			RES,FXD:THICK FILM,6.81K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK6811FT
A12R94	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A12R95	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A12R98	321–5066–00			RES,FXD:THICK FILM,121K OHM,1%,0.125W,TC=100 PPM,1206,T&R	91637	CRCW1206–1213FT
A12R99	321–5034–00			RES,FXD:THICK FILM,22.1K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK2212FT
A12R100	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A12R101	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A12R102	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A12R103	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A12R104	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A12R105	321–5018–00			RES,FXD:THICK FILM,1.0K OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1001FT
A12R106	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A12R107	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A12R108	321–5006–00			RES,FXD:THICK FILM,100 OHM,1%,0.125W,TC=100 PPM,1206,T&R	50139	BCK1000FT
A12R113	321–5167–00			RES,FXD:THICK FILM,221K OHM,1%,0.125W,TC=100 PPM,1206,T&R	59124	RK73H2B2213FT
A12R114	321–5167–00			RES,FXD:THICK FILM,221K OHM,1%,0.125W,TC=100 PPM,1206,T&R	59124	RK73H2B2213FT
A12R115	321–5167–00			RES,FXD:THICK FILM,221K OHM,1%,0.125W,TC=100 PPM,1206,T&R	59124	RK73H2B2213FT
A12R116	321–5167–00			RES,FXD:THICK FILM,221K OHM,1%,0.125W,TC=100 PPM,1206,T&R	59124	RK73H2B2213FT
A12R119	321–5167–00			RES,FXD:THICK FILM,221K OHM,1%,0.125W,TC=100 PPM,1206,T&R	59124	RK73H2B2213FT
A12R120	321–5167–00			RES,FXD:THICK FILM,221K OHM,1%,0.125W,TC=100 PPM,1206,T&R	59124	RK73H2B2213FT
A12R127	321–5167–00			RES,FXD:THICK FILM,221K OHM,1%,0.125W,TC=100 PPM,1206,T&R	59124	RK73H2B2213FT
A12R128	321–5167–00			RES,FXD:THICK FILM,221K OHM,1%,0.125W,TC=100 PPM,1206,T&R	59124	RK73H2B2213FT

Replaceable Electrical Parts List (Cont.), A12 Front Panel

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A12R129	321–5167–00			RES,FXD:THICK FILM,221K OHM,1%,0.125W,TC=100 PPM,1206,T&R	59124	RK73H2B2213FT
A12R130	321–5167–00			RES,FXD:THICK FILM,221K OHM,1%,0.125W,TC=100 PPM,1206,T&R	59124	RK73H2B2213FT
A12R131	321–5167–00			RES,FXD:THICK FILM,221K OHM,1%,0.125W,TC=100 PPM,1206,T&R	59124	RK73H2B2213FT
A12R132	321–5167–00			RES,FXD:THICK FILM,221K OHM,1%,0.125W,TC=100 PPM,1206,T&R	59124	RK73H2B2213FT
A12U1	160–9015–01			IC,PROCESSOR:CMOS,MICROPROCESSOR,8–BIT,416 0 X 8 ROM,A/D 16–BIT TIMER,SCI,68HC05B4,PLCC52,T&R	04713	SC408068FNR2
A12U2	156–5082–01			IC,LINEAR:BIPOLAR,OP–AMP,LOW OFFSET,OP07CD,SO8.150,16MM T&R	01295	OP07CDR
A12U3	156–5462–01			IC,DIGITAL:ACMOS,FLIP FLOP,DUAL J–K,SET,CLEAR,74AC109,SO16.150,16MM T&R	04713	MC74AC109DR2
A12U4	156–5088–01			IC,DIGITAL:HCTCMOS,DECODER,1–OF–8,ACTIVE LOW,74HCT138,SO16.150,16MM T&R	01295	SN74HCT138DR
A12U5	156–5458–01			IC,DIGITAL:HCMOS,LATCH,OCTAL ADDRESSABLE,74HC259,SO16.150,16MM T&R	01295	SN74HC259DR
A12U6	156–5458–01			IC,DIGITAL:HCMOS,LATCH,OCTAL ADDRESSABLE,74HC259,SO16.150,16MM T&R	01295	SN74HC259DR
A12U7	156–5458–01			IC,DIGITAL:HCMOS,LATCH,OCTAL ADDRESSABLE,74HC259,SO16.150,16MM T&R	01295	SN74HC259DR
A12U8	156–5050–01			IC,MISC:HCMOS,ANALOG MUX,8–CHANNEL,74HC4051,SO16.150,16MM T&R	04713	MC74HC4051D
A12U9	156–5050–01			IC,MISC:HCMOS,ANALOG MUX,8–CHANNEL,74HC4051,SO16.150,16MM T&R	04713	MC74HC4051D
A12U10	156–5868–01			IC,LINEAR:BIPOLAR,VOLTAGE REFERENCE,POSITIVE,10V,0.5%,25PPM,SERIES,LT102 1DCS8–10,SO8.150,1	64155	LT1021DCS8–10TR

Replaceable Electrical Parts List , A14 D1 Bus

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A14	671–2847–00			CIRCUIT BD ASSY:D1 BUS	80009	671284700
A14P28	131–4618–00			CONN,RIBBON:PCB,FEMALE,STR,100 POS,2 X 50,0.05 CTR,0.299 H X 0.11 TAIL,0.075 STAGGERED PCB,	53387	91100–22010AR
A14P100	131–4618–00			CONN,RIBBON:PCB,FEMALE,STR,100 POS,2 X 50,0.05 CTR,0.299 H X 0.11 TAIL,0.075 STAGGERED PCB,	53387	91100–22010AR

Replaceable Electrical Parts List , A17 Low Voltage Power Supply – RLB Motherboard

Com–ponent Number	Xytec PartNumber	Serial No. Ef-fective	Serial No. Dis-cont'd	Name & Description	Mfr. Code	Mfr. Part Number
A17	23042041			RLB ASSY,MTHR,TEK–IV	1GM54	23042041
C6 C7	22921200			CAP,MYL,250V,.47UF,20%,100C,R	65964	PHE830MD6470M
C9	22908110			CAP,MYLAR,400V,1UF,10%,85C,R	61058	ECQ–E4105KF
C10	22903505			CAP,PPRO,1.6KV,.00068UF10%85CR	TK1913	FKP1 680/1600V/10%
C11 C5	22975012			CAP,CR,DSC,400 VAC,1500 PF,20%,Y5V	18796	IDE7090F152MVA1KC
C12	22908861			CAP,AL,450V,470UF,20%,105C,R	00199	CEAUF2W471M40
					55680	LGQ2W471MHSEZN
C21 C42 C44	22908753			CAP,AL,35V,680UF,20%,105C,R	00199	CEEFM1V681M7
					61058	ECA1VFQ681
					55680	UPL1V681MHH
C22	40066066			CAP,CR,AX,200 V,0.01 UF,10%,X7R	16299	SA102C103KAA
C24 C57 C59 C64 C65 C73 C74 C75 C76 C89	22914106			CAP,MYL,63V,1UF,10%,85C,R	D5243	MKT1817–510/065–61 W
C26 C29 C30 C43 C47 C49 C58 C83 C86	22908717			CAP,AL,10V,2700UF,20%,105C,R	55680	UPL1A272MHH
					61058	ECA1AFQ272
					00199	CEEFM1A272M7
C31 C32 C48 C52	92496125			CAP,MYL,200V,.0022UF,10%,85C,A	49588	192P222X9200
					19701	708D1AC222PK201AX
C33 C38	22969224			CAP,AL,25V,100UF,20%,105C,R	62643	SXC25V101M10X16LL
					56289	678D029
					61058	ECEA1EF101
C34 C35 C62 C63	92496375			CAP,MYL,80V,.0056UF,10%,85C,A	49588	192P562X9080
					19701	708D1CC562PK201AX
C45 C50	92496117			CAP,MYL,200V,.0039UF,10%,85C,A	49588	192P392X9200P304
					19701	708D1CC392PK201AX

Replaceable Electrical Parts List (Cont.), A17 Low Voltage Power Supply – RLB Motherboard

Com–ponent Number	Xytec PartNumber	Serial No. Ef-fective	Serial No. Dis-cont'd	Name & Description	Mfr. Code	Mfr. Part Number
C100 C101 C82 C99	94240404			CAP,CER,50V,.0001UF,10%,X7R,A	31433	C410C101K1G5CAC7200
					16299	SA102A101KAA
					16299	MA105A101KAA–TAPE–AND–REEL
					18796	RPA10C0G101K50VPT
C102 C113 C93 C94	22910833			CAP,AL,35V,10UF,20%,85C,R	55680	UVR1V100MDA1TD
					61058	ECE–A1VU100IW
C103	22910828			CAP,AL,25V,100UF,20%,85C,R	55680	UVR1E101MCA1TD
					61058	ECEA1EU101IW
C104 C118 C123 C124	94842154			CAP,CER,1KV,.001UF,10%,X5R,R	60705	562CX5RTK102EE102K
					19701	D102K29X5RNTKEM
C105	22910832			CAP,AL,35V,4.7UF,20%,85C,R	55680	UVR1V4R7MDA1TD
					61058	ECE–A1VU4R7IW
C106 C115 C119 C120 C25 C36 C37 C66 C68 C69 C70 C71 C72 C90 C95 C96 C97	94240448			CAP,CER,50V,.1UF,10%,X7R,A	31433	C420C104K5R5CA
					16299	SA115C104KAA
					16299	MA305C104KAA–TAPE–AND–REEL
					18796	RPA30X7R104K50V
C107	22914105			CAP,MYL,63V,.68UF,10%,85C,R	D5243	MKT1817–468/065–61W
C108 C109 C112	94240411			CAP,CER,50V,.01UF,10%,X7R,A	31433	C410C103K5R5CAC7200
					16299	SA105C103KAA
					16299	MA105C103KAA–TAPE–AND–REEL
					18796	RPA10X7R103K50VPT
C111 C114 C125 C81 C84 C98	94240401			CAP,CER,50V,.001UF,10%,X7R,A	31433	C410C102K1R5CAC7200
					16299	MA105C102KAA–TAPE–AND–REEL
					16299	SA105C102KAA
					16299	SA101C102KAA

Replaceable Electrical Parts List (Cont.), A17 Low Voltage Power Supply – RLB Motherboard

Com–ponent Number	Xytec Part Number	Serial No. Ef-fective	Serial No. Dis-cont'd	Name & Description	Mfr. Code	Mfr. Part Number
C117 C122	22910836			CAP,AL,35V,47UF,20%,85C,R	55680	UVR1V470MDA1TA
					61058	ECEA1VU470IW
C121 C23	22910838			CAP,AL,35V,220UF,20%,85C,R	55680	UVR1V221MPA1TD
					61058	ECEA1VU221WQ
CR4	22923060			DIO,PWRF,600VR,8A,TO220AC	59993	HFA08TB60
CR5	22900214			DIO,BRI,600VR,8A,SIP4	72699	KBU8J
CR6	95691504			DIO,PWRF,1KVR,1A,A	72699	1N5623
CR14 CR16	22909163			DIO,PWRF,600VR,3A,DO201	72699	UF5406PKG54
CR15 CR17 CR38 CR39	22954933			DIO,PWRF,400VR,1A,A	72699	UF4004PKG54
					54648	UF4004–T
CR18 CR23 CR41 CR42 CR43 CR44 CR45 CR50	51007385			DIO,PWRF,100VR,.2A,DO35	6AX52	1N4148
					27014	1N4148TR
CR19 CR28 CR32	22903743			DIO,DUOF,200VR,16A,TO220,MUR1620CT	76978	MUR1620CT
CR20 CR21 CR35 CR36	22921640			DIO,DUOSKY,45VR,30A,SOT93	6AX52	PBYR3045PT
					76978	MBR3045PT
CR27 CR29 CR33 CR34	22910390			DIO,SKY,30VR,8A,C–24	59993	80SQ030
CR46 CR47	22954935			DIO,PWRF,800VR,1A,DO41	72699	UF4006PKG54
					54648	UF4006–T
CR48 CR49	22906842			DIO,PWRF,600VR,2.3A,A,BYM26C	6AX52	BYM26C
J5	22912371			CONN,CARD,HDR,50P,2P,.1,SQPN	00779	1–103310–0
J6	22912370			CONN,CARD,HDR,40P,2R,SQPN	00779	103310–8
L1	22908305B			INDU,BOOST,80UH,1.3A,–,PC	97520	BE25365001
L2 L3	22979056			INDU,TOR,55UH,5.0A,.02,R,L8	01961	PE92114K
L7	EP49888			INDU,CHOKE,28MH,8AMP,PCMNT	1GM54	EP49888

Replaceable Electrical Parts List (Cont.), A17 Low Voltage Power Supply – RLB Motherboard

Com–ponent Number	Xytec PartNumber	Serial No. Ef-fective	Serial No. Dis-cont'd	Name & Description	Mfr. Code	Mfr. Part Number
L8	10126990			INDU,TOR,98UH,6A,.048,PC,U	57222	NP–6010
					01961	PE51516
					57222	NP–4490
L10 L17 L9	22920740			INDU,TOR,180UH,3A,R	01961	PE–53452
L14 L16	10126985			INDU,TOR,43UH,10A,.018,PC,U	01961	PE51511
					0Y5T9	PT12315
L15	10126980			INDU,TOR,17UH,17A,.0065,PC,U	57222	NP4482
					01961	PE51506
					57222	NP–6000
					0Y5T9	PT12310
L18 L19	22920410			INDU,TOR,MAGAMP,42V–USEC,5A,R	02113	G6424–A
RT1	22950870			THMS,DISC,NTC,10 OHM,185C,5A	75263	RL6606–6.24–73–S15
RT7	22916187			THMS,WASH,PTC,2200 OHM,90C	18796	IPTH9M04BE222TS2F 333
RV1 RV3	1918159			VRIS,275VAC,350VDC,DISC	61058	ERZ–C14DK431U
RV2	22967004			SURG,VOLT,PROTECT,2600V,RADIAL	7K104	Y08SV–262L2
R1 R10 R155 R2 R34 R35 R36 R40 R47 R72 R77 R9	92577100			RES,MF,.5W,10OHM,1%,A	59124	MS50SSD10R00F
					19701	5053HD10R00F
					91637	CCF55–10R0FT1
					91637	CMF55–10R0FT1
R11 R12 R134 R135	22977339			RES,MO,2W,430 OHM,5%,A,FP	59124	RSS2–431J–L
R13	92577171			RES,MF,1/2W,54.90 OHM,1%,A	59124	MS50SSD54R90F
					19701	5053HD54R90F
					91637	CCF55–54R9FT1
					91637	CMF55–54R9FT1
R14 R94	22977382			RES,MO,2W,27K OHM,5%,A,FP	59124	RSS2–273J–L
R38	94399206			RES,WW,3W,.05 OHM,3%,A	91637	LVR–3–.050–OHMS–3 PC
					0DBE5	LOB–3–0.05–3–RP
R43 R65 R71	22977308			RES,MO,2W,22OHM,5%,A,FP	59124	RSS2–220J–L

Replaceable Electrical Parts List (Cont.), A17 Low Voltage Power Supply – RLB Motherboard

Com–ponent Number	Xytec Part Number	Serial No. Ef-fective	Serial No. Dis-cont'd	Name & Description	Mfr. Code	Mfr. Part Number
R44	92577272			RES,MF,.5W,562 OHM,1%,A	59124	MS50SSD562R0F
					19701	5053HD562ROF
					91637	CCF55–5620FT1
					91637	CMF55–5620FT1
R48	92577068			RES,MF,1/2W,5.11 OHM,1%,A	19701	MBB0207C5R110F5T
					91637	CCF55–5R11FT1
					59124	MS50SSD5R11OF
					91637	CMF55–5R11FT1
R53 R64 R75	22977412			RES,MO,1W,33OHM,5%,A,FP	59124	RSS1–330J–L
R66 R69	22974312			2RES,MF,1/2W,1330 OHM,.1%,A	91637	CMF60–1.33KBT9T
					59124	MF60E1.33KBCL1
					0DBE5	T9–60–1.33K–.1%
					19701	RN60E1331B
					19701	5043RE1K330B
R67 R68	22974208			RES,MF,1/2W,121 OHM,.1%,A	91637	CMF60–121.RBT9T
					59124	MF60E121BCL1
					0DBE5	T9–60–121.R–.1%
					19701	RN60E 121R0B
					19701	5043RE121R0B
R80 R84	22977348			RES,MO,2W,1000 OHM,5%,A,FP	59124	RSS2–102J–L
R100 R110 R164 R82	92577329			RES,MF,.5W,2KOHM,1%,A	59124	MS50SSD2K000F
					19701	5053HD2K000F
					91637	CCF55–2001FT1
					91637	CMF55–2001FT1
R103 R105 R127 R26	94399202			RES,WW,3W,.01OHM,3%,A	91637	LVR–3–.010–OHMS–3 PC
					0DBE5	LOB–3–0.01–3–RP
R104 R107 R141	92577300			RES,MF,.5W,1KOHM,1%,A	59124	MS50SSD1K000F
					19701	5053HD1K000F
					91637	CCF55–1001FT1
					91637	CMF55–1001FT1

Replaceable Electrical Parts List (Cont.), A17 Low Voltage Power Supply – RLB Motherboard

Com–ponent Number	Xytec PartNumber	Serial No. Ef-fective	Serial No. Dis-cont'd	Name & Description	Mfr. Code	Mfr. Part Number
R108 R41	92577338			RES,MF,.5W,2.49KOHM,1%,A	59124	MS50SSD2K490F
					19701	5053HD2K490F
					91637	CCF55–2491FT1
					91637	CMF55–2491FT1
R109 R147	92577368			RES,MF,.5W,5.11KOHM,1%,A	59124	MS50SSD5K110F
					19701	5053HD5K110F
					91637	CCF55–5111FT1
					91637	CMF55–5111FT1
R119 R125	92577436			RES,MF,.5W,23.7KOHM,1%,A	59124	MS50SSD23K70F
					19701	5053HD23K70F
					91637	CCF55–2372FT1
					91637	CMF55–2372FT1
R120 R156 R167 R173 R185 R3 R8	92577400			RES,MF,.5W,10KOHM,1%,A	59124	MS50SSD10K00F
					19701	5053HD10K00F
					91637	CCF55–1002FT1
					91637	CMF55–1002FT1
R121 R124 R126 R128 R32 R86	92577267			RES,MF,.5W,499 OHM,1%,A	59124	MS50SSD499R0F
					19701	5053HD499ROF
					91637	CCF55–4990FT1
					91637	CMF55–4990FT1
R122 R123 R151 R174	92577433			RES,MF,.5W,22.1KOHM,1%,A	59124	MS50SSD22K10F
					19701	5053HD22K10F
					91637	CCF55–2212FT1
					91637	CMF55–2212FT1
R129	92577432			RES,MF,1/2W,21.5K,1%,A	59124	MS50SSD21K50F
					19701	5053HD21K5OF
					91637	CCF55–2152FT1
					91637	CMF55–2152FT1

Replaceable Electrical Parts List (Cont.), A17 Low Voltage Power Supply – RLB Motherboard

Com–ponent Number	Xytec Part Number	Serial No. Ef-fective	Serial No. Dis-cont'd	Name & Description	Mfr. Code	Mfr. Part Number
R136	92577129			RES,MF,1/2W,20 OHM,1%,A	59124	MS50SSD20R00F
					19701	5053HD20R00F
					91637	CCF55–20R0FT1
					91637	CMF55–20ROFT1
R142 R143 R144 R145 R184 R19 R31 R93	92577200			RES,MF,1/2W,100 OHM,1%,A	59124	MS50SSD100R0F
					19701	5053HD100ROF
					91637	CCF55–1000FT1
					91637	CMF55–1000FT1
R146 R169 R175 R180 R33 R95 R97 R99	92577367			RES,MF,.5W,4.99KOHM,1%,A	59124	MS50SSD4K990F
					19701	5053HD4K990F
					91637	CCF55–4991FT1
					91637	CMF55–4991FT1
R149	92577165			RES,MF,.5W,47.5OH,1%,A	59124	MS50SSD47R50F
					19701	5053HD47R50F
					91637	CCF55–47R5FT1
					91637	CMF55–47R5FT1
R150	92577317			RES,MF,1/2W,1500 OHM,1%,A	59124	MS50SSD1K500F
					19701	5053HD1K500F
					91637	CCF55–1501FT1
					91637	CMF55–1501FT1
R152 R153 R157 R158 R160 R163 R165 R166	RES,MF,1/2W,1 91K OHM,1%,A			RES,MF,1/2W,191K OHM,1%,A	91637	RN60D1913F
					91637	CMF60–1913FT1T
					59124	MF60D1913F
R154 R171 R27 R37	92577429			RES,MF,.5W,20KOHM,1%,A	59124	MS50SSD20K00F
					19701	5053HD20K00F
					91637	CCF55–2002FT1
					91637	CMF55–2002FT1
R159	92577337			RES,MF,1/2W,2430 OHM,1%,A	59124	MS50SSD2K430F
					19701	5053HD2K430F
					91637	CCF55–2431FT1
					91637	CMF55–2431FT1

Replaceable Electrical Parts List (Cont.), A17 Low Voltage Power Supply – RLB Motherboard

Com–ponent Number	Xytec PartNumber	Serial No. Ef-fective	Serial No. Dis-cont'd	Name & Description	Mfr. Code	Mfr. Part Number
R161	92577348			RES,MF,1/2W,3160 OHM,1%,A	59124	MS50SSD3K160F
					19701	5053HD3K160F
					91637	CCF55–3161FT1
					91637	CMF55–3161FT1
R162	92577250			RES,MF,1/2W,332 OHM,1%,A	59124	MS50SSD332ROF
					19701	5053HD332R0F
					91637	CCF55–3320FT1
					91637	CMF55–3320FT1
R168	92577416			RES,MF,.5W,14.7KOHM,1%,A	59124	MS50SSD14K70F
					19701	5053HD14K70F
					91637	CCF55–1472FT1
					91637	CMF55–1472FT1
R170	92577567			RES,MF,.5W,499KOHM,1%,A	59124	MS50SSD499K0F
					19701	5053HD499K0F
					91637	CCF55–4993FT1
					91637	CMF55–4993FT1
R172 R182	92577500			RES,MF,1/2W,100K OHM,1%,A	91637	CMF551003FT1
					59124	MS50SSD100K0F
					19701	5053HD100K0F
					91637	CCF55–1003FT1
R176	94399458			RES,WW,1W,27OHM,5%,A,FUSE	59124	RF1S–270–OHM–JT52
					0DBE5	SP20F–27–OHMS–5%–R
R177	92577057			RES,MF,1/2W,3.92 OHM,1%,A	19701	5053YD3R92F
					59124	MS50SSD3R920F
					91637	CMF55–3R92FT1
R178	94399205			RES,WW,3W,.04OHM,3%,A	91637	LVR–3–.040–O
					0DBE5	LOB–3–0.04–3–RP

Replaceable Electrical Parts List (Cont.), A17 Low Voltage Power Supply – RLB Motherboard

Com–ponent Number	Xytec Part Number	Serial No. Ef-fective	Serial No. Dis-cont'd	Name & Description	Mfr. Code	Mfr. Part Number
R179	92577308			RES,MF,.5W,1.21KOHM,1%,A	59124	MS50SSD1K210F
					19701	5053HD1K210F
					91637	CCF55–1211FT1
					91637	CMF55–1211FT1
R182	92577500			RES,MF,1/2W,100K OHM,1%,A	91637	CMF551003FT1
					59124	MS50SSD100K
					19701	5053HD100K0F
					91637	CCF55–1003FT1
Q4	22904985			XSTR,BIP,PNP,45V,2A,TO92	K1196	ZTX750STOA
					K1196	ZTX750STZA
Q5 Q6 Q7 Q8	22955108			XSTR,FET,NCH,500V,14A,TO247	59993	IRFP450
Q10 Q13 Q17 Q2	22970402			XSTR,BIP,NPN,40V,.6A,TO92	27014	2N4401RT
					76978	2N4401RLRA
Q11 Q195	22970502			XSTR,BIP,PNP,40V,.6A,TO92	76978	2N4403RLRA
Q14 Q15	22955125			XSTR,FET,NCH,60VD,65A,TO218	50088	STH65N06
Q16 Q18	22904986			XSTR,BIP,PNP,100VC,2A,SO94, 753	K1196	ZTX753STOA
					K1196	ZTX753STZA
Q196	22970358			XSTR,FET,NCH,60V,.6A,TO92	K1196	ZVN4206ASTOA
S1	22967054			SWIT,RKR,N/A,DPST,250V,6A	86845	1802.5103
T2	22908342			XFMR,PULSE	54937	500–2044
T4	22950943			XFMR,DVR,750VUS,200KHZ,.2A,A	01961	PE63388
T5	92555262			COIL,CURRENT,SENSE	01961	PE51688
T6	22916805B			XFMR,PWR,120–390V,45KHZ,430W,B	97520	22916805B (PER–PRINT)
T17	22940105B			XFMR,BIAS,FLYBACK,5W,100KHZ	7J069	SRW16LES–U01V014
U6	22920730			MCKT,JFET,OP AMP,34082P,DIP–8	76978	MC34082P
U7 U8	15157100			MCKT,AMP,OP,DUAL,DIP8,LM358N	01295	LM358P
					27014	LM358N
					76978	LM358N
					50088	LM358N
					19701	LM358N
					76978	LMT358N

Replaceable Electrical Parts List (Cont.), A17 Low Voltage Power Supply – RLB Motherboard

Com–ponent Number	Xytec Part Number	Serial No. Ef-fective	Serial No. Dis-cont'd	Name & Description	Mfr. Code	Mfr. Part Number
U9	95794600			MCKT,VCOMP,QUAD,DIP14,LM339	01295	LM339N
					27014	LM339N
					76978	LM339N
					19701	LM339N
					76978	L339
U10	22922497			MCKT,PWR,CONT,34262P,DIP–8	76978	MC34262P
VR10 VR11	22920735			MCKT,VREG,ADJPOS,317A,TO–220	64155	LT317AT
					27014	LM317AT
VR15 VR17	50240159			DIO,ZEN,5.1VZ,.4W,D035	55464	1N5231D
					76978	1N5231DRL
					76978	1N751DRL
VR18 VR19 VR2 VR3 VR6 VR7	50240117			DIO,ZEN,15V,400MW,.0085A,D035	27014	1N965B.TR
					76978	1N965B.TR
					50088	1N965B.TR
					54648	1N965B.TR
					15238	1N965B.TR
VR20	22910904			MCKT,LIN,VREF2.5,POS,TO92	64155	LT1009CZ–TAPE AND REEL
VR21	50240112			DIO,ZEN,9.1VZ,.02A,DO35	27014	1N757A.TR
					76978	1N757A.TR
					50088	1N757A.TR
					15238	1N757A.TR
					27014	1N5239B.TR
					76978	1N5239B.TR
					50088	1N5239B.TR
					15238	1N5239B.TR
VR23	22910906			MCKT,VREF2.5,POS,SO94,REF25Z	K1196	ZRA250A01STOB
VR24	22978360			DIO,SURG,150VB,2.9IRSM, A,P6KE	72699	P6KE150APKG4
					76978	P6KE150ARL

Replaceable Electrical Parts List (Cont.), A17 Low Voltage Power Supply – RLB Motherboard

Com–ponent Number	Xytec Part Number	Serial No. Ef-fective	Serial No. Dis-cont'd	Name & Description	Mfr. Code	Mfr. Part Number
VR22	50240107			DIO,ZEN,5.6VZ,.02A,DO35	27014	1N752A.TR
					76978	1N752A.TR
					50088	1N752A.TR
					54648	1N5232B.TR
					15238	1N752A.TR
					27014	1N5232B.TR
					76978	1N5232B.TR
					50088	1N5232B.TR
					15238	1N5232B.TR
VR25	50240908			DIO,ZEN,6.8VZ,133MA,A,1N4736A	6AX52	1N4736A
					27014	1N4736A
					76978	1N4736A
VR26	50240901			DIO,ZEN,3.6VZ,252MA,A,1N4729A	6AX52	1N4729A
					27014	1N4729A
					76978	1N4729A

Replaceable Electrical Parts List , A18 Low Voltage Power Supply – Secondary Monitor Board

Com–ponent Number	Xytec PartNumber	Serial No. Ef-fective	Serial No. Dis-cont'd	Name & Description	Mfr. Code	Mfr. Part Number
A18	23042141			TLB ASSY,DTHR,TEK–IV	1GM54	23042141
C1 C10 C17 C22 C23	94240411			CAP,CER,50V,.01UF,10%,X7R,A	31433	C410C103K5R5CAC7200
					16299	SA105C103KAA
					16299	MA105C103KAA–TAPE–AND–REEL
					18796	IRPA10X7R103K50VPT
C2 C9	22910833			CAP,AL,35V,10UF,20%,85C,R	55680	UVR1V100MDA1TD
					61058	ECE–A1VU100IW
C3	22910842			CAP,AL,50V,1UF,20%,85C,R	55680	UVR1H010MDA1TD
					61058	ECE–A1HU010IW
					55680	UVX1H010MDA1TD
C5	22910846			CAP,AL,50V,10UF,20%,85C,R	61058	ECE–A1VU220IW
C8	22910842			CAP,AL,50V,1UF,20%,85C,R	55680	UVR1H010MDA1TD
					61058	ECE–A1HU010IW
					55680	UVX1H010MDA1TD
C11 C21 C6 C7	94240448			CAP,CER,50V,.1UF,10%,X7R,A	31433	C420C104K5R5CA
					16299	SA115C104KAA
					16299	MA305C104KAA–TAPE–AND–REEL
					18796	IRPA30X7R104K50V
C12	94240439			CAP,CER,50V,.018UF,10%,X7R,A	31433	C410C183K5R5CAC7200
					16299	SA105C183KAA
					16299	MA105C183KAA–TAPE–AND–REEL
					18796IR	IRPA10X7R183K50VPT
C13	94240436			CAP,CER,50V,.0082UF,10%,X7R,A	31433	C410C822K5R5CA
					16299	SA105C822KAA
					16299	MA105C822KAA–TAPE–AND–REEL
					18796	IRPA10X7822K50VPT

Replaceable Electrical Parts List (Cont.), A18 Low Voltage Power Supply – Secondary Monitor Board

Com–ponent Number	Xytec PartNumber	Serial No. Ef-fective	Serial No. Dis-cont'd	Name & Description	Mfr. Code	Mfr. Part Number
C14	94240405			CAP,CER,50V,.00068UF,10%,X7R,A	31433	C410C681K1R5CAC7200
					16299	SA101C681KAA
					16299	MA105C681KAA–TAPE–AND–REEL
					18796	IRPA10X7R681K50VPT
C15 C4	94240401			CAP,CER,50V,.001UF,10%,X7R,A	31433	C410C102K1R5CAC7200
					16299	MA105C102KAA–TAPE–AND–REEL
					16299	SA105C102KAA
					16299	SA101C102KAA
C18	94240453			CAP,CER,50V,.27UF,10%,X7R,A	31433	C4302745R5CAC7200
					16299	SA405C274KAA
					16299	MA405C274KAA–TAPE–AND–REEL
					18796	IRPA40X7R274K50VPT
C116	95593019			CAP,CER,DISC,500V,0.01 UF,10%,X7R	60705	562C5TSS10TR
CR1 CR10 CR11 CR12 CR13 CR14 CR15 CR16 CR17 CR18 CR2 CR3 CR4 CR5 CR6 CR7 CR8 CR9	51007385			DIO,PWRF,100VR,.2A,DO35	6AX52	1N4148
					27014	1N4148TR
K1	22914660			RELAY,LATCH,DPDT,12V,1/.3A,DIP	61529	DS2YE–SL2–DC12V
P4	51857630			CONN,CARD,HDR,12P,1R	27264	A–41772–0318
					8Z573	B12PS–VS–90
P7	51857625			CONN,CARD,HDR,7P,1R,SQPN	27264	A–41772–0313
					8Z573	B7PS–VS–90

Replaceable Electrical Parts List (Cont.), A18 Low Voltage Power Supply – Secondary Monitor Board

Com–ponent Number	Xytec Part Number	Serial No. Ef-fective	Serial No. Dis-cont'd	Name & Description	Mfr. Code	Mfr. Part Number
R1 R16 R25 R28 R41 R42 R43 R51	92577429			RES,MF,.5W,20KOHM,1%,A	59124	MS50SSD20K00F
					19701	5053HD20K00F
					91637	CCF55–2002FT1
					91637	CMF55–2002FT1
R5	92577362			RES,MF,1/2W,4420 OHM,1%,A	59124	MS50SSD4K420F
					19701	5053HD4K420F
					91637	CCF55–4421FT1
					91637	CMF55–4421FT1
R6	92577450			RES,MF,1/2W,33.2K OHM,1%,A	59124	MS50SSD33K20F
					19701	5053HD33K20F
					91637	CCF55–3322FT1
					91637	CMF55–3322FT1
R10 R11 R13 R14 R19 R21 R22 R24 R49 R52 R62 R64 R65 R9	92577400			RES,MF,.5W,10KOHM,1%,A	59124	MS50SSD10K00F
					19701	5053HD10K00F
					91637	CCF55–1002FT1
					91637	CMF55–1002FT1
R12 R15 R2 R56 R63	92577367			RES,MF,.5W,4.99KOHM,1%,A	59124	MS50SSD4K990F
					19701	5053HD4K990F
					91637	CCF55–4991FT1
					91637	CMF55–4991FT1
R17 R33 R4 R7 R8	92577500			RES,MF,1/2W,100K OHM,1%,A	91637	CMF551003FT1
					59124	MS50SSD100K0F
					19701	5053HD100K0F
					91637	CCF55–1003FT1
R18 R57	92577368			RES,MF,.5W,5.11KOHM,1%,A	59124	MS50SSD5K110F
					19701	5053HD5K110F
					91637	CCF55–5111FT1
					91637	CMF55–5111FT1

Replaceable Electrical Parts List (Cont.), A18 Low Voltage Power Supply – Secondary Monitor Board

Com–ponent Number	Xytec Part Number	Serial No. Ef-fective	Serial No. Dis-cont'd	Name & Description	Mfr. Code	Mfr. Part Number
R20	92577378			RES,MF,1/2W,6490 OHM,1%,A	59124	MS50SSD6490F
					19701	5053HD6K49F
					91637	CCF55–6491FT1
					91637	CMF55–6491FT1
R23	92577529			RES,MF,1/2W,200K OHM,1%,A	59124	MS50SSD200K0F
					19701	5053HD200KOF
					91637	CCF55–2003FT1
					91637	CMF55–2003FT1
R26 R37	92577346			RES,MF,1/2W,3010 OHM,1%,A	59124	MS50SSD3K010F
					19701	5053HD3K010F
					91637	CCF55–3011FT1
					91637	CMF55–3011FT1
R27 R3 R38 R48	92577300			RES,MF,.5W,1KOHM,1%,A	59124	MS50SSD1K000F
					19701	5053HD1K000F
					91637	CCF55–1001FT1
					91637	CMF55–1001FT1
R30	92577463			RES,MF,1/2W,45.3K OHM,1%,A	91637	CMF604532FT1
					59124	MS50SSD45K30F
					19701	5053HD45K30F
					91637	CCF55–4532FT1
					91637	CMF55–4532FT1
R31 R34	92577332			RES,MF,1/2W,2150 OHM,1%,A	59124	MS50SSD2K150F
					19701	5053HD2K150F
					91637	CCF55–2151FT1
					91637	CMF55–2151FT1
R32	92577461			RES,MF,1/2W,43.2K OHM,1%,A	59124	MS50SSD43K20F
					19701	5053HD43K20F
					91637	CCF55–4322FT1
					91637	CMF55–4322FT1

Replaceable Electrical Parts List (Cont.), A18 Low Voltage Power Supply – Secondary Monitor Board

Com–ponent Number	Xytec Part Number	Serial No. Ef-fective	Serial No. Dis-cont'd	Name & Description	Mfr. Code	Mfr. Part Number
R35	92577568			RES,MF,1/2W,511K OHM,1%,A	59124	MS50SSD511K0F
					19701	5053HD511K0F
					91637	CCF55–5113FT1
					91637	CMF55–5113FT1
R36 R46	92577338			RES,MF,.5W,2.49KOHM,1%,A	59124	MS50SSD2K490F
					19701	5053HD2K490F
					91637	CCF55–2491FT1
					91637	CMF55–2491FT1
R39	92577437			RES,MF,1/2W,24.3K OHM,1%,A	59124	MS50SSD24K30F
					19701	5053HD24K30F
					91637	CCF55–2432FT1
					91637	CMF55–2432FT1
R40	92577467			RES,MF,.5W,49.9KOHM,1%,A	59124	MS50SSD49K90F
					19701	5053HD49K9F
					91637	CCF55–4992FT1
					91637	CMF55–4992FT1
R58 R59	92577417			RES,MF,.5W,15KOHM,1%,A	59124	MS50SSD15K00F
					19701	5053HD15K00F
					91637	CCF55–1502FT1
					91637	CMF55–1502FT1
Q1	22970502			XSTR,BIP,PNP,40V,.6A,TO92	76978	2N4403RLRA
Q2 Q3	22970402			XSTR,BIP,NPN,40V,.6A,TO92	27014	2N4401RT
					76978	2N4401RLRA
U1	15163610			MCKT,VCOMP,DUAL,DIP8,LM393	01295	LM393P
					27014	LM393N
					76978	LMT393N
					76978	L393

Replaceable Electrical Parts List (Cont.), A18 Low Voltage Power Supply – Secondary Monitor Board

Com–ponent Number	Xytec PartNumber	Serial No. Ef-fective	Serial No. Dis-cont'd	Name & Description	Mfr. Code	Mfr. Part Number
U2	15157100			MCKT,AMP,OP,DUAL,DIP8,LM358N	01295	LM358P
					27014	LM358N
					76978	LM358N
					50088	LM358N
					19701	LM358N
					76978	LMT358N
U3	22970471			MCKT,CMOS,F/F,D,DUAL,DIP14	27014	CD4013BCN
					76978	MC14013BCP
					27014	CD4013BCJ
					76978	MC14013BCL
U4 U6	95794600			MCKT,VCOMP,QUAD,DIP14,LM339	01295	LM339N
					27014	LM339N
					76978	LM339N
					19701	LM339N
					76978	L339
U5	40062470			MCKT,PWM,SW,SUP,DIP16,3525	1GM54	40062470
U12	40040322			MCKT,PWM,TO220,TOP200YAI,VMODE,LIN	1GM54	40040322
VR2	50240101			DIO,ZEN,3.3VZ,.02A,A	27014	1N746A.TR
					76978	1N746A.TR
					50088	1N746A.TR
					54648	1N5226B.TR
					15238	1N746A.TR
					27014	1N5226B.TR
					76978	1N5226B.TR
					50088	1N5226B.TR
					15238	1N5226B.TR
VR3	22910907			MCKT,VREF5.0,POS,SO94,REF50Z	K1196	ZRA500A01STOB
					1GB45	REF50ZSTOB
					1GB45	REF50ZTA
					K1196	ZRB500A01STOB

Replaceable Electrical Parts List , A20 Monochrome Display

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A20	640–0071–06			DISPLAY,MONOCHR:7 INCH	80009	640007106
A20C171	283–0729–00			CAP,FXD,MICA DI:2500PF,5%,500V	09023	CD19FD252J03
A20C208	285–1454–00			CAP,FXD,FILM:4700PF,20%,600V	49588	SB715P47206JD1
A20C236	281–0812–00			CAP,FXD,CERAMIC:MLC,1000PF,10%,100V,0.100 X 0.170,AXIAL,MI	04222	SA101C102KAA
A20C248	290–0916–00			CAP,FXD,ALUM:2200UF,20%,35V,18 X 35MM,LS=7.5MM,RADIAL	55680	ULB1V222MRA
A20C258	290–0916–00			CAP,FXD,ALUM:2200UF,20%,35V,18 X 35MM,LS=7.5MM,RADIAL	55680	ULB1V222MRA
A20C263	290–0947–00			CAP,FXD,ALUM:33UF,+50–10%,160V,12.5 X 20 MM,W/SLEEVE	62643	CEUSM2C330–Q
A20C275	283–0013–00			CAP,FXD,CER DI:0.01UF,–0+100%,1000V ,DISC	31433	ADVISE
A20C277	283–0013–00			CAP,FXD,CER DI:0.01UF,–0+100%,1000V ,DISC	31433	ADVISE
A20C279	283–0013–00			CAP,FXD,CER DI:0.01UF,–0+100%,1000V ,DISC	31433	ADVISE
A20C308	290–0942–00			CAP,FXD,ELCTLT:100UF,+100–10%,25V ,ALUMINUM	62643	CEUFM1E101
A20C320	285–1217–00			CAP,FXD,PLASTIC:1.33UF,5%,200V	14752	S950D1C334J
A20C322	285–1188–00			CAP,FXD,MTLZD:0.082 UF,5%,100 V	05292	PMT 3R ADVISE
A20C323	285–1189–00			CAP,FXD,MTLZD:0.1 UF,5%,100 V	05292	PMT 3R .1J 100
A20C326	281–0812–00			CAP,FXD,CERAMIC:MLC,1000PF,10%,100V,0.100 X 0.170,AXIAL,MI	04222	SA101C102KAA
A20C330	290–0922–00			CAP,FXD,ALUM:1000UF,20%,50V,16 X 25MM,RADIAL	55680	UVX1J102MHA
A20C334	290–0974–02			CAP,FXD,ALUM:1OUF,20%,50V,ESR=16.58 OHM (120HZ,20C),RADIAL	55680	UVX1H100MAA1TD
A20C345	290–0974–02			CAP,FXD,ALUM:1OUF,20%,50V,ESR=16.58 OHM (120HZ,20C),RADIAL	55680	UVX1H100MAA1TD
A20C362	290–0768–00			CAP,FXD,ELCTLT:10UF,+50–20%,100WVDC AL FOIL,RADIAL LEADS	62643	CEBSM2D100M
A20C365	281–0767–00			CAP,FXD,CERAMIC:MLC,330PF,20%,100V,0.100 X0.170,AXIAL,MI	04222	SA102C331MAA
A20C376	283–0280–00			CAP,FXD,CER DI:2200PF,10%,2000V DISC	04222	5724–Y5S–222K
A20C390	283–0111–04			CAP,FXD,CER DI:0.1UF,20%,50V SQUARE TAPE & REEL	04222	SR595C104MAAAP1
A20C405	281–0820–00			CAP,FXD,CERAMIC:MLC,680 PF,10%,50V,0.100 X 0.170,AXIAL,MI	04222	SA101C681KAA
A20C414	281–0826–00			CAP,FXD,CERAMIC:MLC,2200PF,10%,100V,0.100 X 0.170,AXIAL,MI	04222	SA101C222KAA
A20C422	290–0950–00			CAP,FXD,ALUM:100UF,+50–20%,50V,10 X 12 MM,RADIAL	55680	UVX1J101MPA
A20C423	290–0782–01			CAP,FXD,ALUM:4.7UF,20%,35V,ESR=42.33 OHM (120HZ,20C),RADIAL	55680	UVX1V4R7MAA1TD
A20C424	283–0626–00			CAP,FXD,MICA DI:1800PF,5%,500V	09023	CD19FD182J03
A20C426	281–0813–00			CAP,FXD,CERAMIC:MLC,0.047UF,20%,50V,0.100 X 0.170,AXIAL,MI	04222	SA105E473MAA

Replaceable Electrical Parts List (Cont.), A20 Monochrome Display

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A20C427	290–0778–01			CAP,FXD,ALUM:1UF,20%,50V,ESR=198.94 OHM (120HZ,20C),RADIAL,T&A	61058	(ADVISE)
A20C428	290–0943–00			CAP,FXD,ALUM:47UF,+50–20%,25V,6 X 11MM,RADIAL	62643	CEUSM1E470–Q
A20C433	281–0819–00			CAP,FXD,CERAMIC:MLC,33 PF,5%,50V,0.100 X 0.170,AXIAL,MI	04222	SA102A330JAA
A20C434	281–0775–00			CAP,FXD,CERAMIC:MLC,0.1UF,20%,50V,Z5U,0.170 X 0.100,AXIAL	04222	SA105E104MAA
A20C438	290–0974–02			CAP,FXD,ALUM:1OUF,20%,50V,ESR=16.58 OHM (120HZ,20C),RADIAL	55680	UVX1H100MAA1TD
A20C447	290–0766–00			CAP,FXD,ALUM:2.2UF,+50–20%,160V,8 X 11.5MM,RADIAL,BULK	61058	ECEA2CS2R2
A20C448	283–0067–00			CAP,FXD,CER DI:0.001UF,10%,200V DISC	18796	DD09B10 Y5F 102K 200V
A20C453	290–0852–00			CAP,FXD,ALUM:1UF,+75%–10%,350V,0.680 X 0.414,RADIAL	62643	CE04W2V010A
A20C455	283–0111–04			CAP,FXD,CER DI:0.1UF,20%,50V SQUARE TAPE & REEL	04222	SR595C104MAAAP1
A20C457	281–0775–00			CAP,FXD,CERAMIC:MLC,0.1UF,20%,50V,Z5U,0.170 X 0.100,AXIAL	04222	SA105E104MAA
A20C506	290–0745–00			CAP,FXD,ALUM:22UF,20%,50V,8 X 11MM,RADIAL,BULK	61058	ECEA1HU220
A20C507	283–0341–01			CAP,FXD,CERAMIC:MLC,0.047UF,10%,100V,X7R,0.30 X 0.30,0.20 LS,RADIAL,T&A PACK	04222	SR211C473KAAAP1
A20C509	285–1340–00			CAP,FXD,PLASTIC:METALIZED FILM,0.01UF,10%,63V,POLYESTER,7.2 X .7MM,RADIAL,T&A	37942	185/0.01/K/63/AA/A
A20C522	281–0812–00			CAP,FXD,CERAMIC:MLC,1000PF,10%,100V,0.100 X 0.170,AXIAL,MI	04222	SA101C102KAA
A20C526	285–1189–00			CAP,FXD,MTLZD:0.1 UF,5%,100 V	05292	PMT 3R .1J 100
A20C535	281–0812–00			CAP,FXD,CERAMIC:MLC,1000PF,10%,100V,0.100 X 0.170,AXIAL,MI	04222	SA101C102KAA
A20C541	290–0950–00			CAP,FXD,ALUM:100UF,+50–20%,50V,10 X 12 MM,RADIAL	55680	UVX1J101MPA
A20C545	281–0812–00			CAP,FXD,CERAMIC:MLC,1000PF,10%,100V,0.100 X 0.170,AXIAL,MI	04222	SA101C102KAA
A20C555	281–0772–00			CAP,FXD,CERAMIC:MLC,4700PF,10%,100V,0.100 X 0.170,AXIAL,MI	04222	SA101C472KAA
A20CR149	152–0906–00			DIODE,RECT:ULTRA FAST,400V,3A,IFSM=70A,VF=1.25V AT 3A,50NS,MUR440	04713	MUR440
A20CR205	152–1165–00			DIODE,RECT:ULTRA FAST,600V,4A,50NS,MUR460,T&R	04713	MUR460RL
A20CR246	152–0400–00			DIODE,RECT:FAST RCVRY,400V,1A,200NS,1N4936,DO–41,T&R	04713	1N4936RL
A20CR253	152–1189–00			DIODE,RECT:FAST RCVRY,1,500V,200NS,5A IFSM,LOW STORED CHRG,BY584	0LUA3	BY584
A20CR261	152–0400–00			DIODE,RECT:FAST RCVRY,400V,1A,200NS,1N4936,DO–41,T&R	04713	1N4936RL

Replaceable Electrical Parts List (Cont.), A20 Monochrome Display

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A20CR333	152–0400–00			DIODE,RECT:FAST RCVRY,400V,1A,200NS,1N4936,DO–41,T&R	04713	1N4936RL
A20CR369	152–0331–00			DIODE,RECT:FAST RCVRY,1,500V,30MA,300NS,RM113	60211	RM113
A20CR426	152–0400–00			DIODE,RECT:FAST RCVRY,400V,1A,200NS,1N4936,DO–41,T&R	04713	1N4936RL
A20CR253	152–1189–00			DIODE,RECT:FAST RCVRY,1,500V,200NS,5A IFSM,LOW STORED CHRG,BY584	0LUA3	BY584
A20CR543	152–0400–00			DIODE,RECT:FAST RCVRY,400V,1A,200NS,1N4936,DO–41,T&R	04713	1N4936RL
A20E343	119–0181–00			ARSR,ELEC SURGE:230V, +/–15%, GAS DISCHARGE	25088	B1–A230T
A20F553	344–0286–00			CLIP,ELECTRICAL:PCB,FEMALE,STR,ACCOM 0.25 FUSE,0.42 H X 0.141 TAIL,W/END HOLDER,BRASS TIN	75915	102074
A20F554	344–0286–00			CLIP,ELECTRICAL:PCB,FEMALE,STR,ACCOM 0.25 FUSE,0.42 H X 0.141 TAIL,W/END HOLDER,BRASS TIN	75915	102074
A20J340	131–4807–00			CONN,HDR PWR::PCB,MALE,STR,1 X 5,0.156 CTR,0.450 MLG X 0.172 TAIL,PLZ WALL,TIN,	00779	640445–5
A20J475	136–1056–01			CA ASSY,CRT:DISCRETE,SDI,6,22 AWG,600V,CRT SKT,20MM X STRAIN RLF TERM,1=3.8 L,2=3.5 L,3=3.2	16237	136–1056–01
A20J565	131–0589–00			TERMINAL,PIN:PRESSFIT/PCB,MALE,STR,0.025 SQ,0.343 MLG X 0.122 TAIL,0.465 L,50 GOLD,W/FERRULE	22526	48283–087
A20J567	131–0589–00			TERMINAL,PIN:PRESSFIT/PCB,MALE,STR,0.025 SQ,0.343 MLG X 0.122 TAIL,0.465 L,50 GOLD,W/FERRULE	22526	48283–087
A20J574	131–3152–00			CONN,HDR:PCB,MALE,STR,2 X 8,0.1 CTR,0.365 H X 0.112 TAIL,SHRD/4 SIDES,CTR PLZ,30 GOLD,	22526	66506–043
A20L100	108–2000–00			COIL,LINEARITY:FXD,NOM 13.O UH,8UH–50UH @ –3.5 TO 3.5A,PKG,3 TERMINAL,0.63 DIA,1.25 HIGH	50783	933884401
A20L105	114–0421–00			INDUCTOR,VAR:10–40UH,W/LITZ WIRE,DCR=0.1 OHM,I=0.1A MIN,1.5IN HIGH,0.562 DIA,VERT MOUNT	50783	932–8182–00
A20L167	108–1481–00			INDUCTOR,VAR:CUSTOM,10–20MH DYNAMIC FOCUS	0JR03	108–1481–00
A20L354	108–0231–00			INDUCTOR,FXD:CUSTOM,SIGNAL,4.5UH,10%,IDC<420 MA,Q>51@7.9MHZ,ON FORM 307–5005–01,53T W/38 AWG,	0JR03	108–0231–00
A20L452	108–0345–00			INDUCTOR,FXD:CUSTOM,SIGNAL,1.8UH,10%,ON FORM 276–0153–00,43T W/39 AWG,AXIAL	0JR03	108–0345–00
A20Q205	151–0632–00			TRANSISTOR,PWR:BIPOLAR,NPN,400V,8.0A,SWITCHI NG,MJE13007,TO–220	04713	MJE13007
A20Q405	151–0476–00			TRANSISTOR,PWR:BIPOLAR,NPN,100V,3.0A,3.0MHZ,A MPLIFIER,TIP31C,TO–220	04713	TIP31C
A20Q456	151–0756–00			TRANSISTOR,SIG:BIPOLAR,NPN,100V,100MA,500MHZ, AMPLIFIER,MRF531,TO–39	04713	MRF531
A20Q462	151–0411–00			TRANSISTOR,SIG:BIPOLAR,NPN,30V,400MA,1.2GHZ,A MPLIFIER,2N5943,TO–39	04713	2N5943
A20Q464	151–0712–02			TRANSISTOR,SIG:BIPOLAR,PNP,20V,50MA,600MHZ,AM PLIFIER,MPSH81,TO–92 BEC,T&A	04713	MPSH81RLRP

Replaceable Electrical Parts List (Cont.), A20 Monochrome Display

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A20Q538	151–0347–02			TRANSISTOR,SIG:BIPOLAR,NPN,160V,600MA,100MHZ, AMPLIFIER,2N5551,TO–92 EBC,T&A	04713	2N5551RLRA
A20R202	315–0470–00			RES,FXD,FILM:47 OHM,5%,0.25W MI	50139	CB4705
A20R234	301–0821–00			RES,FXD,FILM:820 OHM,5%,0.5W MI	19701	5053CX820R0J
A20R238	315–0472–00			RES,FXD,FILM:4.7K OHM,5%,0.25W MI	50139	CB4725
A20R278	315–0103–00			RES,FXD,FILM:10K OHM,5%,0.25W MI	50139	CB1035
A20R304	307–0053–00			RES,FXD,CMPSN:3.3 OHM,5%,0.5W	50139	EB33G5
A20R306	315–0681–00			RES,FXD,FILM:680 OHM,5%,0.25W MI	50139	CB6815
A20R311	315–0393–00			RES,FXD,FILM:39K OHM,5%,0.25W MI	50139	CB3935
A20R315	301–0122–00			RES,FXD,FILM:1.2K OHM,5%,0.5W MI	19701	5053CX1K200J
A20R325	315–0562–00			RES,FXD,FILM:5.6K OHM,5%,0.25W MI	50139	CB5625
A20R326	315–0473–00			RES,FXD,FILM:47K OHM,5%,0.25W MI	50139	CB4735
A20R327	315–0153–00			RES,FXD,FILM:15K OHM,5%,0.25W MI	50139	CB1535
A20R335	308–0459–00			RES,FXD,WW:1.1 OHM,5%,3W AXIAL LEADS	05347	CS4 1.1 OHM 5 PERCENT
A20R340	321–0245–00			RES,FXD,FILM:3.48K OHM,1%,0.125W,TC=T0 MI	50139	NOT AVAILABLE
A20R346	315–0301–00			RES,FXD,FILM:300 OHM,5%,0.25W MI	50139	CB3015
A20R352	315–0100–00			RES,FXD,FILM:10 OHM,5%,0.25W MI	50139	CB1005
A20R353	308–0676–00			RES,FXD,WW:750 OHM,1%,5W,NON–INDUCTIVE AXIAL LEAD	91637	NS5–750R0F
A20R366	315–0100–00			RES,FXD,FILM:10 OHM,5%,0.25W MI	50139	CB1005
A20R367	308–0431–00			RES,FXD,WW:120 OHM,5%,3W AXIAL LEADS	91637	CW–2B–60–1200–J–T /R
A20R368	315–0106–00			RES,FXD,FILM:10M OHM,5%,0.25W MI	19701	SFR25 2322–181–63106
A20R372	302–0473–00			RES,FXD,FILM:47K OHM,10%,0.5W MI	19701	5053CX47K00K
A20R374	301–0202–01			RES,FXD,CMPSN:2K OHM,5%,0.5W MI	50139	EB2025 (TAPE & REEL)
A20R390	315–0473–00			RES,FXD,FILM:47K OHM,5%,0.25W MI	50139	CB4735
A20R395	315–0473–00			RES,FXD,FILM:47K OHM,5%,0.25W MI	50139	CB4735
A20R405	301–0330–00			RES,FXD,FILM:33 OHM,5%,0.5W MI	19701	5053CX33R00J
A20R410	315–0334–00			RES,FXD,FILM:330K OHM,5%,0.25W MI	50139	CB3345
A20R411	315–0393–00			RES,FXD,FILM:39K OHM,5%,0.25W MI	50139	CB3935
A20R412	315–0162–00			RES,FXD,FILM:1.6K OHM,5%,0.25W MI	50139	CB1625
A20R413	315–0203–00			RES,FXD,FILM:20K OHM,5%,0.25W MI	50139	CB2035
A20R426	315–0153–00			RES,FXD,FILM:15K OHM,5%,0.25W MI	50139	CB1535
A20R434	315–0224–00			RES,FXD,FILM:220K OHM,5%,0.25W MI	50139	CB2245
A20R435	307–0104–00			RES,FXD,CMPSN:3.3 OHM,5%,0.25W MI	50139	CB33G5
A20R442	321–0133–00			RES,FXD,FILM:237 OHM,1%,0.125W,TC=T0 MI	50139	NOT AVAILABLE
A20R444	311–2230–00			RES,VAR,TRMR:CERMET,500 OHM,20%,0.5W,0.197 SQ,TOP ADJUST,T&R	TK2073	GF06UT2 501 M L20

Replaceable Electrical Parts List (Cont.), A20 Monochrome Display

Component Number	Tektronix PartNumber	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A20R445	302–0471–00			RES,FXD,CMPSN:470 OHM,10%,0.5W MI	19701	5053CX470R0K
A20R451	315–0222–00			RES,FXD,FILM:2.2K OHM,5%,0.25W MI	50139	CB2225
A20R458	315–0470–00			RES,FXD,FILM:47 OHM,5%,0.25W MI	50139	CB4705
A20R459	315–0162–00			RES,FXD,FILM:1.6K OHM,5%,0.25W MI	50139	CB1625
A20R461	321–0012–00			RES,FXD,FILM:13.0 OHM,1%,0.125W,TC=T0MI	07716	CEA
A20R465	315–0182–00			RES,FXD,FILM:1.8K OHM,5%,0.25W MI	50139	CB1825
A20R468	315–0105–00			RES,FXD,FILM:1M OHM,5%,0.25W MI	50139	CB1055
A20R469	315–0474–00			RES,FXD,FILM:470K OHM,5%,0.25W MI	50139	CB4745
A20R485	315–0472–00			RES,FXD,FILM:4.7K OHM,5%,0.25W MI	50139	CB4725
A20R487	307–0113–00			RES,FXD,CMPSN:5.1 OHM,5%,0.25W MI	50139	CB51G5
A20R489	307–0113–00			RES,FXD,CMPSN:5.1 OHM,5%,0.25W MI	50139	CB51G5
A20R491	315–0473–00			RES,FXD,FILM:47K OHM,5%,0.25W MI	50139	CB4735
A20R493	315–0473–00			RES,FXD,FILM:47K OHM,5%,0.25W MI	50139	CB4735
A20R495	315–0472–00			RES,FXD,FILM:4.7K OHM,5%,0.25W MI	50139	CB4725
A20R504	315–0331–00			RES,FXD,FILM:330 OHM,5%,0.25W MI	50139	CB3315
A20R508	311–2234–00			RES,VAR,TRMR:CERMET,5K OHM,20%,0.5W,0.197 SQ,TOP ADJUST,T&R	TK2073	GF06UT2 502 M L20
A20R511	315–0222–00			RES,FXD,FILM:2.2K OHM,5%,0.25W MI	50139	CB2225
A20R512	315–0272–00			RES,FXD,FILM:2.7K OHM,5%,0.25W MI	50139	CB2725
A20R513	315–0202–00			RES,FXD,FILM:2K OHM,5%,0.25W MI	50139	CB2025
A20R515	321–0317–00			RES,FXD,FILM:19.6K OHM,1%,0.125W,TC=T0 MI	50139	NOT AVAILABLE
A20R519	311–2229–00			RES,VAR,TRMR:CERMET,250 OHM,20%,0.5W,0.197 SQ,TOP ADJUST,T&R	TK2073	GF06UT2 251 M L20
A20R521	301–0621–00			RES,FXD,FILM:620 OHM,5%,0.5W MI	19701	5053CX620R0J
A20R524	315–0103–00			RES,FXD,FILM:10K OHM,5%,0.25W MI	50139	CB1035
A20R525	315–0103–00			RES,FXD,FILM:10K OHM,5%,0.25W MI	50139	CB1035
A20R527	321–0406–00			RES,FXD,FILM:165K OHM,1%,0.125W,TC=T0MI	50139	NOT AVAILABLE
A20R528	311–2238–00			RES,VAR,TRMR:CERMET,50K OHM,20%,0.5W,0.197 SQ,SIDE ADJUST,T&R	TK2073	GF06UT2 503 M L20
A20R529	321–0422–00			RES,FXD,FILM:243K OHM,1%,0.125W,TC=T0MI	50139	NOT AVAILABLE
A20R530	311–2239–00			RES,VAR,TRMR:CERMET,100K OHM,20%,0.5W,0.197 SQ,SIDE ADJUST,T&R	TK2073	GF06UT2 104 M L20
A20R536	315–0473–00			RES,FXD,FILM:47K OHM,5%,0.25W MI	50139	CB4735
A20R543	315–0103–00			RES,FXD,FILM:10K OHM,5%,0.25W MI	50139	CB1035
A20R544	315–0471–00			RES,FXD,FILM:470 OHM,5%,0.25W MI	50139	CB4715
A20R546	315–0222–00			RES,FXD,FILM:2.2K OHM,5%,0.25W MI	50139	CB2225
A20R547	315–0183–00			RES,FXD,FILM:18K OHM,5%,0.25W MI	50139	CM1835
A20R552	315–0244–00			RES,FXD,FILM:240K OHM,5%,0.25W MI	50139	CB2445
A20R554	315–0473–00			RES,FXD,FILM:47K OHM,5%,0.25W MI	50139	CB4735
A20R558	315–0471–00			RES,FXD,FILM:470 OHM,5%,0.25W MI	50139	CB4715

Replaceable Electrical Parts List (Cont.), A20 Monochrome Display

Component Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Name & Description	Mfr. Code	Mfr. Part Number
A20R560	315–0105–00			RES,FXD,FILM:1M OHM,5%,0.25W MI	50139	CB1055
A20R565	311–1256–00			RES,VAR,TRMR:CERMET,2.5M OHM,10%,0.5W,0.375 SQ,TOP ADJUST,BULK	02111	63M–255–T604
A20R567	311–2267–00			RES,VAR,NONWW:TRMR,50K OHM,20%,0.5W LINEAR,MI AMMO–PACK	TK2073	GF06VT2 503 M L20
A20R568	321–0114–00			RES,FXD,FILM:150 OHM,1%,0.125 W,TC=T0 MI	50139	NOT AVAILABLE
A20R569	311–2266–00			RES,VAR,NONWW:TRMR,100K OHM,20%,0.5W LINEAR,MI	TK2073	GF06VT2 104 M L20
A20R572	311–2276–00			RES,VAR,NONWW:TRMR,100 OHM,20%,0.5W LINEAR,MI	TK2073	GF06VT2 101 M L20
A20R579	321–0068–00			RES,FXD,FILM:49.9 OHM, 1% ,0.125W,TC=T0 MI	07716	CEA
A20T225	120–1841–00			TRANSFORMER,RF:FLYBACK	50783	921871304
A20T403	120–1476–00			XFMR,BASE DRIVE:L1 18MH +/–15% 2.0 OHM MAX, L2 367.5UH +/–15% 0.15 OHMMAX, 1.04 X 0.95, HEIGHT	02113	A8369
A20U375	156–2702–00			IC,LINEAR:BIPOLAR,OP–AMP,DUAL,HIGH OUTPUT CURRENT,4560,DIP08.3	07933	RC4560
A20U415	156–1147–00			IC,MISC:BIPOLAR,VIDEO SUBSYSTEM,HORIZONTAL PROCESSOR,MC1391P,DIP08.3	04713	MC1391P
A20U428	156–4618–00			IC,MISC:BIPOLAR,VIDEO SUBSYSTEM,VERTICAL DEFLECTION SYSTEM,TDA1175P,DIP16.3	66958	TDA1175P
A20U438	156–1161–00			IC,LINEAR:BIPOLAR,VOLTAGE REGULATOR,POSITIVE,ADJUSTABLE,1.5A,4%,LM317T, TO–220	04713	LM317T
A20VR458	152–0227–00			DIODE,ZENER:6.2V,5%,0.4W,1N753A FMLY,DO–35 OR 7,TR	04713	1N753ARL

Replaceable Mechanical Parts

Replaceable Mechanical Parts

This section contains a list of compoents that are replaceable for the TDS 520B oscilloscope. Use this list to identify and order replacement parts.

Parts Ordering Information

Replacement parts are available through your local Tektronix field office or representative.

Changes to Tektronix instruments are sometimes made to accommodate improved components as they become available and to give you the benefit of the latest circuit improvements. Therefore, when ordering parts, it is important to include the following information in your order.

- Part number
- Instrument type or model number
- Instrument serial number
- Instrument modification number, if applicable

If you order a part that has been replaced with a different or improved part, your local Tektronix field office or representative will contact you concerning any change in part number.

Change information, if any, is located at the rear of this manual.

Using the Replaceable Parts List

This section contains a list of the mechanical and/or electrical components that are replaceable for the oscilloscope. Use this list to identify and order replacement parts. The following table describes each column in the parts list.

Parts List Column Descriptions

Column	Column Name	Description
1	Figure & Index Number	Items in this section are referenced by component number.
2	Tektronix Part Number	Use this part number when ordering replacement parts from Tektronix.
3 and 4	Serial Number	Column three indicates the serial number at which the part was first effective. Column four indicates the serial number at which the part was discontinued. No entries indicates the part is good for all serial numbers.
5	Qty	This indicates the quantity of parts used.
6	Name & Description	An item name is separated from the description by a colon (:). Because of space limitations, an item name may sometimes appear as incomplete. Use the U.S. Federal Catalog handbook H6-1 for further item name identification.
7	Mfr. Code	This indicates the code of the actual manufacturer of the part. (Code to name and address cross reference is located after this page.)
8	Mfr. Part Number	This indicates the actual manufacturer's or vendor's part number.

Abbreviations Abbreviations conform to American National Standard ANSI Y1.1–1972.

Mfr. Code to Manufacturer Cross Index

The following table cross indexes codes, names, and addresses of manufacturers or vendors of components listed in the parts list.

Manufacturers Cross Index

Mfr. Code	Manufacturer	Address	City, State, Zip Code
S3019	HIRTENBERGER GES.M.B.H.		HIRTENBERG NOE, AUSTRIA
S3109	FELLER	72 VERONICA AVE UNIT 4	SUMMERSET NJ 08873
TK0IK	MODERN METALS	UNIT A/K, 5/F GOLD KING IND. BLDG NO. 35–41 TAI LIN ROAD	KWAI–CHUNG N.T. HONG KONG
TK0488	CURRAN COIL SPRING INC	9265 SW 5TH	WILSONVILLE, OR 97070
TK0588	UNIVERSAL PRECISION PRODUCTS	1775 NW 216TH	HILLSBORO OR 97123
TK1163	POLYCAST INC	9898 SW TIGARD ST	TIGARD OR 97223
TK1465	BEAVERTON PARTS MFG CO	1800 NW 216TH AVE	HILLSBORO OR 97124–6629
TK2162	DERBY MFG	24350 STATE ROAD 23 SOUTH	SOUTH BEND IN 46614–9696
TK2248	WESTERN MICRO TECHNOLOGY	1800 NW 169TH PL SUITE B–300	BEAVERTON OR 97006
TK2338	ACC MATERIALS	ED SNYDER BLDG 38–302	BEAVERTON OR 97077
TK2432	UNION ELECTRIC	15/F #1, FU–SHING N. ROAD	TAIPEI, TAIWAN ROC
TK2469	UNITREK CORPORATION	3000 LEWIS & CLARK WAY SUITE #2	VANCOUVER WA 98601
TK2500	SOLECTEK ACCESSORIES CORP	6370 NANCY RIDGE DR SUITE 109	SAN DIEGO CA 92121
TK2539	ROYAL CASE CO INC	315 SOUTH MONTGOMERY PO BOX 2231	SHERMAN TX 75091–2231
TK2548	XEROX BUSINESS SERVICES DIV OF XEROX CORPORATION	14181 SW MILLIKAN WAY	BEAVERTON OR 97077
TK2597	MERIX CORPORATION	1521 POPLAR LANE	FOREST GROVE, OR 97116
0CGF1	GEROME MFG CO INC	CORP OFFICE OLIVER ROAD PO BOX 1089	UNIONTOWN, PA 15401
0JR05	TRIQUEST CORP	3000 LEWIS AND CLARK HWY	VANCOUVER WA 98661–2999
0J9P9	GEROME MFG CO INC	PO BOX 737 403 NORTH MAIN	NEWBERG OR 97132
0KB01	STAUFFER SUPPLY	810 SE SHERMAN	PORTLAND OR 97214
0KB05	NORTH STAR NAMEPLATE	5750 NE MOORE COURT	HILLSBORO OR 97124–6474
00779	AMP INC	2800 FULLING MILL PO BOX 3608	HARRISBURG PA 17105
01KV9	MERIX CORP	1521 POPLAR LANE PO BOX 3000	FOREST GROVE, OR 97116
060D9	UNITREK CORPORATION	3000 COLUMBIA HOUSE BLVD, SUITE 1 20	VANCOUVER, WA 98661
07416	NELSON NAME PLATE CO	3191 CASITAS	LOS ANGELES CA 90039–2410
1DM20	PARLEX CORPORATION LAMINATED CABLE DIV	7 INDUSTRIAL WAY	SALEM, NH 03079

Manufacturers Cross Index (Cont.)

Mfr. Code	Manufacturer	Address	City, State, Zip Code
1GM54	ZYTEC CORPORATION	7575 MARKET PLACE DR	EDEN PRAIRIE MN 55344–3637
1JJ96	KAM ELECTRIC CO	11866 SLATER AVE NE	KIRKLAND WA 98034
1V691	R AND M MANUFACTURING	2424 N 5TH ST	NILES, MI 49120–1175
11536	OPTICAL COATING LABORATORY INC	2789 NORTHPOINT PARKWAY	SANTA ROSA, CA 95407
2W733	COOPER INDUSTRIES INC BELDEN DIVISION	2200 US HIGHWAY 27 SOUTH PO BOX 1980	RICHMOND IN 47375–0010
22526	BERG ELECTRONICS INC (DUPONT)	857 OLD TRAIL RD	ETTERS PA 17319
24931	SPECIALTY CONNECTOR CO INC	2100 EARLYWOOD DR PO BOX 547	FRANKLIN IN 46131
30817	INSTRUMENT SPECIALTIES CO INC	EXIT 53 RT 80 BOX A	DELAWARE WATER GAP PA 18327
34416	PARSONS MFG CORP	1055 OBRIAN DR	MENLO PARK CA 94025–1408
41394	DELTA PRODUCTS CORPORATION	26250 EUCLID AVE SUITE 305–E	EUCLID, OH 44132
5Y400	TRIAX METAL PRODUCTS INC DIV OF BEAVERTON PARTS MFG CO	1800 NW 216TH AVE	HILLSBORO OR 97124–6629
5Y921	COMAIR ROTRON INC	2675 CUSTOMHOUSE CT	SAN YSIDRO, CA 92073
55285	BERGUIST CO.	5300 EDINA INDUSTRIAL BLVD	MINNEAPOLIS, MN 55435–3707
6D224	HARBOR ELECTRONICS COMPANY	14500 S BROADWAY	GARDENA, CA 90248
61857	SAN–0 INDUSTRIAL CORP	91–3 COLIN DRIVE	HOLBROOK NY 11741
61935	SCHURTER INC	1016 CLEGG COURT	PETALUMA CA 94952–1152
71400	BUSSMANN	DIVISION COOPER INDUSTRIES INC PO BOX 14460	ST LOUIS, MO 63178
71785	CINCH CONNECTORS	1501 MORSE AVE.	ELK GROVE VILLAGE, IL 60007
75915	LITTELFUSE TRACOR INC SUB OF TRACOR INC	800 E NORTHWEST HWY	DES PLAINES IL 60016–3049
80009	TEKTRONIX INC	14150 SW KARL BRAUN DR PO BOX 500	BEAVERTON OR 97077–0001

Replaceable Parts List

Fig. & Index Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Qty	Name & Description	Mfr. Code	Mfr. Part Number
1–1	437–0465–00			1	CABINET,SCOPE:ALUM,VINYL CLAD	0J9P9	437–0465–00
–2	367–0247–01			1	HANDLE,CARRYING:11.54 L,W/CLIP	80009	367024701
–3	200–2191–00			2	CAP,RETAINER:PLASTIC	0JR05	ORDER BY DESC
–4	348–1110–04			1	FOOT,CABINET:FRONT	0J9P9	348–1110–04
–5	348–1254–01			4	PAD,FOOT:TEK BLACK,SANTOPRENE	80009	348125401
–6	348–0875–00			1	FLIPSTAND,CAB	TK0488	ORDER BY DESC
–7	200–3696–01			1	COVER,FRONT:PLASTIC (STANDARD ACCESSORY)	80009	200369601

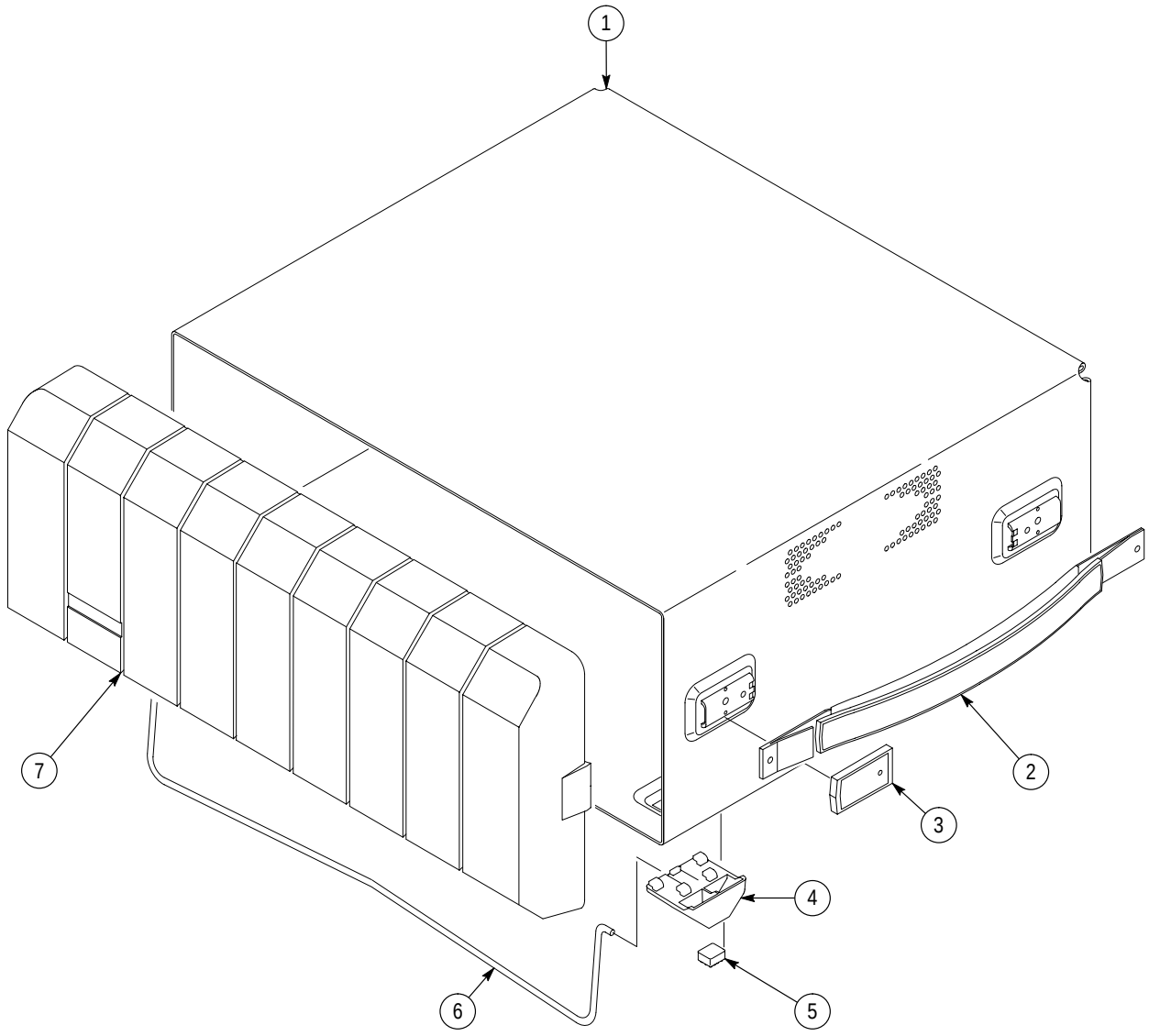


Figure 4–1: Cabinet

Replaceable Parts List

Fig. & Index Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Qty	Name & Description	Mfr. Code	Mfr. Part Number
2–1	348–1109–01			1	GASKET,SHIELD:348–1109–00 CUT 45.0 L	80009	348110901
–2	174–2288–00			1	CA ASSY,PWR:DISCRETE,PSC,18 AWG,3.5 L,RTANG,0.25 FEMALE,FASTON XRING TONGUE,	TK2469	174–2288–00
–3	211–0730–00			3	SCR,ASSEM WSHR:6–32 X 0.375,PNH,STL,T–15	0KB01	ORDER BY DESC
–4	131–1688–00			1	TERM,QIK DISC.:0.250 SPADE,STUD MT,MALE,45 DEG,0.250 X 0.032 X 0.315 TAB,TIN,FOR 0.145 DIA STUD	00779	42822–4
–5	348–1159–00			2	SHIELD,ELEC:SST,W/CHEVRONS,0.4 PITCH,5.0 L	52814	ORDER BY DESC
–6	————————			1	CIRCUIT BD ASSY:FRONT PANEL (SEE A12 REPL)		
–7	380–0927–01			1	HOLDER,SWITCH:FRONT PANEL	TK1163	ORDER BY DESCRIPTION
–8	386–6145–00			1	SUBPANEL,FRONT:ALUMINUM	0J9P9	ORDER BY DESCRIPTION
–9	333–4196–00			1	OVERLAY,FRONT:FRONT PANEL GRAPHICS	80009	333–4196–00
–10	386–5954–00			1	PANEL,INPUT:PLASTIC,ATTENUATOR	80009	386595400
–11	131–6124–00			2	PROBE,TIP:TERMINAL, CALIBRATOR .250 HEX C36000 GOLD PLATED, CALGRATOR TERMINAL	TK0588	131–6124–00
–12	366–2170–00			1	KNOB:DIMPLED GPK,1.7 DIA	TK1163	ORDER BY DESC
–13	101–0142–00			1	TRIM,DECORATIVE:FRONT	TK1163	ORDER BY DESC
–14	214–4287–01			1	ACTUATOR:ELASTOMER MAT,FRONT PANEL,RBR (for use in TDS 500B and 700A)	TK0IK	ORDER BY DESC
–15	200–4095–00			1	COV,DISK DRIVE:COSMETIC	80009	200–4095–00
–16	334–9163–00			1	MARKER, IDENT:FRONT LABEL, TDS520B	80009	334–9095–00
–17	650–2927–00			1	REPLACEABLE AS:DISPLAY FRAME WITH FLEX	80009	650–2927–00
–18	378–0366–01			1	FILTER,LT,CRT:6.525 X 5.225, ESP, EMC	11536	378–0366–01
–19	386–6211–02			1	RETAINER,FILTER:DUST SEAL ASSY,LEXAN	TK1163	386–6211–02
–20	366–2114–00			2	KNOB:LARGE,DETENTED	TK1163	ORDER BY DESC
–21	366–2111–00			3	KNOB:SMALL,FLUTED	TK1163	ORDER BY DESC
–22	377–0579–00			5	INSERT,KNOB:PLASTIC	TK1163	ORDER BY DESCRIPTION
–23	337–3956–00			1	SHIELD:DISK DRIVE HOLE,0.005 STAINLESS STEEL	80009	337–3956–00
–24	348–1160–00			2	SHIELD,ELEC:SST,W/CHEVRONS,0.4 PITCH,8.0 L	52814	ORDER BY DESC
–25	386–5871–01			1	SUBPANEL,FRONT:FINISHED,ALUMINUM	5Y400	386–5871–01

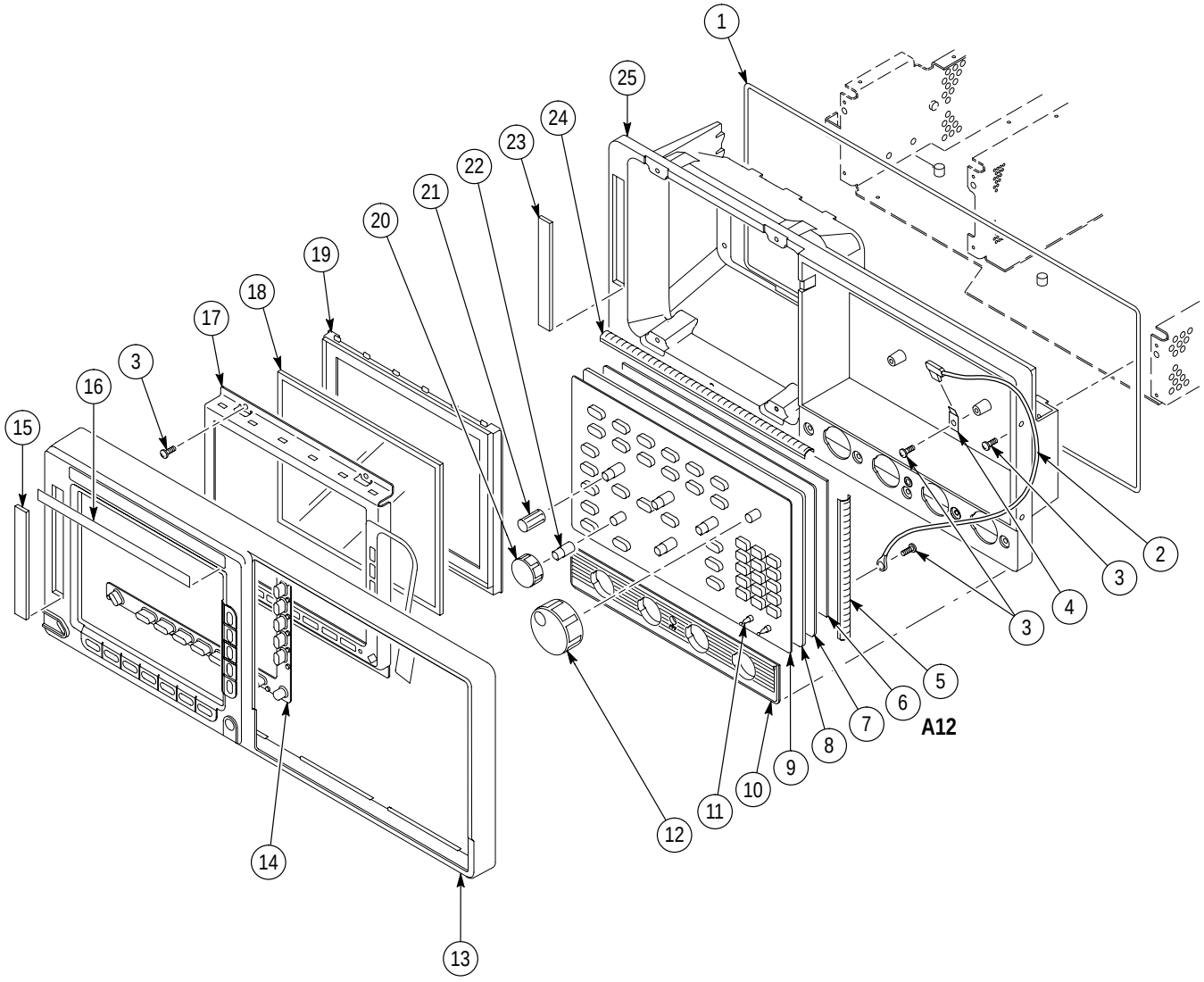


Figure 4–2: Front

Replaceable Parts List

Fig. & Index Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Qty	Name & Description	Mfr. Code	Mfr. Part Number
3–1	441–1901–03			1	CHASSIS,SCOPE:TOP	0CGF1	441–1901–03
–2	174–2975–00			1	CA ASSY,SP:RIBBON,;CPR,16,28 AWG,4.0 L	TK2469	ORDER BY DESC
	131–0890–01			2	CONN,HARDWARE:DSUB,JACK SCREW	00779	205818–2
–3	211–0730–00			6	SCR,ASSEM WSHR:6–32 X 0.375,PNH,STL,T–15	0KB01	ORDER BY DESC
–4	334–9110–00			1	MARKER, IDENT:REAR PANEL CONNECTORS/OPTIONS	80009	334–9110–00
–5	200–3695–02			1	COVER,REAR:REAR COSMETIC COVER	TK1163	200–3695–02
–6	212–0189–00			6	SCR,ASSEM WSHR:8–32 X 0.500,PNH,STL,T–20	0KB01	ORDER BY DESC
–7	174–1524–01			1	CA ASSY SP:RIBBON,GPIB;IDC,24,28 AWG,4.0L	TK2469	ORDER BY DESC
	129–1439–00			2	SPACER,POST:0.17 L,4–40 BRS,0.25 RND (USE WITH 174–1524–XX ONLY)	TK0588	ORDER BY DESC
–8	131–1315–01			4	CONN,RF JACK:BNC/PNL, 50 OHM, FEMALE	24931	28JR306–1
–9	386–5872–00			1	PLATE,REAR:ALUMINUM,STD	0J9P9	ORDER BY DESCRIPTION
–10	348–1109–01			1	GASKET,SHIELD:348–1109–00 CUT 45.0 L	80009	348110901
–11	441–1902–01			1	CHASSIS,SCOPE:REAR	0J9P9	ORDER BY DESC
–12	348–1300–00			4	SHLD,GSKT,ELEK:3.165 L,CLIP ON	30817	0098–0564–09–03
–13	441–2043–00			1	CHASSIS,SCOPE:MAIN,0.05 ALUMINUM	0J9P9	441–2043–00
–14	346–0266–00			1	STRAP,CABLE:PLASTIC	0KB05	346–0266–00
–15	174–3736–00			1	ACA ASSY, SP:RIBBON,DIGITAL POWER,IDC,40,28 AWG	060D9	174–3736–00
–16	174–3735–00			1	CA ASSY,SP:RIBBON,IDC,28 AWG,50	060D9	174–3735–00
–17	343–0088–00			2	CLAMP,CABLE:0.062 DIA,PLASTIC	80009	343008800
–18	119–5044–00			1	FAN,DC:TUBEAXIAL, WITH CABLE	5Y921	JQ24F4V/031349
–19	407–3825–00			2	BRACKET,CKT BD:PLASTIC,REAR	TK1163	ORDER BY DESC
–20	407–3878–00			6	BRACKET,CKT BD:PLASTIC	TK1163	ORDER BY DESC
–21	407–3877–00			2	BRACKET,CKT BD:PLASTIC	TK1163	ORDER BY DESC

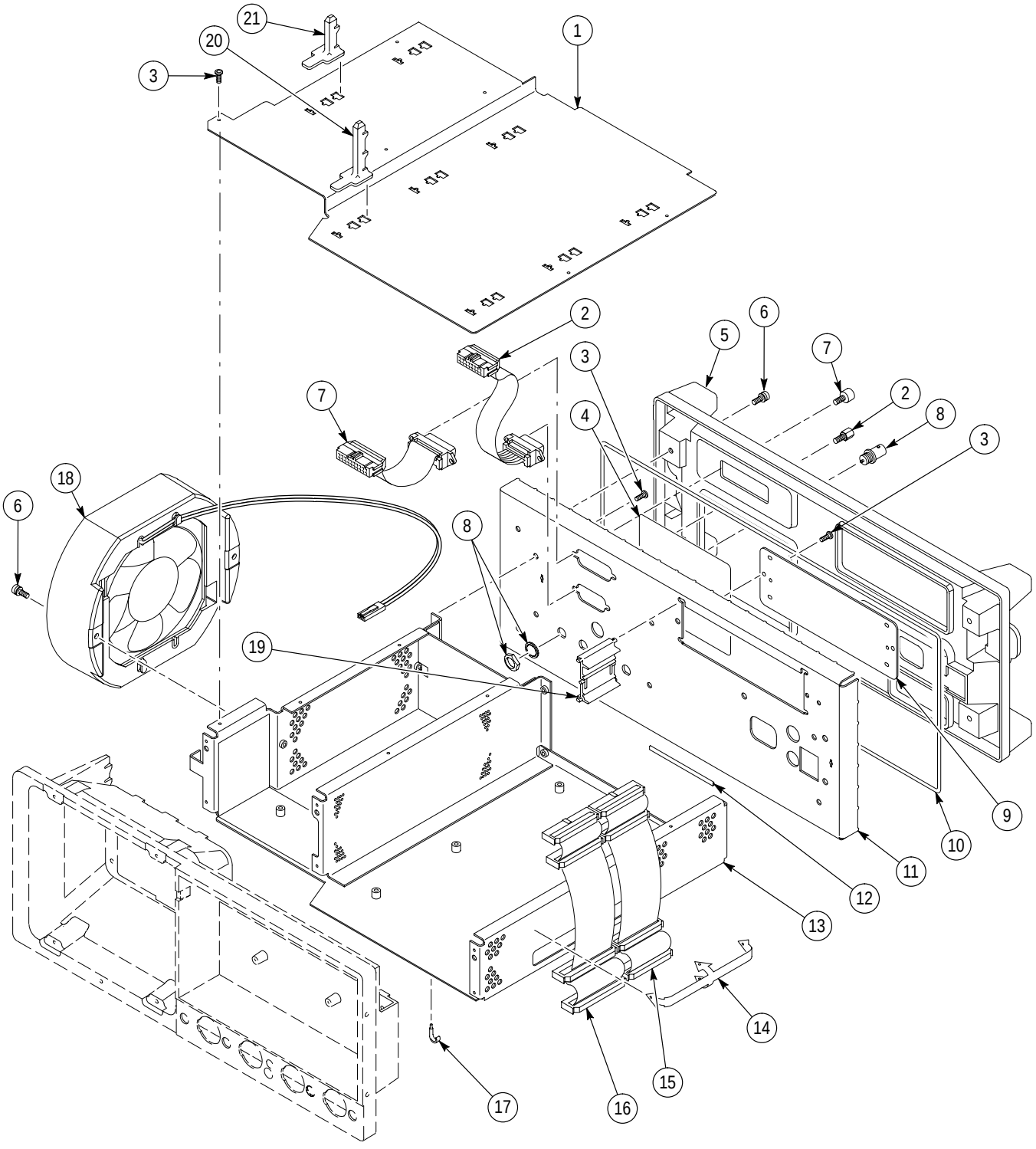


Figure 4–3: Chassis and Rear

Replaceable Parts List

Fig. & Index Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Qty	Name & Description	Mfr. Code	Mfr. Part Number
4–1	————————			1	CIRCUIT BD ASSY:PROCESSOR DISPLAY (SEE A11 REPL)		
–2	214–4266–00			2	HEAT SINK,XSTR:TO–220 OR TO–218,2 INCH	13103	6392B–P3
–3	————————			1	CIRCUIT BD ASSY:MONOCHROME DISPLAY (SEE A20 REPL)		
–4	346–0128–00			1	STRAP,TIEDOWN,E:8.0 L X 0.1 W,NYLON	TK1719	TY232M
–5	————————			1	CIRCUIT BD ASSY:ACQUISITION (SEE A10 REPL)		
–6	————————			1	CIRCUIT BD ASSY:D1 BUS (SEE A14 REPL)		
–7	174–2031–00			4	CABLE ASSY:COAX,RFP,50 OHM,6.5L,PELTOLA BOTH ENDS	80009	174–2031–00
–8	211–0730–00			39	SCR,ASSEM WSHR:6–32 X 0.375,PNH,STL CD PL	0KB01	ORDER BY DESC
–9	131–5361–00			4	CONN,RF JACK:BNC,;50 OHM,FEMALE,STR	24931	28JR472–1
–10	————————			4	HYBRID ATTEN: (SEE A10A1000 REPL)		
–11	386–6418–00			1	HSG,ATTENUATOR:ALUM,NICKEL PLATED	80009	386612301
–12	348–1422–00			1	GASKET,RF:SHIELDING,0.005 BERYLLIUM COPPER	0J9P9	348–1422–00
–13	259–0101–02			1	FLEX CIRCUIT:LEVEL II PROBE INTERFACE	01KV9	259010102
–14	————————			2	INTERCON ASSY: PLASTIC FRAME (SEE A10JP1200 & A10JP1400 REPL)		
–15	154–0959–00			1	ELECTRON TUBE:CRT	80009	154095900
–16	342–0324–00			2	INSULATOR,DISK:TRANSISTOR,NYLON	13103	7717–5N
–17	214–2593–00			1	HEAT SINK,XSTR:TO–5,AL	13103	2257B
–18	344–0286–00			2	CLIP,ELECTRICAL:PCB,;FEMALE,STR,ACCOM	75915	102074
–19	159–0021–00			1	FUSE,CARTRIDGE:3AG,2A,250V,FAST BLOW	71400	AGC–2
–20	214–4265–00			1	HEAT SINK,ELEC:SOLDER FOR DIP16.3 LEAD	TK2341	V8–800S
–21	211–0503–00			2	SCREW,MACHINE:6–32 X 0.188,PNH,STL	TK0435	ORDER BY DESC
–22	174–1525–00			1	CA ASSY,SP,ELEC:2 X 8–13,28 AWG,VIDEO/MONITOR BUS	TK2469	174–1525–00
–23	136–1056–01			1	CA, ASSY, CRT: (SEE A20J475 REPL)	———	136–1056–01

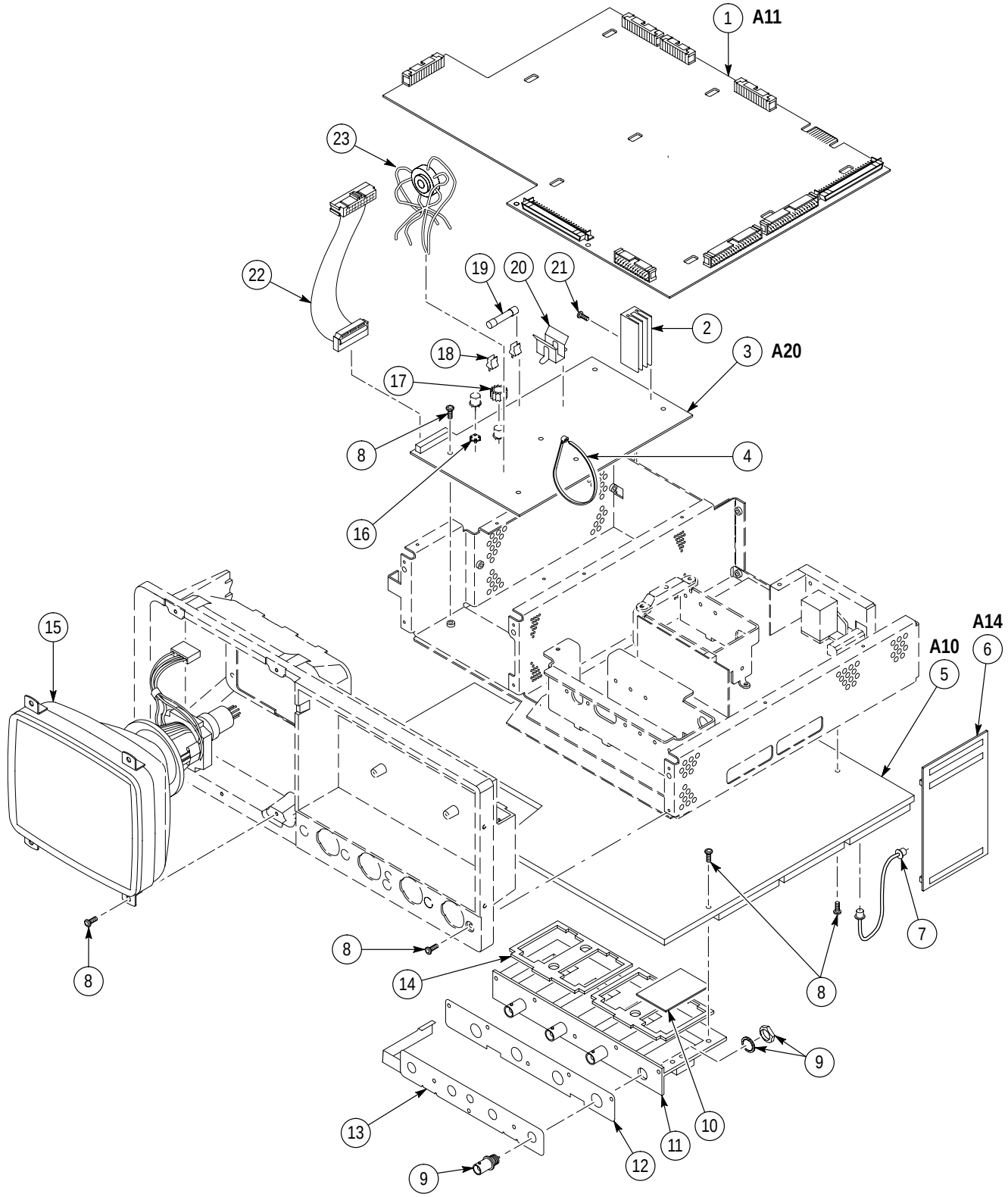


Figure 4–4: Circuit Boards

Replaceable Parts List

Fig. & Index Number	Tektronix/ Zytec Part Number	Serial No. Effective	Serial No. Discont'd	Qty	Name & Description	Mfr. Code	Mfr. Part Number
	620-0063-05			1	TEK IV POWER SUPPLY (ITEMS 1 THROUGH 19 EXCLUDING ITEMS 9, 17 AND 18)	1GM54	22943040
5–1	22940215			1	SHIELD,TEK IV	1GM54	22940215
–2	22927239			1	CLIP, GROUNDING, TKX–C	1V691	22927239
–3	22964145			1	FILT,115/250,6A,50–60HZ	41394	06ME2(MOD)
–4	22965340			1	FUSEHLDR,CAP,HOLE,.25D,UCVS	61935	FEK031.1666
–5	93418334			1	FUSE,CAR,NON,FAST,6A,250V,3AG	71400	AGC6
						75915	312006
–6	22964108			1	FUSEHLDR,ILN,PC,5MX20,PIN,UCVS	61935	FAU031.3573
						61935	FAU031.3577
–7	23042041			1	RLB ASSY,MTHR,TEK–IV	1GM54	23042041
–8	23042141			1	TLB ASSY,DTHR,TEK–IV	1GM54	23042141
–9	211-0730-00			7	SCR,ASSEM WSHR:6-32X0.375,PNH,STL,T-15	0KB01	ORDER BY DESC
–10	93749164			17	SCR,MLKG,PAN,CR,ST,6–32X.5	1GM54	93749164 (PER–PRINT)
–11	22908166			1	THERMPAD,INS,K10,1.25ROLL	55285	22908166 (PER–PRINT)
–12	22903621			15	CLIP,HTSK,THREADED	1V691	22903621 (PER–PRINT)
–13	22942615			1	ASSY,HTSK,1833,RLB,H4	1GM54	22942615
–14	10127103			1	SCR, MACH, PAN, CR, ST, 4–40X.3125	1GM54	10127103 (PER–PRINT)
–15	22903611			1	CLIP,HTSK,CLEARANCE	1V691	22903611 (PER–PRINT)
						S3019	22903611 (PER–PRINT)
–16	22942614			1	ASSY,HTSK,1833,RLB,H3	1GM54	22942614
–17	211-0534-00			2	SCR,ASSEM WSHR:6-32X0.312,PNH,STL	TK0435	ORDER BY DESC
–18	407-4099-00			1	BRKT,PWR SPLY:TDS 520B	80009	407409900
–19	95510024			1	NUT, HEX, NON, STL, 4–40	1GM54	95510024

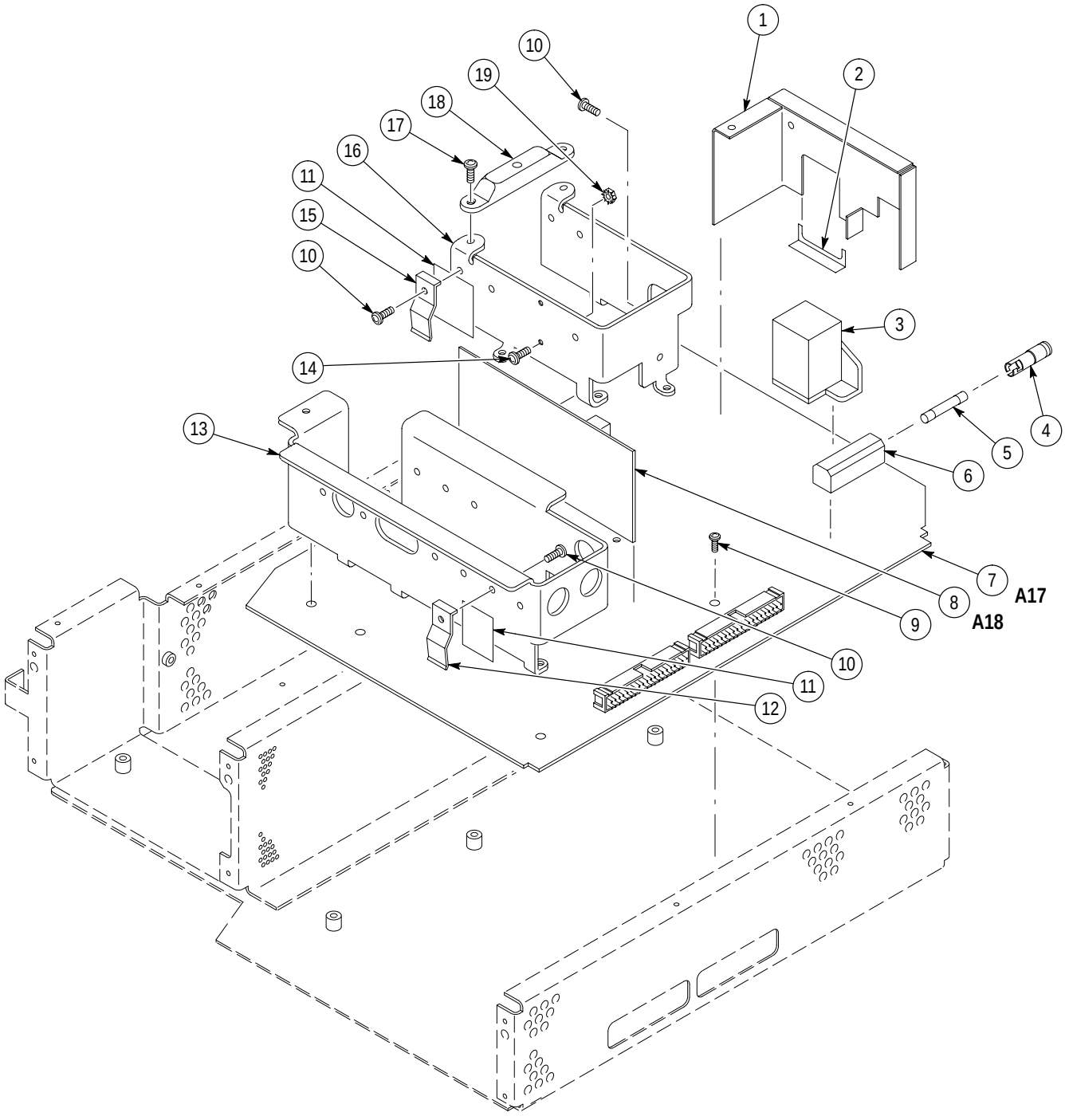


Figure 4–5: LV Power Supply

Replaceable Parts List

Fig. & Index Number	Tektronix Part Number	Serial No. Effective	Serial No. Discont'd	Qty	Name & Description	Mfr. Code	Mfr. Part Number
					STANDARD ACCESSORIES		
6–1	161–0230–01			1	CABLE ASSY,PWR,:3,18 AWG,92 L,SVT,TAN (STANDARD)	TK2432	ORDER BY DESC
–2	343–1213–00			1	CLAMP,PWR CORD:POLYMIDE	TK1163	ORDER BY DESC
–3	————			1	ACCESSORY PKG:TWO P6139A 1.5M,W/ASSY		
	————			1	COVER,FRONT:PLASTIC (SEE FIGURE 10–1–9)		
	063–0870–02			1	DATA SHEET:TECHNICAL,P6139A,DP	80009	063087002
	063–2599–01			1	SOFTWARE PKG:INSTRUMENT FIRMWARE,3.5 DISKETTE,V4.2.1,TDS500/700 SERIES	80009	063259901
	070–9556–00			1	MANUAL,TECH:PROGRAMMER, TDS 400A/500B/600B/700A	80009	070955600
	070–9383–01			1	MANUAL,TECH:USERS, TDS 500B/600B/744A/784A	80009	070938301
	070–9384–02			1	MANUAL,TECH:PERFORMANCE VERIFICATION MANUAL,TDS5XXB	80009	070938402
	070–9710–03			1	MANUAL, TECH:COMPONENT LEVEL SERVICE	80009	070971003
	020–2148–01			1	MANUAL,TECH:REFERENCE SET, TDS 500B/600B/7700A	80009	020214801

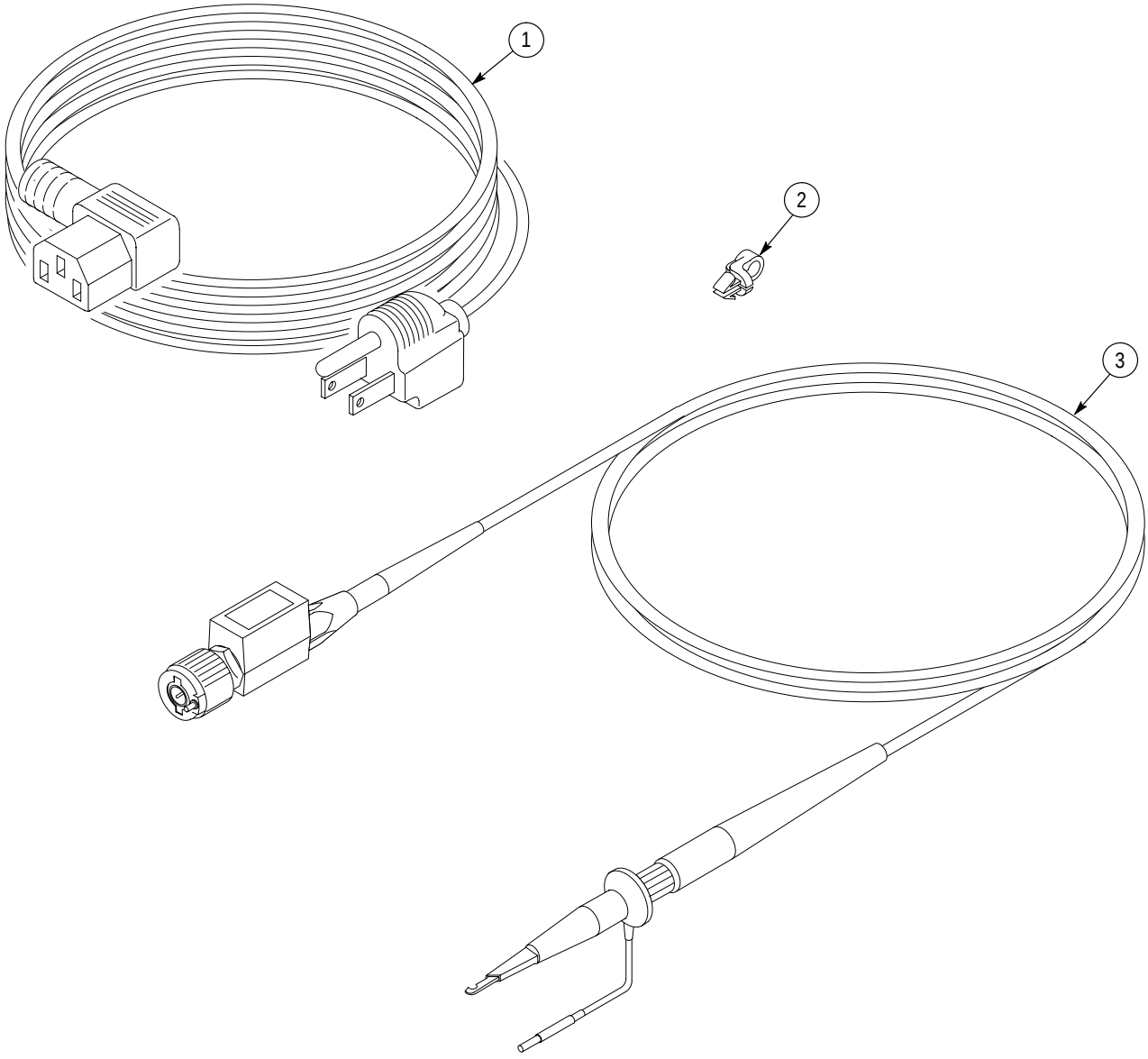


Figure 4–6: Accessories

Diagrams and Circuit Board Illustrations

Diagrams and Circuit Board Illustrations

This section contains block diagrams, circuit board illustrations, component locator tables and schematic diagrams.

Symbols

Graphic symbols and class designation letters are based on ANSI Standard Y32.2-1975. Abbreviations are based on ANSI Y1.1-1972.

Logic symbology is based on ANSI/IEEE Standard 91-1984 in terms of positive logic. Logic symbols depict the logic function performed and can differ from the manufacturer's data.

The tilde (~) preceding a signal name indicates that the signal performs its intended function when in the low state.

Other standards used in the preparation of diagrams by Tektronix, Inc., include the following:

- ANSI Y14.159-1971 Interconnection Diagrams
- ANSI Y32.16-1975 Reference Designations for Electronic Equipment
- MIL-HDBK-63038-1A Military Standard Technical Manual Writing Handbook

Component Values

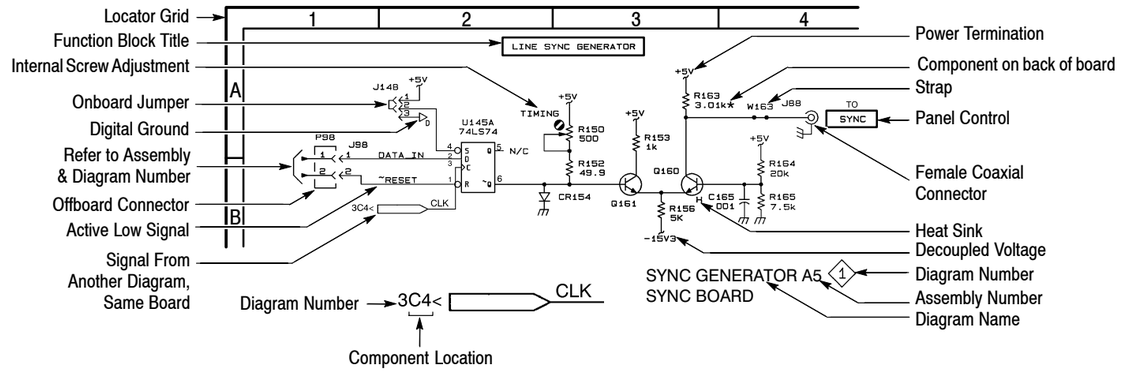
Electrical components shown on the diagrams are in the following units unless noted otherwise:

Capacitors: Values one or greater are in picofarads (pF).
Values less than one are in microfarads (μF).

Resistors: Values are in Ohms (Ω).

Graphic Items and Special Symbols Used in This Manual

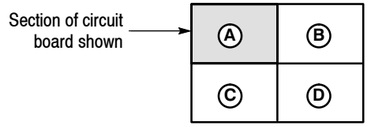
Each assembly in the instrument is assigned an assembly number (for example A5). The assembly number appears in the title on the diagram, in the lookup table for the schematic diagram, and corresponding component locator illustration. The Replaceable Electrical Parts list is arranged by assembly in numerical sequence; the components are listed by component number.

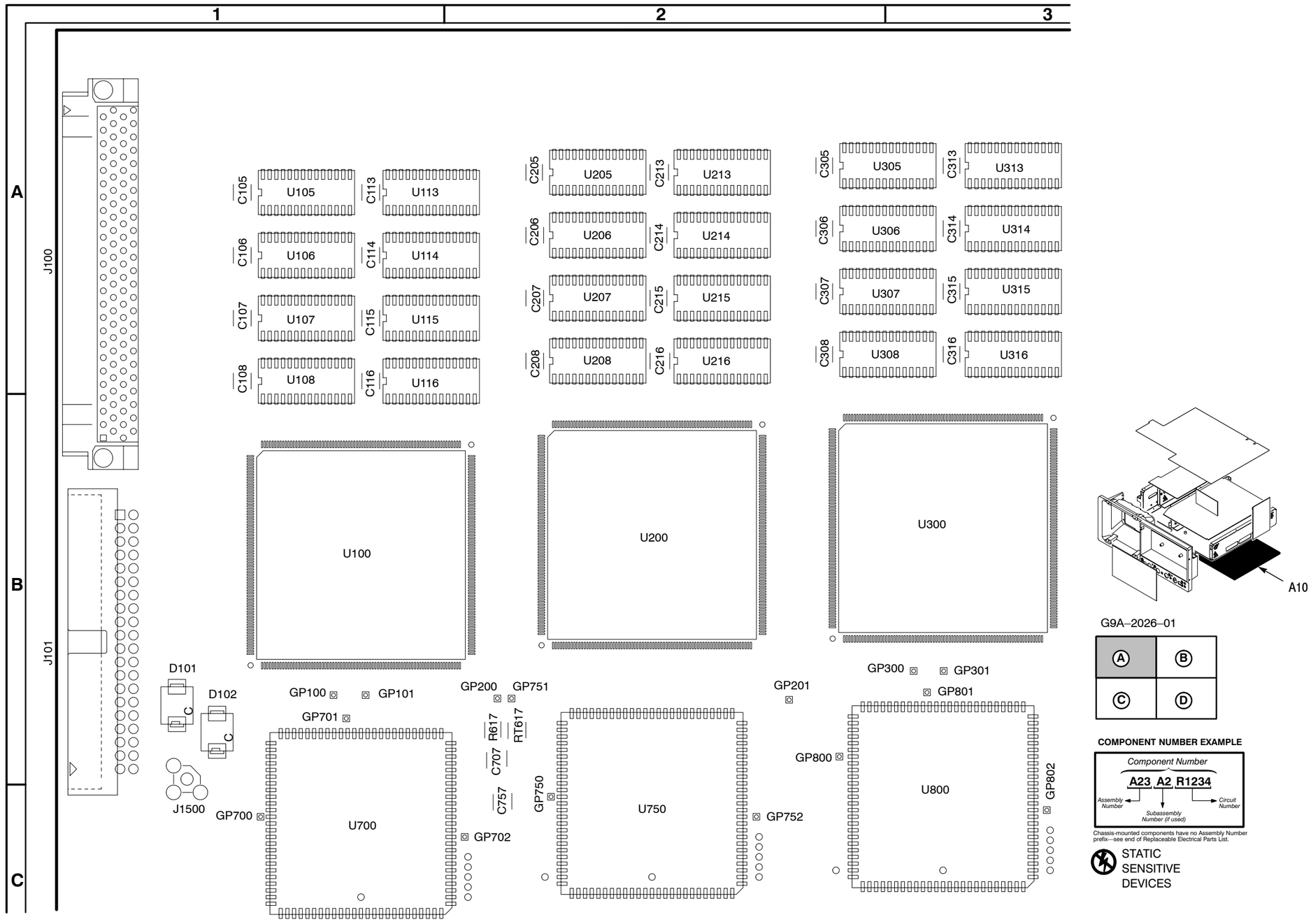


Component Locator Diagrams

The schematic diagram and circuit board component location illustrations have grids marked on them. The component lookup tables refer to these grids to help you locate a component. The circuit board illustration appears only once; its lookup table lists the diagram number of all diagrams on which the circuitry appears.

Some of the circuit board component location illustrations are expanded and divided into several parts to make it easier for you to locate small components. To determine which part of the whole locator diagram you are looking at, refer to the small locator key shown below. The gray block, within the larger circuit board outline, shows where that part fits in the whole locator diagram. Each part in the key is labeled with an identifying letter that appears in the figure titles under component locator diagrams.





G9A–2026–01

COMPONENT NUMBER EXAMPLE

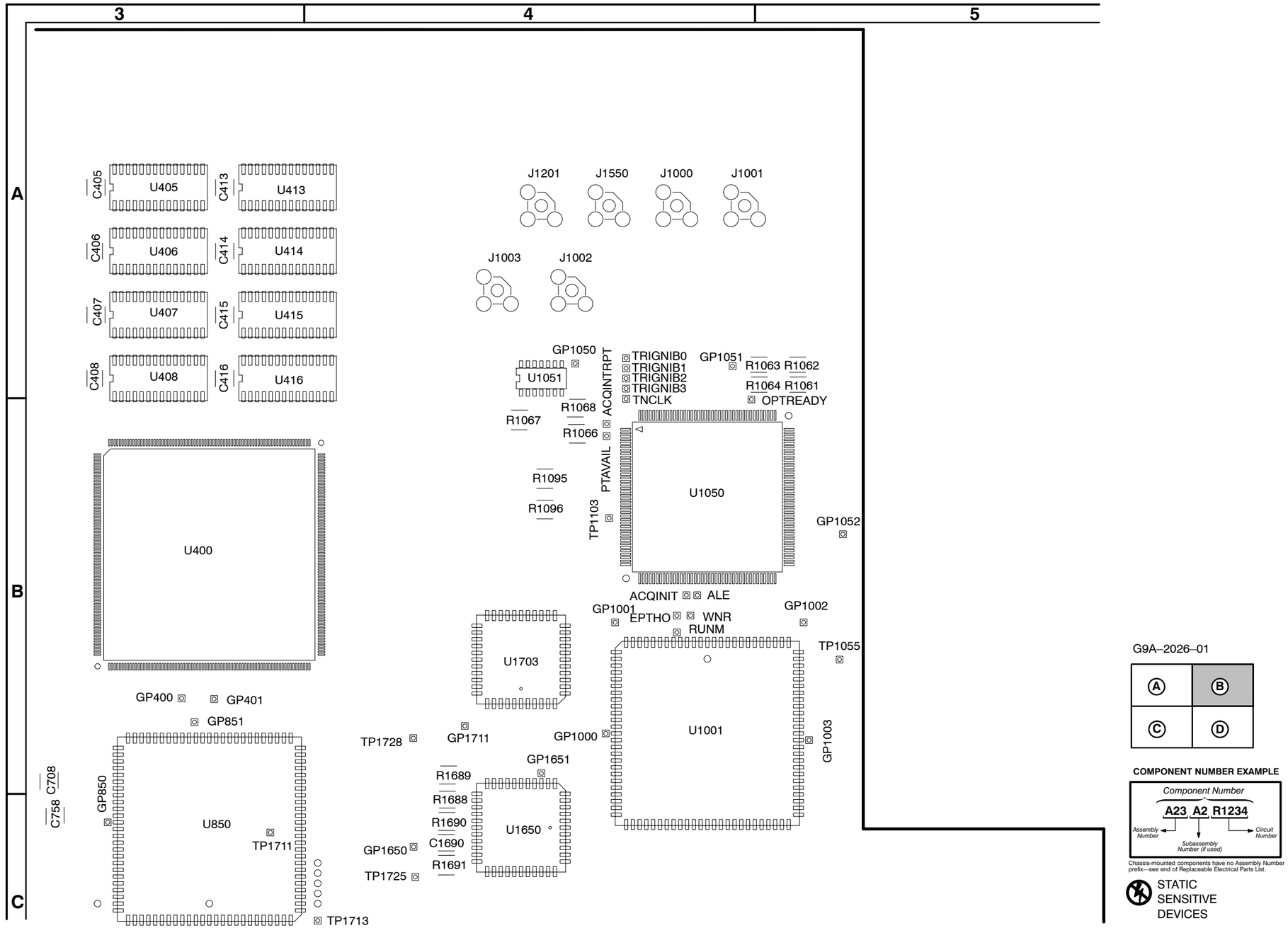
Chassis-mounted components have no Assembly Number prefix—see end of Replaceable Electrical Parts List.

STATIC SENSITIVE DEVICES

The following parts are excluded from the TDS 520B:

C105	C214	U116
C106	C215	U200
C107	C216	U205
C108	D101	U206
C113	D102	U207
C114	U100	U208
C115	U105	U213
C116	U106	U214
C205	U107	U215
C206	U108	U216
C207	U113	U700
C208	U114	U750
C213	U115	

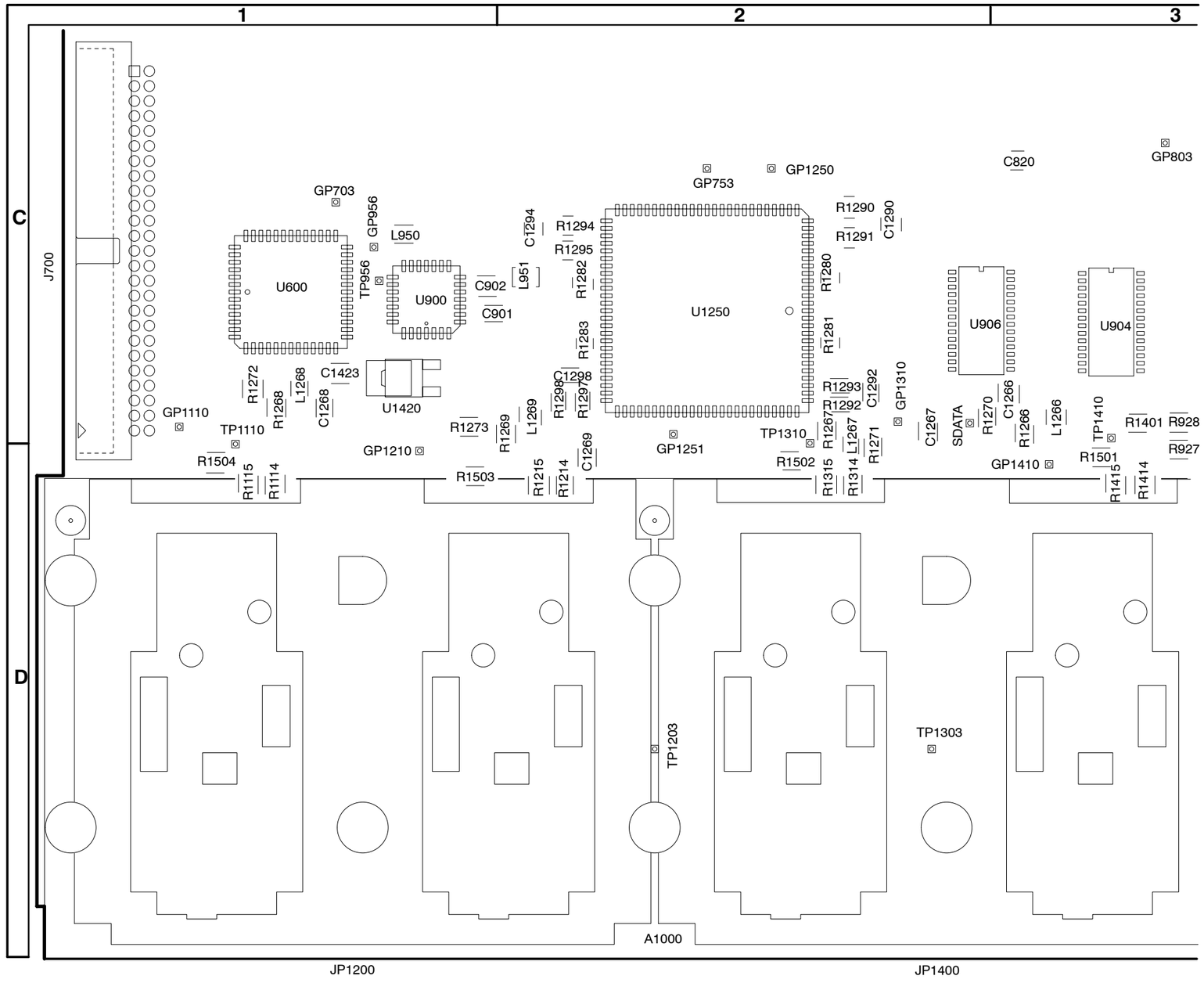
Figure 5–1: A10 Acquisition board front (section A)



The following parts are excluded from the TDS 520B:

J1002	R1067	U1051
J1003	R1068	

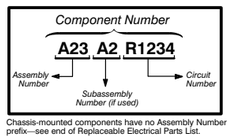
Figure 5–2: A10 Acquisition board front (section B)



G9A–2026–01



COMPONENT NUMBER EXAMPLE



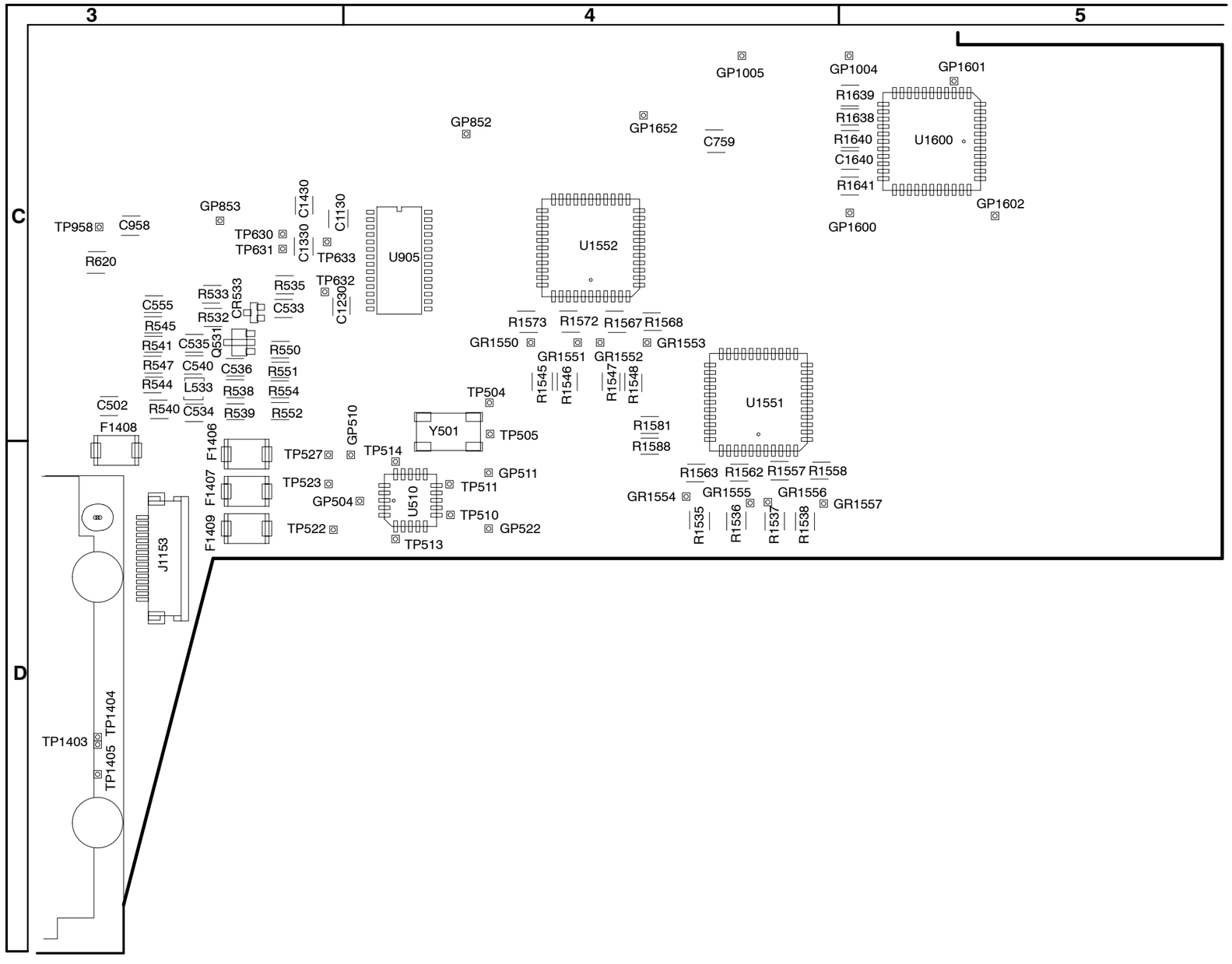
Chassis-mounted components have no Assembly Number prefix—see end of Replaceable Electrical Parts List.

STATIC SENSITIVE DEVICES

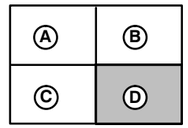
The following parts are excluded from the TDS 520B:

C1294	R1294	R1295

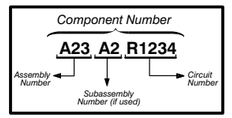
Figure 5–3: A10 Aquisition board front (section C)



G9A–2026–01



COMPONENT NUMBER EXAMPLE



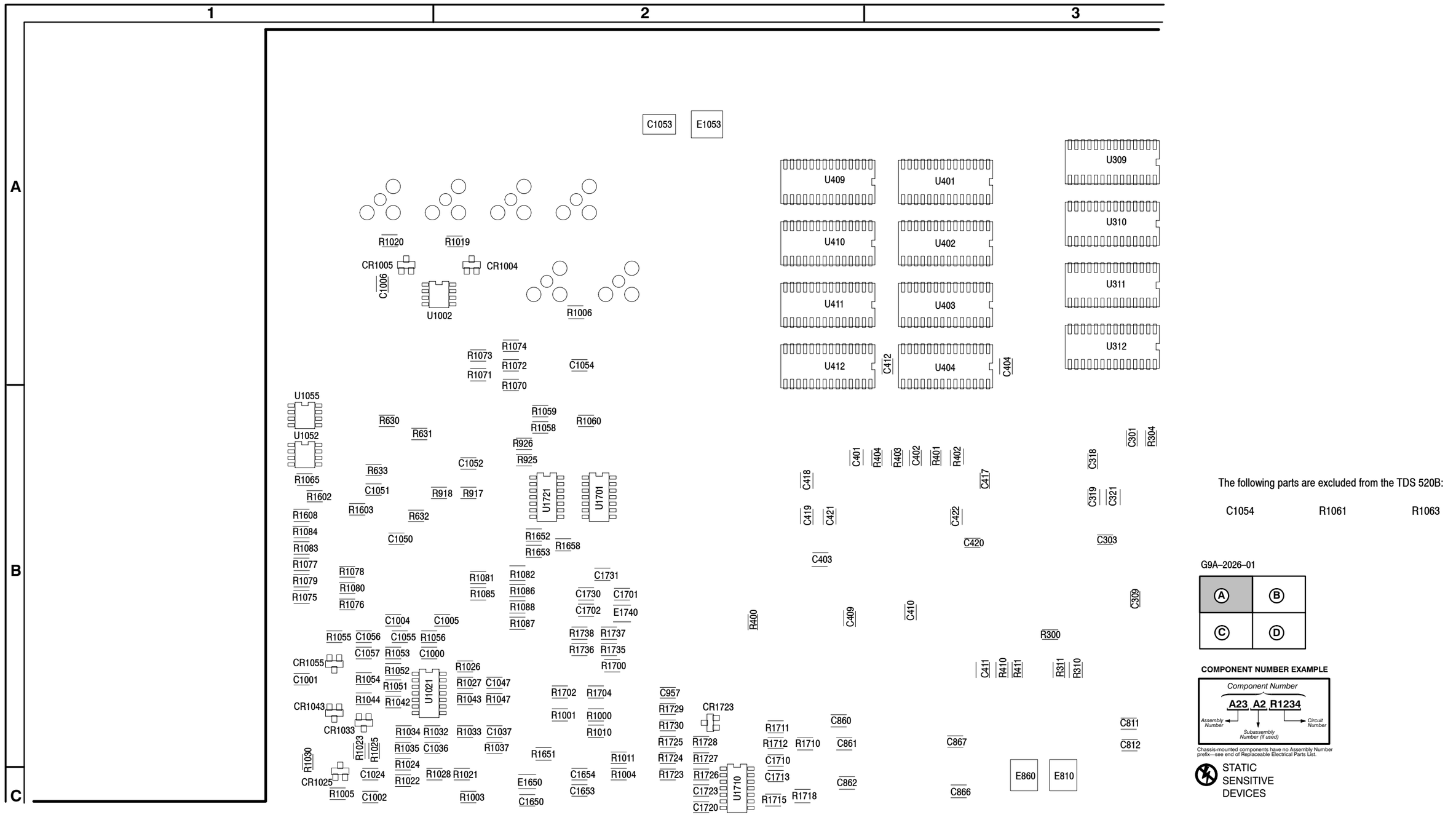
Chassis-mounted components have no Assembly Number prefix—see end of Replaceable Electrical Parts List.

STATIC SENSITIVE DEVICES

The following parts are excluded from the TDS 520B:

C1130	C1230	C1330
C1430		

Figure 5–4: A10 Acquisition board front (section D)



The following parts are excluded from the TDS 520B:

C1054 R1061 R1063

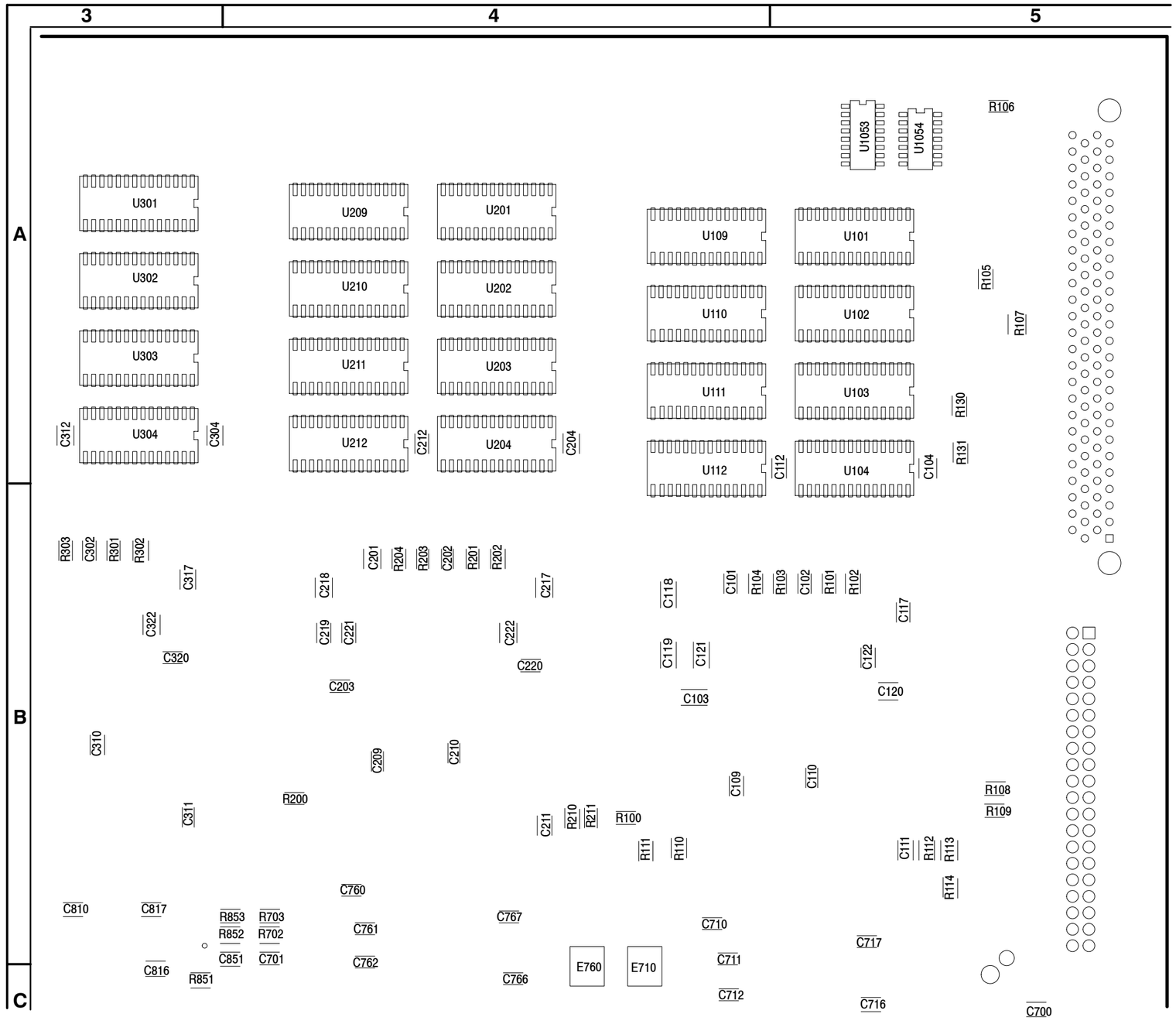
G9A–2026–01

COMPONENT NUMBER EXAMPLE

Chassis-mounted components have no Assembly Number prefix—see end of Replaceable Electrical Parts List.

STATIC SENSITIVE DEVICES

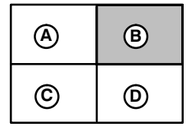
Figure 5–5: A10 Acquisition board back (section A)



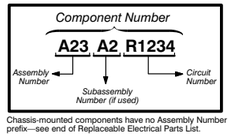
The following parts are excluded from the TDS 520B:

C101	C218	R201
C102	C219	R202
C103	C220	R203
C104	C221	R204
C109	C222	R210
C110	C710	R211
C111	C711	U101
C112	C712	U102
C117	C716	U103
C118	C717	U104
C119	C760	U109
C120	C761	U110
C121	C762	U111
C122	C766	U112
C201	C767	U201
C202	E710	U202
C203	E760	U203
C204	R101	U204
C209	R102	U209
C210	R103	U210
C211	R104	U211
C212	R110	U212
C217	R111	

G9A–2026–01



COMPONENT NUMBER EXAMPLE



Chassis-mounted components have no Assembly Number prefix—see end of Replaceable Electrical Parts List.

STATIC SENSITIVE DEVICES

Figure 5–6: A10 Aquisition board back (section B)

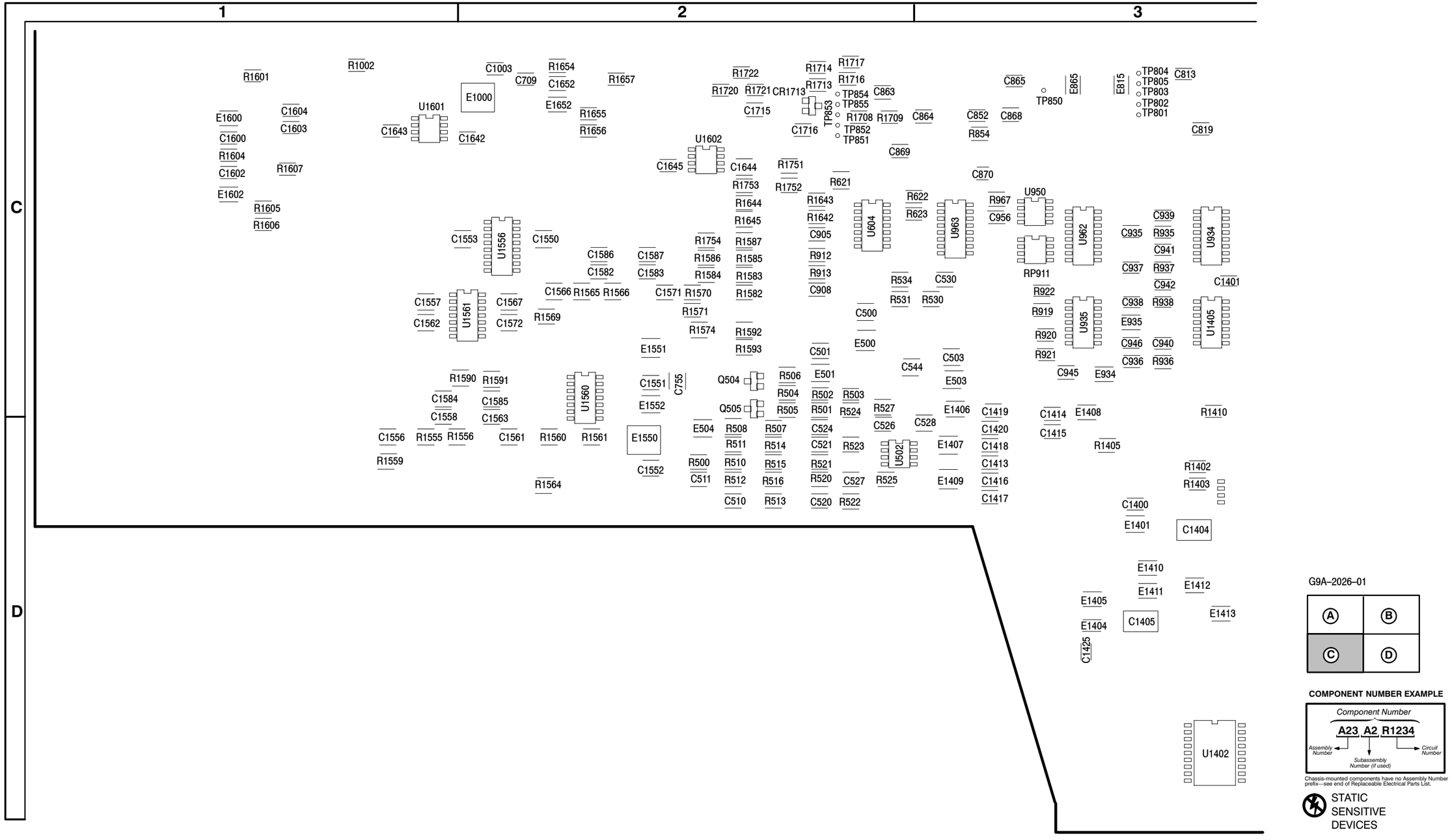
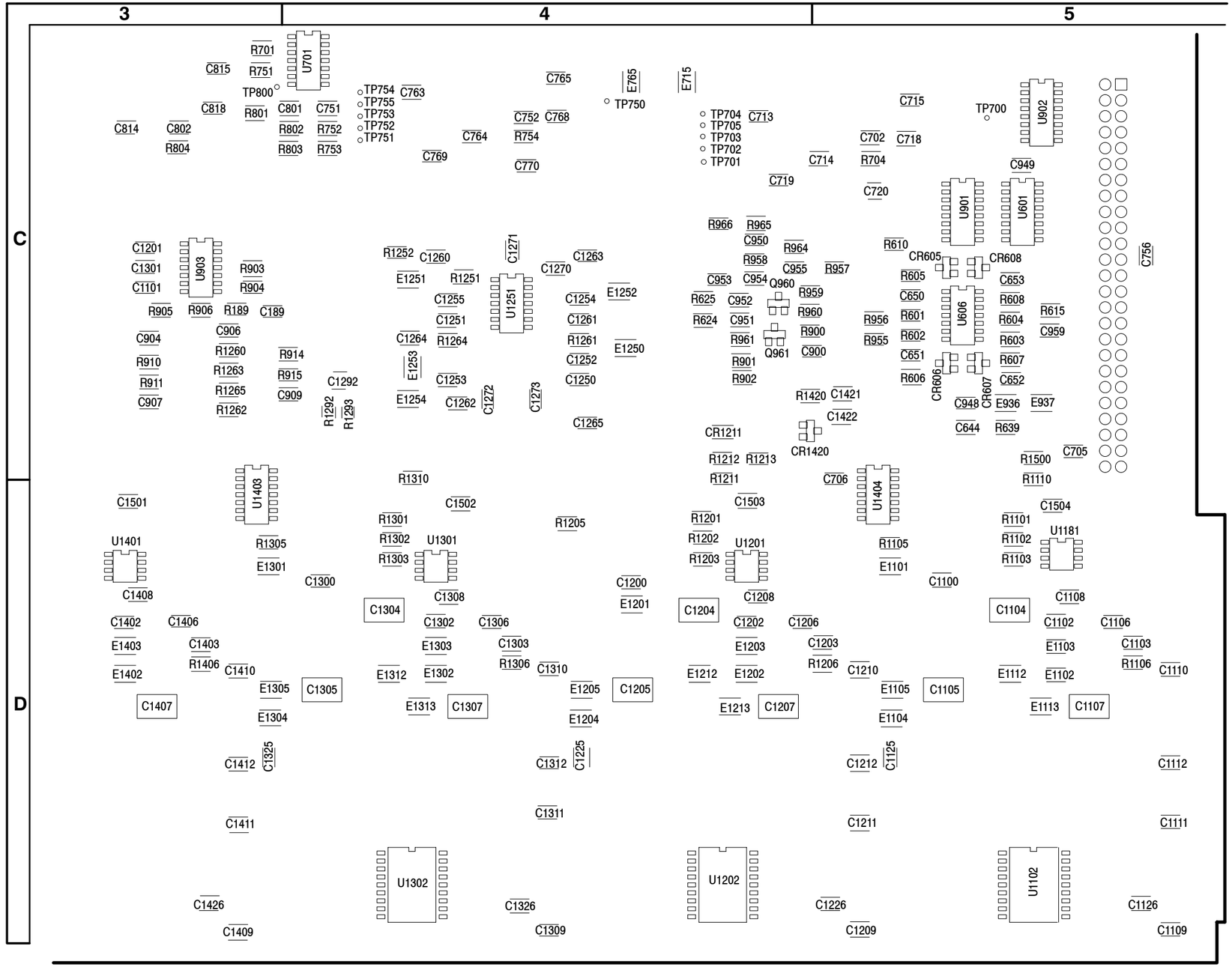
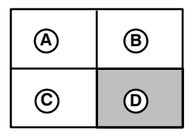


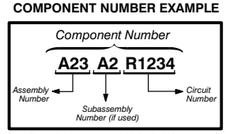
Figure 5–7: A10 Acquisition board back (section C)



G9A–2026–01



COMPONENT NUMBER EXAMPLE



Chassis-mounted components have no Assembly Number prefix—see end of Replaceable Electrical Parts List.

STATIC SENSITIVE DEVICES

The following parts are excluded from the TDS 520B:

C702	C763	R754
C713	C764	R959
C714	C765	R960
C715	C1296	R1296
C718	E715	R1297
C719	Q960	
C752	R704	

Figure 5–8: A10 Acquisition board back (section D)

A10 Acquisition Component Locator

CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION
A1000	D1	7D1	C405	A3	13D1	C763*	C4	11C1	C1024*	B1	20C1	C1304*	D4	4D1	C1650*	C2	23D2	E1304*	D3	4D2	GP1410	D3	3D1
C101*	B4	16D1	C406	A3	13D1	C764*	C4	11C1	C1036*	B1	20D1	C1305*	D4	4D2	C1652*	C2	23D2	E1305*	D3	4D2	GP1600	D1	23D1
C102*	B5	16D1	C407	A3	13D1	C765*	C4	11C1	C1037*	B2	20D1	C1306*	D4	4D2	C1653*	C2	23D1	E1312*	D4	4D2	GP1601	D1	23D1
C103*	B4	16D1	C408	A3	13D1	C766*	B4	11C1	C1047*	B2	20D1	C1307*	D4	4D2	C1654*	B2	23D1	E1313*	D4	4D2	GP1602	D1	23D1
C104*	A5	16D1	C409*	B2	13D1	C767*	B4	11C1	C1050*	B1	21C2	C1308*	D4	4D2	C1690	C4	23D1	E1401*	D3	3D2	GP1650	D1	23D1
C105	A1	16D1	C410*	B3	13D1	C768*	C4	11C1	C1051*	B1	21C2	C1309*	D4	4C1	C1701*	B2	22C1	E1402*	D3	3D2	GP1651	D1	23D1
C106	A1	16D1	C411*	B3	13D1	C769*	C4	11C1	C1052*	B2	21C2	C1310*	D4	4D1	C1702*	B2	22C2	E1403*	D3	3D2	GP1652	D1	23D1
C107	A1	16D1	C412*	A2	13D1	C770	C4	11C3	C1053*	A2	21C2	C1311*	D4	4D1	C1710*	B2	22D1	E1404*	D3	3D2	GP1711	B4	22D1
C108	A1	16D1	C413	A3	13D1	C801*	C3	10D1	C1054*	A2	21C3	C1312*	D4	4D1	C1713*	B2	22D1	E1405*	D3	3D2	GR1550	D1	18C1
C109*	B4	16D1	C414	A3	13D2	C802*	C3	10D1	C1055*	B1	20D1	C1325*	D3	4D3	C1715*	C2	22D1	E1406*	C3	7D1	GR1551	D1	18C1
C110*	B5	16D1	C415	A3	13D2	C810*	B3	10A2	C1056*	B1	20D1	C1326*	D4	4D1	C1716*	C2	22D1	E1407*	D2	7D1	GR1552	D1	18D1
C111*	B5	16D1	C416	A3	13D2	C811*	B3	10C1	C1057*	B1	20D1	C1330	C3	4C1	C1720*	C2	22D1	E1408*	C3	7D1	GR1553	D1	18D1
C112*	A4	16D1	C417*	B3	13C1	C812*	B3	10C1	C1100*	D5	6D2	C1400*	D3	3D2	C1723*	C2	22D1	E1409*	D2	7D1	GR1554	D1	18D1
C113	A1	16D1	C418*	B2	13C1	C813*	C3	10C1	C1101*	C3	6D1	C1401*	C3	3D1	C1730*	B2	22D1	E1410*	D3	7D1	GR1555	D1	18D1
C114	A1	16D2	C419*	B2	13C1	C814*	C3	10C1	C1102*	D5	6D1	C1402*	D3	3D1	C1731*	B2	22D1	E1411*	D3	7D1	GR1556	D1	18D1
C115	A1	16D2	C420*	B3	13C1	C815*	C3	10C1	C1103*	D5	6D1	C1403*	D3	3D1	CR533	C3	17D1	E1412*	D3	3D2	GR1557	D1	18D1
C116	A1	16D2	C421*	B2	13D1	C816*	B3	10C1	C1104*	D5	6D1	C1404*	D3	3D1	CR605*	C5	26C1	E1413*	D3	3D2	J100	A1	27C1
C117*	B5	16C1	C422*	B3	13D1	C817*	B3	10C1	C1105*	D5	6D2	C1405*	D3	3D2	CR606*	C5	26D1	E1550*	D2	18D1	J101	D1	27C1
C118*	B4	16C1	C500*	C2	17D1	C818*	C3	10C1	C1106*	D5	6D2	C1406*	D3	3D2	CR607*	C5	26D1	E1551*	C2	18D1	J700	D1	27D1
C119*	B4	16C1	C501*	C2	17D1	C819*	C3	10C1	C1107*	D5	6D2	C1407*	D3	3D2	CR608*	C5	26D1	E1552*	C2	18D1	J1000	A4	20D2
C120*	B5	16C1	C502	C3	17D2	C820	C2	10D1	C1108*	D5	6D2	C1408*	D3	3D2	CR1004*	A2	20D2	E1600*	C1	23D1	J1001	A4	20D2
C121*	B4	16D1	C503*	C3	17D1	C851*	B3	9D1	C1109*	D5	6C1	C1409*	D3	3C1	CR1005*	A1	20D2	E1602*	C1	23D1	J1002	A4	20C3
C122*	B5	16D1	C510*	D2	17D1	C852*	C3	9D1	C1110*	D5	6D1	C1410*	D3	3D1	CR1025*	B1	20C1	E1650*	B2	23D1	J1003	A4	20C3
C189*	C3	26C2	C511*	D2	17D1	C860*	B2	9C1	C1111*	D5	6D1	C1411*	D3	3D1	CR1033*	B1	20D1	E1652*	C2	23D1	J1153	D3	7C1
C201*	B4	15D1	C520*	D2	17C1	C861*	B2	9C1	C1112*	D5	6D1	C1412*	D3	3D1	CR1043*	B1	20D1	E1740*	B2	22C1	J1201	A4	7C2
C202*	B4	15D1	C521*	D2	17C1	C862*	B2	9A2	C1125*	D5	6D3	C1413*	D3	7D1	CR1055*	B1	20D1	F1406	C3	7D1	J1500	B1	7C1
C203*	B4	15D1	C524*	C2	17D1	C863*	C2	9C1	C1126*	D5	6D1	C1414*	C3	7D1	CR1211*	C4	7C1	F1407	D3	7D1	J1550	A4	20C1
C204*	A4	15D1	C526*	C2	17C1	C864*	C2	9C1	C1130	C3	6C1	C1415*	C3	7D1	CR1420*	C4	7D1	F1408	C3	7D1	JP1200	D1	5C1
C205	A2	15D1	C527*	D2	17D1	C865*	C3	9C1	C1200*	D4	5D2	C1416*	D3	7D1	CR1713*	C2	22D1	F1409	D3	7D1	JP1200	D1	6C1
C206	A2	15D1	C528*	C2	17D1	C866*	C3	9C1	C1201*	C3	5D1	C1417*	D3	7D1	CR1723*	B2	22D1	GP100	B1	16D1	JP1400	D1	3C1
C207	A2	15D1	C530*	C2	17C2	C867*	B3	9C1	C1202*	D4	5D1	C1418*	D3	7D1	D101	B1	27D1	GP101	B1	16D1	JP1400	D1	4C1
C208	A2	15D1	C533	C3	17D1	C868*	C3	9C1	C1203*	D4	5D1	C1419*	C3	7D1	D102	B1	27D1	GP200	B2	15D1	L533	C3	17D1
C209*	B4	15D1	C534	C3	17D1	C869*	C2	9C1	C1204*	D4	5D1	C1420*	C3	7D1	E500*	C2	17D1	GP201	B2	15D1	L950	C1	25D1
C210*	B4	15D1	C535	C3	17D1	C870*	C3	9D1	C1205*	D4	5D2	C1421*	C4	7D1	E501*	C2	17D1	GP300	B2	14D1	L951	C1	25D1
C211*	B4	15D1	C536	C3	17D1	C900*	C4	26D1	C1206*	D4	5D2	C1422*	C4	7D1	E503*	C3	17D1	GP301	B3	14D1	L1266	C3	8D1
C212*	A4	15D1	C540	C3	17D1	C901	C1	26C1	C1207*	D4	5D2	C1423	C1	7D1	E504*	C2	17D1	GP400	B3	13D1	L1267	C2	8D1
C213	A2	15D1	C544*	C2	17D1	C902	C1	26C1	C1208*	D4	5D2	C1425*	D3	3D3	E710*	B4	12C1	GP401	B3	13D1	L1268	C1	8D1
C214	A2	15D2	C555	C3	17D1	C904*	C3	24D1	C1209*	D5	5C1	C1426*	D3	3D1	E715*	C4	12B1	GP504	D3	17D1	L1269	C1	8D1
C215	A2	15D2	C644*	C5	26D1	C905*	C2	24D1	C1210*	D5	5D1	C1430	C3	3C1	E760*	B4	11C1	GP510	C3	17C1	Q504*	C2	17D1
C216	A2	15D2	C650*	C5	26D1	C906*	C3	24D1	C1211*	D5	5D1	C1501*	D3	7C1	E765*	C4	11B1	GP511	D4	17C1	Q505*	C2	17D1
C217*	B4	15C1	C651*	C5	26D1	C907*	C3	24D1	C1212*	D5	5D1	C1502*	D4	7C1	E810*	B3	10B1	GP522	D4	17D1	Q531	C3	17D1
C218*	B4	15C1	C652*	C5	26D1	C908*	C2	24D1	C1225*	D4	5D3	C1503*	D4	7C1	E815*	C3	10C1	GP700	D1	12D2	Q960*	C4	25D1
C219*	B4	15C1	C653*	C5	26D1	C909*	C3	24D1	C1226*	D4	5D1	C1504*	D5	7C1	E860*	B3	9B1	GP701	D1	12D2	Q961*	C4	25D1
C220*	B4	15C1	C700*	C5	27D1	C935*	C3	26D2	C1230	C3	5C1	C1550*	C2	18D1	E865*	C3	9B1	GP702	C1	12D2	R100*	B4	16C1
C221*	B4	15D1	C701*	B4	12D1	C936*	C3	26D2	C1250*	C4	8C1	C1551*	C2	18D1	E934*	C3	26D1	GP703	C1	12D2	R101*	B5	16C1
C222*	B4	15D1	C702*	C5	12D1	C937*	C3	26D2	C1251*	C4	8C1	C1552*	D2	18D1	E935*	C3	26D1	GP750	D1	11D2	R102*	B5	16D1
C301*	B3	14D1	C705*	C5	27D1	C938*	C3	26D2	C1252*	C4	8C2	C1553*	C1	18D1	E936*	C5	26D1	GP751	B2	11D2	R103*	B4	16D1
C302*	B3	14D1	C706*	C4	27D1	C939*	C3	26D1	C1253*	C4	8C2	C1556*	D1	18D1	E937*	C5	26D1	GP752	C2	11D2	R104*	B4	16D1
C303*	B3	14D1	C707	B2	27D1	C940*	C3	26D1	C1254*	C4	8C2	C1557*	C1	18D1	E1000*	C1	20C2	GP753	C2	11D2	R105*	A5	27D1
C304*	A3	14D1	C708	B3	27D1	C941*	C3	26D1	C1255*	C4	8C2	C1558*	C1	18D1	E1053*	A2	21C1	GP800	D1	10D2	R106*	A5	27D1
C305	A2	14D1	C709*	C2	27D1	C942*	C3	26D1	C1260*	C4	8D1	C1561*	D2	18C1	E1101*	D5	6D2	GP801	D1	10D2	R107*	A5	27D1
C306	A2	14D1	C710*	B4	12C1	C945*	C3	26D1	C1261*	C4	8C1	C1562*	C1	18C1	E1102*	D5	6D2	GP802	C3	10D2	R108*	B5	27D1
C307	A2	14D1	C711*	B4	12C1	C946*	C3	26D1	C1262*	C4	8D1	C1563*	C2	18D1	E1103*	D5	6D2	GP803	D1	10D2	R110*	B4	16D1
C308	A2	14D1	C712*	C4	12C1	C948*	C5	26D1	C1263*	C4	8D1	C1566*	C2	18D1	E1104*	D5	6D2	GP850	D1	9D2	R111*	B4	16D1
C309*	B3	14D1	C713*	C4	12C1	C949*	C5	26D1	C1264*	C4	8C1	C1567*	C2	18D1	E1105*	D5	6D2	GP851	D1	9D2	R112*	B5	16C1
C310*	B3	14D1	C714*	C4	12C1	C950*	C4	25D1	C1265*	C4	8D1	C1571*	C2	18D1	E1112*	D5	6D2	GP852	C4	9D2	R113*	B5	16C1
C311*	B3	14D1	C715*	C5	12C1	C951*	C4	25D1	C1266	C2	8D1	C1572*	C2	18D1	E1113*	D5	6D2	GP853	C3	9D2	R114*	B5	16C1
C312*	A3	14D1	C716*	C5	12C1	C952*	C4	25D1	C1267	C2	8D1	C1582*	C2	18D1	E1201*	D4	5D2	GP956	C1	25D1	R189*	C3	26C2
C313	A3	14D1	C717*	B5	12C1	C953*	C4	25D1	C1268	C1	8D1	C1583*	C2	18D1	E1202*	D4	5D2	GP1000	D1	20D1	R130*	A5	27B3
C314	A3	14D2	C718*	C5	12C1	C954*	C4	25D1	C1269	C2	8D1	C1584*	C1	18D1	E1203*	D4	5D2	GP1001	B4	20D1	R131*	A5	27B3
C315	A3	14D2	C719*	C4	12C1	C955*	C4	25D1	C1270*	C4	8D1	C1585*	C2	18D1	E1204*	D4	5D2	GP1002	B5	20D1	R200*	B4	15C1
C316	A3	14D2	C720*	C5	12D1	C956*	C3	25C1	C1271*	C4	8D1	C1586*	C2	18D1	E1205*	D4	5D2	GP1003	D1	20D1	R201*	B4	15C1
C317*	B3	14C1	C751*	C4	11D1	C957*	B2	25D1	C1272*	C4	8D1	C1587*	C2	18D1	E1212*	D4	5D2	GP1004	C4	20D1	R202*	B4	15D1
C318*	B3	14C1	C752*	C4	11D1	C958	C3	25D1	C1273*	C4	8D1	C1600*	C1	23D2	E1213*	D4	5D2	GP1005	C4	20D1	R203*	B4	15D1
C319*	B3	14C1	C755*	C2	27D1	C959*	C5	26D1	C1290	C2	8C1	C1602*	C1	23D2	E1250*	C4	8C1	GP1050	A4	21D1	R204*	B4	15D1
C320*	B3	14C1	C756*	C5	27D1	C1000*	B1	20C2	C1292	C4	8D1	C1603*	C1	23C1	E1251*	C4	8C1	GP1051	A4	21D1	R210*	B4	15D1
C321*	B3	14D1	C757	C2	27D1	C1001*	B1	20C2	C1294	C2	8D1	C1604*	C1	23C1	E1252*	C4	8B1	GP1052	B5	21D1	R211*	B4	15D1
C322*	B3	14D1	C758	C3	27D1	C1002*	C1	20C2	C1296	C4	8D1	C1640	C4	23D1	E1253*	C4	8C1	GP1110	C1	6D1	R300*	B3	14C1
C401*	B2	13D1	C759	C4	27D1	C1003*	C2	20D2	–C1300*	D4	4D2	C1642*	C1	23C1	E1254*	C4	8C1	GP1210	C1	5D1	R301*	B3	14C1
C402*	B3	13D1	C760*	B4	11C1	C1004*	B1	20D2	C1301*	C3	4D1	C1643*	C1	23D1	E1301*	D3	4D2	GP1250	C2	8D1	R302*	B3	14D1
C403*	B2	13D1	C761*	B4	11C1	C1005*	B1	20D2	C1302*	D4	4D1	C1644*	C2	23D1	E1302*	D4	4D2	GP1251	C2	8D1	R303*	B3	14D1
C404*	A3	13D1	C762*	B4	11C1	C1006*	A1	20D2	C1303*	D4	4D1	C1645*	C2	23D1	E1303*	D4	4D2	GP1310	C2	4D1			

***Asterisks indicate components located on the back of the board.**

Figure 5–9: A10 Aquisition component locator

A10 Acquisition Component Locator (cont.)

CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION
R304*	B3	14D1	R633*	B1	21D1	R1024*	B1	20C1	R1260*	C3	8D1	R1569*	C2	18D1	R1730*	B2	22D1	U106	A1	16D1	U700	C1	12D1
R310*	B3	14D1	R639*	C5	26D1	R1025*	B1	20C1	R1261*	C4	8C1	R1570*	C2	18D1	R1735*	B2	22D1	U107	A1	16D1	U701*	C3	9D1
R311*	B3	14D1	R701*	C3	12D1	R1026*	B2	20D1	R1262*	C3	8D1	R1571*	C2	18D1	R1736*	B2	22D1	U108	A1	16D2	U701*	C3	10D1
R400*	B2	13C1	R702*	B4	12D1	R1027*	B2	20D1	R1263*	C3	8D1	R1572	C4	18D1	R1737*	B2	22D1	U109*	A4	16D1	U701*	C3	11D1
R401*	B3	13C1	R703*	B4	12D1	R1028*	C1	20D1	R1264*	C4	8C1	R1573	C4	18D1	R1738*	B2	22D1	U110*	A4	16D1	U701*	C3	12D1
R402*	B3	13D1	R704*	C5	12D1	R1030*	B1	20D1	R1265*	C3	8D1	R1574*	C2	18D1	R1751*	C2	22D1	U111*	A4	16D1	U750	C2	11D1
R403*	B2	13D1	R751*	C3	11D1	R1032*	B1	20D1	R1266	C2	8D1	R1581	C4	18D1	R1752*	C2	22D1	U112*	A4	16D2	U800	C3	10D1
R404*	B2	13D1	R752*	C4	11D1	R1033*	B2	20D1	R1267	C2	8D1	R1582*	C2	18D1	R1753*	C2	22D1	U113	A1	16D1	U850	C3	9D1
R410*	B3	13D1	R753*	C4	11D1	R1034*	B1	20D1	R1268	C1	8D1	R1583*	C2	18D1	R1754*	C2	22D1	U114	A1	16D1	U900	C1	26C1
R411*	B3	13D1	R754*	C4	11D1	R1035*	B1	20D1	R1269	C1	8D1	R1584*	C2	18D1	RP911*	C3	25C1	U115	A1	16D1	U901*	C5	26D1
R500*	D2	17C1	R801*	C3	10D1	R1037*	B2	20D1	R1270	C2	8D1	R1585*	C2	18D1	RT617	B2	26D1	U116	A1	16D2	U902*	C5	26D1
R501*	C2	17D1	R802*	C3	10D1	R1042*	B1	20D1	R1271	C2	8D1	R1586*	C2	18D1	TP504	C4	17D1	U200	B2	15C1	U903*	C3	20D1
R502*	C2	17D1	R803*	C3	10D1	R1043*	B2	20D1	R1272	C1	8D1	R1587*	C2	18D1	TP505	C4	17D1	U201*	A4	15C1	U903*	C3	26C1
R503*	C2	17D1	R804*	C3	10D1	R1044*	B1	20D1	R1273	C1	8D1	R1588	C4	18D1	TP510	D1	17C1	U202*	A4	15C1	U903*	C3	26C2
R504*	C2	17D1	R851*	B3	9D1	R1047*	B2	20D1	R1280	C2	8C1	R1590*	C1	18D1	TP511	D1	17C1	U203*	A4	15C1	U904	C3	24C1
R505*	C2	17D1	R852*	B3	9D1	R1051*	B1	20D1	R1281	C2	8C1	R1591*	C2	18D1	TP513	D4	17C1	U204*	A4	15C2	U905	C4	24D1
R506*	C2	17D1	R853*	B3	9D1	R1052*	B1	20D1	R1282	C2	8C1	R1592*	C2	18D1	TP514	D4	17C1	U205	A2	15D1	U906	C2	24C1
R507*	C2	17D1	R854*	C3	9D1	R1053*	B1	20D1	R1283	C2	8C1	R1593*	C2	18D1	TP522	D3	17C1	U206	A2	15D1	U934*	C3	26D1
R508*	C2	17D1	R900*	C4	26D1	R1054*	B1	20D1	R1290	C2	8C1	R1601*	C1	23C1	TP523	D3	17C1	U207	A2	15D1	U935*	C3	26D2
R510*	D2	17C1	R901*	C4	26D1	R1055*	B1	20D1	R1291	C2	8D1	R1602*	B1	23C2	TP527	C3	17C1	U208	A2	15D2	U950*	C3	25C1
R511*	D2	17C1	R902*	C4	26D1	R1056*	B1	20D1	R1292*	C4	8D1	R1603*	B1	23C2	TP630	C3	21D1	U209*	A4	15D1	U962*	C3	25C1
R512*	D2	17C1	R903*	C3	26C1	R1058*	B2	21C1	R1293*	C4	8D1	R1604*	C1	23C1	TP631	C3	21D1	U210*	A4	15D1	U963*	C3	25C1
R513*	D2	17C1	R904*	C3	26C1	R1059*	B2	21C1	R1294	C2	8D1	R1605*	C1	23C1	TP632	C3	21D1	U211*	A4	15D1	U1001	B4	20C1
R514*	D2	17C1	R905*	C3	26D2	R1060*	B2	21D1	R1295	C2	8D1	R1606*	C1	23C1	TP633	C3	21D1	U212*	A4	15D2	U1002*	A1	20D1
R515*	D2	17C1	R906*	C3	26C2	R1065*	B1	21D1	R1296	C4	8D1	R1607*	C1	23C2	TP700*	C5	12C1	U213	A2	15D1	U1021*	B1	20D1
R516*	D2	17C1	R910*	C3	24D1	R1066	B4	21C1	R1297	C4	8D1	R1608*	B1	23D2	TP701*	C4	12C1	U214	A2	15D1	U1050	B4	21B1
R520*	D2	17C1	R911*	C3	24D1	R1067	B4	21C1	R1301*	D4	4D1	R1638	C4	23C1	TP702*	C4	12D1	U215	A2	15D1	U1051	A4	21B1
R521*	D2	17C1	R912*	C2	24D1	R1068	A4	21C1	R1302*	D4	4D1	R1639	C4	23C1	TP703*	C4	12C1	U216	A2	15D2	U1051	A4	21C1
R522*	D2	17C1	R913*	C2	24D1	R1070*	A2	21D1	R1303*	D4	4D1	R1640	C4	23C1	TP704*	C4	12D1	U300	B3	14C1	U1052*	B1	21D1
R523*	D2	17C1	R914*	C3	24D1	R1071*	A2	21D1	R1305*	D3	4D1	R1641	C4	23C1	TP705*	C4	12D1	U301*	A3	14C1	U1053*	A5	21C2
R524*	C2	17C1	R915*	C3	24D1	R1072*	A2	21D1	R1306*	D4	4D1	R1642*	C2	23C1	TP750*	C4	11C1	U302*	A3	14C1	U1054*	A5	21C2
R525*	D2	17C1	R917*	B2	24D1	R1073*	A2	21D1	R1310*	C4	4D1	R1643*	C2	23C1	TP751*	C4	11C1	U303*	A3	14C1	U1054*	A5	21C2
R527*	C2	17C1	R918*	B1	24D1	R1074*	A2	21D1	R1314	D2	4D1	R1644*	C2	23D1	TP752*	C4	11D1	U304*	A3	14C2	U1054*	A5	21D2
R530*	C2	17D2	R919*	C3	26D2	R1075*	B1	20D1	R1315	D2	4D1	R1645*	C2	23D1	TP753*	C4	11C1	U305	A2	14D1	U1054*	A5	21D2
R531*	C2	17D2	R920*	C3	26D2	R1076*	B1	20D1	R1401	C3	3D1	R1651*	B2	23D1	TP754*	C4	11D1	U306	A2	14D1	U1055*	B1	21D2
R532	C3	17D1	R921*	C3	26D2	R1077*	B1	20D1	R1402*	D3	3D1	R1652*	B2	23D2	TP755*	C4	11D1	U307	A2	14D1	U1101*	D5	6D1
R533	C3	17D1	R922*	C3	26D2	R1078*	B1	20D1	R1403*	D3	3D1	R1653*	B2	23D2	TP800*	C3	10C1	U308	A2	14D2	U1102*	D5	6D1
R534*	C2	17D2	R925*	B2	24C1	R1079*	B1	20D2	R1405*	D3	3D1	R1654*	C2	23D1	TP801*	C3	10C1	U309*	A3	14D1	U1201*	D4	5D1
R535	C3	17D1	R926*	B2	24C1	R1080*	B1	20D2	R1406*	D3	3D1	R1655*	C2	23D1	TP802*	C3	10D1	U310*	A3	14D1	U1202*	D4	5D1
R538	C3	17D1	R927	C3	24C1	R1081*	B2	20D2	R1410*	C3	3D1	R1656*	C2	23D1	TP803*	C3	10C1	U311*	A3	14D1	U1250	C2	8C1
R539	C3	17D1	R928	C3	24C1	R1082*	B2	20D2	R1414	D3	3D1	R1657*	C2	23D2	TP804*	C3	10D1	U312*	A3	14D2	U1251*	C4	8C1
R540	C3	17D2	R935*	C3	26D1	R1083*	B1	20D2	R1415	D3	3D1	R1658*	B2	23D2	TP805*	C3	10D1	U313	A3	14D1	U1301*	D4	4D1
R541	C3	17D1	R936*	C3	26D1	R1084*	B1	20D2	R1420*	C4	7D1	R1688	B4	23D1	TP850*	C3	9C1	U314	A3	14D1	U1302*	D4	4D1
R544	C3	17D1	R937*	C3	26D1	R1085*	B2	20D2	R1500*	C5	7C1	R1689	B4	23D1	TP851*	C2	9C1	U315	A3	14D1	U1401*	D3	3D1
R545	C3	17D1	R938*	C3	26D1	R1086*	B2	20D2	R1501	C3	7C1	R1690	C4	23D1	TP852*	C2	9D1	U316	A3	14D2	U1402*	D3	3D1
R547	C3	17D1	R955*	C5	25D1	R1087*	B2	20D1	R1502	D2	7C1	R1691	C4	23D1	TP853*	C2	9C1	U400	B3	13C1	U1403*	C3	7D1
R550	C3	17D1	R956*	C5	25D1	R1088*	B2	20D1	R1503	D1	7C1	R1700*	B2	22C1	TP854*	C2	9D1	U401*	A3	13C1	U1404*	C5	7D1
R551	C3	17D1	R957*	C4	25D1	R109*	B5	27D1	R1504	D1	7C1	R1702*	B2	22C1	TP855*	C2	9D1	U402*	A3	13C1	U1405*	C3	3D1
R552	C3	17D1	R958*	C4	25D1	R1095	B4	21D1	R1535	D4	18C1	R1704*	B2	22C1	TP956	C1	25D1	U403*	A3	13C1	U1405*	C3	4D1
R554	C3	17D1	R959*	C4	25D1	R1096	B4	21D1	R1536	D4	18C1	R1708*	C2	22D1	TP958	D1	25C1	U404*	A3	13C2	U1405*	C3	5D1
R601*	C5	26C1	R960*	C4	25D1	R1101*	D5	6D1	R1537	D4	18D1	R1709*	C2	22D1	TP1055	B5	20D1	U405	A3	13D1	U1405*	C3	6D1
R602*	C5	26D1	R961*	C4	25D1	R1102*	D5	6D1	R1538	D4	18D1	R1710*	B2	22D1	TP1103	D1	6D1	U406	A3	13D1	U1420	C1	7D1
R603*	C5	26D1	R964*	C4	25D1	R1103*	D5	6D1	R1545	C4	18D1	R1711*	B2	22D1	TP1110	C1	6D1	U407	A3	13D1	U1551	C4	18C2
R604*	C5	26D1	R965*	C4	25D1	R1105*	D5	6D1	R1546	C4	18D1	R1712*	B2	22D1	TP1203	D2	5D1	U408	A3	13D2	U1552	C4	18D2
R605*	C5	26C1	R966*	C4	25D1	R1106*	D5	6D1	R1547	C4	18D1	R1713*	C2	22D1	TP1303	D2	4D1	U409*	A2	13D1	U1556*	C2	18C1
R606*	C5	26D1	R967*	C3	25C1	R1110*	C5	6D1	R1548	C4	18D1	R1714*	C2	22D1	TP1310	C2	4D1	U410*	A2	13D1	U1560*	C2	18C1
R607*	C5	26D1	R1000*	B2	20C1	R1114	D1	6D1	R1555*	D1	18D1	R1715*	C2	22D1	TP1403	D3	3D1	U411*	A2	13D1	U1560*	C2	18D1
R608*	C5	26D1	R1001*	B2	20C1	R1115	D1	6D1	R1556*	D1	18D1	R1716*	C2	22D1	TP1404	D3	3D1	U412*	A2	13D2	U1561*	C1	18C1
R610*	C5	26D1	R1002*	C1	20C1	R1201*	D4	5D1	R1557	D4	18D1	R1717*	C2	22D1	TP1405	D3	3D1	U413	A3	13D1	U1561*	C1	18D1
R615*	C5	26D1	R1003*	C2	20C1	R1202*	D4	5D1	R1558	D4	18D1	R1718*	C2	22D1	TP1410	C3	3D1	U414	A3	13D1	U1600	C5	23C1
R617	B2	26D1	R1004*	B2	20D1	R1203*	D4	5D1	R1559*	D1	18D1	R1720*	C2	22D1	TP1711	D1	22D1	U415	A3	13D1	U1601*	C1	23C1
R620	C3	21D1	R1005*	C1	20C2	R1205*	D4	5D1	R1560*	D2	18C1	R1721*	C2	22D1	TP1713	C3	22D1	U416	A3	13D2	U1602*	C2	23D1
R621*	C2	21D1	R1006*	A2	20C2	R1206*	D4	5D1	R1561*	D2	18C1	R1722*	C2	22D1	TP1725	C4	22D1	U502*	D2	17C1	U1650	C4	23D1
R622*	C2	21D1	R1010*	B2	20C1	R1211*	C4	7C1	R1562	D4	18C1	R1723*	B2	22D1	TP1728	B4	22D1	U502*	D2	17C2	U1701*	B2	22D1
R623*	C2	21D1	R1011*	B2	20D1	R1212*	C4	7C1	R1563	D4	18C1	R1724*	B2	22D1	U100	B1	16C1	U510	D4	17C1	U1703	B4	22C1
R624*	C4	21D1	R1019*	A1	20D2	R1213*	C4	7C2	R1564*	D2	18C1	R1725*	B2	22D1	U101*	A5	16C1	U600	C1	26C1	U1710*	C2	22D1
R625*	C4	21D1	R1020*	A1	20D2	R1214	D2	5D1	R1565*	C2	18D1	R1726*	B2	22D1	U102*	A5	16C1	U601*	C5	26D1	U1721*	B2	21D2
R630*	B1	21D1	R1021*	B1	20D1	R1215	D2	5D1	R1566*	C2	18D1	R1727*	B2	22D1	U103*	A5	16C1	U604*	C2	21D1	U1721*	B2	22D1
R631*	B1	21D1	R1022*	B1	20C1	R1251*	C4	8C1	R1567	C4	18D1	R1728*	B2	22D1	U104*	A5	16C2	U606*	C5	25D1	Y501	C4	17C1
R632*	B1	21D1	R1023*	B1	20C1	R1252*	C4	8C1	R1568	C4	18D1	R1729*	B2	22D1	U105	A1	16D1	U606*	C5	26C1			

***Asterisks indicate components located on the back of the board.**

Figure 5–10: A10 Aquisition component locator (cont.)

MQUAD VERSION

DMUX_ACQMEMD
DMUX_ACQMEMC
DMUX_ACQMEMB
DMUX_ACQMEMA
COMMIN
COMMOUT
D1CONN<100>
100
200
300
400
DDATA_AL<8>
DDATA_AH<8>
ADATA_AL<8>
ADATA_AH<8>
ADCLK_AL
ADCLK_AH

CONNSHEET
27
D1CONN<100..1>

ADD
ADC
ADB
ADA
DDATA_DL<7..0>
DDATA_DH<7..0>
ADATA_DL<7..0>
ADATA_DH<7..0>
DDATA_CL<7..0>
DDATA_CH<7..0>
ADATA_CL<7..0>
ADATA_CH<7..0>
DDATA_BL<7..0>
DDATA_BH<7..0>
ADATA_BL<7..0>
ADATA_BH<7..0>
DDATA_AL<7..0>
DDATA_AH<7..0>
ADATA_AL<7..0>
ADATA_AH<7..0>
CLKOUTDL
CLKOUTDH
CLKOUTCL
CLKOUTCH
CLKOUTBL
CLKOUTBH
ADCLK_AL
ADCLK_AH
700
750
800
850
12
11
10
9
ADDACUD
ADDACUC
ADDACUB
ADDACUA
CLKDL
CLKDH
SIGD-
SIGD+
CLKCL
CLKCH
SIGC-
SIGC+
CLKBL
CLKBH
SIGB-
SIGB+
CLKAL
CLKAH
SIGA-
SIGA+
<7,6>
<5,4>
<3,2>
<1,0>
ADDACU<7..0>

PHASECLOCK<3..1>

TRACKHOLD
8
1250
CP+
CP-
CLKCL
CLKCH
PHS1
PHS2
PHS3
CLKAH
CLKAL
AP+
AP-
DISP3-
DISP3+
DISP1-
DISP1+
DISP4+
DISP4-
DISP2+
DISP2-
DP-
DP+
CLKDL
CLKDH
DIGCTRL
THDACU
CLKBH
CLKBL
BP-
BP+

ACQCLOCK
17
500
PHS1
PHS2
PHS3
PLLDIAG
VCO<1..0>
PLLDIV<1..0>
REFOSC25

ACVS
26
600
D1CONN
CVRSEL
VDAC10
PLLDIAG
PRCTRL<5>
DAC<8>

CALIBRATOR
25
950
CVRSEL
VDAC10
CVR<6..0>
AC_CALCTRL
ATTCAL

ALL/DMUXCOMM

DACULATORS
24
900
ADDACU<8>
THDACU<4>
ATTENDACU<15>
DTCDACU<8>
LIN_AUX
TIDACU<4>
XTRIGDACU<4>
DACUCTRL
16
8

TRIGLOGIC
19
XTRIGDACU
EVNT1234
BTL
VCO
PLLDIV
REFOSC25
LIN_AUX_DACU
D1CONN
TIDACU
20
XTRIG
22
TI
23
GTL
21
OVLS<4>
ACCALCTRL
DMUXCOMM
DACUCTRL
DTC_CTRL
TH_AD
ATT_PA
CVR
J1550
J1000
J1001
EVNT1234<8..1>

DTC
18
1550
TRIG1-
TRIG1+
TRIG2-
TRIG2+
TRIG3-
TRIG3+
TRIG4-
TRIG4+
EVNT1L
EVNT1H
EVNT2L
EVNT2H
EVNT3L
EVNT3H
EVNT4L
EVNT4H
DTCDACU<7..0>
DTC_CTRL<8..1>

TRIGPICK<8..1>

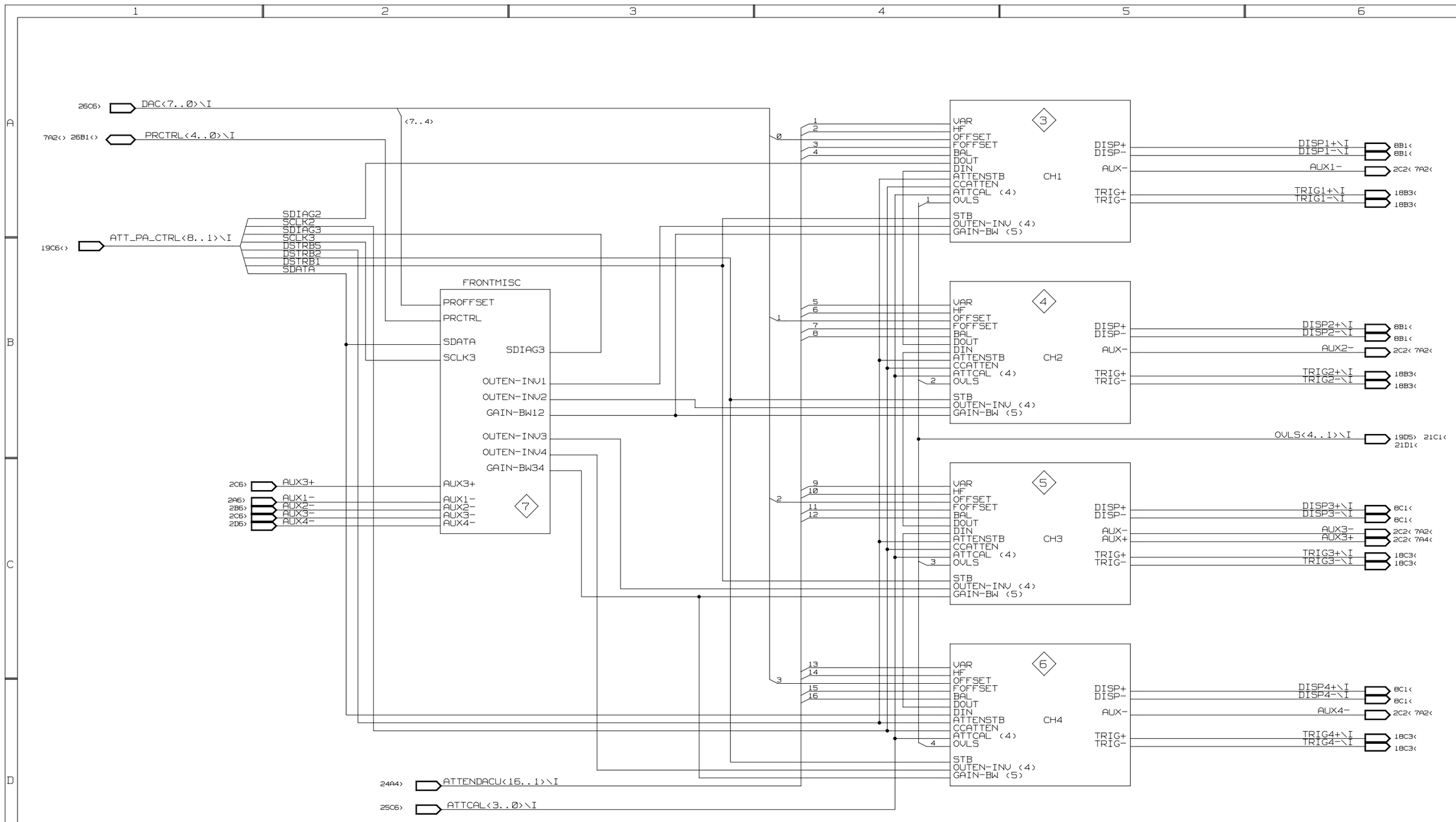
CH1 AND CH3 PREAMPS
ARE NORMALLY INVERTED
TO ACCOMODATE THE
TRACK/HOLD PINOUT

FRONTEND
2
J1153
J1500
J1201
DISP4-
DISP4+
TRIG4-
TRIG4+
DISP3-
DISP3+
TRIG3-
TRIG3+
DISP2-
DISP2+
TRIG2-
TRIG2+
DISP1-
DISP1+
TRIG1-
TRIG1+
6
5
4
3
7
CH4
CH3
CH2
CH1
FRONTMISC
OVLS
PRCTRL
ATT_PA_CTRL
ATTENDACU
DAC
ATTCAL

TDS 520B

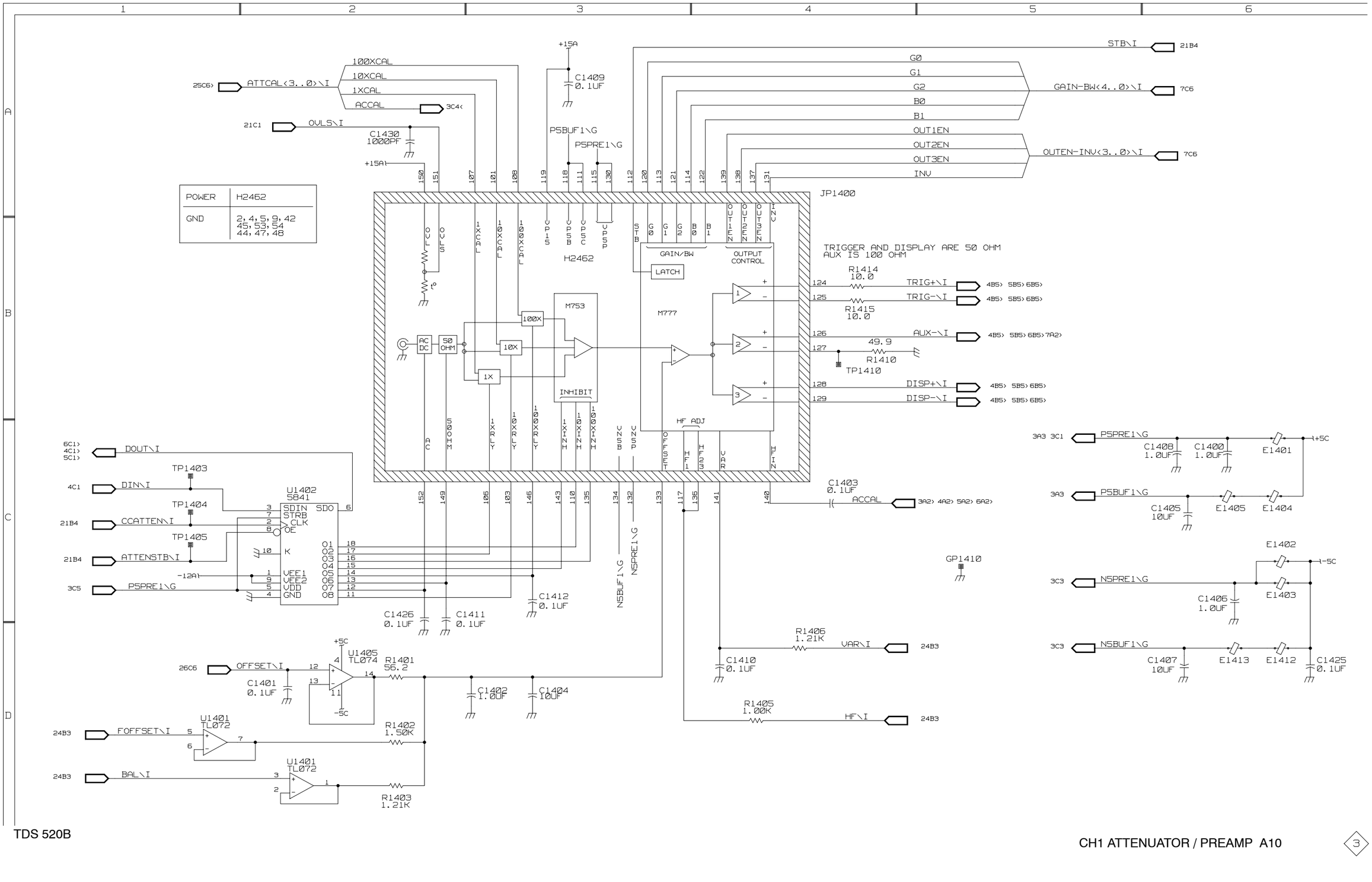
ACQUISTION ROOT A10

1



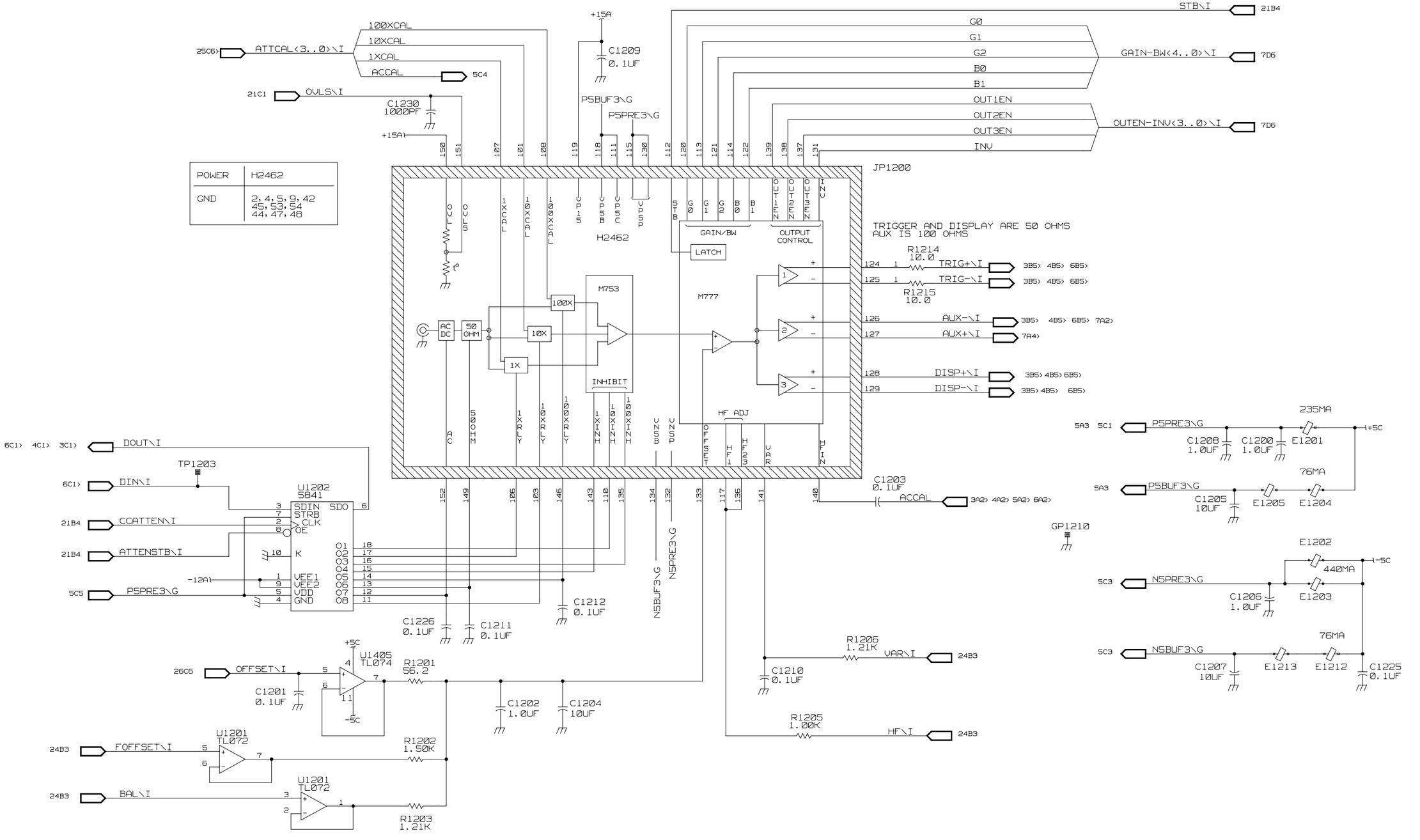
TDS 520B

FRONT END A10


+15A
C1409
0.1UF
100XCAL
10XCAL
1XCAL
ACCAL
25C6 ATTCAL<3..0>\I
3C4
21C1 OVLS\I
C1430
1000PF
+15A1
P5BUF1\G
P5PRE1\G
STB\I 21B4
G0
G1
G2
B0
B1
GAIN-BW<4..0>\I 7C6
OUT1EN
OUT2EN
OUT3EN
INV
OUTEN-INV<3..0>\I 7C6
JP1400
POWER | H2462
GND | 2,4,5,9,42 45,53,54 44,47,48
H2462
GAIN/BW
OUTPUT CONTROL
LATCH
TRIGGER AND DISPLAY ARE 50 OHM
AUX IS 100 OHM
R1414
10.0
TRIG+\I 4B5 5B5 6B5
TRIG-\I 4B5 5B5 6B5
R1415
10.0
AUX-\I 4B5 5B5 6B5 7A2
49.9
R1410
TP1410
DISP+\I 4B5 5B5 6B5
DISP-\I 4B5 5B5 6B5
M753
M777
100X
10X
1X
AC DC
50 OHM
INHIBIT
HF ADJ
6C1 4C1 5C1 DOUT\I
TP1403
4C1 DIN\I
TP1404
21B4 CCATTEN\I
TP1405
21B4 ATTENSTB\I
-12A1
3C5 P5PRE1\G
U1402
5841
SDIN SDO
STRB
CLK
OE
K
VEE1
VEE2
VDD
GND
C1426
0.1UF
C1411
0.1UF
C1412
0.1UF
N5BUF1\G
N5PRE1\G
C1403
0.1UF
ACCAL 3A2 4A2 5A2 6A2
GP1410
R1406
1.21K
VAR\I 24B3
C1410
0.1UF
R1405
1.00K
HF\I 24B3
+5C
U1405
TL074
26C6 OFFSET\I
C1401
0.1UF
R1401
56.2
C1402
10UF
C1404
10UF
U1401
TL072
24B3 FOFFSET\I
R1402
1.50K
24B3 BAL\I
R1403
1.21K
3A3 3C1 P5PRE1\G
C1408
1.0UF
C1400
1.0UF
E1401
+5C
3A3 P5BUF1\G
C1405
10UF
E1405
E1404
E1402
-5C
3C3 N5PRE1\G
C1406
1.0UF
E1403
3C3 N5BUF1\G
C1407
10UF
E1413
E1412
C1425
0.1UF

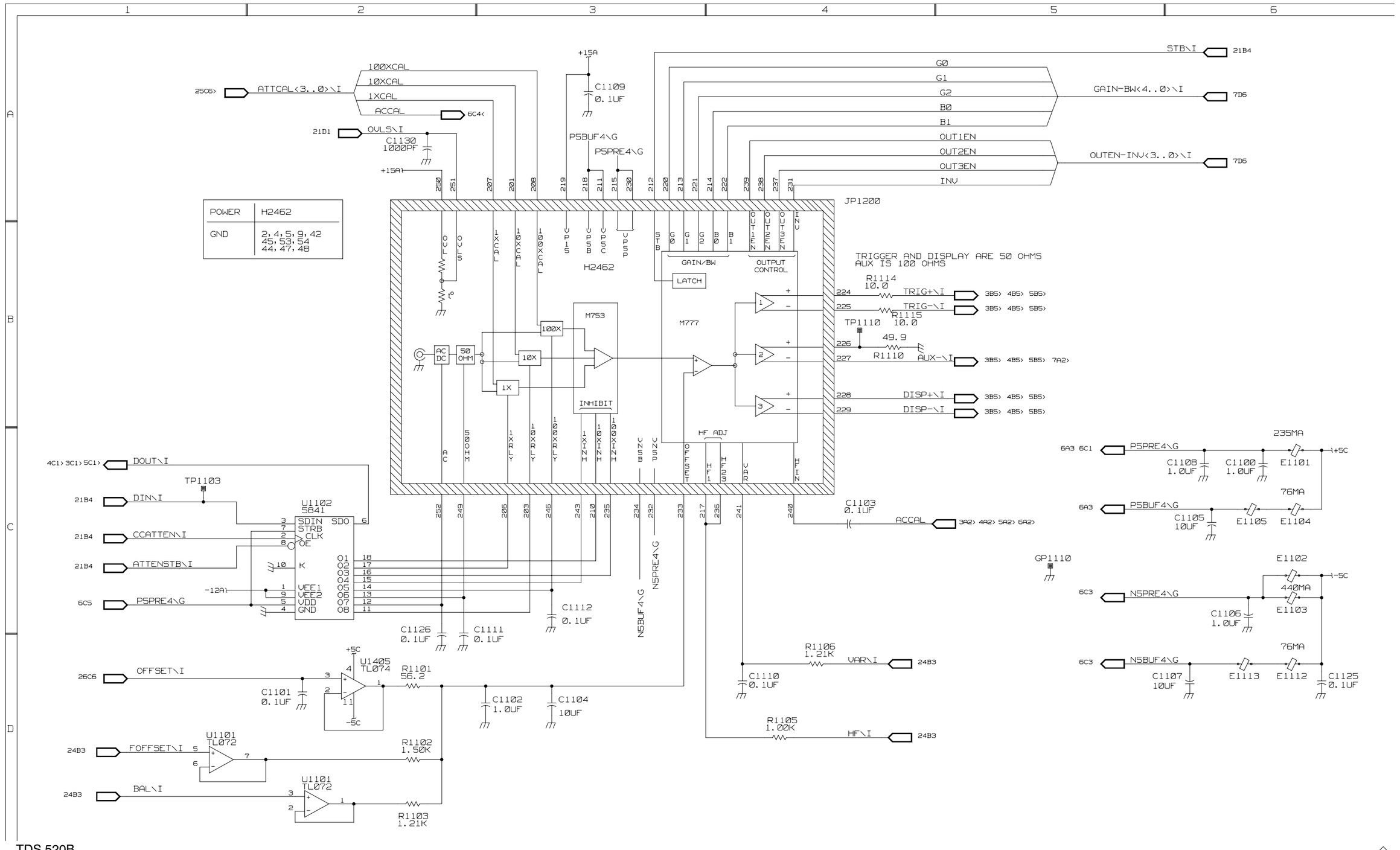
POWER	H2462
GND	2, 4, 5, 9, 42 45, 53, 54 44, 47, 48

TRIGGER AND DISPLAY ARE 50 OHMS
AUX IS 100 OHMS

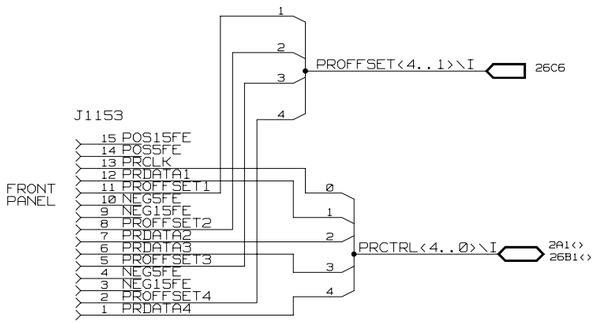


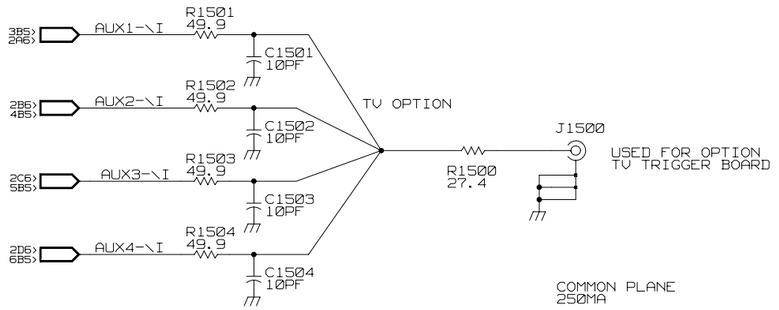
TDS 520B

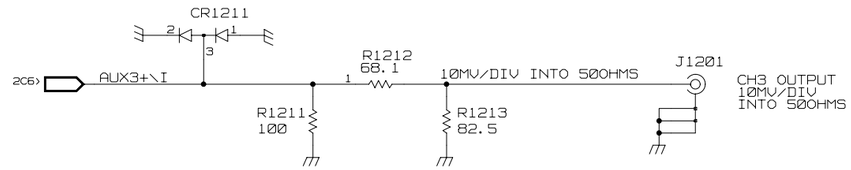
CH3 ATTENUATOR / PREAMP A10

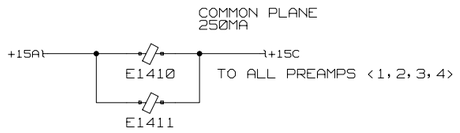


POWER	H2462
GND	2, 4, 5, 9, 42 45, 53, 54 44, 47, 48

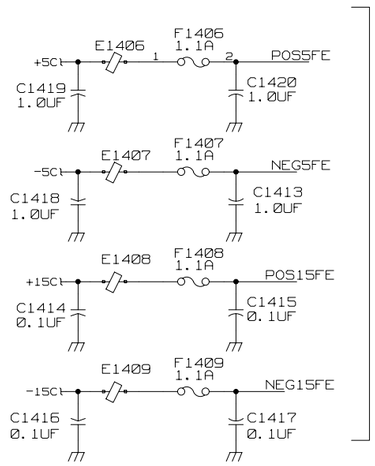




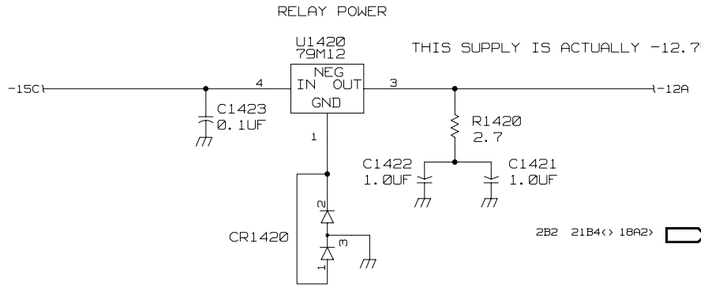


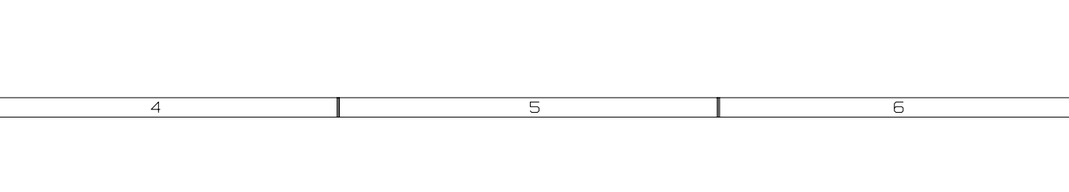


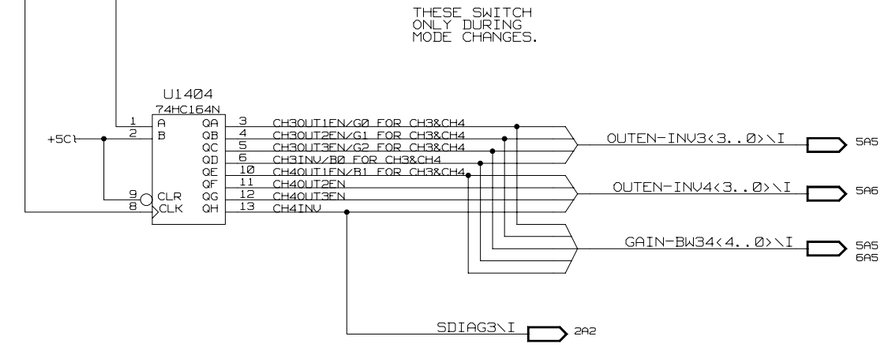
POWER	74HC164N
VDD	14
VSS	7

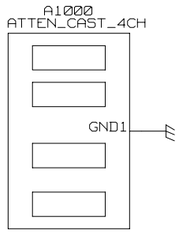


THESE SUPPLIES GO
TO J1153 7A1

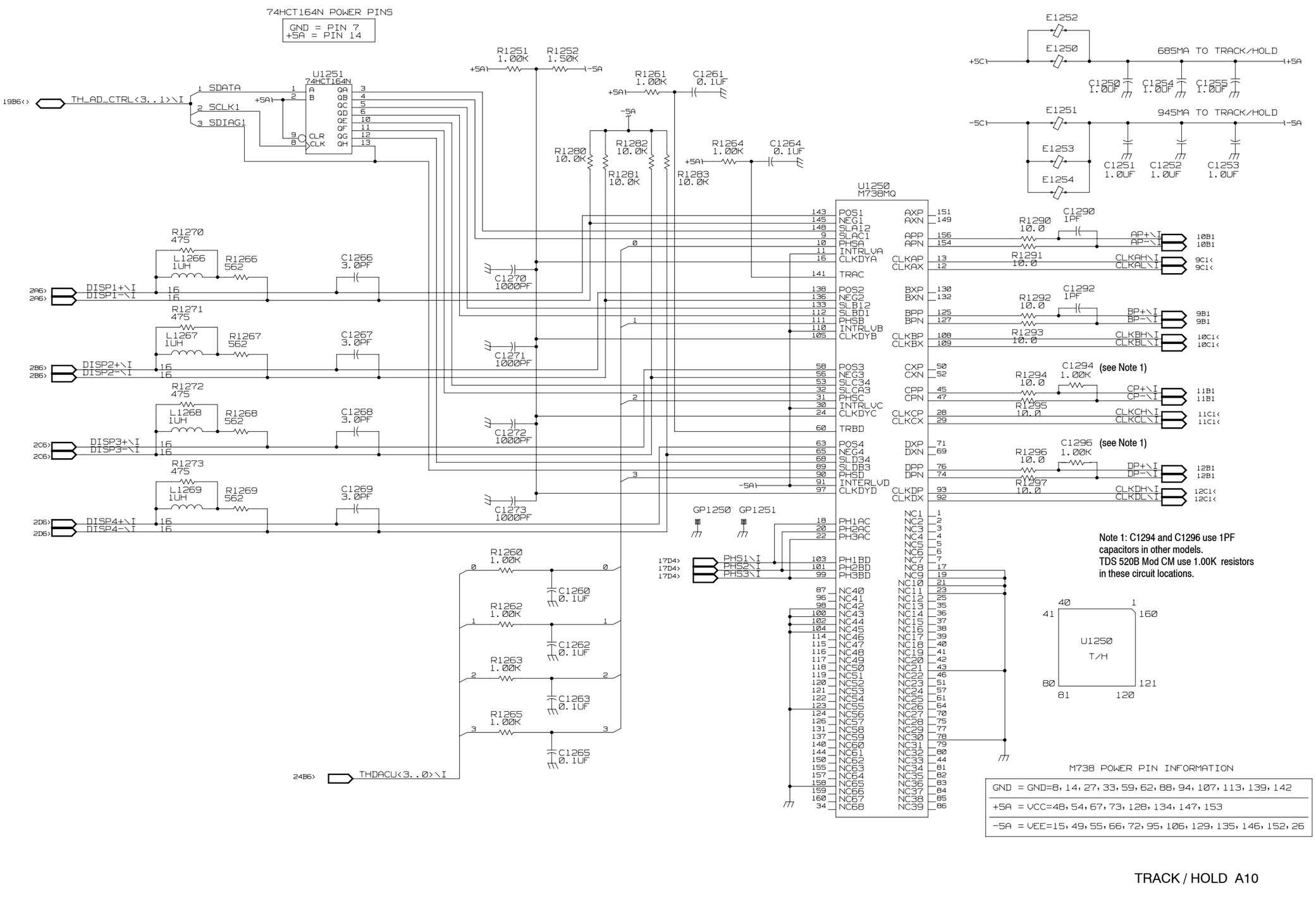


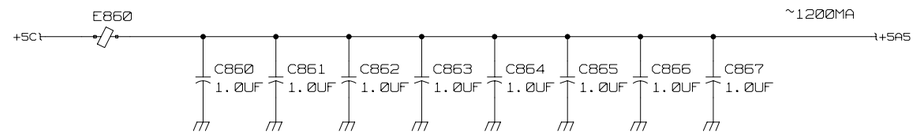


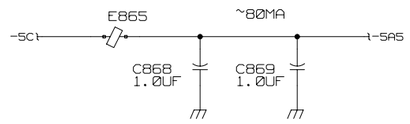


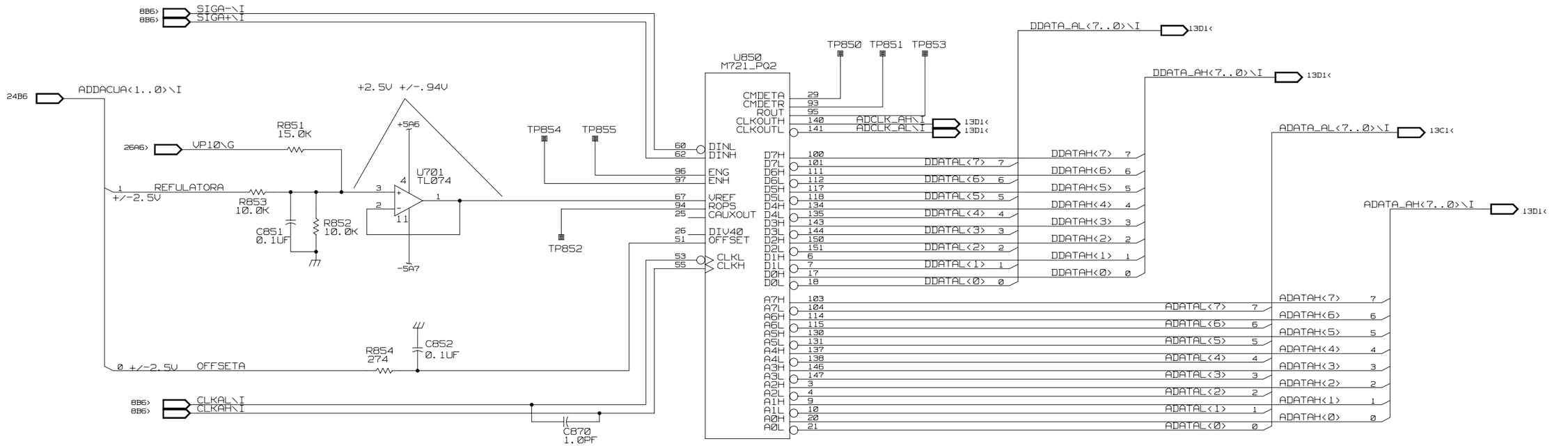


NOTE: JP1400 IS A CINCH CONNECTOR
USED FOR CHANNELS 1 & 2. JP1200
IS USED FOR CHANNELS 3 & 4.


74HCT164N POWER PINS
GND = PIN 7
+5A = PIN 14
U1251
74HCT164N
TH_AD_CTRL<3..1>\I
SDATA
SCLK1
SDIAG1
R1251 1.00K
R1252 1.50K
R1261 1.00K
C1261 0.1UF
R1280 10.0K
R1281 10.0K
R1282 10.0K
R1283 10.0K
R1264 1.00K
C1264 0.1UF
U1250
M738MQ
E1252
E1250
685MA TO TRACK/HOLD
C1250 1.0UF
C1254 1.0UF
C1255 1.0UF
E1251
E1253
E1254
945MA TO TRACK/HOLD
C1251 1.0UF
C1252 1.0UF
C1253 1.0UF
R1270 475
L1266 1UH
R1266 562
C1266 3.0PF
DISP1+\I
DISP1-\I
C1270 1000PF
R1271 475
L1267 1UH
R1267 562
C1267 3.0PF
DISP2+\I
DISP2-\I
C1271 1000PF
R1272 475
L1268 1UH
R1268 562
C1268 3.0PF
DISP3+\I
DISP3-\I
C1272 1000PF
R1273 475
L1269 1UH
R1269 562
C1269 3.0PF
DISP4+\I
DISP4-\I
C1273 1000PF
GP1250
GP1251
PHS1\I
PHS2\I
PHS3\I
R1260 1.00K
C1260 0.1UF
R1262 1.00K
C1262 0.1UF
R1263 1.00K
C1263 0.1UF
R1265 1.00K
C1265 0.1UF
THDACU<3..0>\I
R1290 10.0
C1290 1PF
AP+\I
AP-\I
R1291 10.0
CLKAH\I
CLKAL\I
R1292 10.0
C1292 1PF
BP+\I
BP-\I
R1293 10.0
CLKBH\I
CLKBL\I
R1294 10.0
C1294 1.00K (see Note 1)
CP+\I
CP-\I
R1295 10.0
CLKCH\I
CLKCL\I
R1296 10.0
C1296 1.00K (see Note 1)
DP+\I
DP-\I
R1297 10.0
CLKDH\I
CLKDL\I
Note 1: C1294 and C1296 use 1PF capacitors in other models.
TDS 520B Mod CM use 1.00K resistors in these circuit locations.
U1250
T/H
M738 POWER PIN INFORMATION
GND = GND=8, 14, 27, 33, 59, 62, 88, 94, 107, 113, 139, 142
+5A = VCC=48, 54, 67, 73, 128, 134, 147, 153
-5A = VEE=15, 49, 55, 66, 72, 95, 106, 129, 135, 146, 152, 26

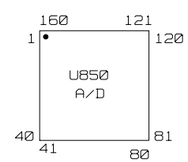


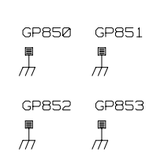


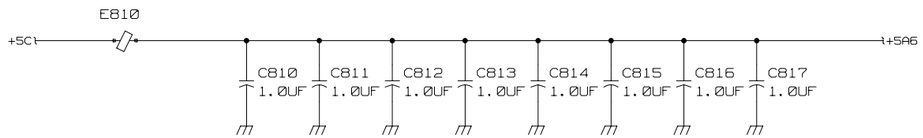


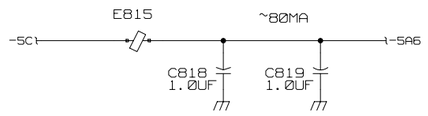
M721 PIN INFORMATION

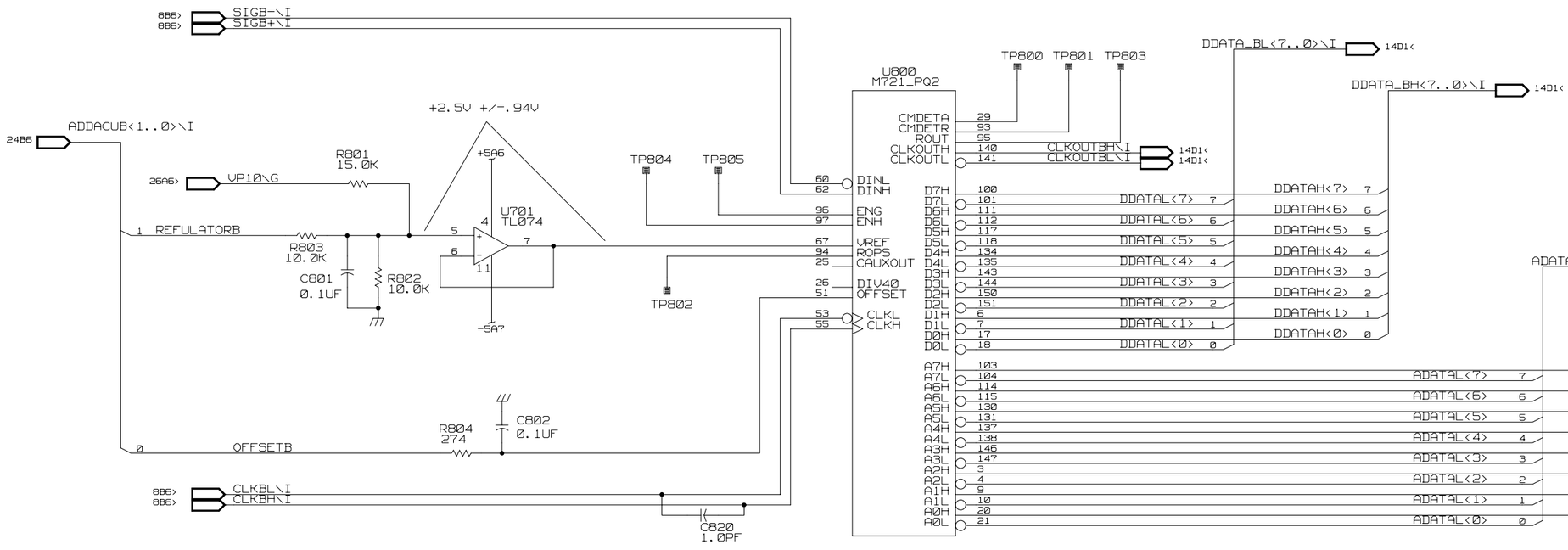
+5A5	VCCA=14, 32, 90, 107 VCCD=13, 108 VCCI=33, 58, 64, 89 VCCO=5, 8, 11, 16, 19, 22, 99, 102, 105, 110, 113, 116, 129, 132, 136, 139, 142, 145, 149, 152
GND	GNDR=66 VGNDA=15, 31, 91, 106 VGNDD=12, 23, 98, 109, 133, 148 VGNDI=34, 54, 59, 61, 63, 88
-5A5	VEEI=50, 57, 65, 68 VSUB=30, 92





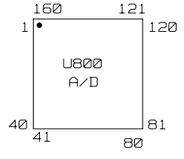


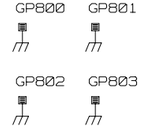


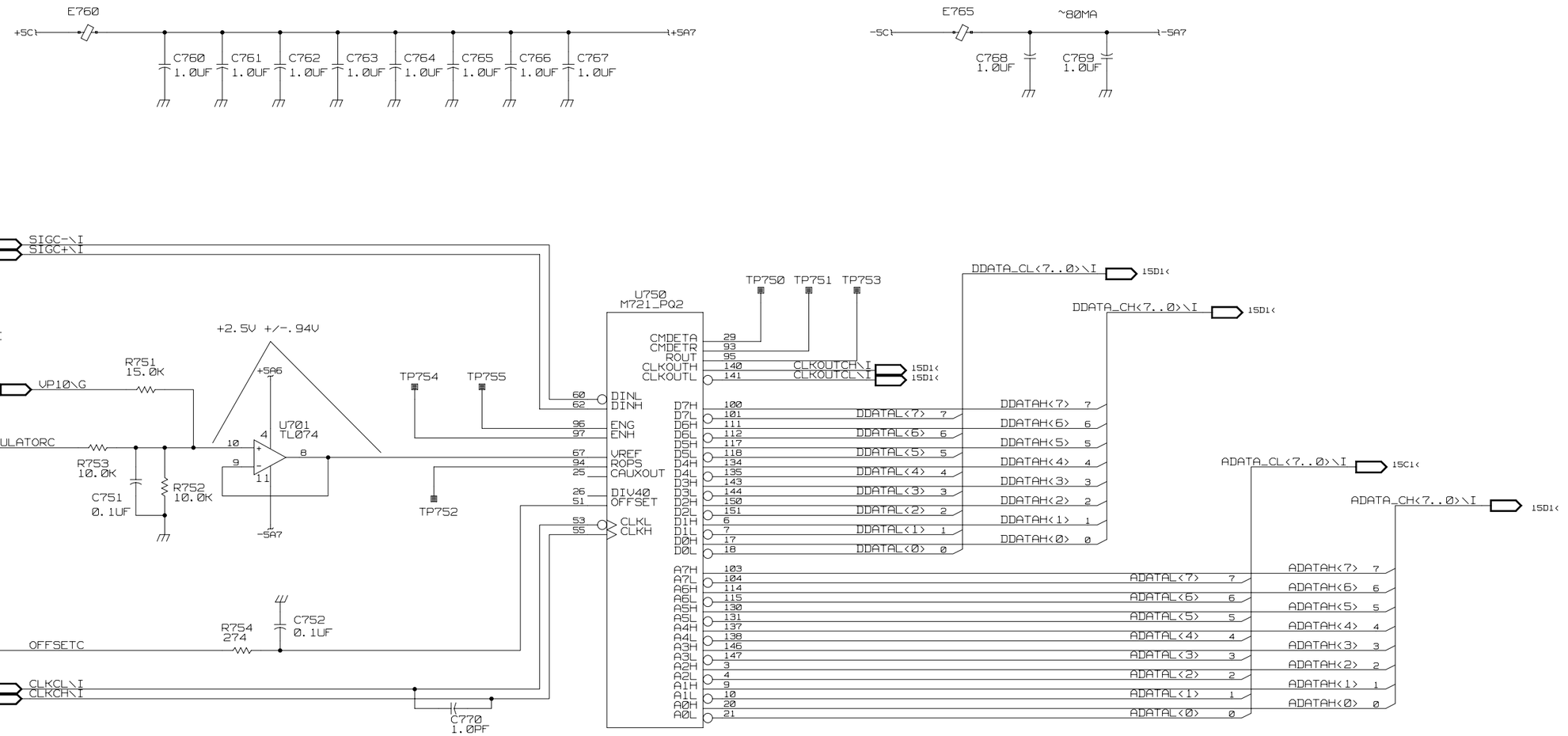


M721 PIN INFORMATION

+5A6	VCCA=14, 32, 90, 107 VCCD=13, 108 VCCI=33, 58, 64, 89 VCCO=5, 8, 11, 16, 19, 22, 99, 102, 105, 110, 113, 116, 129, 132, 136, 139, 142, 145, 149, 152
GND	GNDR=66 VGNDA=15, 31, 91, 106 VGNDD=12, 23, 98, 109, 133, 148 VGNDI=34, 54, 59, 61, 63, 88
-5A6	VEEI=50, 57, 65, 68 VSUB=30, 92

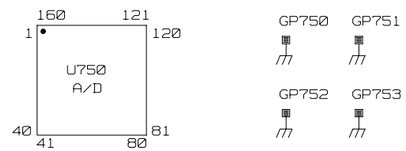


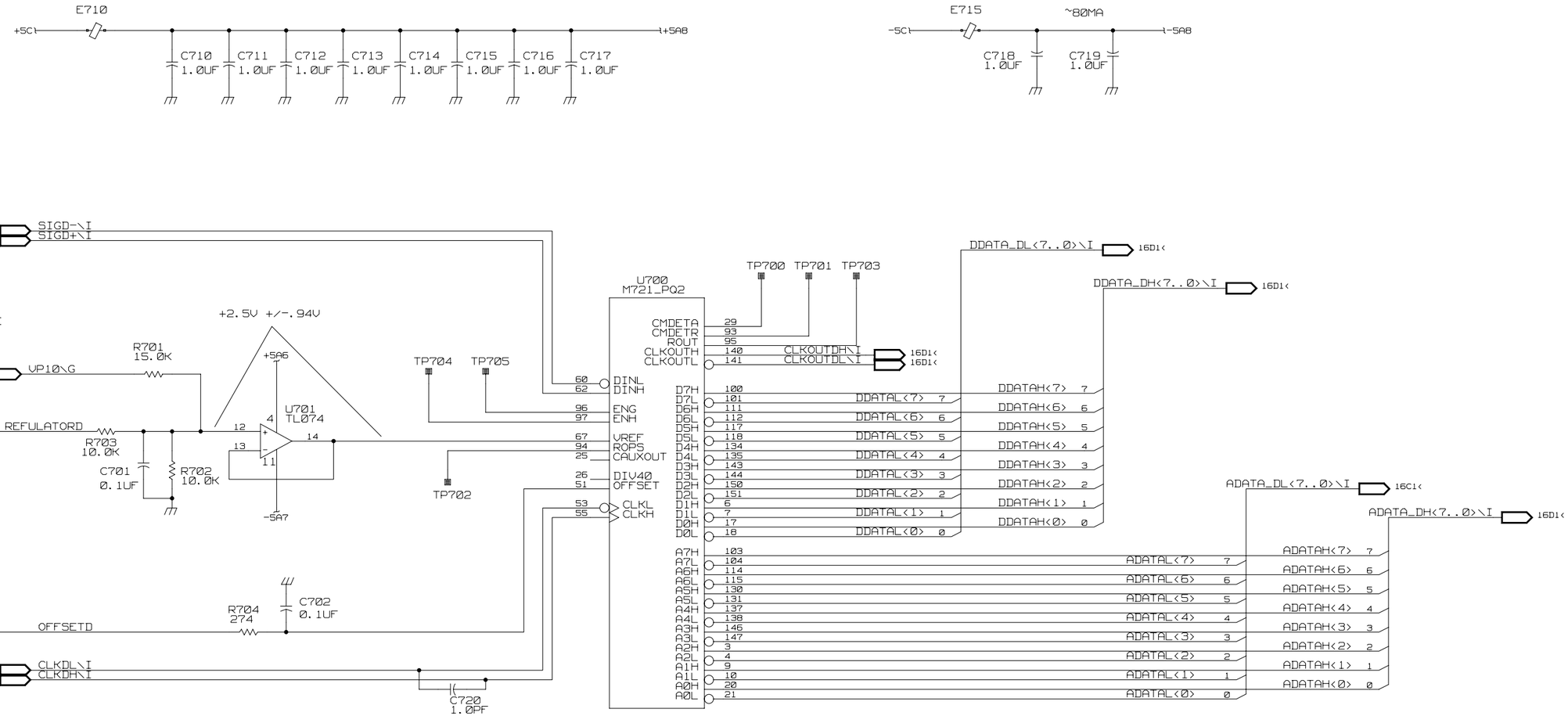




M721 PIN INFORMATION

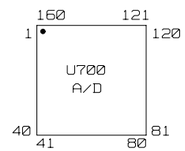
+5A7	VCCA=14, 32, 90, 107 VCCD=13, 108 VCCI=33, 58, 64, 89 VCCO=5, 8, 11, 16, 19, 22, 99, 102, 105, 110, 113, 116, 129, 132, 136, 139, 142, 145, 149, 152
GND	GNDR=66 VGNDA=15, 31, 91, 106 VGNDD=12, 23, 98, 109, 133, 148 VGNDI=34, 54, 59, 61, 63, 88
-5A7	VEEI=50, 57, 65, 68 VSUB=30, 92

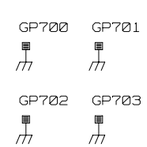


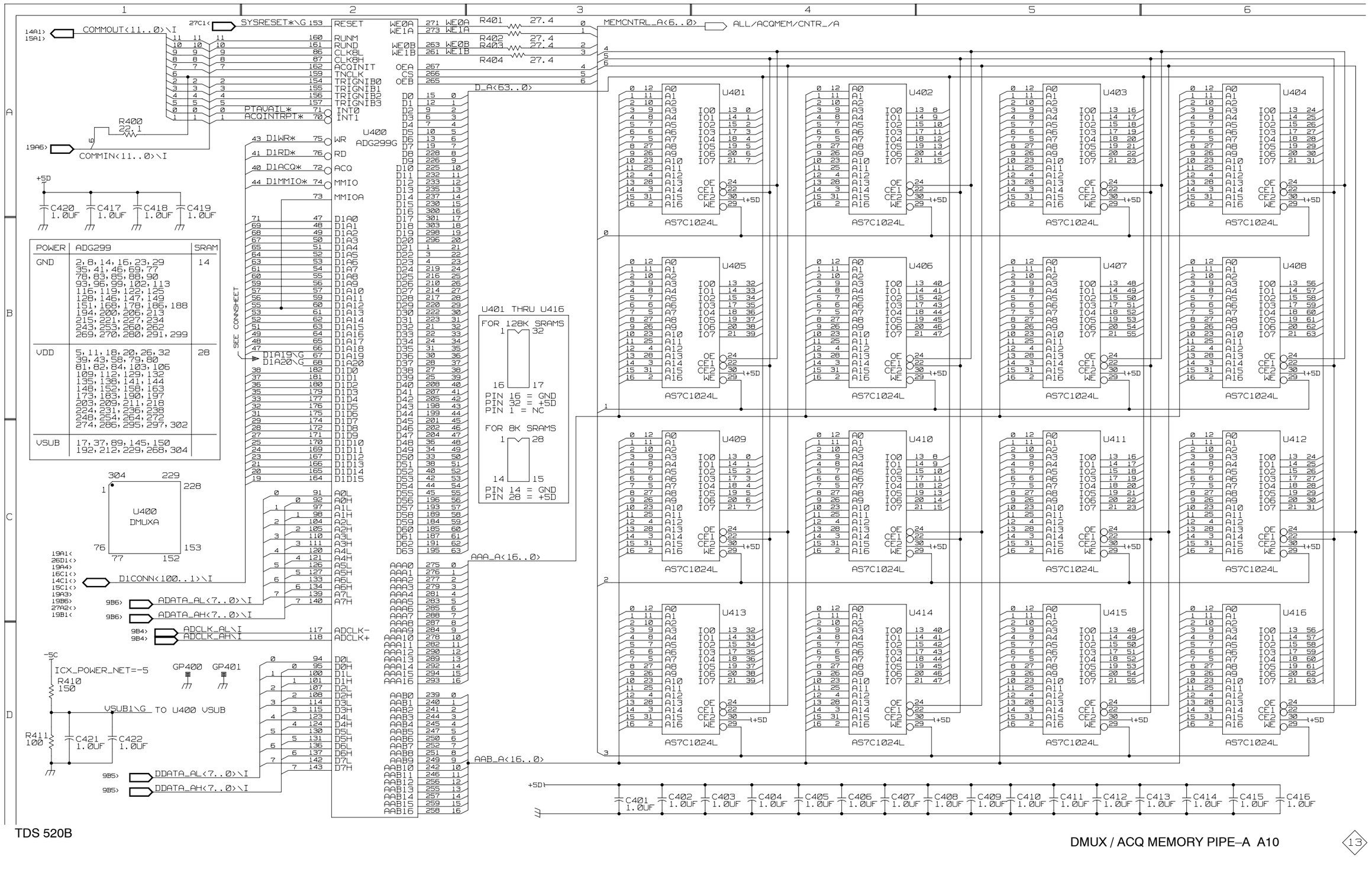


M721 PIN INFORMATION

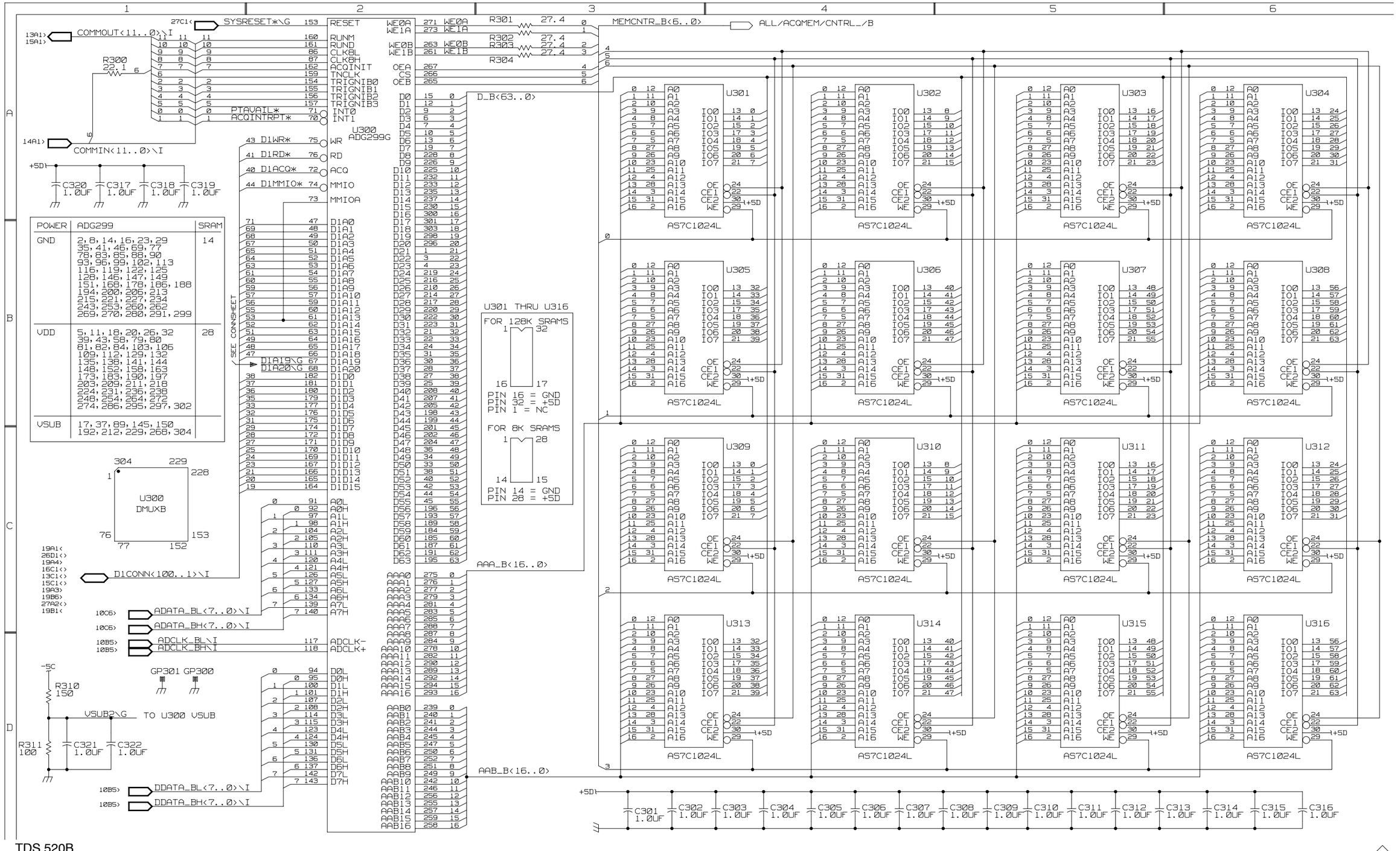
+5A8	VCCA=14, 32, 90, 107 VCCD=13, 108 VCCI=33, 58, 64, 89 VCCO=5, 8, 11, 16, 19, 22, 99, 102, 105, 110, 113, 116, 129, 132, 136, 139, 142, 145, 149, 152
GND	GNDR=66 VGNDA=15, 31, 91, 106 VGNDD=12, 23, 98, 109, 133, 148 VGNDI=34, 54, 59, 61, 63, 88
-5A8	VEEI=50, 57, 65, 68 VSUB=30, 92







POWER	ADG299	SRAM
GND	2, 8, 14, 16, 23, 29 35, 41, 46, 59, 72 78, 83, 85, 88, 90 93, 96, 99, 102, 113 116, 119, 122, 125 128, 146, 147, 149 151, 168, 178, 186, 188 194, 200, 206, 213 215, 221, 227, 234 243, 253, 260, 262 269, 270, 280, 291, 299	14
VDD	5, 11, 18, 20, 26, 32 39, 43, 58, 79, 80 81, 82, 84, 103, 106 109, 112, 129, 132 135, 138, 141, 144 148, 152, 158, 163 173, 183, 190, 197 203, 209, 211, 218 224, 231, 236, 238 248, 254, 264, 272 274, 286, 295, 297, 302	28
VSUB	17, 37, 89, 145, 150 192, 212, 229, 268, 304	

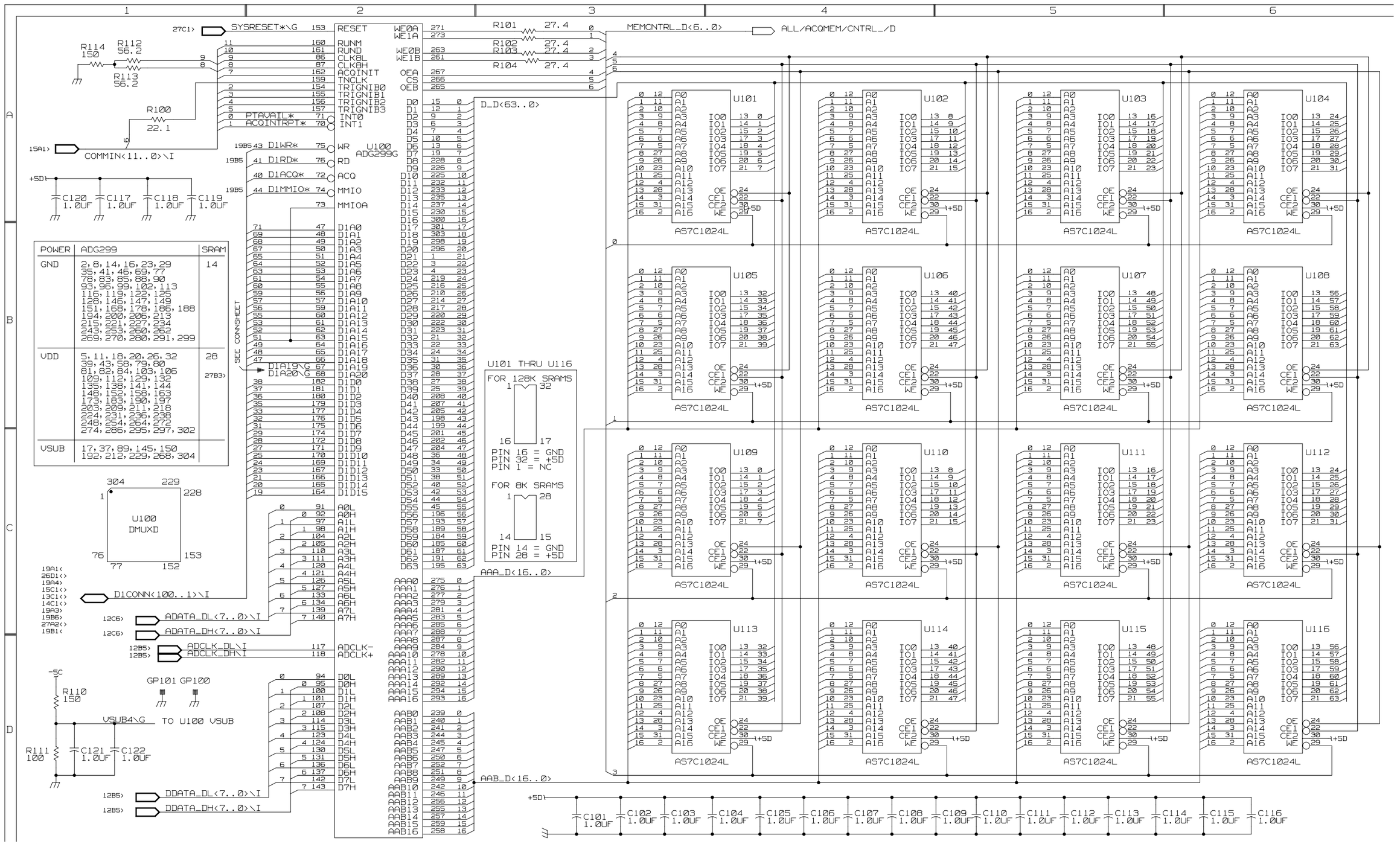


POWER	ADG299	SRAM
GND	2, 8, 14, 16, 23, 29 35, 41, 46, 69, 77 78, 83, 85, 88, 90 93, 96, 99, 102, 113 116, 119, 122, 125 128, 146, 147, 149 151, 168, 178, 186, 188 194, 200, 206, 213 215, 221, 227, 234 245, 253, 260, 262 269, 270, 280, 291, 299	14
VDD	5, 11, 18, 20, 26, 32 39, 43, 58, 79, 80 81, 82, 84, 103, 106 109, 112, 129, 132 135, 138, 141, 144 148, 152, 158, 163 173, 183, 190, 197 203, 209, 211, 218 224, 231, 236, 238 248, 254, 264, 272 274, 286, 295, 297, 302	28
VSUB	17, 37, 89, 145, 150 192, 212, 229, 268, 304	

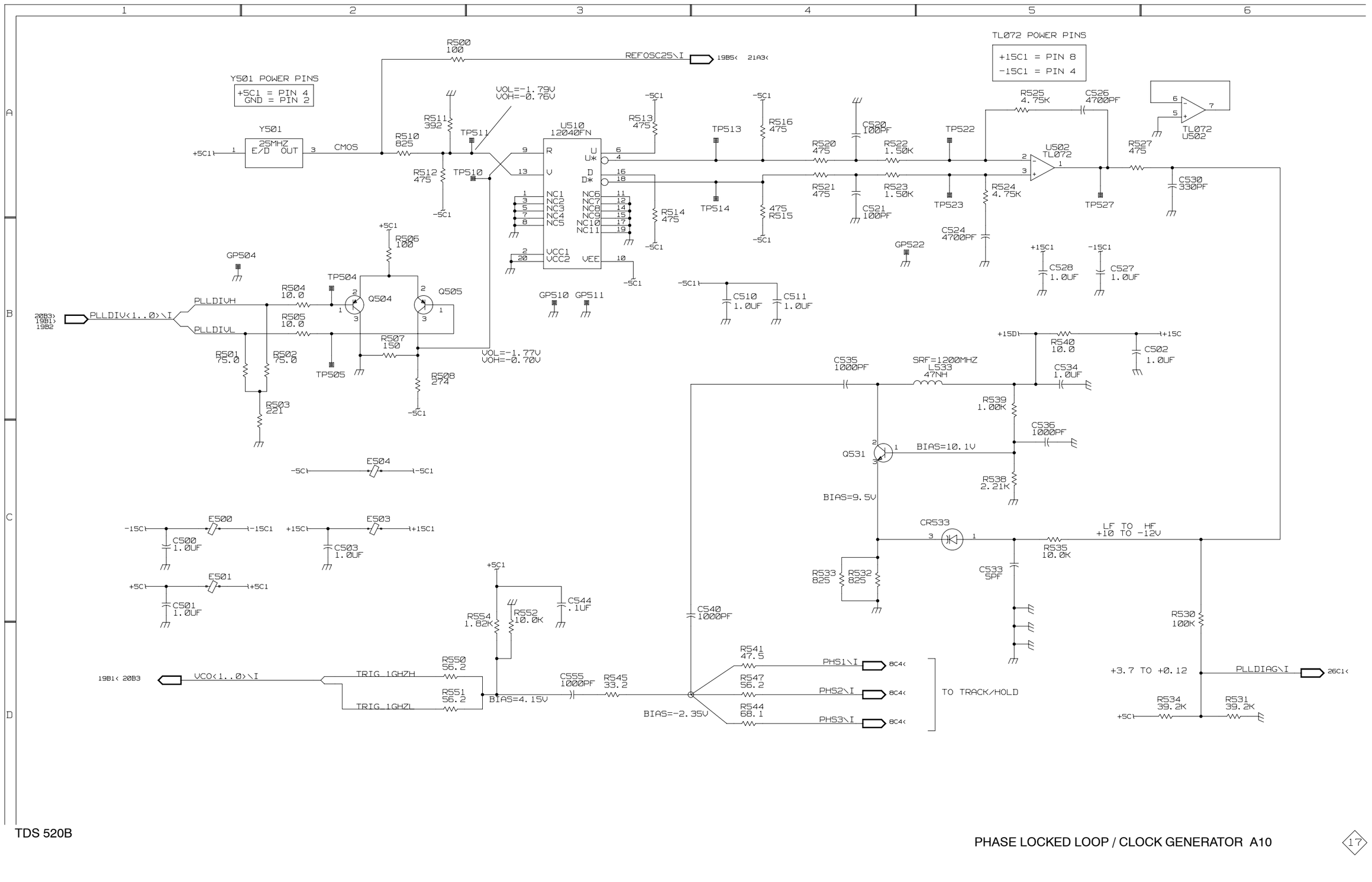
POWER	ADG299	SRAM
GND	2,8,14,16,23,29 35,41,46,69,77 78,83,85,88,90 93,96,99,102,113 116,119,122,125 128,146,147,149 151,168,178,186,188 194,200,206,213 215,221,227,234 243,253,260,262 269,270,280,291,299	14
VDD	5,11,18,20,26,32 39,43,58,79,80 81,82,84,103,106 109,112,129,132 135,138,141,144 148,152,158,163 173,183,190,197 203,209,211,218 224,231,236,238 248,254,264,272 274,286,295,297,302	28
VSUB	17,37,89,145,150 192,212,229,268,304	

PIN 16 = GND
PIN 32 = +5D
PIN 1 = NC

PIN 14 = GND
PIN 28 = +5D



POWER	ADG299	SRAM
GND	2, 8, 14, 16, 23, 29 35, 41, 46, 69, 77 78, 83, 85, 88, 90 93, 96, 99, 102, 113 116, 119, 122, 125 128, 146, 147, 149 151, 168, 178, 186, 188 194, 200, 206, 213 215, 221, 227, 234 243, 253, 260, 262 269, 270, 280, 291, 299	14
VDD	5, 11, 18, 20, 26, 32 39, 43, 58, 79, 80 81, 82, 84, 103, 106 109, 112, 129, 132 135, 138, 141, 144 148, 152, 158, 163 173, 183, 190, 197 203, 209, 211, 218 224, 231, 236, 238 248, 254, 264, 272 274, 286, 295, 297, 302	28
VSUB	17, 37, 89, 145, 150 192, 212, 229, 268, 304	


TL072 POWER PINS
+15C1 = PIN 8
-15C1 = PIN 4
Y501 POWER PINS
+5C1 = PIN 4
GND = PIN 2
R500 100
REFOSC25\I
19B5< 21A3<
Y501
25MHZ E/D OUT
CMOS
R510 825
R511 392
R512 475
TP510
TP511
VOL=-1.79V
VOH=-0.76V
U510 12040FN
R513 475
R514 475
R515 475
R516 475
TP513
TP514
R520 475
R521 475
R522 1.50K
R523 1.50K
C520 100PF
C521 100PF
TP522
TP523
R524 4.75K
C524 4700PF
R525 4.75K
C526 4700PF
U502 TL072
TP527
R527 475
C530 330PF
TL072 U502
GP522
C528 1.0UF
C527 1.0UF
C510 1.0UF
C511 1.0UF
GP504
R506 100
TP504
R504 10.0
R505 10.0
Q504
Q505
PLLDIVH
PLLDIVL
20B3> 19B1> 19B2
PLLDIV<1..0>\I
R501 75.0
R502 75.0
R503 221
R507 150
R508 274
TP505
VOL=-1.77V
VOH=-0.70V
GP510 GP511
E504
E500
E503
E501
C500 1.0UF
C503 1.0UF
C501 1.0UF
R554 1.82K
R552 10.0K
C544 .1UF
C540 1000PF
R550 56.2
R551 56.2
TRIG_1GHZH
TRIG_1GHZL
VCO<1..0>\I
19B1< 20B3
C555 1000PF
R545 33.2
BIAS=4.15V
BIAS=-2.35V
R541 47.5
R547 56.2
R544 68.1
PHS1\I
PHS2\I
PHS3\I
8C4<
TO TRACK/HOLD
+15D1
R540 10.0
C502 1.0UF
C535 1000PF
SRF=1200MHZ
L533 47NH
C534 1.0UF
R539 1.00K
C536 1000PF
Q531
BIAS=10.1V
R538 2.21K
BIAS=9.5V
CR533
LF TO HF
+10 TO -12V
R535 10.0K
C533 5PF
R533 825
R532 825
R530 100K
+3.7 TO +0.12
PLLDIAG\I
26C1<
R534 39.2K
R531 39.2K

POWER	TL074	DG444
GND		5
+5A1	4	12, 13
-5A1	11	4

DTC_CTRL<8..1>\I

SDIAG0 18D6<
DSTRB0 18A5>18C5>
SCLK0 18B5>18D5>
SDATA 18B5<

U1556
DG444
CLOSE

E1550 +5C1 +5A1 C1550 1.0UF C1552 1.0UF

E1551 -5C1 -5A1 E1552 C1551 1.0UF C1553 1.0UF

R1581 1.82K MAIN_TL_CH12
R1590 1.21K C1558 0.1UF
R1588 1.82K DELAY_TL_CH12
R1591 1.21K C1563 0.1UF
R1582 1.82K MAIN_TL_CH34
R1592 1.21K C1582 0.1UF
R1583 1.82K DELAY_TL_CH34
R1593 1.21K C1583 0.1UF
R1584 274 MAIN_HYS_CH12
C1584 0.1UF
R1585 274 DELAY_HYS_CH12
C1585 0.1UF
R1586 274 MAIN_HYS_CH34
C1586 0.1UF
R1587 274 DELAY_HYS_CH34
C1587 0.1UF
24C3> +/-1.0V
24C3> +/-2.5V
24C4> DTCDACU<7..0>\I

GR1550 GR1551 GR1552 GR1553 GR1554 GR1555 GR1556 GR1557

TRIG2+\I 2B6>
TRIG2-\I 2B6>
TRIG1-\I 2A6>
TRIG1+\I 2A6>
TRIG4+\I 2D6>
TRIG4-\I 2D6>
TRIG3-\I 2C6>
TRIG3+\I 2C6>

R1535 0 R1536 0 R1538 0 R1537 0
R1545 0 R1546 0 R1548 0 R1547 0

R1564 10.0K R1563 10.0K R1562 10.0K R1561 10.0K U1560 TL074 R1560 100K C1562 22PF C1561 0.1UF U1561 TL074
R1559 10.0K R1558 10.0K R1557 10.0K R1556 10.0K U1560 TL074 R1555 100K C1556 0.1UF C1557 22PF U1561 TL074
R1574 10.0K R1573 10.0K R1572 10.0K R1571 10.0K U1560 TL074 R1570 100K C1572 22PF C1571 0.1UF U1561 TL074
R1569 10.0K R1568 10.0K R1567 10.0K R1566 10.0K U1560 TL074 R1565 100K C1566 0.1UF C1567 27PF U1561 TL074

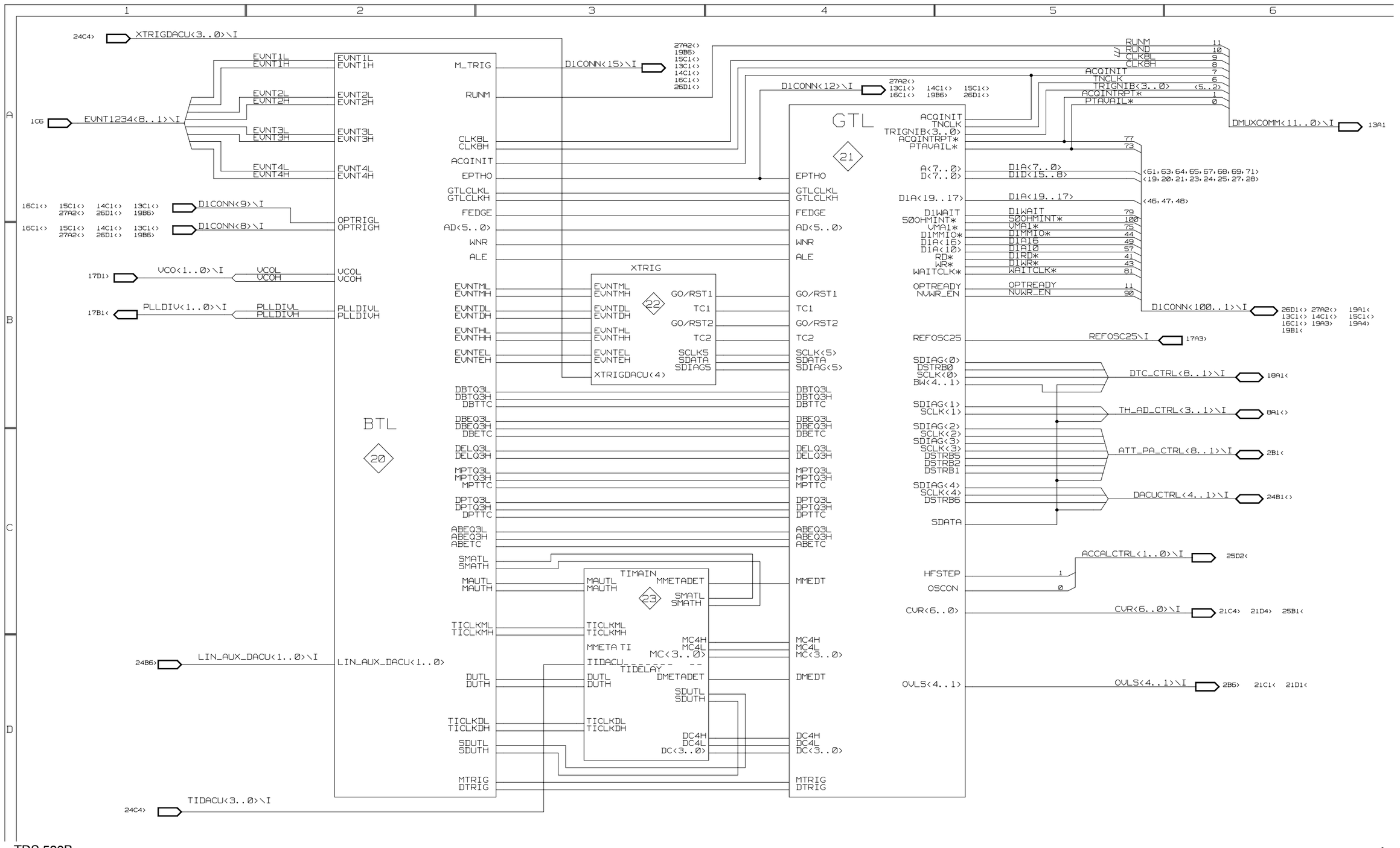
U1551
M748

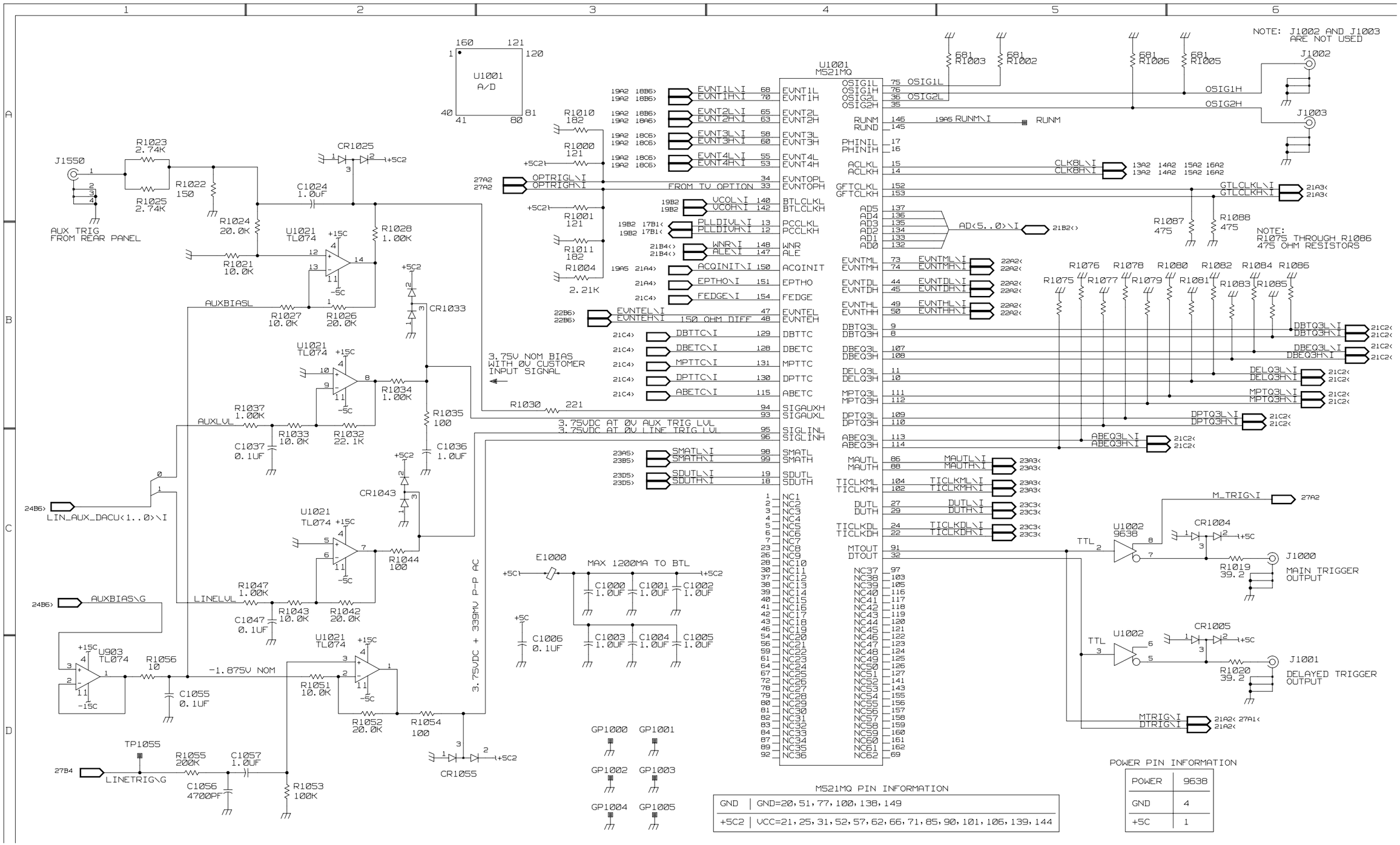
21B4> 18A2> 24C3>	DSTRB0	33	SLDL	
DELAY_HYS_CH12		35	HYS2	
		39	CP2	OUT21H 26 EVNT2H\I 19A2 20A3<
		41	IN2H	OUT21L 25 EVNT2L\I 19A2 20A3<
		42	IN2L	
		44	TL2	
24C3> DELAY_TL_CH12		2	TL1	
24C3> MAIN_TL_CH12		4	IN1L	OUT11L 21 EVNT1L\I 19A2 20A3<
		5	IN1H	OUT11H 20 EVNT1H\I 19A2 20A3<
		7	CP1	
24C3> MAIN_HYS_CH12		11	HYS1	
18A2> SCLK0		13	SCKH	
18A2> SDATA		14	SDIH	SDOH 32
21B4<> 2B2				
		34	GND1	VCC1 8
		37	GND2	VCC2 15
		40	GND3	VCC3 19
		43	GND4	VCC4 22
		3	GND5	VCC5 24
		6	GND6	VCC6 27
		9	GND7	VCC7 31
		12	GND8	VCC8 38 +5A1
		16	GND9	VEE1 1
		30	GND10	VEE2 10
		28	GND11	VEE3 17
		23	GND12	VEE4 29
		18	GND13	VEE5 36 -5A1

U1552
M748

21B4> 18A2> 24C3>	DSTRB0	33	SLDL	
DELAY_HYS_CH34		35	HYS2	
		39	CP2	OUT21H 26 EVNT4H\I 19A2 20A3<
		41	IN2H	OUT21L 25 EVNT4L\I 19A2 20A3<
		42	IN2L	
		44	TL2	
24C3> DELAY_TL_CH34		2	TL1	
24C3> MAIN_TL_CH34		4	IN1L	OUT11L 21 EVNT3L\I 19A2 20A3<
		5	IN1H	OUT11H 20 EVNT3H\I 19A2 20A3<
		7	CP1	
24C3> MAIN_HYS_CH34		11	HYS1	
18A2> SCLK0		13	SCKH	
		14	SDIH	SDOH 32 SDIAG0 18A2>
		34	GND1	VCC1 8
		37	GND2	VCC2 15
		40	GND3	VCC3 19
		43	GND4	VCC4 22
		3	GND5	VCC5 24
		6	GND6	VCC6 27
		9	GND7	VCC7 31
		12	GND8	VCC8 38 +5A1
		16	GND9	VEE1 1
		30	GND10	VEE2 10
		28	GND11	VEE3 17
		23	GND12	VEE4 29
		18	GND13	VEE5 36 -5A1

U1551
U1552
DTC


XTRIGDACU<3..0>\I
24C4>
EVNT1L
EVNT1H
EVNT2L
EVNT2H
EVNT3L
EVNT3H
EVNT4L
EVNT4H
1C6
EVNT1234<8..1>\I
D1CONN<9>\I
D1CONN<8>\I
OPTRIGL
OPTRIGH
VCO<1..0>\I
17D1>
VCOL
VCOH
PLLDIV<1..0>\I
17B1<
PLLDIVL
PLLDIVH
BTL
20
M_TRIG
RUNM
CLK8L
CLK8H
ACQINIT
EPTHO
GTLCLKL
GTLCLKH
FEDGE
AD<5..0>
WNR
ALE
EVNTML
EVNTMH
EVNTDL
EVNTDH
EVNTHL
EVNTHH
EVNTEL
EVNTEH
XTRIGDACU<4>
DBTQ3L
DBTQ3H
DBTTC
DBEQ3L
DBEQ3H
DBETC
DELQ3L
DELQ3H
MPTQ3L
MPTQ3H
MPTTC
DPTQ3L
DPTQ3H
DPTTC
ABEQ3L
ABEQ3H
ABETC
SMATL
SMATH
MAUTL
MAUTH
TICLKML
TICLKMH
DUTL
DUTH
TICLKDL
TICLKDH
SDUTL
SDUTH
MTRIG
DTRIG
TIDACU<3..0>\I
24C4>
LIN_AUX_DACU<1..0>\I
24B6>
LIN_AUX_DACU<1..0>
XTRIG
22
GO/RST1
TC1
GO/RST2
TC2
SCLK5
SDATA
SDIAG5
TIMAIN
23
MMETADET
SMATL
SMATH
MMETA TI
IIDACU
TIDELAY
DMETADET
MC4H
MC4L
MC<3..0>
DC4H
DC4L
DC<3..0>
D1CONN<15>\I
27A2>
19B6>
15C1<>
13C1<>
14C1<>
16C1<>
26D1<>
D1CONN<12>\I
27A2>
13C1<>
16C1<>
14C1<>
19B6>
15C1<>
26D1<>
GTL
21
EPTHO
GTLCLKL
GTLCLKH
FEDGE
AD<5..0>
WNR
ALE
GO/RST1
TC1
GO/RST2
TC2
SCLK<5>
SDATA
SDIAG<5>
DBTQ3L
DBTQ3H
DBTTC
DBEQ3L
DBEQ3H
DBETC
DELQ3L
DELQ3H
MPTQ3L
MPTQ3H
MPTTC
DPTQ3L
DPTQ3H
DPTTC
ABEQ3L
ABEQ3H
ABETC
MMEDT
MC4H
MC4L
MC<3..0>
DMEDT
DC4H
DC4L
DC<3..0>
MTRIG
DTRIG
ACQINIT
TNCLK
TRIGNIB<3..0>
ACQINTRPT*
PTAVAIL*
A<7..0>
D<7..0>
D1A<19..17>
D1WAIT
50OHMINT*
VMA1*
D1MMIO*
D1A<16>
D1A<10>
RD*
WR*
WAITCLK*
OPTREADY
NVWR_EN
REFOSC25
SDIAG<0>
DSTRB0
SCLK<0>
BW<4..1>
SDIAG<1>
SCLK<1>
SDIAG<2>
SCLK<2>
SDIAG<3>
SCLK<3>
DSTRB5
DSTRB2
DSTRB1
SDIAG<4>
SCLK<4>
DSTRB6
SDATA
HFSTEP
OSCON
CVR<6..0>
OVLS<4..1>
RUNM
RUND
CLK8L
CLK8H
ACQINIT
TNCLK
TRIGNIB<3..0>
ACQINTRPT*
PTAVAIL*
11
10
9
8
7
6
<5..2>
1
0
DMUXCOMM<11..0>\I
13A1
77
73
D1A<7..0>
D1D<15..8>
<61,63,64,65,67,68,69,71>
<19,20,21,23,24,25,27,28>
D1A<19..17>
<46,47,48>
D1WAIT
50OHMINT*
VMA1*
D1MMIO*
D1A16
D1A10
D1RD*
D1WR*
WAITCLK*
79
100
75
44
49
57
41
43
81
OPTREADY
NVWR_EN
11
90
D1CONN<100..1>\I
26D1<> 27A2<> 19A1<
13C1<> 14C1<> 15C1<>
16C1<> 19A3> 19A4>
19B1<
REFOSC25\I
17A3>
DTC_CTRL<8..1>\I
18A1<
TH_AD_CTRL<3..1>\I
8A1<>
ATT_PA_CTRL<8..1>\I
2B1<
DACUCTRL<4..1>\I
24B1<>
ACCALCTRL<1..0>\I
25D2<
1
0
CVR<6..0>\I
21C4> 21D4> 25B1<
OVLS<4..1>\I
2B6> 21C1< 21D1<



M521MQ PIN INFORMATION

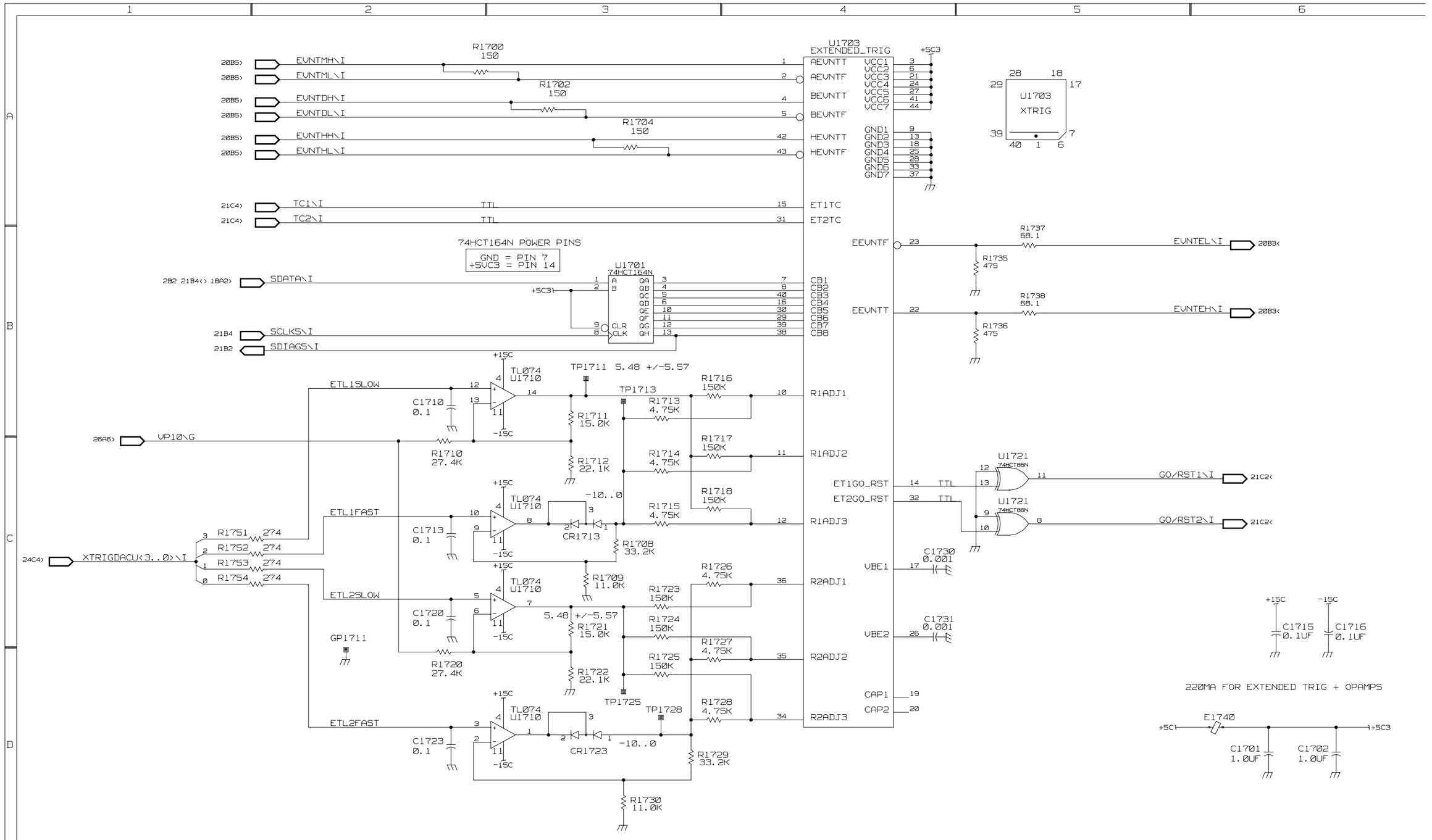
GND	GND=20, 51, 77, 100, 138, 149
+5C2	VCC=21, 25, 31, 52, 57, 62, 66, 71, 85, 90, 101, 106, 139, 144

POWER PIN INFORMATION

POWER	9638
GND	4
+5C	1

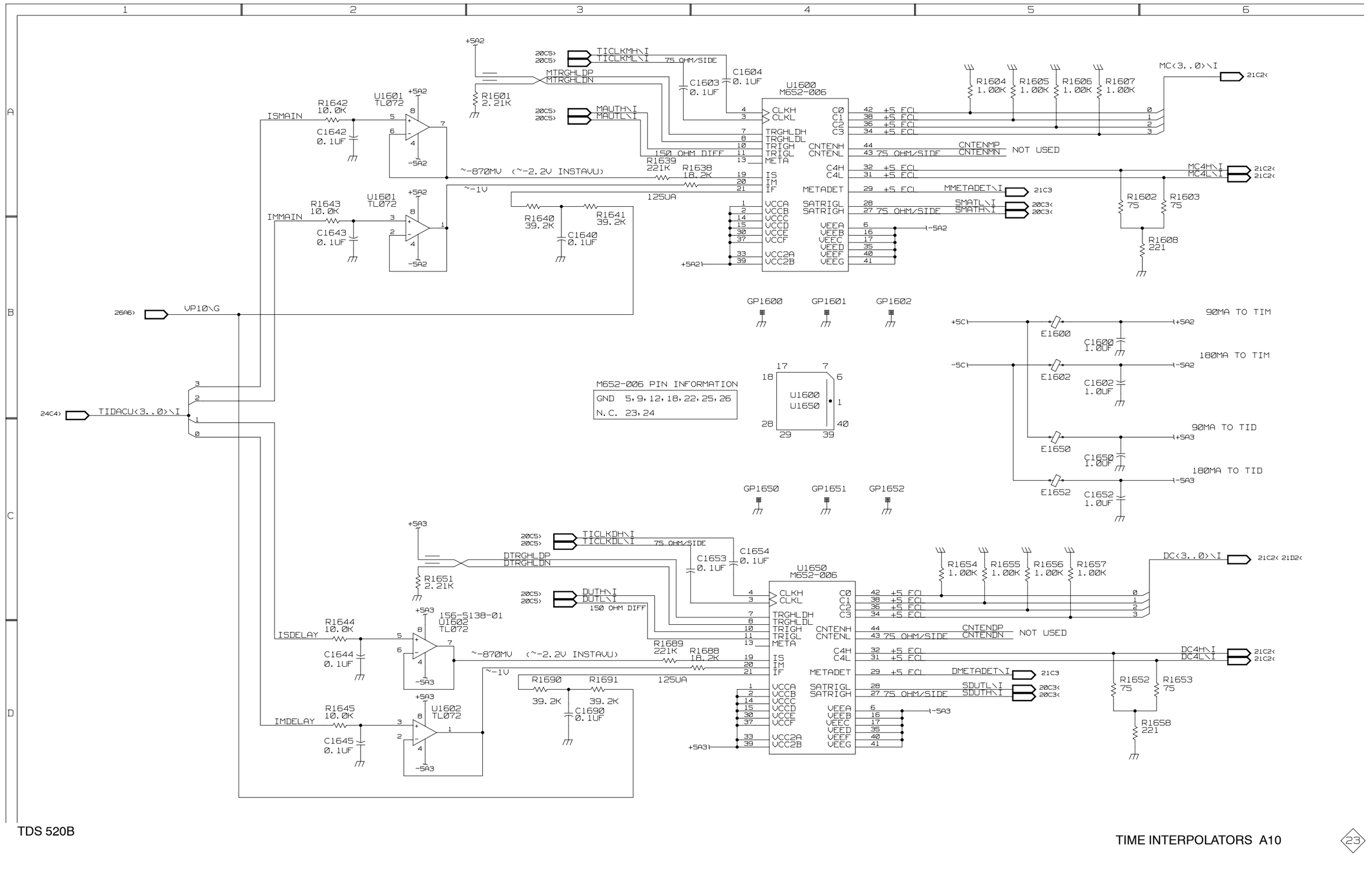
POWER	GND	+5D2
ADG308	13, 19, 24, 33, 52 60, 68, 88, 90 101, 105, 117 140, 146, 155	15, 21, 26, 47, 55 65, 72, 99, 103 119, 142, 148 157
X24C02	4	8
74HCT86	7	14
74F132	7	14
74F02	7	(+5D) 14
74F138	8	(+5D) 16
LM339	12	(+15C) 3

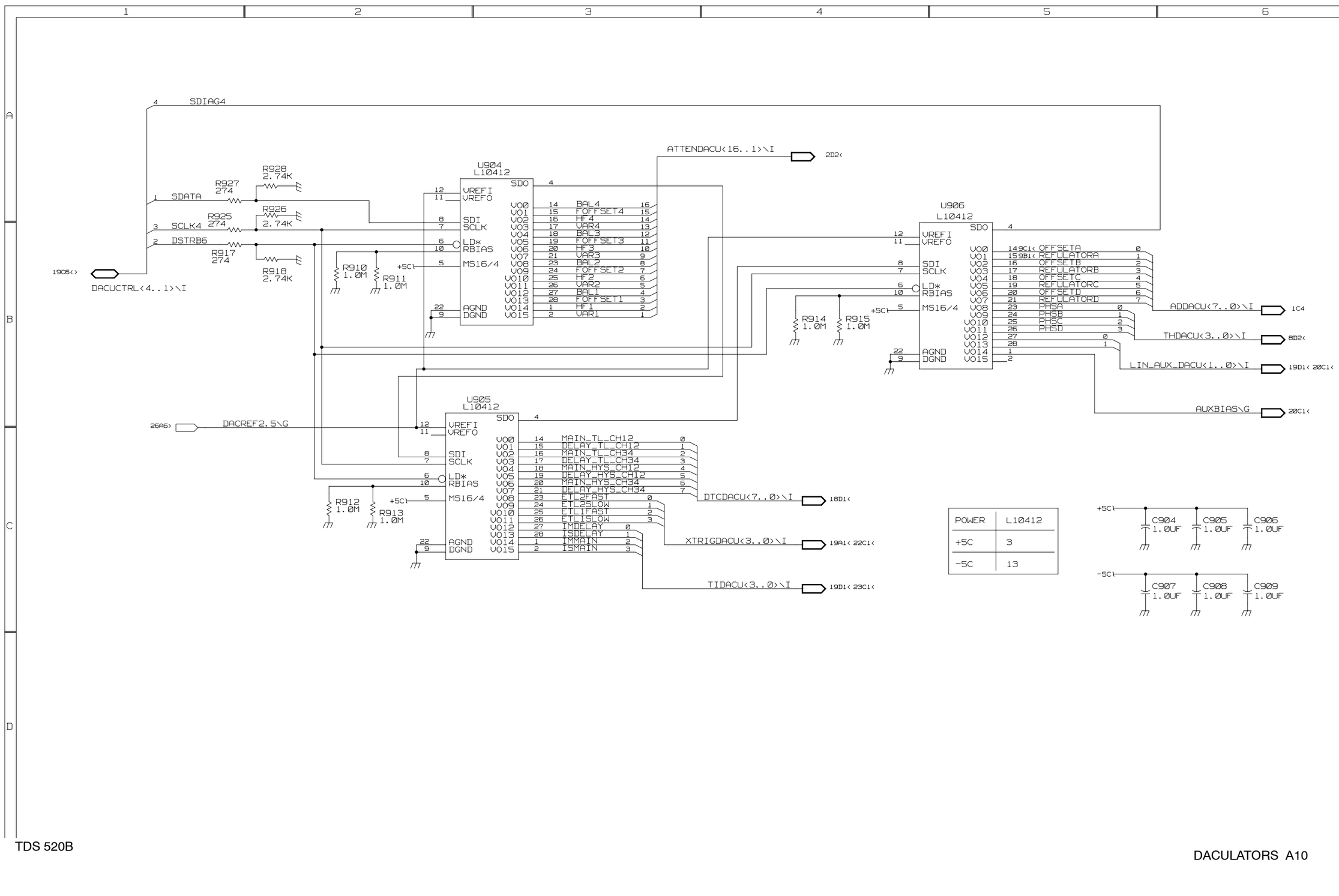
50 OHM INPUT RESISTOR
OVERLOAD DETECTION

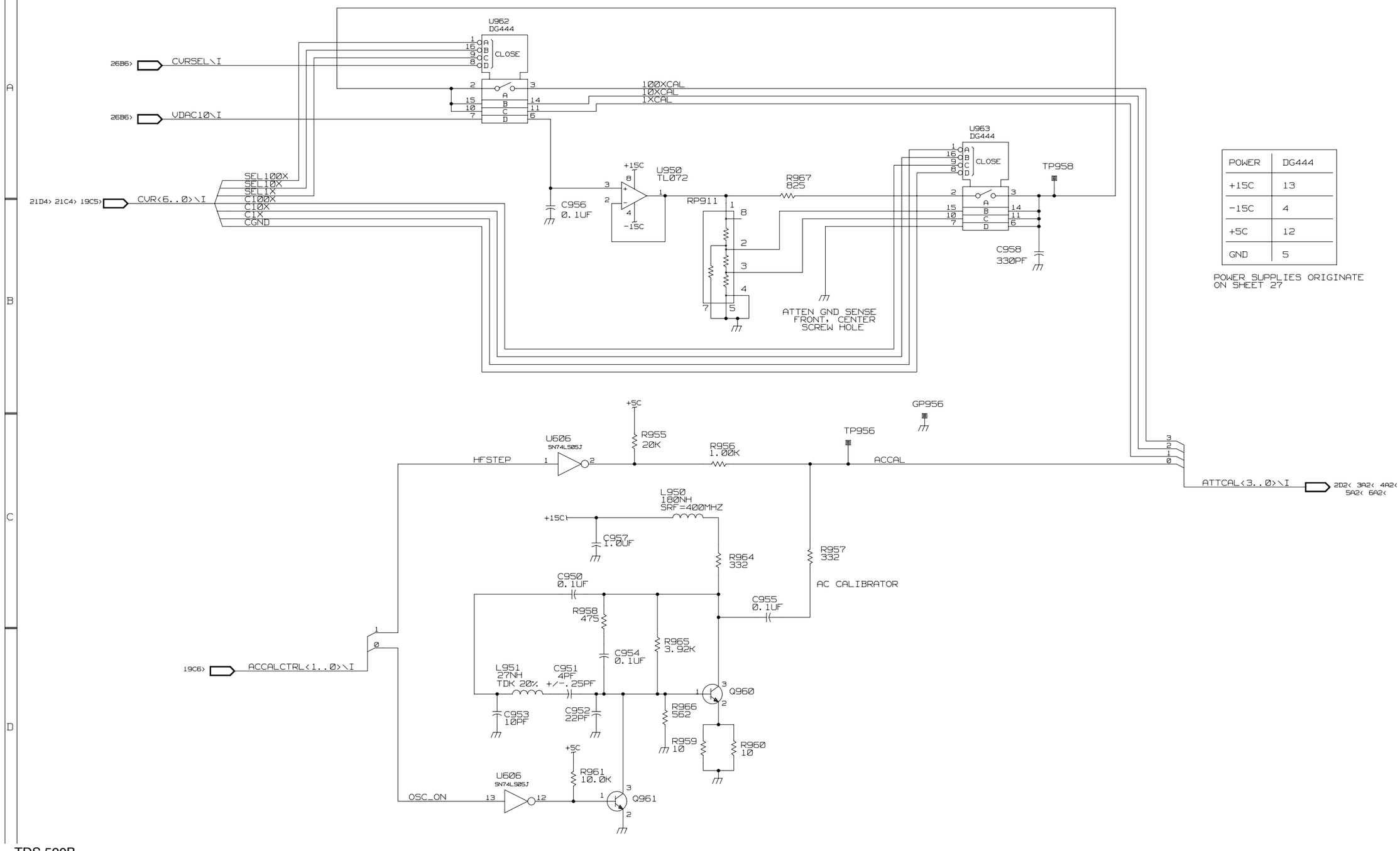


TDS 520B

EXTENDED TRIGGER A10


M652-006 PIN INFORMATION
GND 5, 9, 12, 18, 22, 25, 26
N.C. 23, 24
U1600 M652-006
U1650 M652-006
U1601 TL072
U1602 TL072
156-5138-01
TICLKMH\I
TICLKML\I
TICLKDH\I
TICLKDL\I
75 OHM/SIDE
MTRGHLDP
MTRGHLDN
DTRGHLDP
DTRGHLDN
MAUTH\I
MAUTL\I
DUTH\I
DUTL\I
150 OHM DIFF
150 OHM DIFF
ISMAIN
IMMAIN
ISDELAY
IMDELAY
~-870MV (~-2.2V INSTAVU)
~-1V
125UA
VP10\G
TIDACU<3..0>\I
MC<3..0>\I
DC<3..0>\I
CNTENMP
CNTENMN
CNTENDP
CNTENDN
NOT USED
MMETADET\I
DMETADET\I
SMATL\I
SMATH\I
SDUTL\I
SDUTH\I
MC4H\I
MC4L\I
DC4H\I
DC4L\I
GP1600
GP1601
GP1602
GP1650
GP1651
GP1652
90MA TO TIM
180MA TO TIM
90MA TO TID
180MA TO TID
E1600
E1602
E1650
E1652
C1600 1.0UF
C1602 1.0UF
C1650 1.0UF
C1652 1.0UF


SDIAG4
SDATA
SCLK4
DSTRB6
19C6‹›
DACUCTRL‹4..1›\I
R927 274
R928 2.74K
R925 274
R926 2.74K
R917 274
R918 2.74K
R910 1.0M
R911 1.0M
+5C‹
U904 L10412
VREFI
VREFO
SDI
SCLK
LD*
RBIAS
MS16/4
AGND
DGND
SDO
VO0 BAL4
VO1 FOFFSET4
VO2 HF4
VO3 VAR4
VO4 BAL3
VO5 FOFFSET3
VO6 HF3
VO7 VAR3
VO8 BAL2
VO9 FOFFSET2
VO10 HF2
VO11 VAR2
VO12 BAL1
VO13 FOFFSET1
VO14 HF1
VO15 VAR1
ATTENDACU‹15..1›\I
2D2‹
U906 L10412
VO0 OFFSETA
VO1 REFULATORA
VO2 OFFSETB
VO3 REFULATORB
VO4 OFFSETC
VO5 REFULATORC
VO6 OFFSETD
VO7 REFULATORD
VO8 PHSA
VO9 PHSB
VO10 PHSC
VO11 PHSD
VO12
VO13
VO14
VO15
R914 1.0M
R915 1.0M
ADDACU‹7..0›\I
1C4
THDACU‹3..0›\I
8D2‹
LIN_AUX_DACU‹1..0›\I
19D1‹ 20C1‹
AUXBIAS\G
20C1‹
U905 L10412
26A6›
DACREF2.5\G
R912 1.0M
R913 1.0M
MAIN_TL_CH12
DELAY_TL_CH12
MAIN_TL_CH34
DELAY_TL_CH34
MAIN_HYS_CH12
DELAY_HYS_CH12
MAIN_HYS_CH34
DELAY_HYS_CH34
ETL2FAST
ETL2SLOW
ETLIFAST
ETLISLOW
IMDELAY
ISDELAY
IMMAIN
ISMAIN
DTCDACU‹7..0›\I
18D1‹
XTRIGDACU‹3..0›\I
19A1‹ 22C1‹
TIDACU‹3..0›\I
19D1‹ 23C1‹
POWER | L10412
+5C | 3
-5C | 13
C904 1.0UF
C905 1.0UF
C906 1.0UF
C907 1.0UF
C908 1.0UF
C909 1.0UF

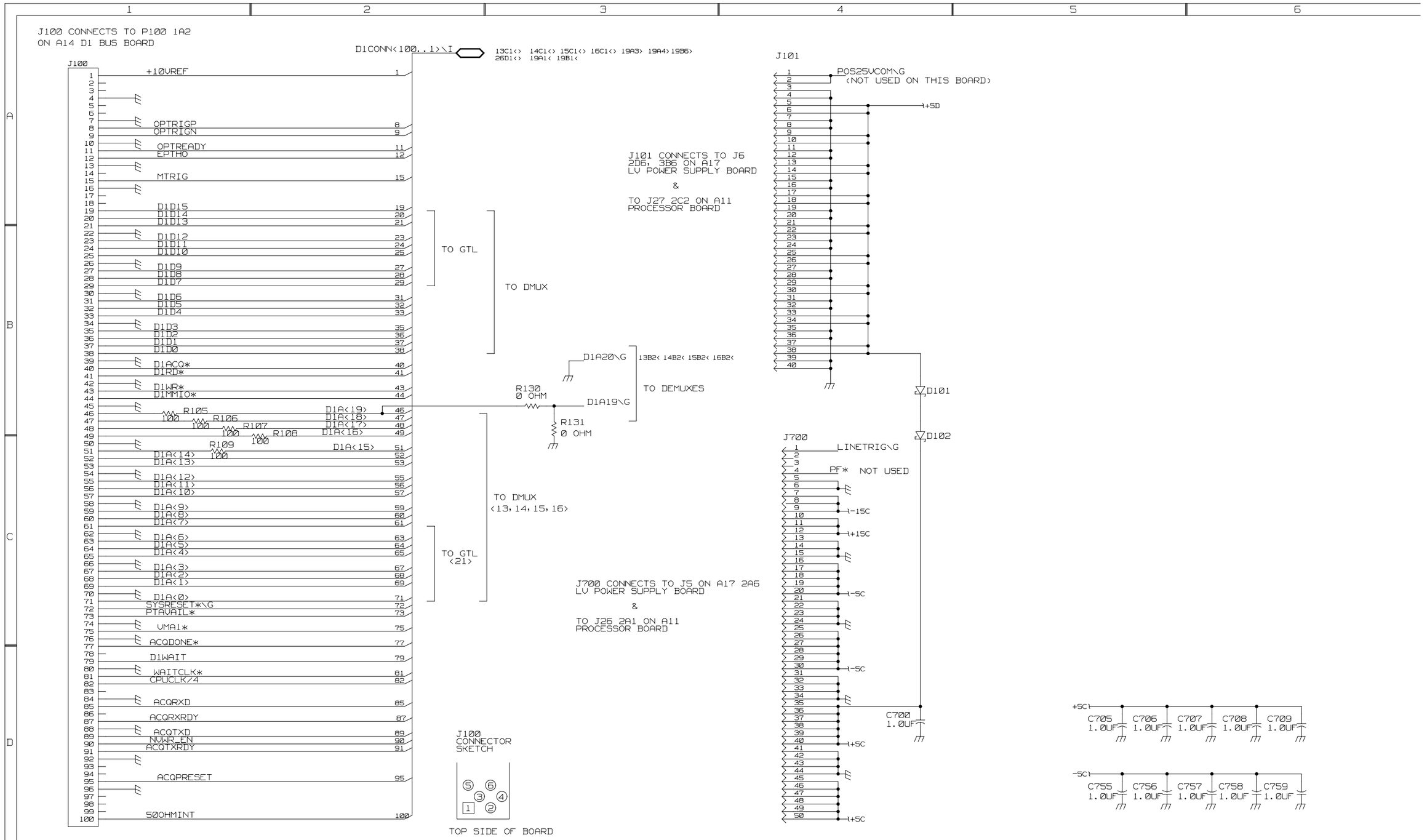


POWER	DG444
+15C	13
-15C	4
+5C	12
GND	5

POWER SUPPLIES ORIGINATE ON SHEET 27

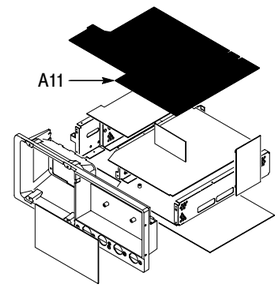
POWER	GND	+5D1	-5A4	+15C	-15C
68HC705	41	10			
AD667	16			8	10
74HCT138	8	16			
CD4051	8	16 (+5A4)	7		
TL074				4	11
74HCT139	8	16			
74LS05	7	14			

PRCTRL<4..0>\I
2A1<>
7A2<>
PRDATA<1>
PRDATA<2>
PRDATA<3>
PRDATA<4>
PRCLOCK
17D6>
PLLDIAG\I
D1CONN<100..1>\I
19A1<
19B6>
19A3>
15C1<>
13C1<>
14C1<>
16C1<>
19A4>
27A2<>
19B1<
R601 10
R602 10
R603 10
R604 10
C650 1000PF
C651 1000PF
C652 1000PF
C653 1000PF
R605 1.00K
R606 1.00K
R607 1.00K
R608 1.00K
CR605
CR606
CR607
CR608
+5C
+5D1
U600 68HC705B5
PD0/AN0
PD1/AN1
PD2/AN2
PD3/AN3
PD4/AN4
PD5/AN5
PD6/AN6
PD7/AN7
VPP6
NC
VRH
VRL
OSC1
OSC2
RESET
IRQ
RDI
SCLK
TDO
TCMP1
TCMP2
PLMA
PLMB
TCAP1
TCAP2
PA0
PA1
PA2
PA3
PA4
PA5
PA6
PA7
PB0
PB1
PB2
PB3
PB4
PB5
PB6
PB7
PC0
PC1
PC2/ECLK
PC3
PC4
PC5
PC6
PC7
R610 1.00K
R615 2.21K
R617 4.75K
RT617 4.7K
C959 1.0UF
U600 68HC705
U605 SN74LS05J
U606 SN74LS05J
U606 SN74LS05J
U606 SN74LS05J
+10VREF
26A6<
27A1<
ALL/CPUCLK4
82 CPUCLK4*
95 ACQPRESET*
85 ACQRXD
89 ACQTXD
87 ACQRXRDY
91 ACQTXRDY
U900 AD667
C901 0.1UF
C902 0.1UF
U900 AD667
DB11_MSB_
DB10
DB9
DB8
DB7
DB6
DB5
DB4
DB3
DB2
DB1
DB0_LSB_
4 /LSB
V OUT
20V SPAN
10V SPAN
SUM JCT
VREF OUT
BIP OFFSET
VREF IN
AGND
CS
A0
A1
A2
A3
R900 274
C900 10PF
R901 75
R902 100
R904 2.21K
R903 11.0K
U903 TL074
U903 TL074
U903 TL074
R189 2.21K
C189 0.1UF
+10VREF
26D2>
VP10\G
22C1<
11B1<
9B1<
10B1<
12B1<
23B1<
R906 11.0K
DACREF2.5\G
24C1<
+/-2.5V
R905 2.74K
+10V
+/-10V
VDAC10\I
25A1<
U902 74HCT138N
CURSEL\I
25A1<
U934 CD4051
INH
DMUX
U935 TL074
R935 11.0K
R936 11.0K
R937 11.0K
R938 11.0K
R919 100
R920 100
R921 100
R922 100
C939 0.1
C935 0.01
C940 0.1
C936 0.01
C941 0.1
C937 0.01
C942 0.1
C938 0.01
POFFSET1
POFFSET2
POFFSET3
POFFSET4
OFFSET1
OFFSET2
OFFSET3
OFFSET4
DAC<7..0>\I
2A1<
U601 74HCT139N
U901 74HCT138N
R639 100
C644 1000PF
E937
E936
E934
E935
C945 1.0UF
C946 1.0UF
C948 1.0UF
C949 1.0UF

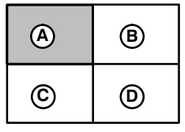

J100 CONNECTS TO P100 1A2
ON A14 D1 BUS BOARD
J100
+10VREF
OPTRIGP
OPTRIGN
OPTREADY
EPTHO
MTRIG
D1D15
D1D14
D1D13
D1D12
D1D11
D1D10
D1D9
D1D8
D1D7
D1D6
D1D5
D1D4
D1D3
D1D2
D1D1
D1D0
D1ACQ*
D1RD*
D1WR*
D1MMIO*
R105 100
R106 100
R107 100
R108 100
R109 100
D1A<19>
D1A<18>
D1A<17>
D1A<16>
D1A<15>
D1A<14>
D1A<13>
D1A<12>
D1A<11>
D1A<10>
D1A<9>
D1A<8>
D1A<7>
D1A<6>
D1A<5>
D1A<4>
D1A<3>
D1A<2>
D1A<1>
D1A<0>
SYSRESET*\G
PTAVAIL*
VMA1*
ACQDONE*
D1WAIT
WAITCLK*
CPUCLK/4
ACQRXD
ACQRXRDY
ACQTXD
NVWR_EN
ACQTXRDY
ACQPRESET
50OHMINT
D1CONN<100..1>\I
13C1<> 14C1<> 15C1<> 16C1<> 19A3> 19A4> 19B6>
26D1<> 19A1< 19B1<
TO GTL
TO DMUX
TO DMUX
<13, 14, 15, 16>
TO GTL
<21>
J100
CONNECTOR
SKETCH
TOP SIDE OF BOARD
J101 CONNECTS TO J6
2D6, 3B6 ON A17
LV POWER SUPPLY BOARD
&
TO J27 2C2 ON A11
PROCESSOR BOARD
D1A20\G
13B2< 14B2< 15B2< 16B2<
TO DEMUXES
R130
0 OHM
D1A19\G
R131
0 OHM
J101
POS25VCOM\G
<NOT USED ON THIS BOARD>
+5D
D101
D102
J700
LINETRIG\G
PF* NOT USED
-15C
+15C
-5C
-5C
+5C
C700
1.0UF
J700 CONNECTS TO J5 ON A17 2A6
LV POWER SUPPLY BOARD
&
TO J25 2A1 ON A11
PROCESSOR BOARD
+5C
C705 1.0UF
C706 1.0UF
C707 1.0UF
C708 1.0UF
C709 1.0UF
-5C
C755 1.0UF
C756 1.0UF
C757 1.0UF
C758 1.0UF
C759 1.0UF

The following parts are excluded from the TDS 520B:

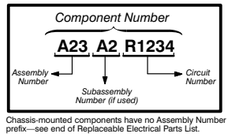
U108	U109	U110
U111	U200	U201
U202	U203	U250
U834	U835	U836
U837		



G9B-2043-00



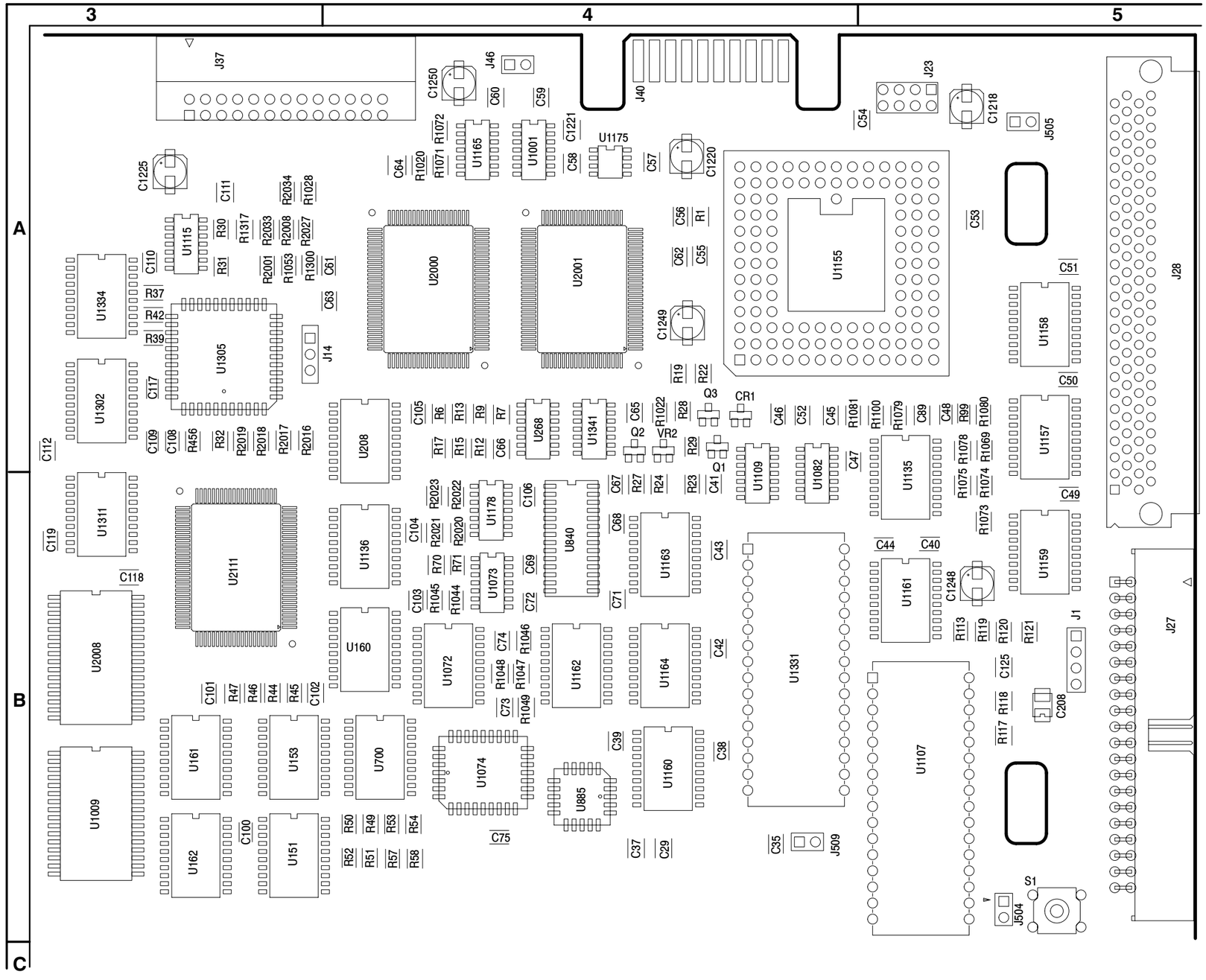
COMPONENT NUMBER EXAMPLE



Chassis-mounted components have no Assembly Number prefix—see end of Replaceable Electrical Parts List.

STATIC SENSITIVE DEVICES

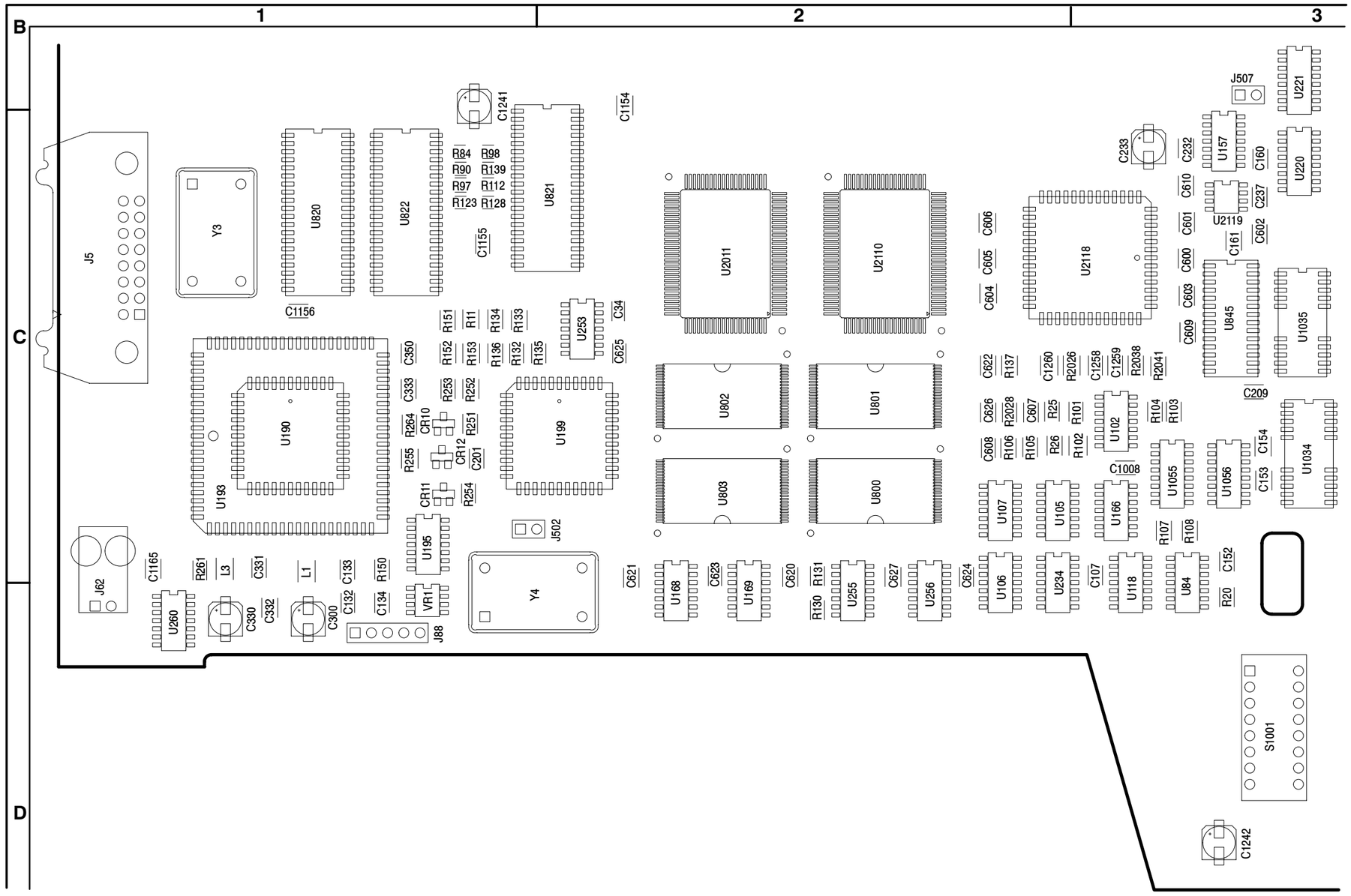
Figure 5–11: A11 Processor board (section A)



The following parts are excluded from the TDS 520B:

R13	R15	R32
R37	R39	R45
R47	R49	R52
R58	R113	R230
R121	U2008	U2111

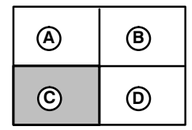
Figure 5–12: A11 Processor board (section B)



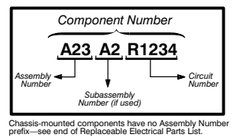
The following parts are excluded from the TDS 520B:

C350	J62	R101
R103	R106	R107
R261	R264	U105
U106	U107	U260
U820	U821	U822

G9B–2043–00



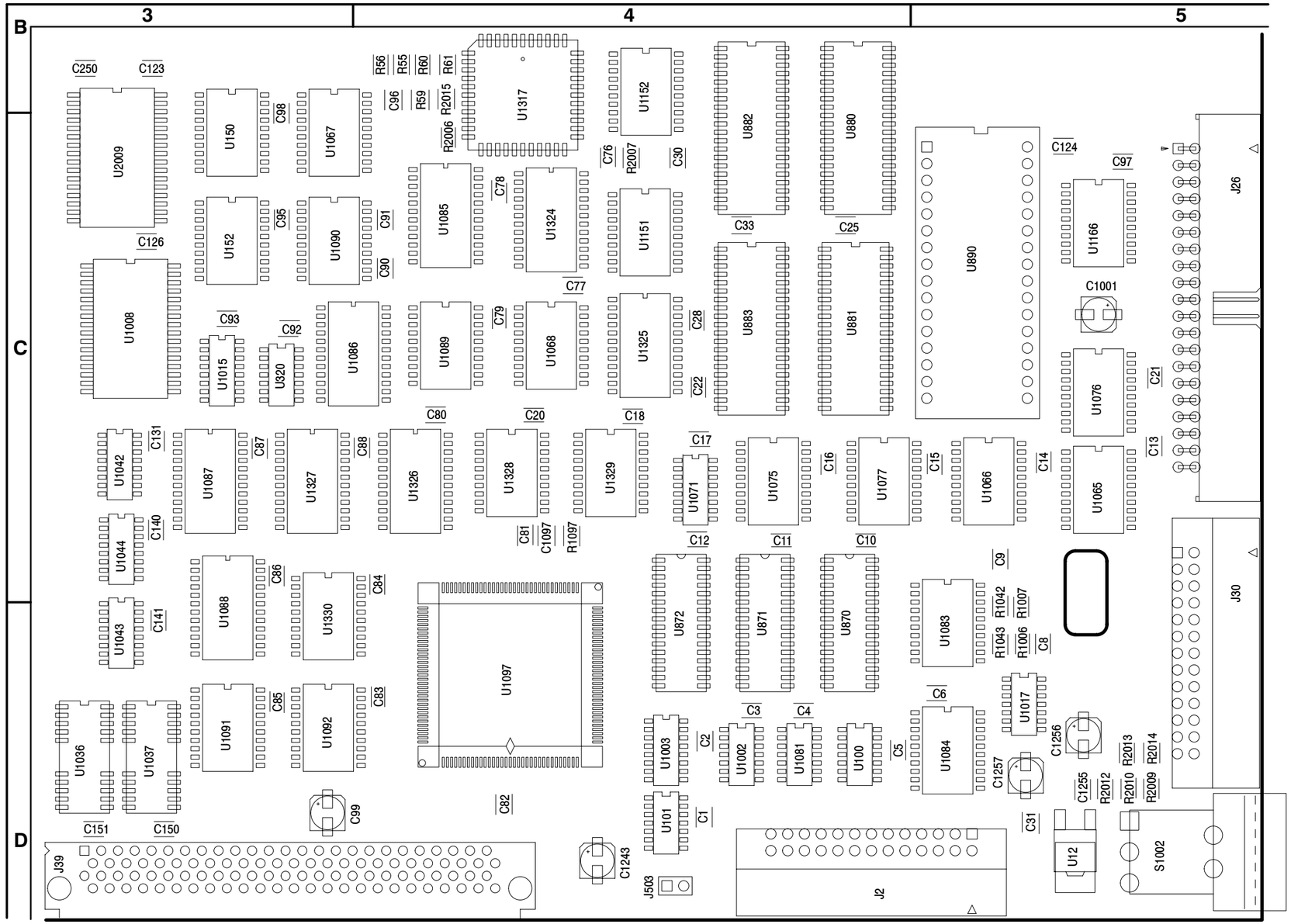
COMPONENT NUMBER EXAMPLE



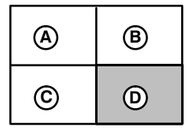
Chassis-mounted components have no Assembly Number prefix—see end of Replaceable Electrical Parts List.

STATIC SENSITIVE DEVICES

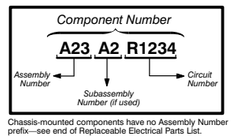
Figure 5–13: A11 Processor board (section C)



G9B–2043–00



COMPONENT NUMBER EXAMPLE



Chassis-mounted components have no Assembly Number prefix—see end of Replaceable Electrical Parts List.

STATIC SENSITIVE DEVICES

The following parts are excluded from the TDS 520B

J30 U2009

Figure 5–14: A11 Processor board (section D)

A11 Processor Component Locator

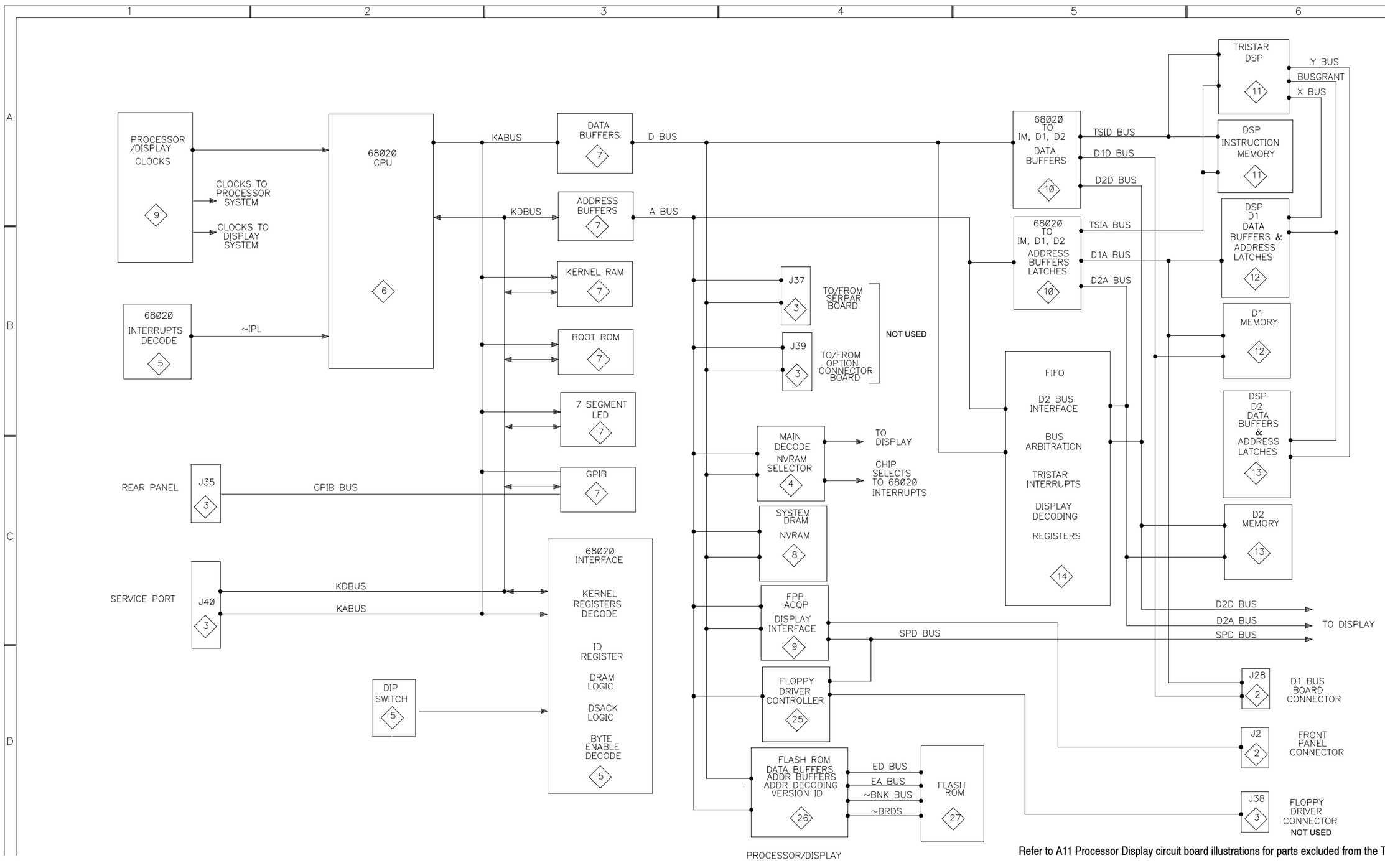
CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION
C1	D4	15A4	C120	B3	15D5	C209	C3	15D6	C55	A4	15B5	C85	D3	15C4	L3	C1	23A4	R117	B5	8B5	R2022	A4	7B6
C10	C4	15A4	C121	B3	15D5	C21	C5	15A5	C56	A4	15B5	C86	C3	15C4	Q1	A4	6D5	R118	B5	8B5	R2023	A4	7B6
C100	B3	15C5	C1218	A5	15A1	C22	C4	15B4	C57	A4	15B5	C87	C3	15C4	Q2	A4	6D3	R119	B5	8B5	R2026	C2	25B5
C1001	C5	15A2	C122	B3	15D5	C23	B3	15B4	C58	A4	15B5	C88	C3	15C4	Q3	A4	6D3	R12	A4	5D1	R2027	A3	5B1
C1002	A2	15D4	C1220	A4	6D2	C232	C3	25B5	C59	A4	15B5	C89	A5	6B5	R1	A4	5D6	R120	B5	8A5	R2028	C2	25B4
C1005	A2	15D4	C1221	A4	6D2	C233	C3	25B5	C6	D4	15A4	C9	C5	15A4	R10	B1	20D5	R121	B5	8A6	R2033	A3	5C1
C1007	A2	15D4	C1225	A3	15A2	C237	C3	25C5	C60	A4	15B5	C90	C3	15C4	R37	A3	C2	R122	B1	20D5	R2034	A3	5B1
C1008	C2	15D4	C1226	A3	15A1	C24	B2	15B4	C600	C3	25A3	C91	C3	15C4	R39	A3	C2	R123	C1	23C3	R2038	C3	25B5
C101	B3	15C5	C123	B3	15D5	C25	C4	15B4	C601	C3	25A3	C92	C3	15C4	R42	A3	C2	R124	B2	20A5	R2041	C3	25B4
C1017	B2	15D4	C1233	A1	15A2	C250	B3	15D3	C602	C3	25A3	C93	C3	15C4	R100	B2	20A5	R127	B1	20C5	R21	A2	19C5
C1019	A2	15D4	C124	C5	15D3	C251	B3	15D4	C603	C3	25A3	C94	B1	20D4	R1006	D5	14A6	R128	C1	23C3	R22	A4	6D5
C102	B3	15C5	C1240	B2	15A1	C252	B2	15D4	C604	C2	25A3	C95	C3	15C4	R1007	C5	14A6	R13	A4	5D1	R23	A4	6D5
C1021	A2	15D4	C1241	B1	15A2	C253	B2	15D4	C605	C2	25A3	C96	B3	15C4	R101	C2	4B5	R130	D2	25C6	R24	A4	6D2
C1024	A2	15D5	C1242	D3	15A2	C254	A2	15D4	C606	C2	25A3	C97	C5	15D3	R102	C2	4B5	R1300	A3	5C1	R25	C2	4B5
C103	B4	15C5	C1243	D4	15A2	C26	B2	15B4	C607	C2	25A3	C98	B3	15C5	R1020	A4	5C3	R131	C2	25D6	R251	C1	22C3
C104	B4	15C5	C1248	B5	15A3	C27	B2	15B4	C608	C2	25A3	C99	D3	15A2	R1022	A4	6C1	R1317	A3	9C3	R252	C1	22C3
C1041	A2	15D5	C1249	A4	15A3	C28	C4	15B4	C609	C3	25A3	CR1	A4	6D5	R1028	A3	5B1	R132	C1	25D6	R253	C1	22D5
C105	A4	15C5	C125	B5	15D3	C29	B4	15B4	C61	A3	15B5	CR10	C1	22C5	R103	C3	4C4	R133	C1	25C6	R254	C1	22D5
C106	A4	15C5	C1250	A4	15A2	C3	D4	15A4	C610	C3	25A3	CR11	C1	22C5	R104	C3	4B4	R134	C1	25C6	R255	C1	22D5
C1064	A2	15D5	C1255	D5	2B3	C30	C4	15B4	C62	A4	15B5	CR12	C1	22C5	R1042	C5	14A6	R135	C1	25D6	R26	C2	4B6
C107	C2	15C5	C1256	D5	2B3	C300	D1	22A1	C620	C2	27C1	DS1	A2	7A6	R1043	D5	14A6	R136	C1	25D6	R261	C1	23C6
C108	A3	15C5	C1257	D5	2B3	C31	D5	2A1	C621	C2	27C1	J1	B5	7D3	R1044	B4	14B6	R137	C2	25D1	R264	C1	23B4
C109	A3	15D4	C1258	C2	25B5	C32	B1	20D4	C622	C2	27C1	J12	A2	16B2	R1045	B4	14B6	R139	C1	23D3	R27	A4	6D2
C1097	C4	11D1	C1259	C2	25B5	C33	C4	15B4	C623	C2	27C1	J14	A3	5C3	R1046	B4	14C6	R14	A2	19C5	R28	A4	6D3
C1099	A2	15D5	C126	C3	15D5	C330	D1	23A5	C624	C2	27C1	J18	B1	21C6	R1047	B4	14C6	R15	A4	5D1	R29	A4	6D3
C11	C4	15A5	C1260	C2	25B6	C331	C1	23A5	C625	C2	27C1	J2	D4	2A1	R1048	B4	14C6	R150	C1	22B1	R3	B1	20C4
C110	A3	15D4	C13	C5	15A5	C332	D1	23A5	C626	C2	27C2	J20	A1	2C1	R1049	B4	14C6	R151	C1	22A4	R30	A3	9B3
C1103	A1	15D5	C131	C3	15D5	C333	C1	23A5	C627	C2	27C2	J23	A4	6A6	R105	C2	4A2	R152	C1	22A4	R31	A3	9B3
C111	A3	15D4	C132	C1	22A1	C34	C2	15B5	C63	A3	15B5	J26	C5	2A2	R1053	A3	5B1	R153	C1	22B5	R32	A3	14C2
C112	A3	15D4	C133	C1	22A1	C35	B4	15B5	C64	A4	15C4	J27	B5	2C2	R106	C2	4A2	R16	B1	20C5	R33	A2	19C5
C1121	A1	15D5	C134	C1	22B1	C350	C1	23B4	C65	A4	15C4	J28	A5	2A6	R1069	A5	6B5	R17	A4	5D1	R34	A2	19C5
C1125	A1	15D5	C14	C5	15A5	C36	A2	15B5	C66	A4	15C4	J30	D5	3A1	R107	C3	4C2	R18	A2	19C5	R35	A1	20C5
C113	A3	15D4	C140	C3	15D5	C37	B4	15B5	C67	A4	15C4	J35	A2	3B1	R1071	A4	5C4	R19	A4	6D5	R36	A2	19C5
C114	A3	15D4	C141	C3	15D5	C38	B4	15B5	C68	B4	15C4	J37	A3	3C1	R1072	A4	5C4	R2	B1	20D4	R37	A3	9C2
C1147	B1	15D5	C15	C4	15A5	C39	B4	15B5	C69	B4	15C4	J38	B1	3A3	R1073	B5	6C5	R20	C3	4D3	R39	A3	9C2
C1149	B1	15D5	C150	D3	15D5	C4	D4	15A4	C7	A2	15A4	J39	D3	3A6	R1074	A5	6C5	R2001	A3	5B1	R4	B3	18B2
C115	B3	15D4	C151	D3	15D6	C40	B5	15B5	C70	B1	20D5	J40	A4	3B3	R1075	A5	6C5	R2006	B4	9C6	R40	A1	20C5
C1150	A1	15D5	C152	C3	15D6	C41	A4	15B5	C71	B4	15C4	J46	A4	5C1	R1078	A5	6B5	R2007	C4	9C6	R41	A1	20C5
C1151	B1	15D6	C153	C3	15D6	C42	B4	15B5	C72	B4	15C4	J5	C1	2B1	R1079	A4	6B5	R2008	A3	5B1	R42	A3	9C2
C1152	B1	15D6	C154	C3	15D6	C43	B4	15B5	C73	B4	15C4	J501	A2	15A6	R108	C3	4C2	R2009	D5	2B3	R43	B2	20D5
C1153	B2	15D6	C16	C4	15A5	C44	B4	15B4	C74	B4	15C4	J502	C1	15A6	R1080	A5	6B5	R2010	D5	2B3	R44	B3	26D3
C1154	B2	15D6	C160	C3	15D6	C45	A4	15B4	C75	B4	15C5	J503	D4	15A6	R1081	A4	6C2	R2012	D5	2B3	R45	B3	26D3
C1155	C1	15D6	C161	C3	15D6	C46	A4	15B4	C76	C4	15C5	J504	B5	15B6	R1097	C4	11D1	R2013	D5	2B3	R456	A3	14C2
C1156	C1	15D6	C162	B3	15D6	C47	A4	15B4	C77	C4	15C5	J505	A5	15B6	R11	C1	22B6	R2014	D5	2B3	R46	B3	26D3
C116	A2	15D4	C163	B3	15D6	C48	A5	15B4	C78	C4	15C5	J506	A1	15B6	R110	B1	20C5	R2015	B4	9C5	R47	B3	26D3
C1165	C1	15D6	C17	C4	15A5	C49	A5	15B4	C79	C4	15C5	J507	B3	15B6	R1100	A4	6C3	R2016	A3	7A6	R49	B3	26D3
C117	A3	15D4	C18	C4	15A5	C5	D4	15A4	C8	D5	15A4	J508	B3	15C6	R111	B1	20D5	R2017	A3	7A6	R5	A2	19C5
C1175	B2	15D6	C19	B1	20D5	C50	A5	15B4	C80	C4	15C5	J509	B4	15C6	R112	C1	23C3	R2018	A3	7A6	R50	B3	26D3
C118	B3	15D4	C2	D4	15A4	C51	A5	15B4	C81	C4	15C5	J51	A2	3C3	R113	B5	8A5	R2019	A3	7A6	R51	B3	26D3
C119	B3	15D5	C20	C4	15A5	C52	A4	15B4	C82	D4	15C5	J62	C1	2D1	R114	B2	20A5	R2020	B4	7B6	R52	B3	26D3
C1197	B2	15D6	C201	C1	22C5	C53	A5	15B4	C83	D3	15C5	J88	D1	22B6	R116	B1	20B5	R2021	B4	7B6	R53	B4	26D4
C12	C4	15A5	C208	B5	15A1	C54	A4	15B5	C84	C3	15C5	L1	C1	22A1									

Figure 5–15: A11 Processor component locator

A11 Processor Component Locator (cont.)

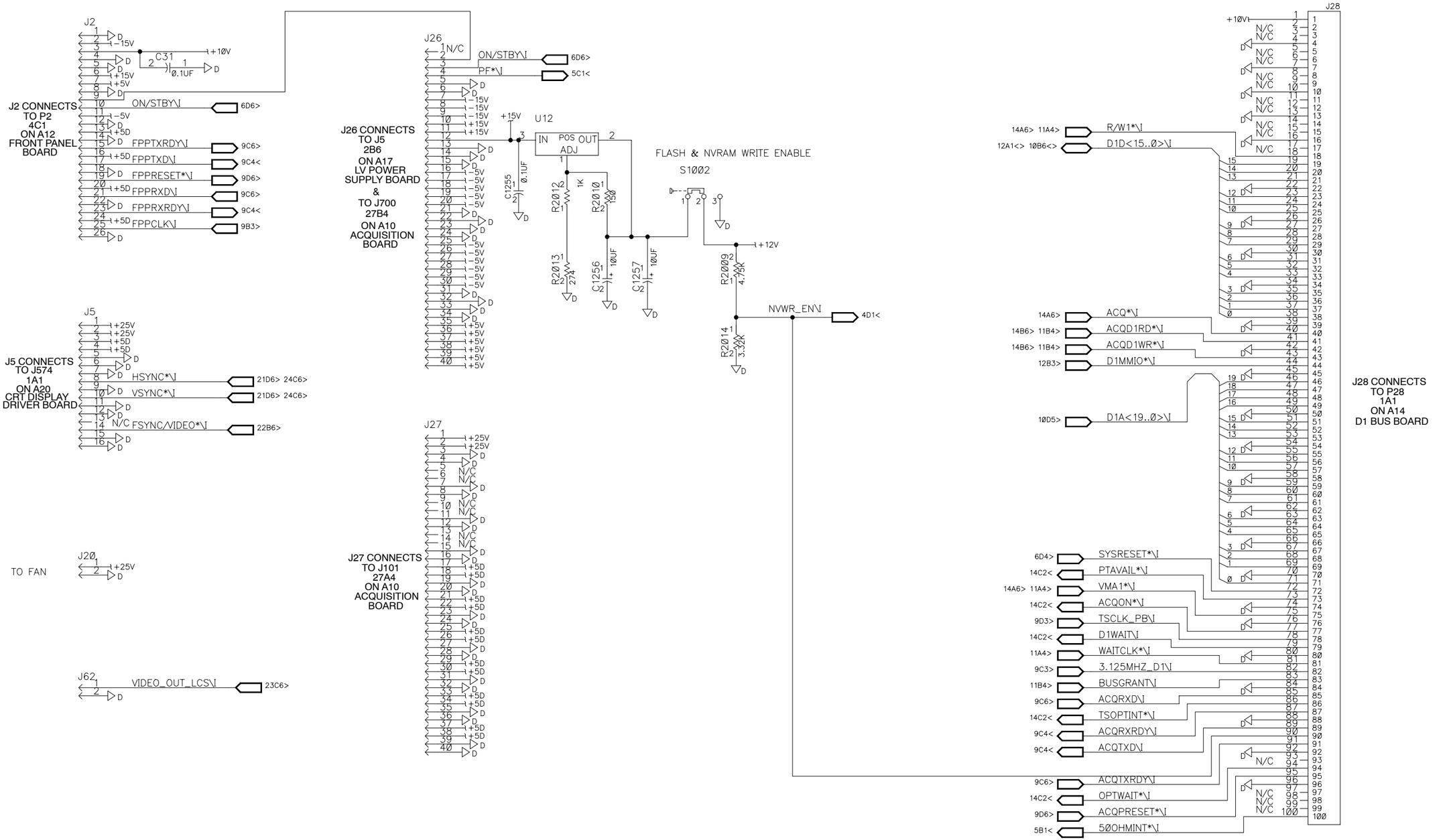
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R7	A4	5D1	S1001	D3	5C1	U84	C3	26B4	U191	A3	16A1	U320	C3	18D2	U1002	D4	12C1	U1082	A4	6C4	U1178	B4	7C5
R8	A2	19C5	S1002	D5	2A3	U100	D4	11B2	U191	A3	16C1	U700	B4	26D4	U1002	D4	12C1	U1082	A4	7A1	U1178	B4	9A3
R9	A4	5D1	U12	D5	2A3	U100	D4	12B1	U193	C1	23B5	U800	C2	27A3	U1002	D4	12D1	U1083	C4	11A3	U1178	B4	9A4
R54	B4	26D4	U28	A2	16B2	U100	D4	13B1	U195	C1	22C2	U801	C2	27C3	U1002	D4	12D1	U1083	C4	14A5	U1302	A3	7B6
R55	B3	26D4	U29	A3	16C2	U100	D4	26A5	U195	C1	22D2	U802	C2	27A4	U1003	D4	11C3	U1084	D4	11C3	U1305	A3	7B4
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R57	B4	26D4	U33	B2	17A2	U101	D4	13D1	U200	D3	20A3	U810	B2	21B4	U1009	B3	12D5	U1086	C3	12D2	U1317	B4	9B5
R58	B4	26D4	U34	A2	17B2	U102	C2	4B4	U201	D3	20B3	U820	C1	23A2	U1015	C3	12A2	U1087	C3	13C2	U1324	C4	10C4
R59	B4	26D3	U35	A2	17C2	U102	C2	4C5	U202	D3	20C3	U821	C1	23B2	U1017	D5	11A2	U1088	C3	13D2	U1325	C4	10C4
R60	B4	26D3	U36	B2	16B2	U105	C2	4C4	U203	D3	20C3	U822	C1	23C2	U1017	D5	14A5	U1089	C4	12A2	U1326	C4	10C3
R61	B4	26D3	U37	B3	16B2	U106	C2	4C4	U208	A3	7A5	U830	B2	20A4	U1017	D5	15B2	U1090	C3	12B2	U1327	C3	10C3
R64	A1	20C5	U38	B3	16C2	U106	C2	4D4	U220	C3	18B2	U831	B1	20B4	U1017	D5	15C2	U1091	D3	13A2	U1328	C4	10B1
R66	B2	20D5	U43	B2	16C4	U107	C2	4C4	U221	B3	18B2	U832	A1	20C4	U1034	C3	13A5	U1092	D3	13B2	U1329	C4	10C1
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R71	B4	14B6	U46	B2	17D4	U110	D3	20C2	U250	B3	21D4	U835	B1	20B6	U1037	D3	13D5	U1109	A4	6B1	U1334	A3	9C2
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R73	A1	20C5	U48	B2	16B5	U118	C3	4B2	U250	B3	24C5	U837	B1	20C6	U1043	D3	13B3	U1115	A3	9C2	U1341	A4	6D4
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R76	B1	20D5	U52	B2	17B4	U150	B3	26A2	U250	B3	24C6	U841	B3	16A3	U1055	C3	4B4	U1115	A3	11D1	U1341	A4	9A4
R77	B2	20B5	U55	A2	19B2	U151	B3	26B2	U251	B3	21C5	U842	B3	16B3	U1056	C3	4A4	U1135	A4	6B4	U2008	B3	12B4
R81	B1	20B5	U56	A2	19B2	U152	C3	26C2	U251	B3	21D4	U843	B2	17A3	U1065	C5	10A4	U1136	B3	7A5	U2009	C3	12D4
R82	A1	20C5	U57	A2	19C2	U153	B3	26C2	U251	B3	21D5	U844	B2	17B3	U1066	C5	10B4	U1151	C4	9A5	U2000	A4	5A2
R83	B1	20D5	U58	A2	19D2	U157	C3	21D3	U251	B3	21D5	U845	C3	25D3	U1067	B3	10B5	U1152	B4	9B5	U2001	A4	5A5
R84	C1	23D3	U59	A2	18A4	U157	C3	15C2	U251	B3	21D5	U870	C4	11A5	U1068	C4	10A5	U1155	A4	6A2	U2011	C2	24A5
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R86	B2	20B5	U61	B2	19A3	U161	B3	26B3	U253	C1	24B3	U872	C4	11C5	U1072	B4	14B5	U1158	A5	7B3	U2101	B2	24A2
R88	B1	20B5	U62	B2	19B3	U162	B3	26C3	U253	C1	24C3	U880	B4	8A2	U1073	B4	14B4	U1159	B5	7B3	U2110	C2	25A2
R89	A1	20C5	U63	A2	20C1	U166	C2	4B2	U253	C1	24D2	U881	C4	8B2	U1073	B4	18D2	U1160	B4	7C3	U2111	B3	14A3
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R91	B2	20A5	U68	B3	16A3	U166	C2	4D2	U256	C2	25C3	U883	C4	8D2	U1073	B4	15B1	U1162	B4	7C2	U2119	C3	25C5
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R94	B1	20B5	U68	B3	15B3	U168	C2	27A1	U260	D1	23D1	U890	C5	8B6	U1075	C4	10A3	U1164	B4	7B2	VR2	A4	6D2
R95	B1	20B5	U68	B3	15C2	U168	C2	27A1	U260	D1	15C1	U1001	A4	5B3	U1076	C5	10B3	U1165	A4	5C4	Y1	A2	9D1
R96	B1	20D5	U79	B2	19A5	U168	C2	27B1	U260	D1	15C1	U1001	A4	5C3	U1077	C4	10B3	U1165	A4	9D5	Y2	A3	9B1
R97	C1	23C3	U80	B2	19A5	U169	C2	27A2	U260	D1	15D1	U1001	A4	5D4	U1081	D4	11B3	U1166	C5	7D4	Y3	C1	23A4
R98	C1	23D3	U84	C3	4C2	U169	C2	27A2	U268	A4	5B6	U1001	A4	6B4	U1081	D4	26B5	U1175	A4	6D2	Y4	C1	25C1
R99	A5	6B5	U84	C3	4D3	U169	C2	27B2	U268	A4	5C6	U1001	A4	6D1	U1082	A4	6B1						

Figure 5–16: A11 Processor component locator (cont.)



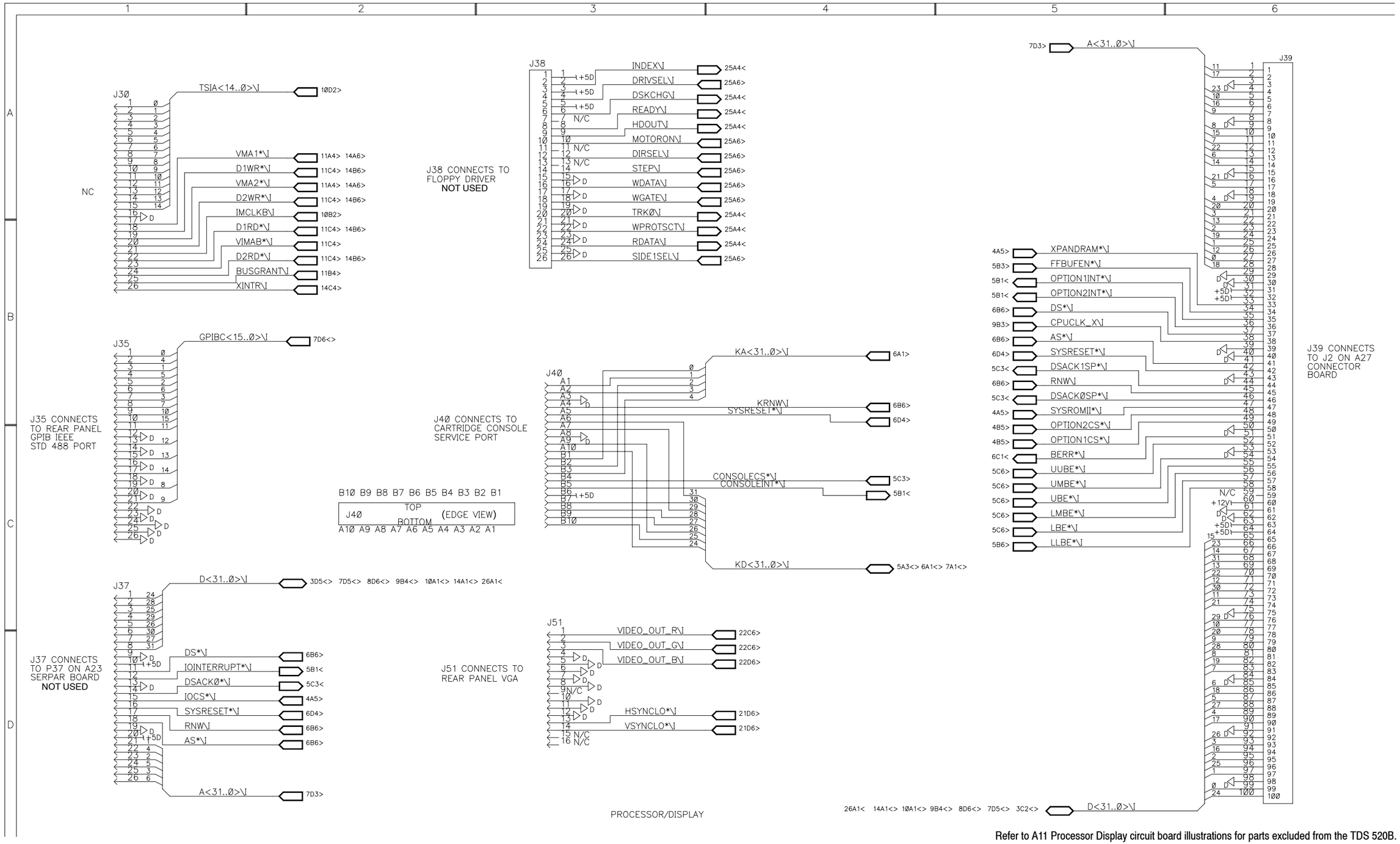
PROCESSOR/DISPLAY

Refer to A11 Processor Display circuit board illustrations for parts excluded from the TDS 520B.

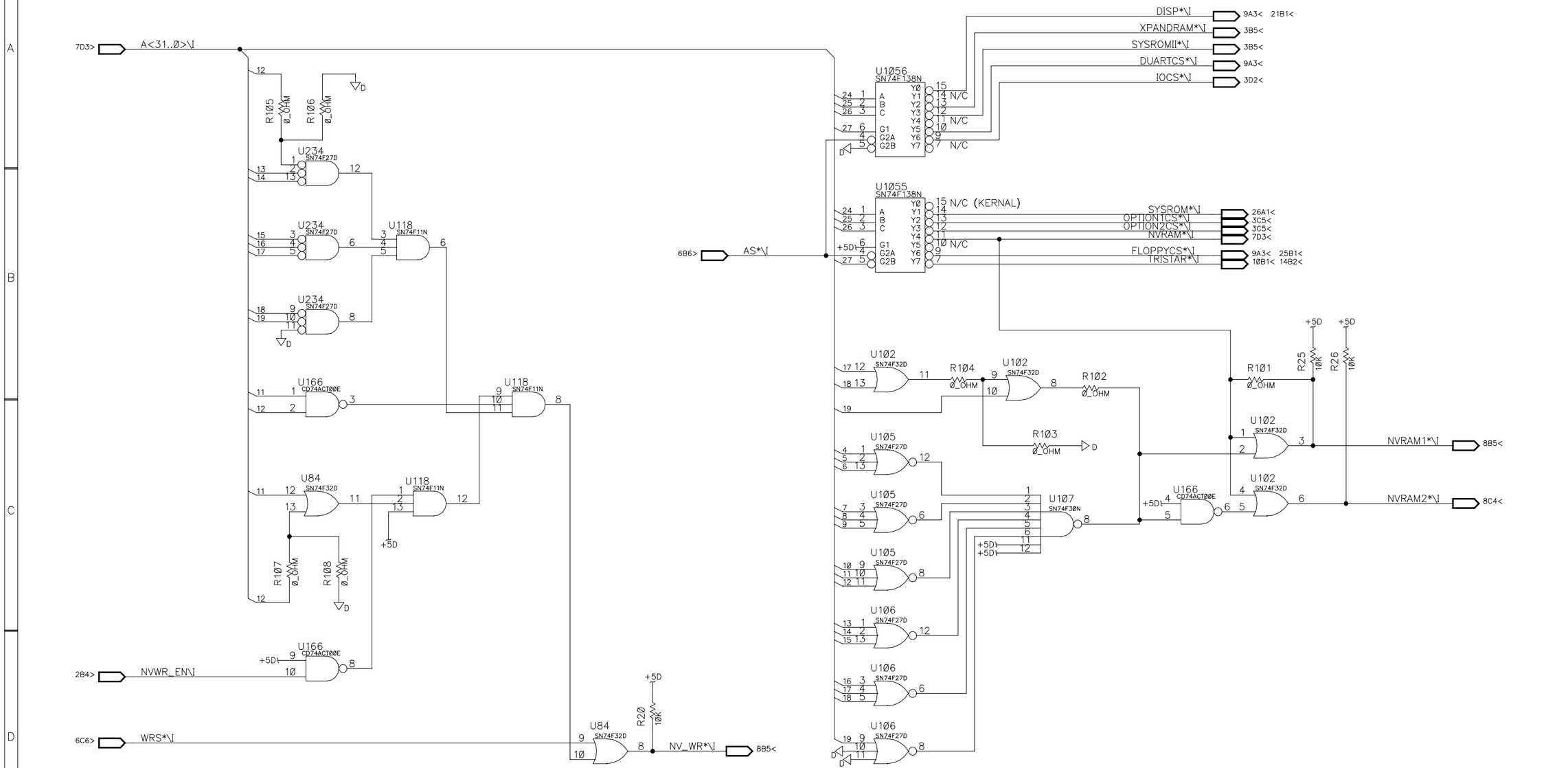


PROCESSOR/DISPLAY

Refer to A11 Processor Display circuit board illustrations for parts excluded from the TDS 520B.

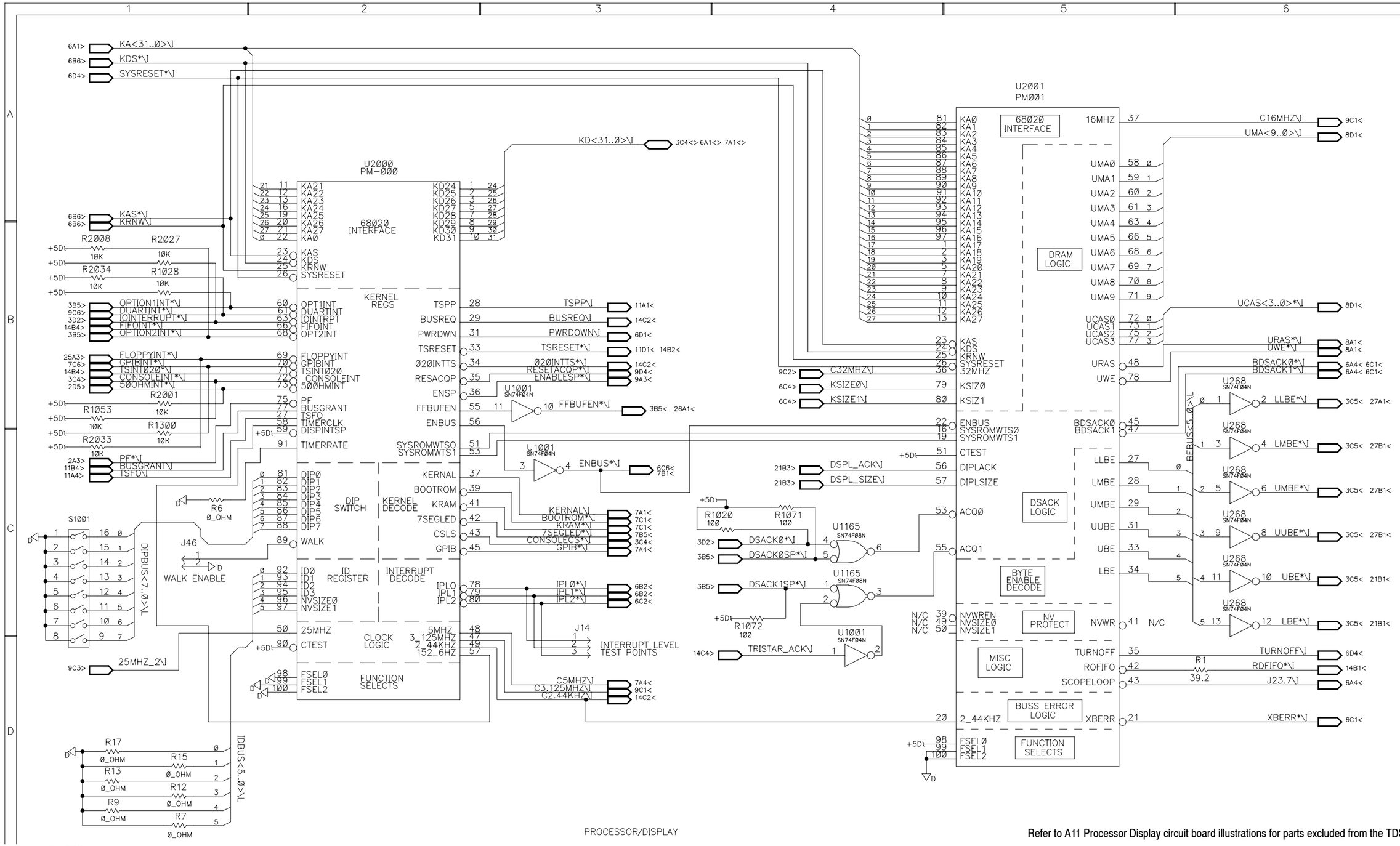


Refer to A11 Processor Display circuit board illustrations for parts excluded from the TDS 520B.



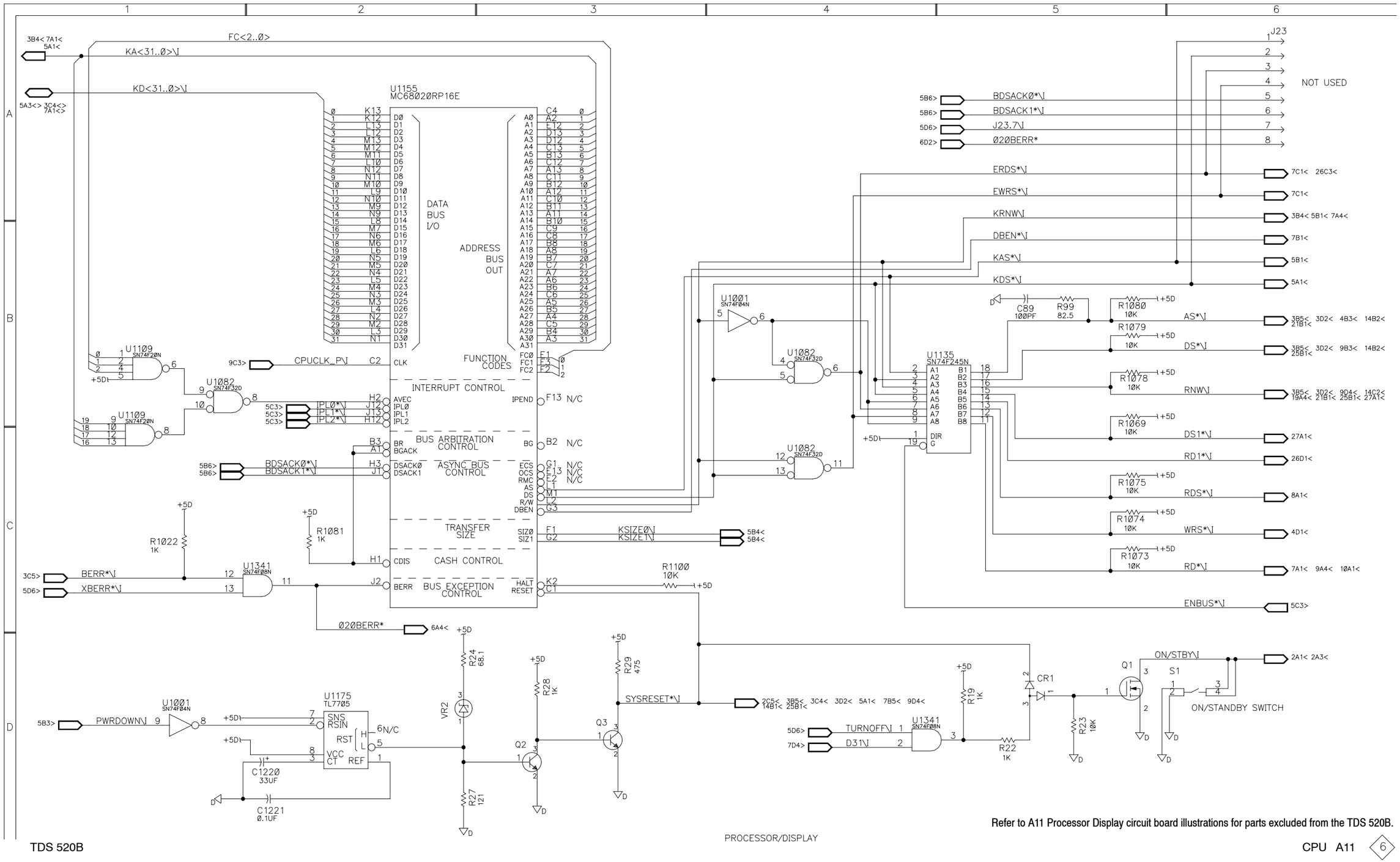
PROCESSOR/DISPLAY

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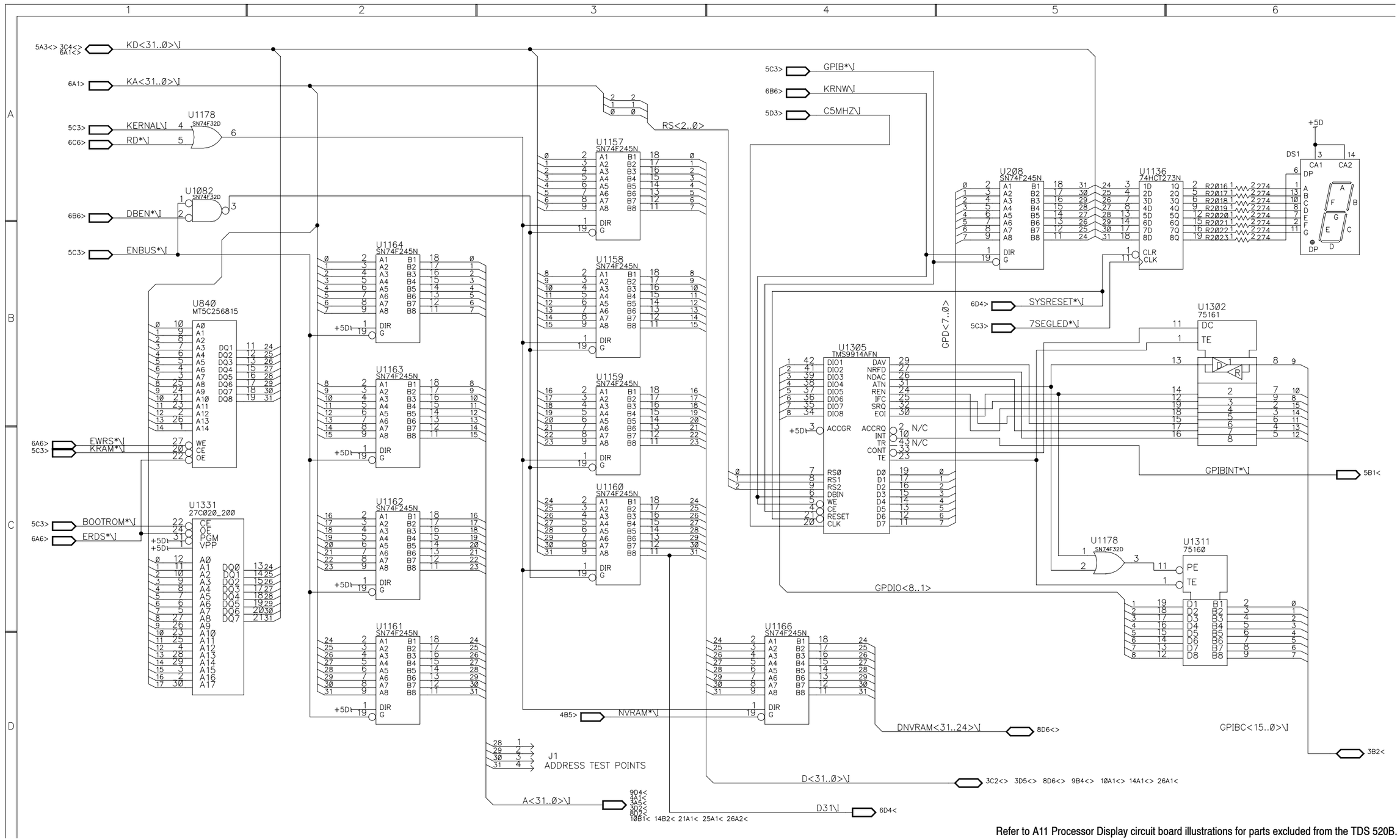


PROCESSOR/DISPLAY

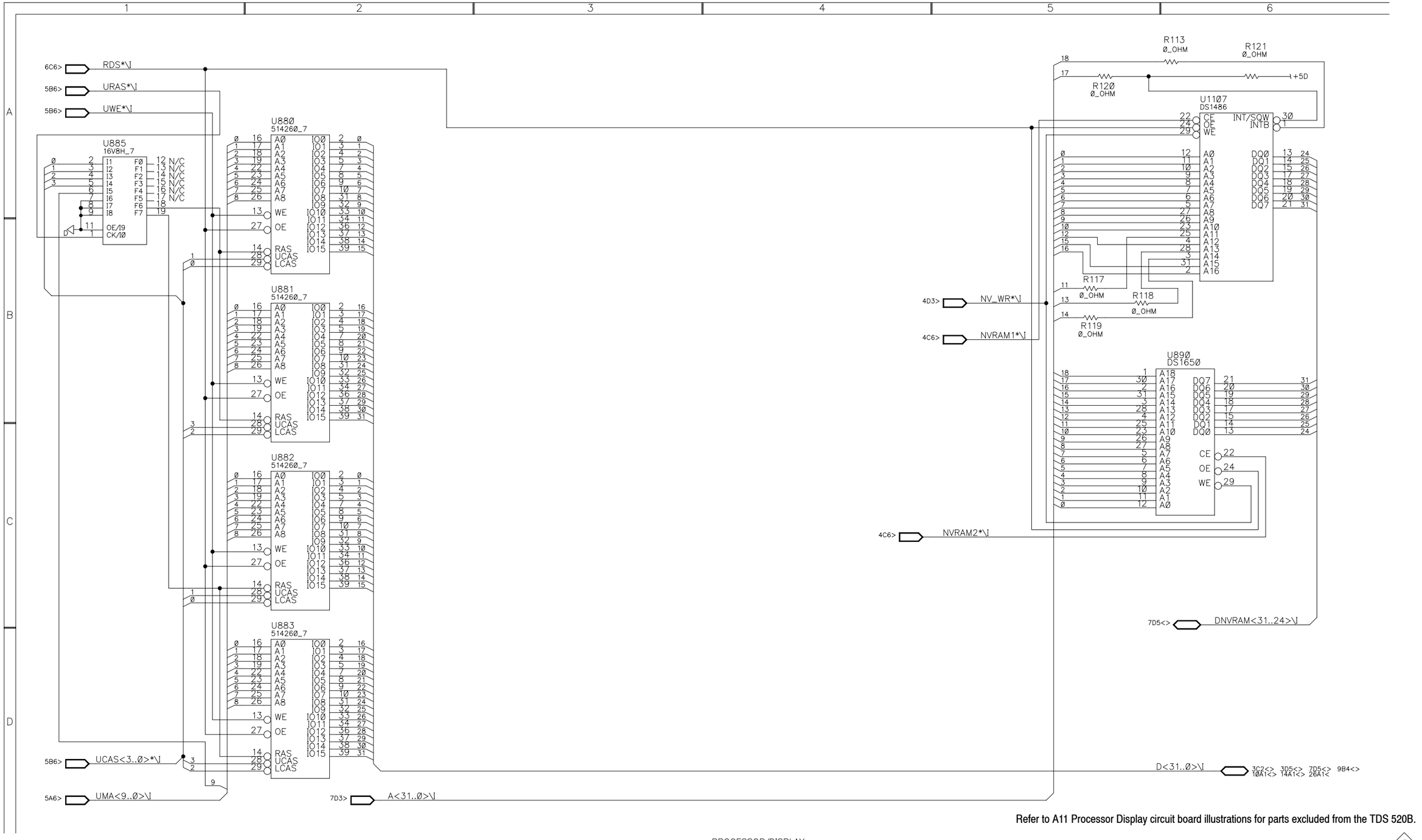
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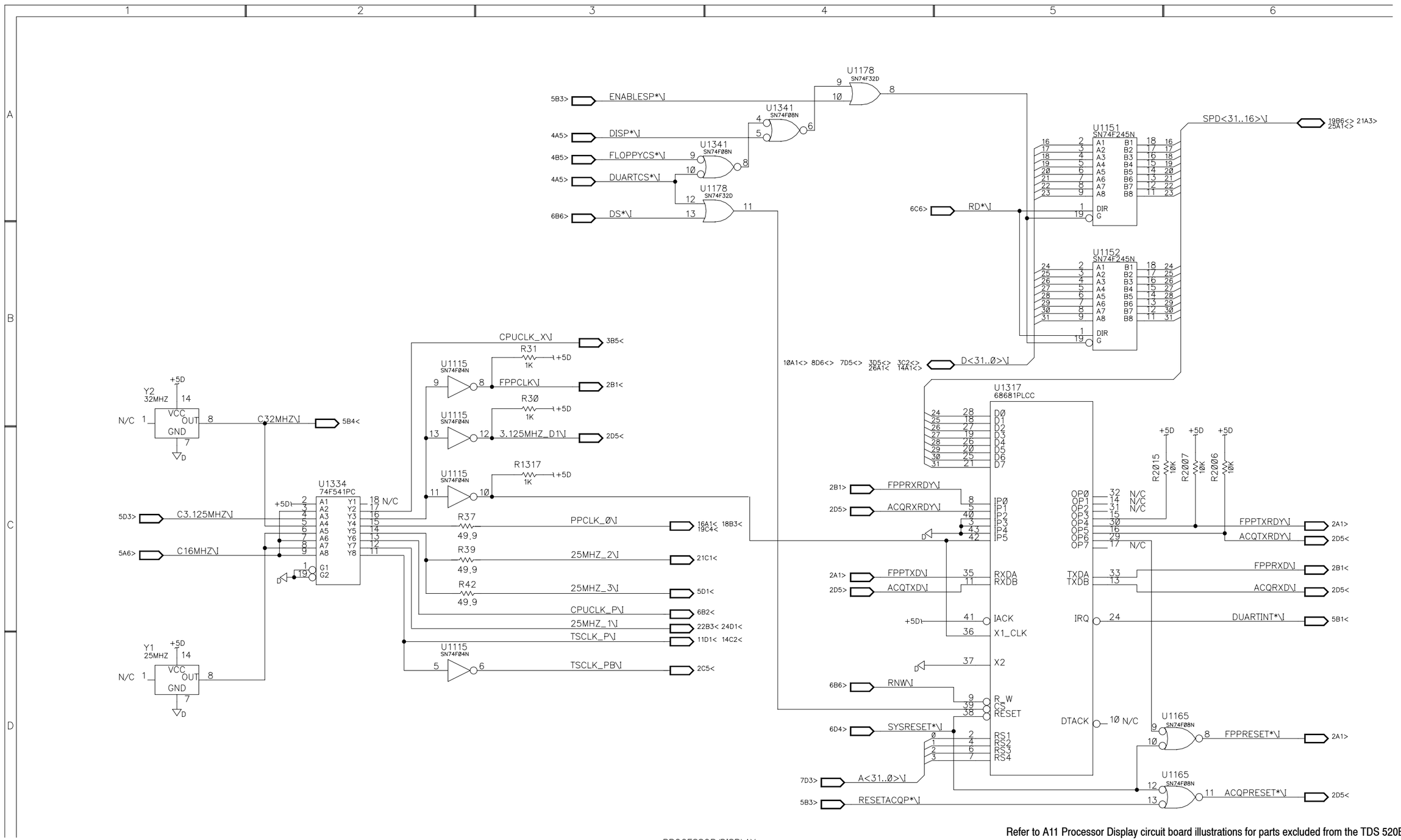
Refer to A11 Processor Display circuit board illustrations for parts excluded from the TDS 520B.



Refer to A11 Processor Display circuit board illustrations for parts excluded from the TDS 520B.

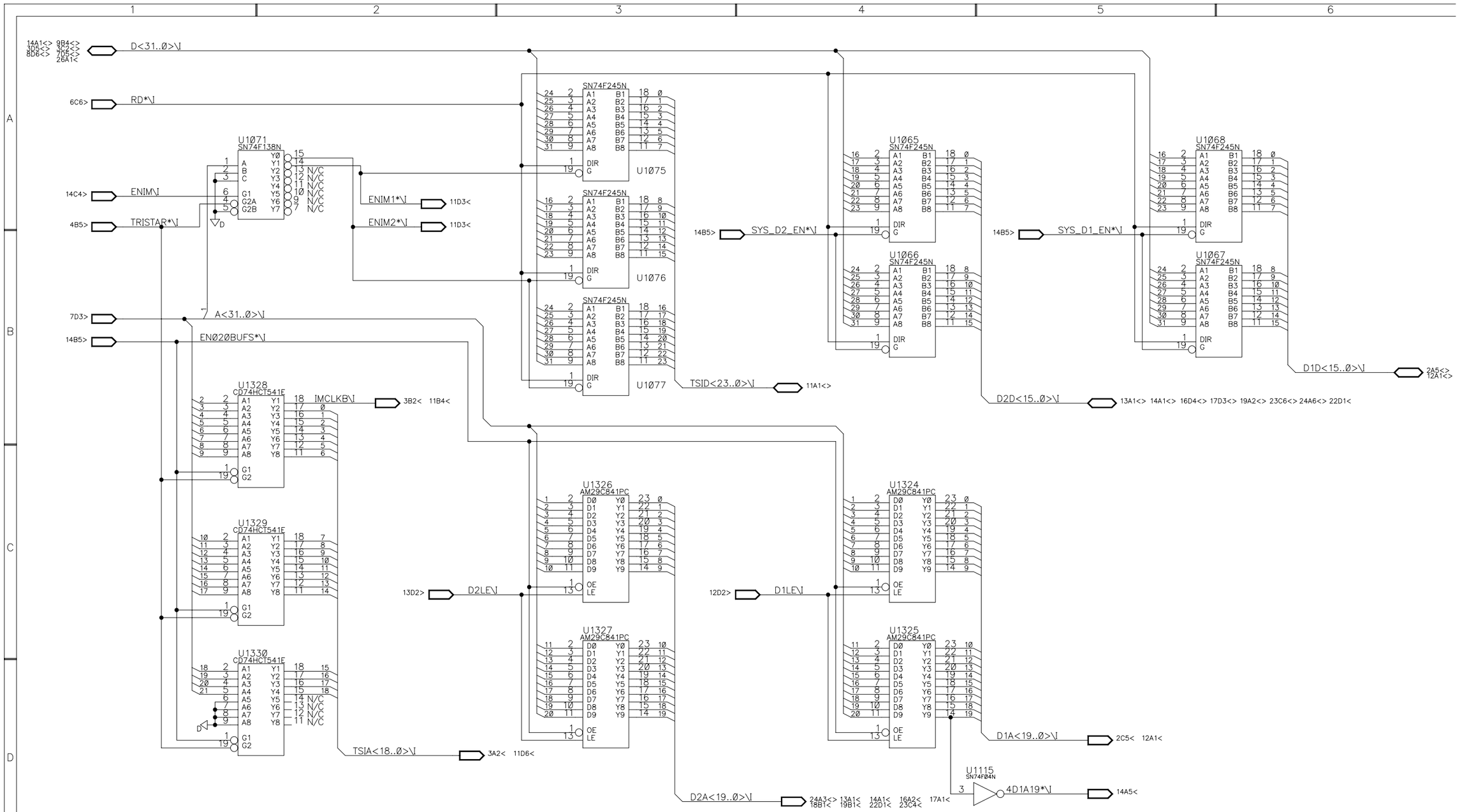


Refer to A11 Processor Display circuit board illustrations for parts excluded from the TDS 520B.

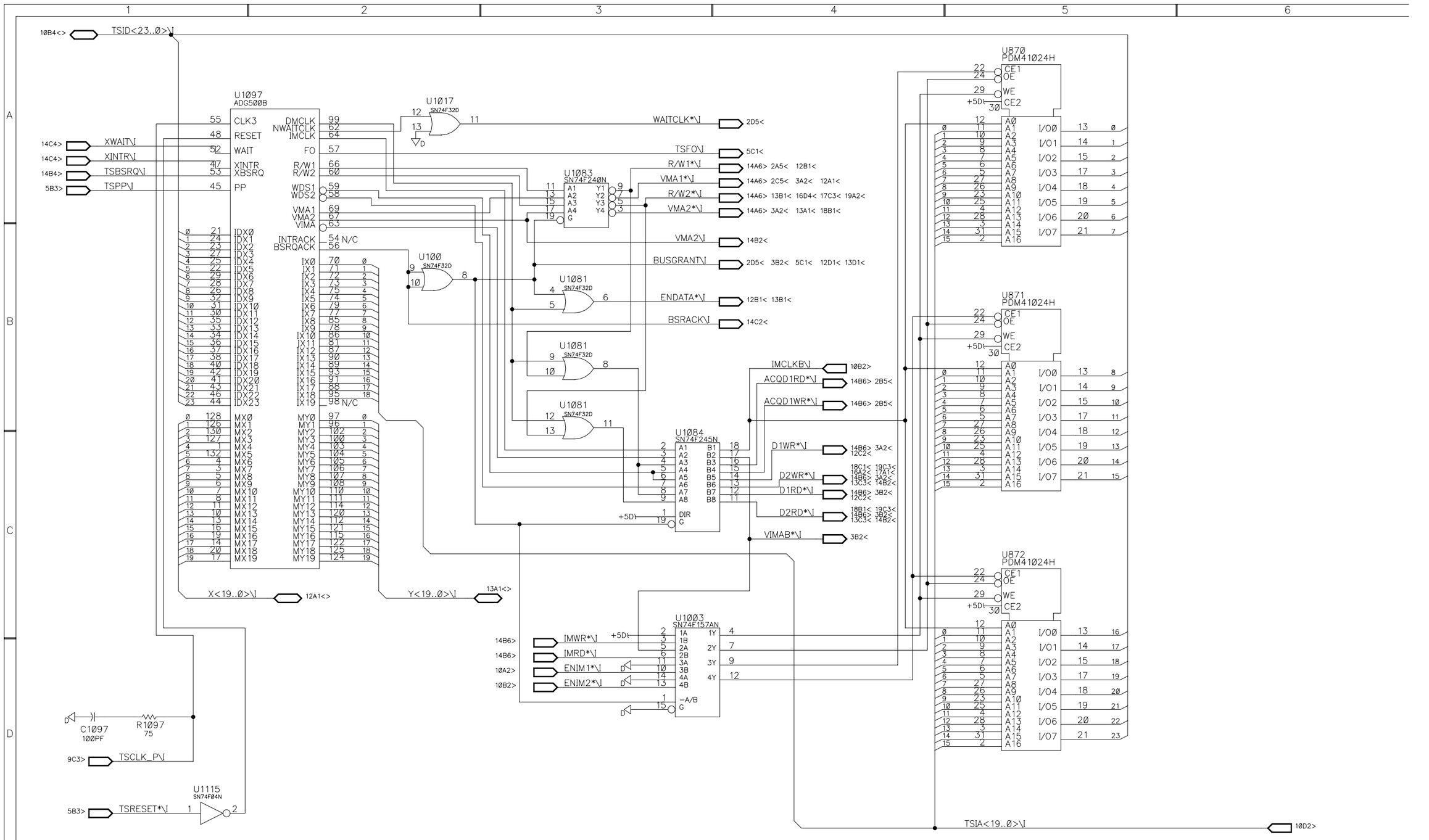


PROCESSOR/DISPLAY

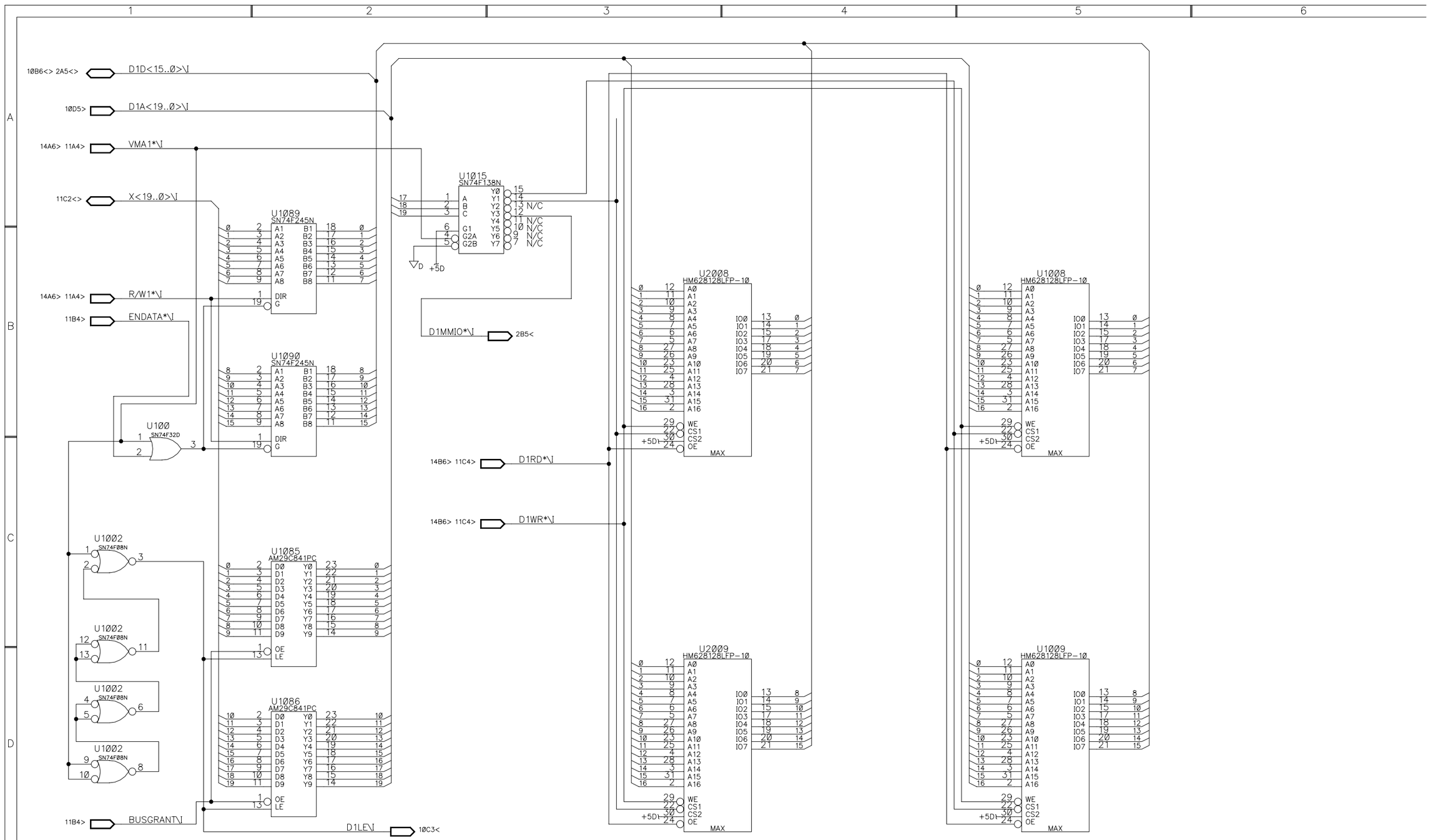
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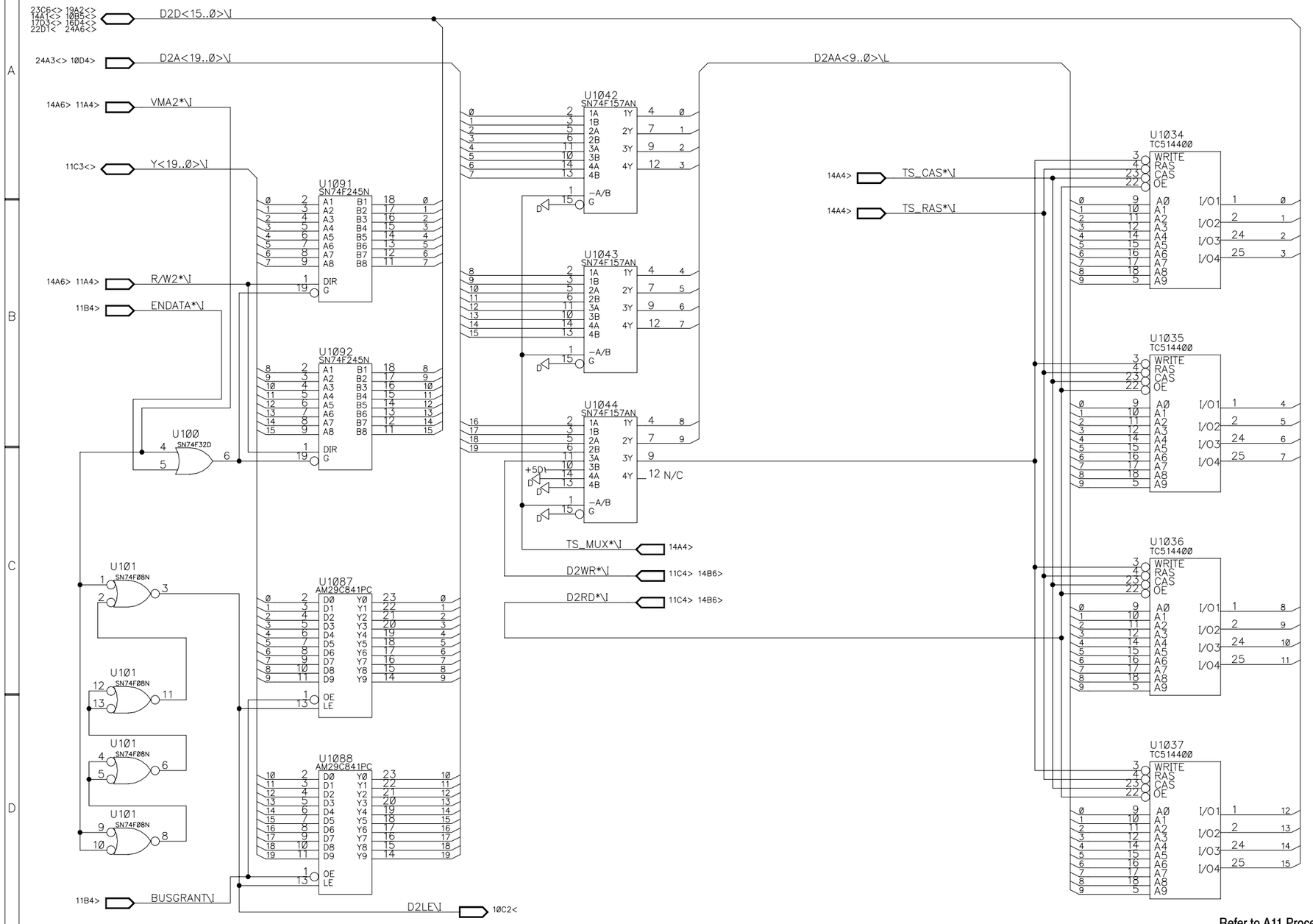
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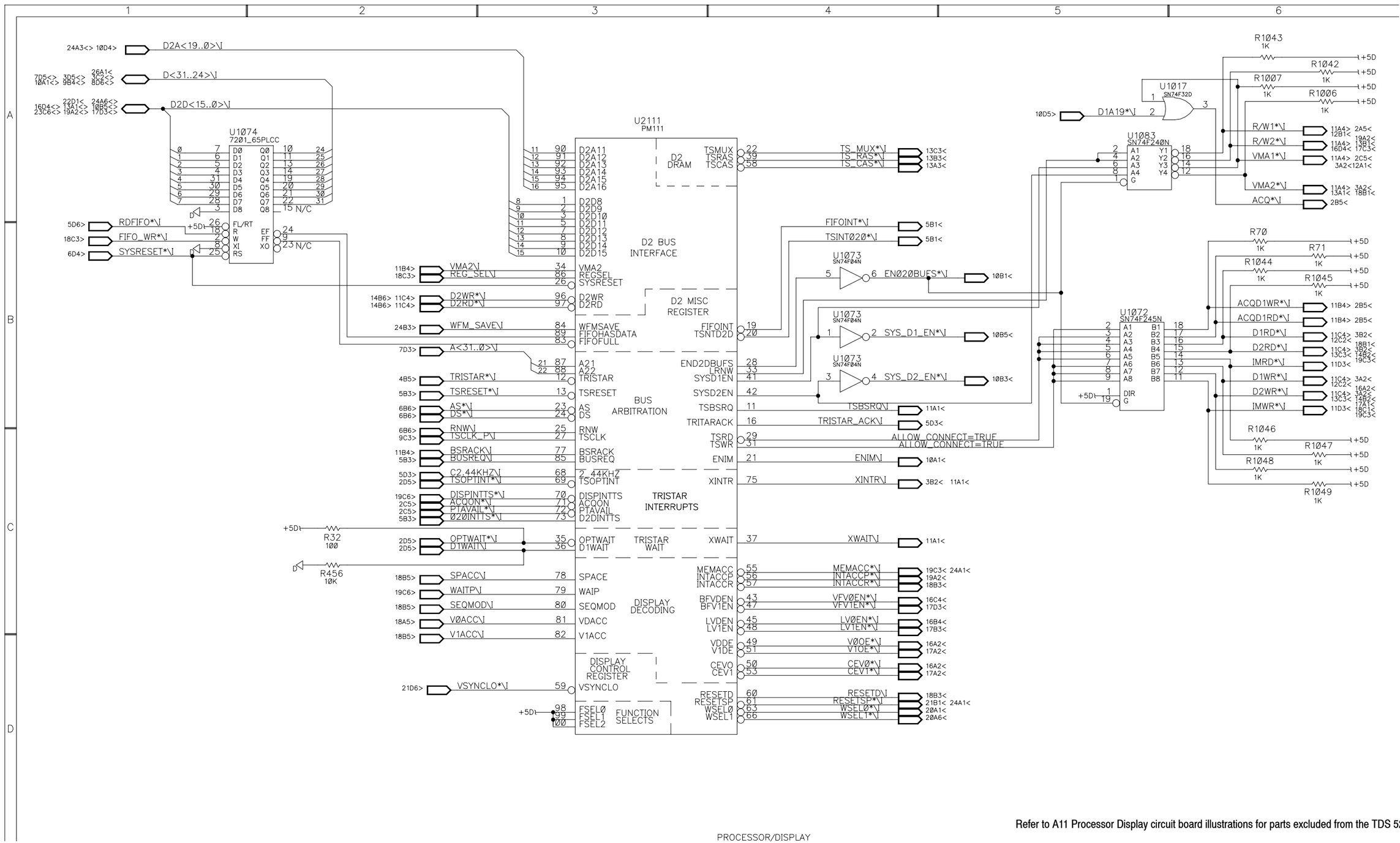
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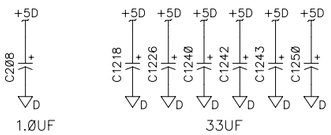
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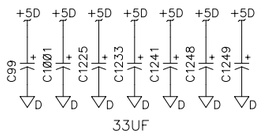


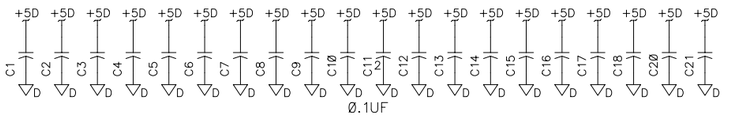
Refer to A11 Processor Display circuit board illustrations for parts excluded from the TDS 520B.

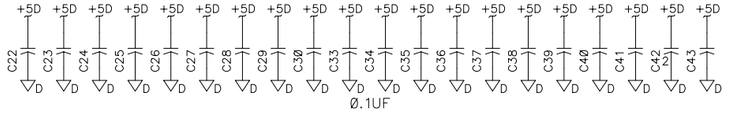


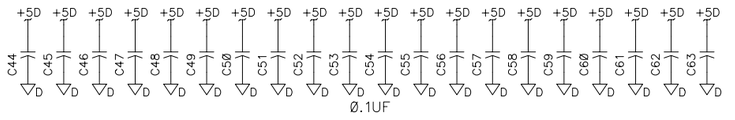
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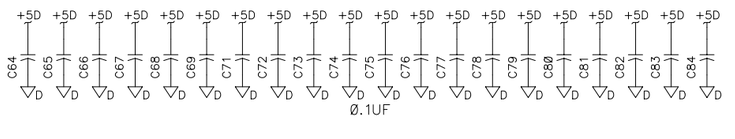


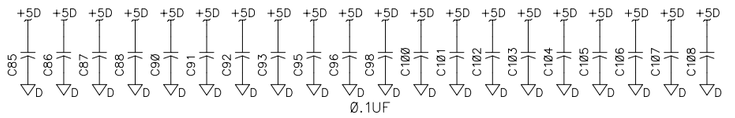


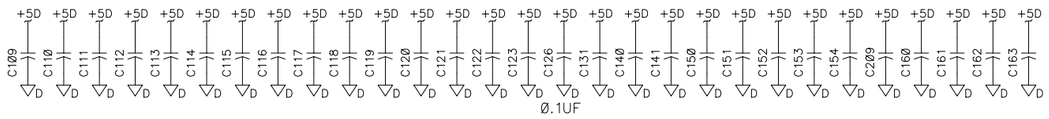


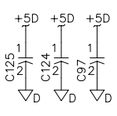


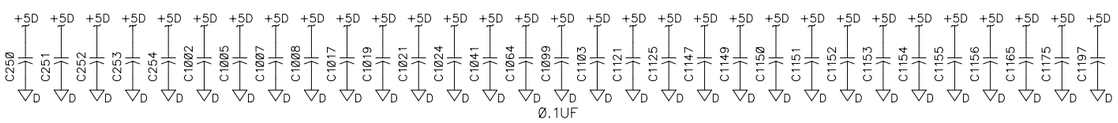




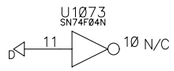




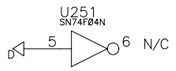




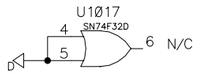
SPARE PARTS

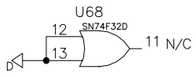


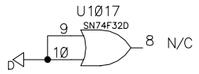
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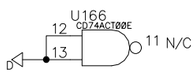


SPARE PARTS

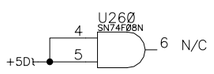


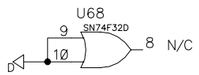


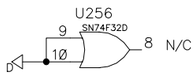


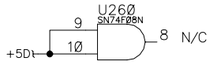


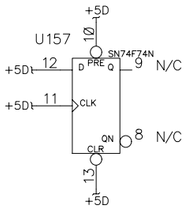
DO NOT USE THESE AND'S

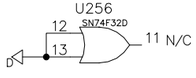


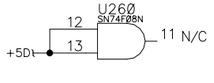


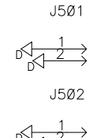






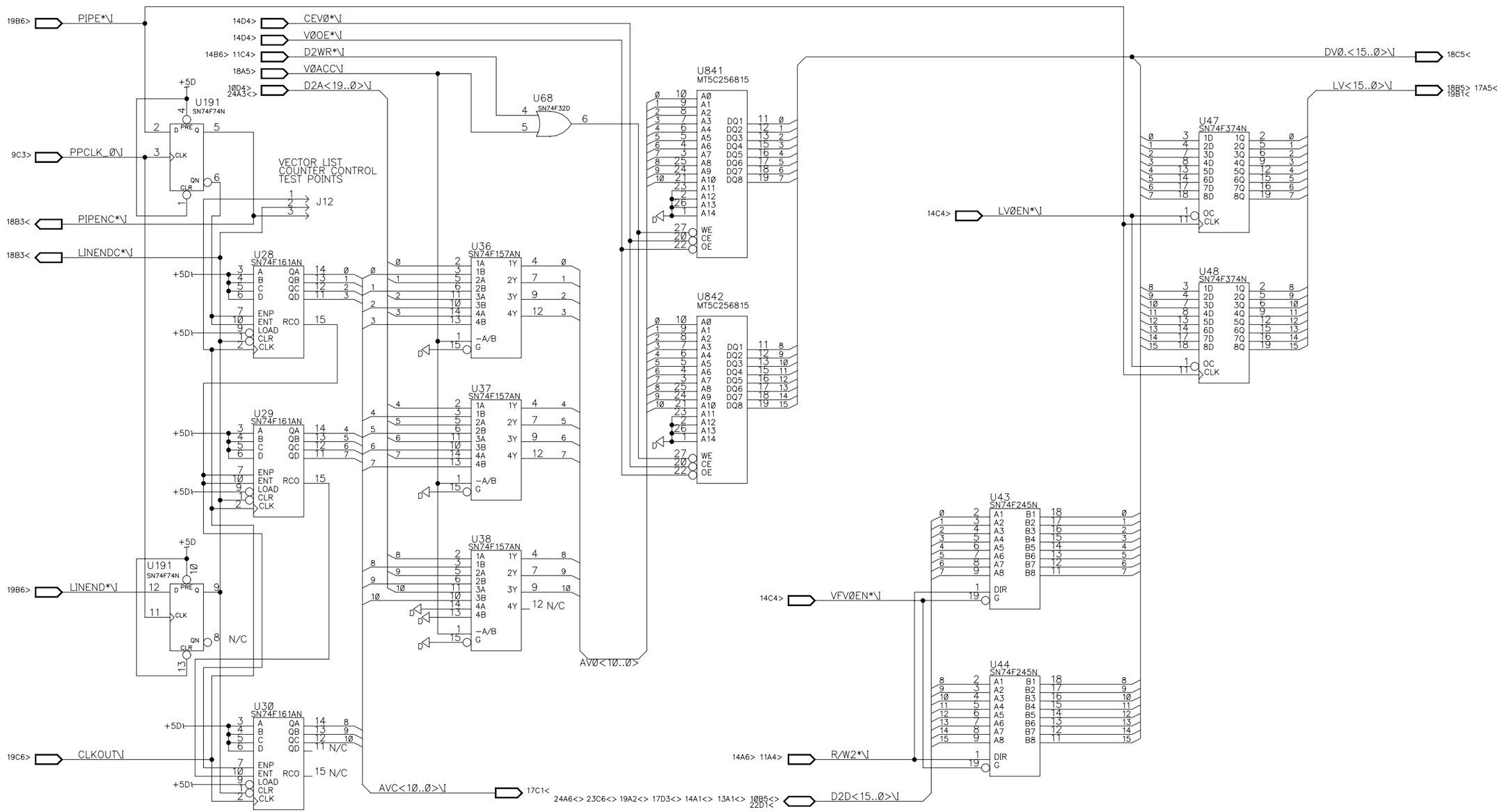




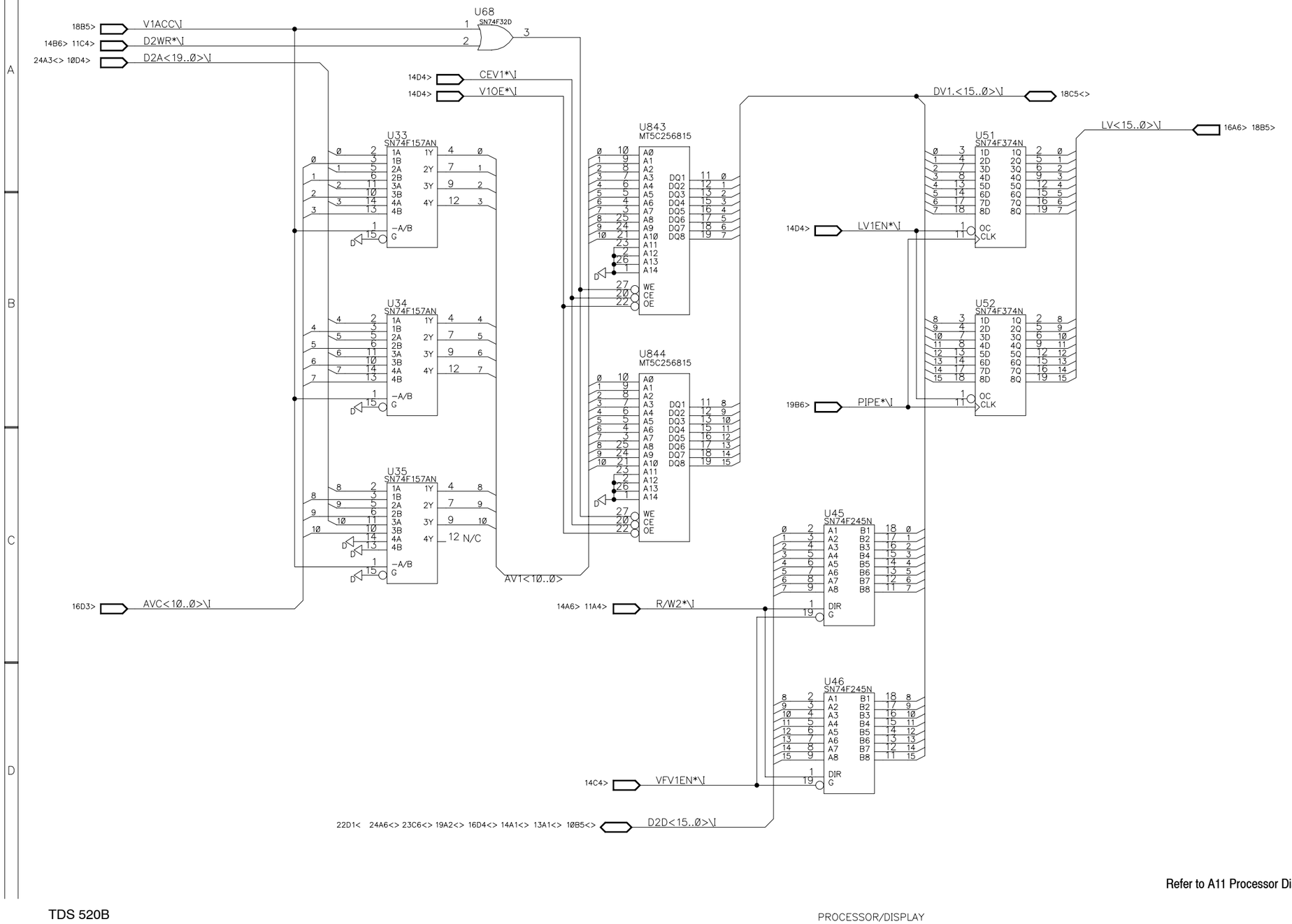


GROUND PINS

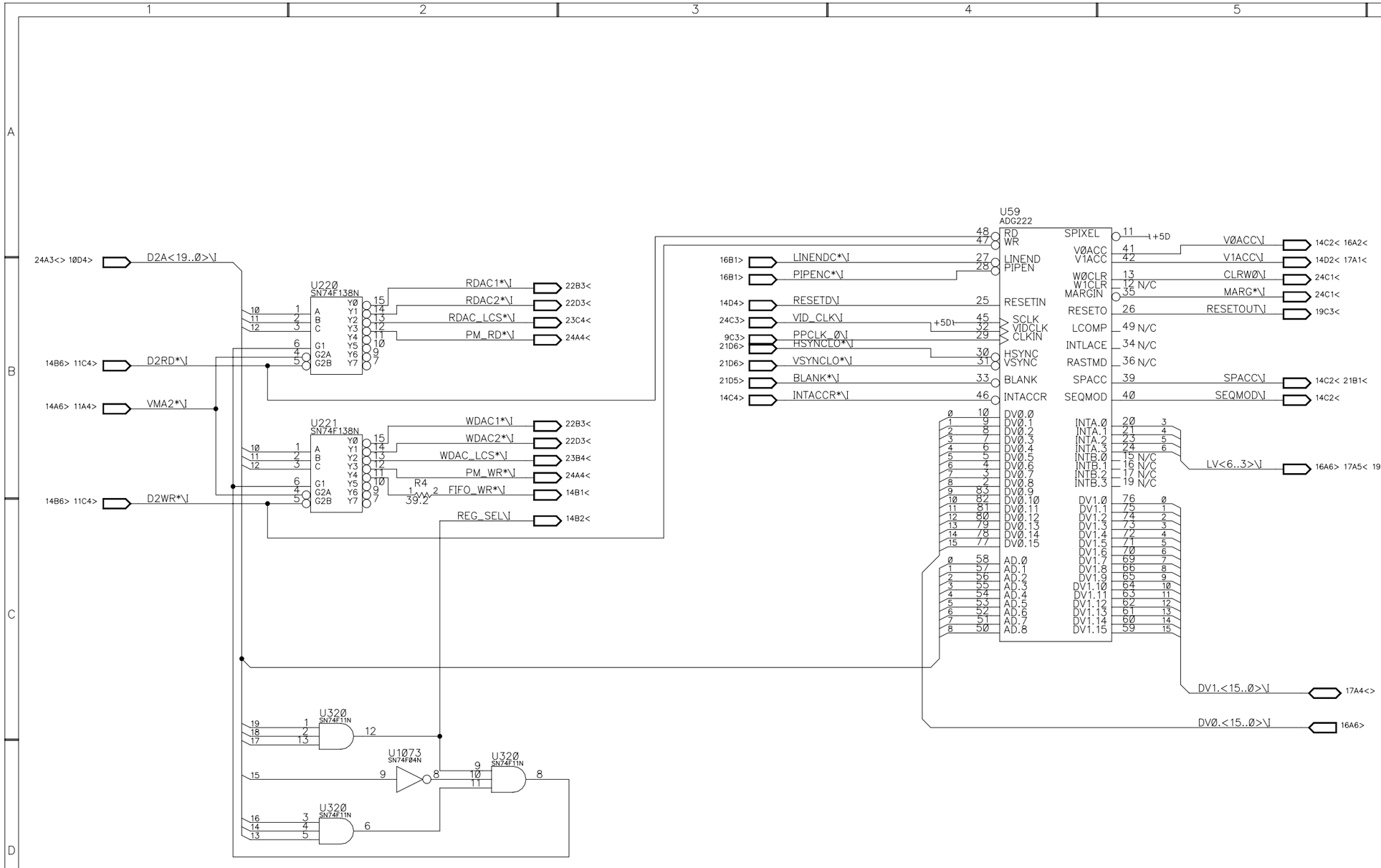
Refer to A11 Processor Display circuit board illustrations for parts excluded from the TDS 520B.



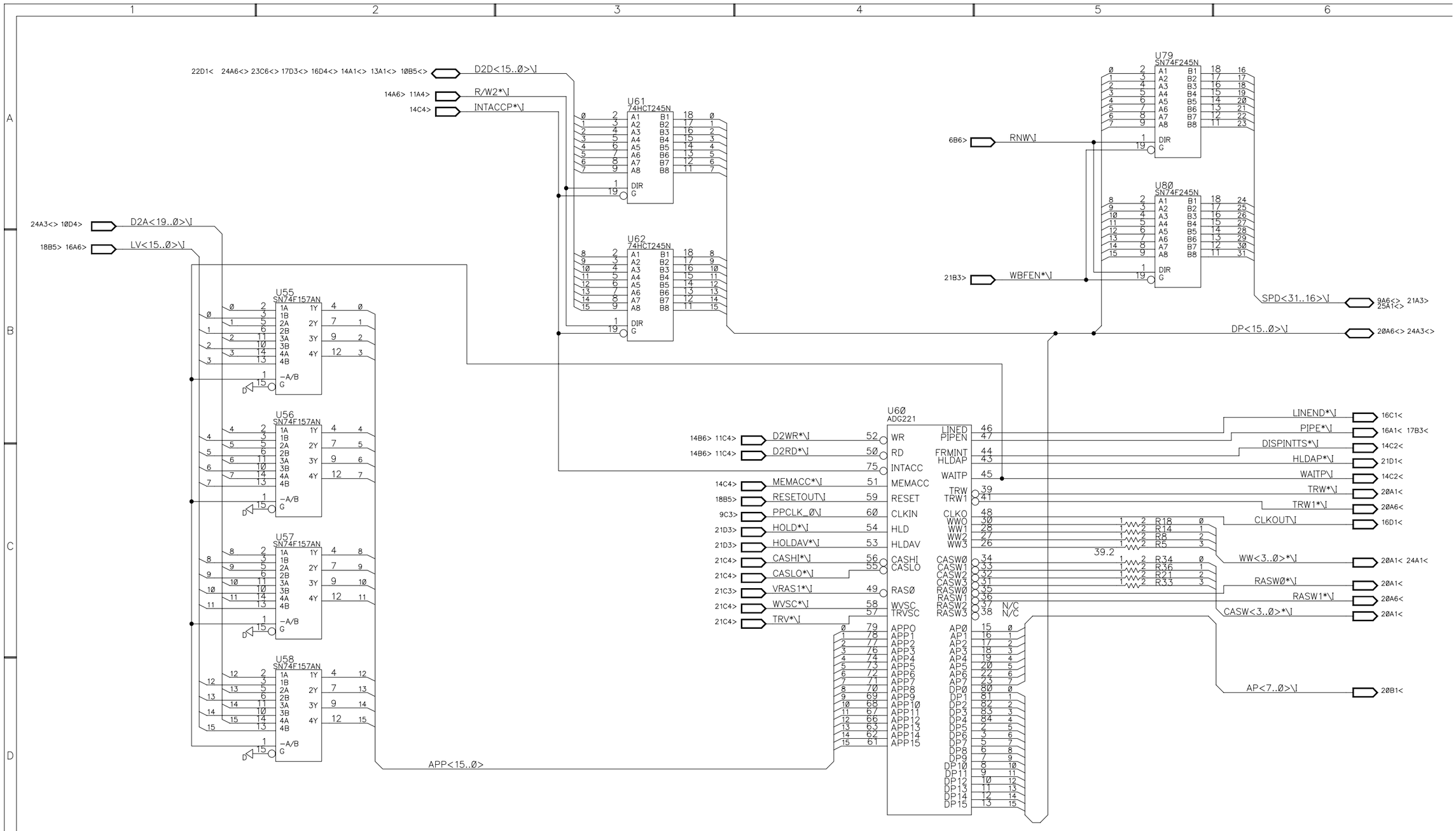
Refer to A11 Processor Display circuit board illustrations for parts excluded from the TDS 520B.



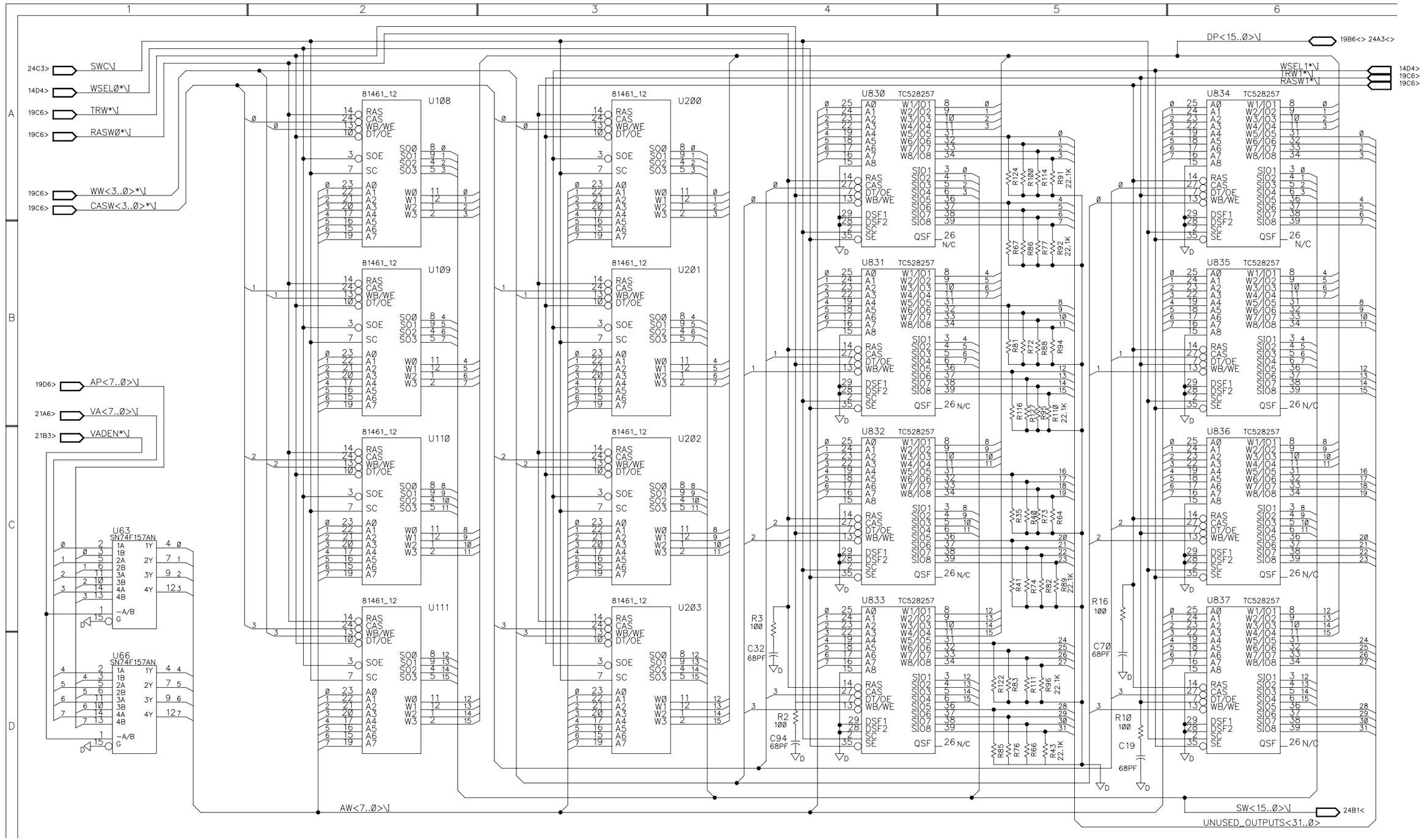
Refer to A11 Processor Display circuit board illustrations for parts excluded from the TDS 520B.



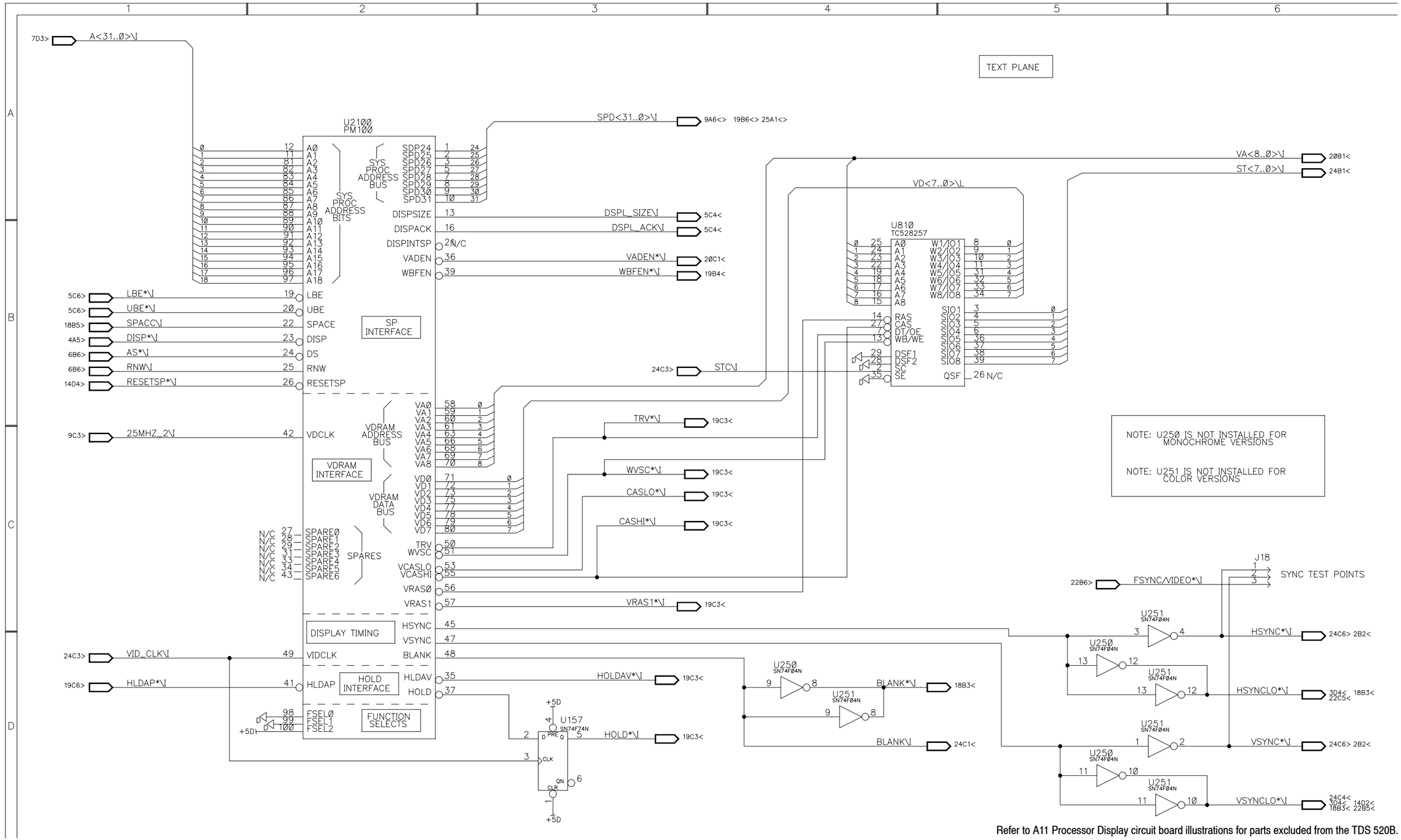
Refer to A11 Processor Display circuit board illustrations for parts excluded from the TDS 520B.



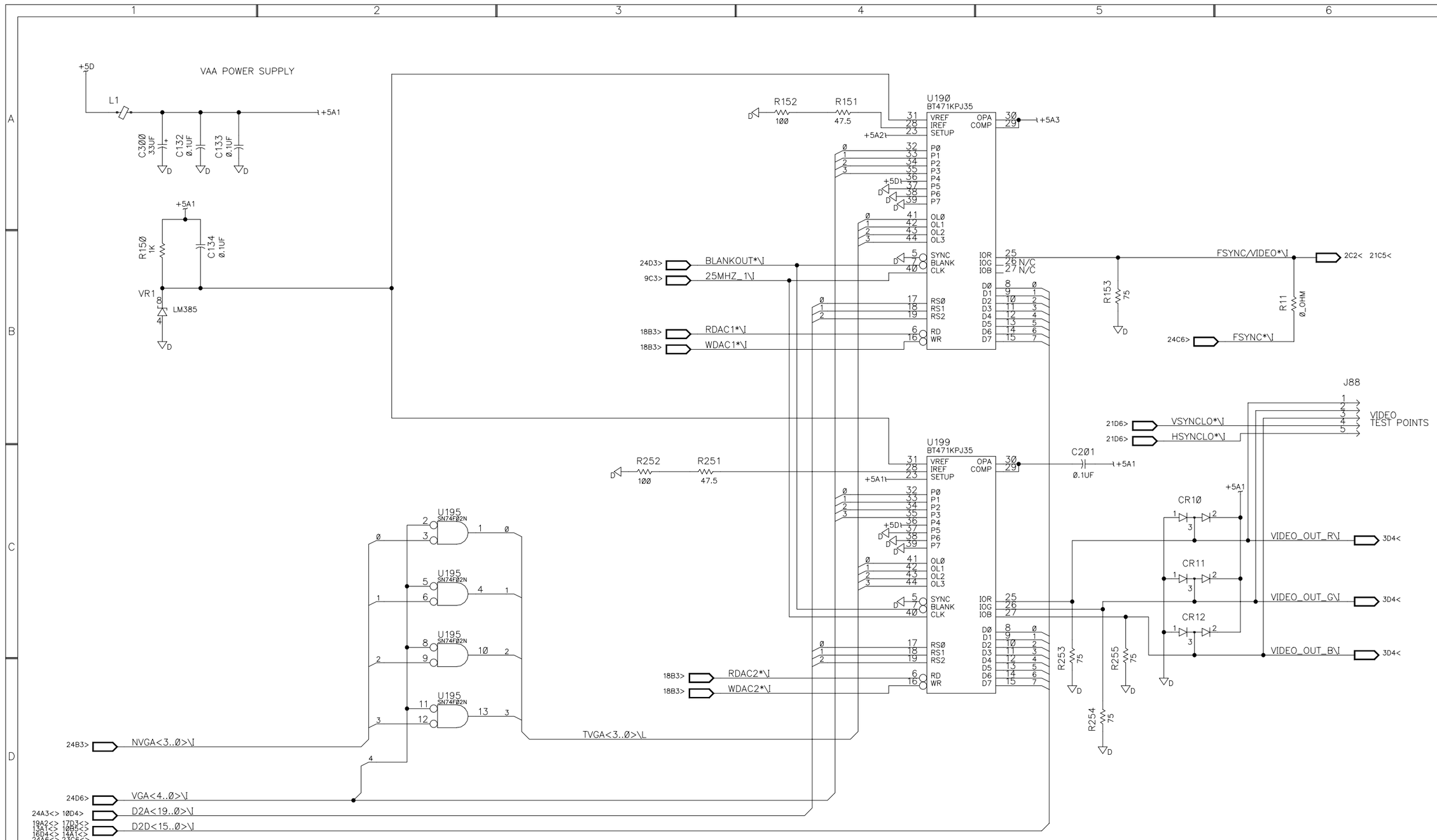
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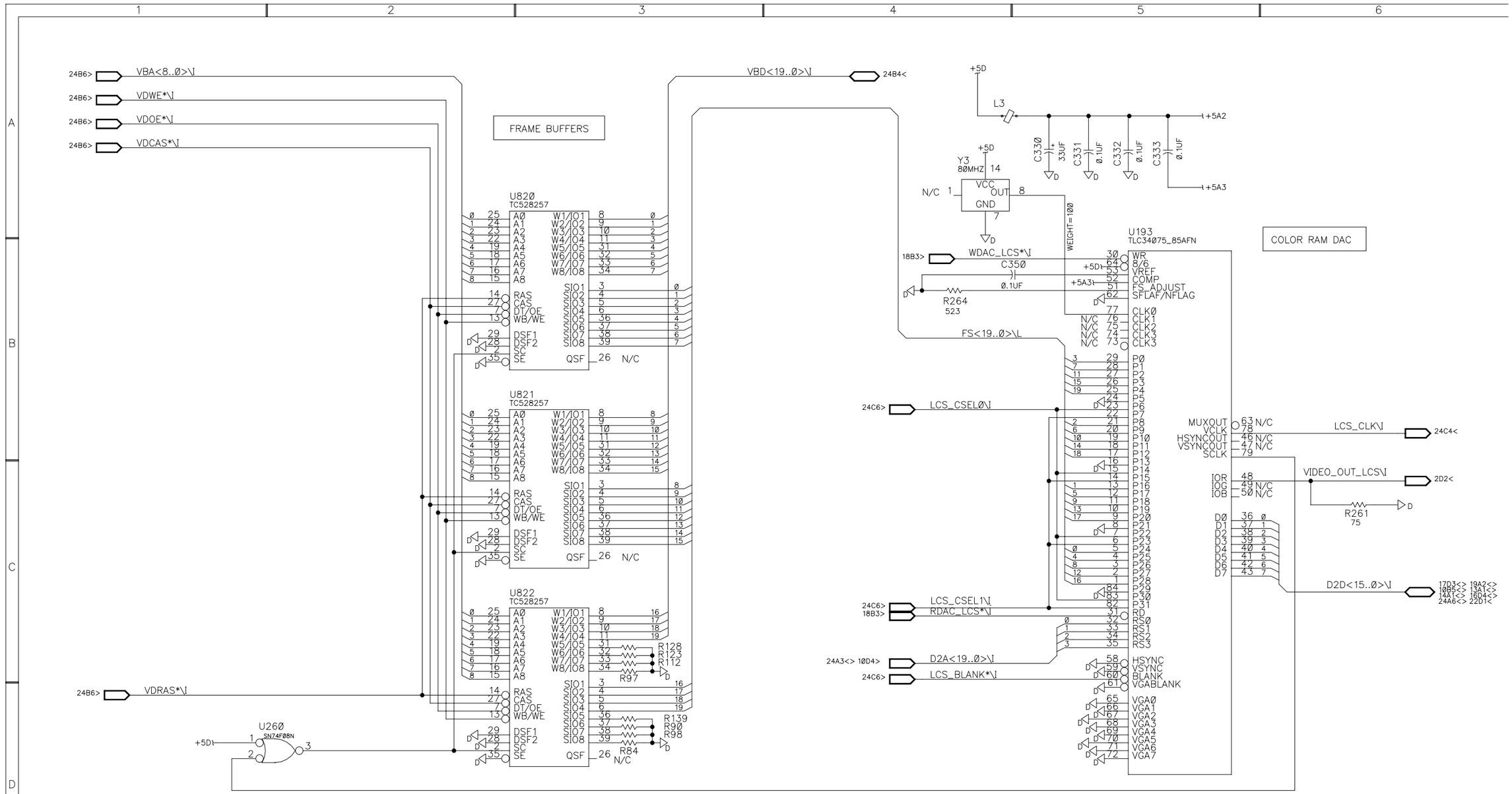
Refer to A11 Processor Display circuit board illustrations for parts excluded from the TDS 520B.



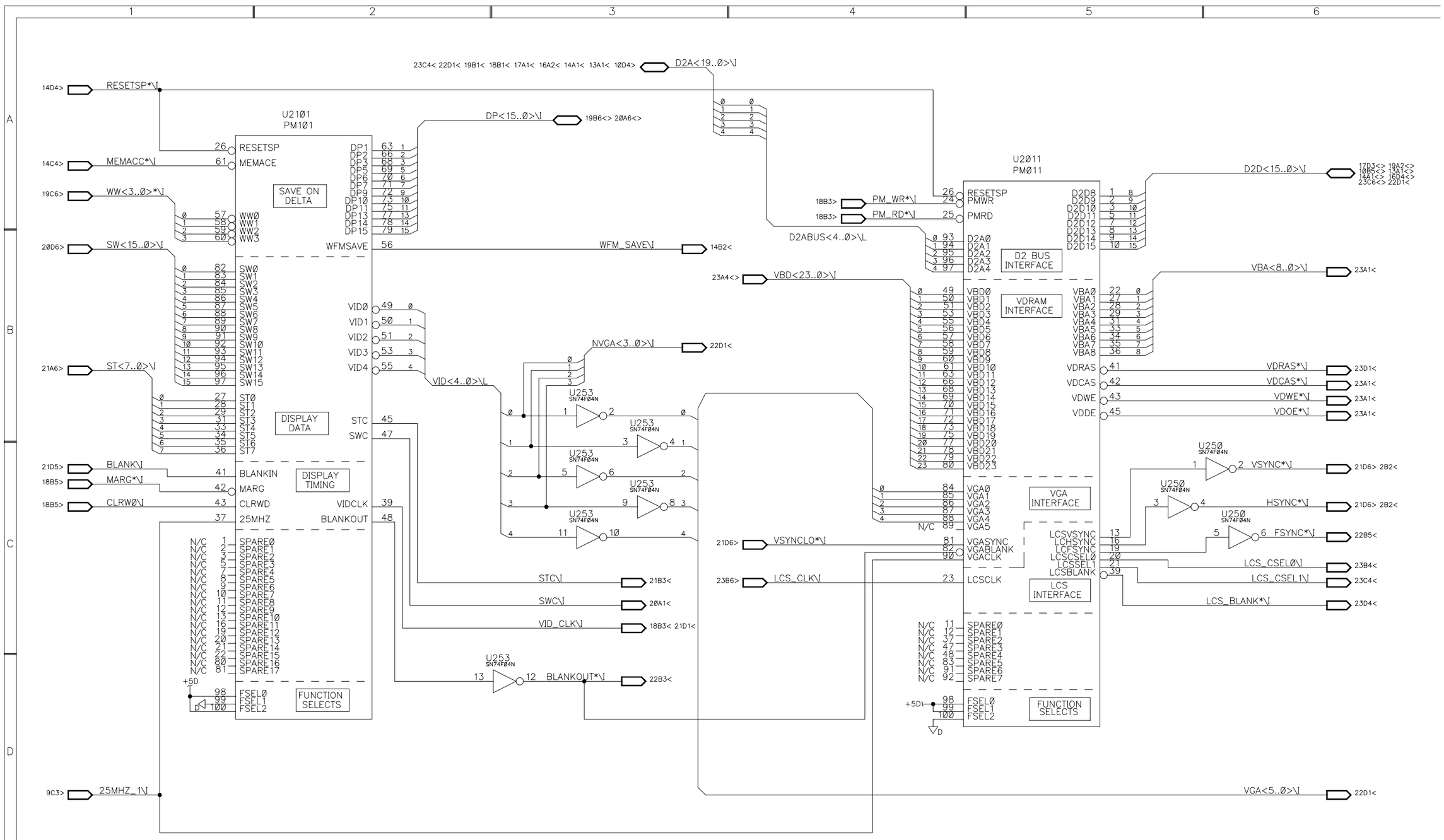
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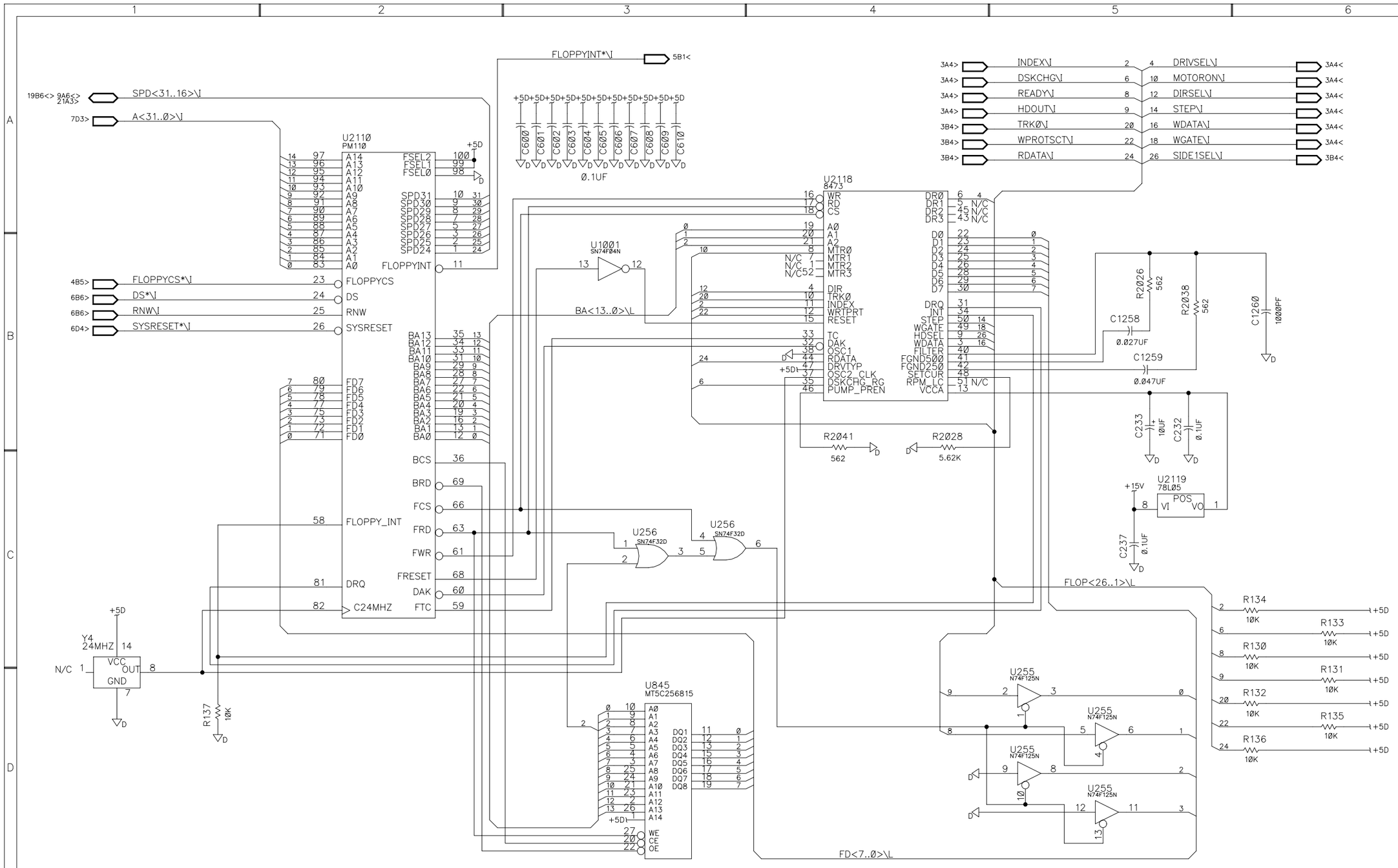
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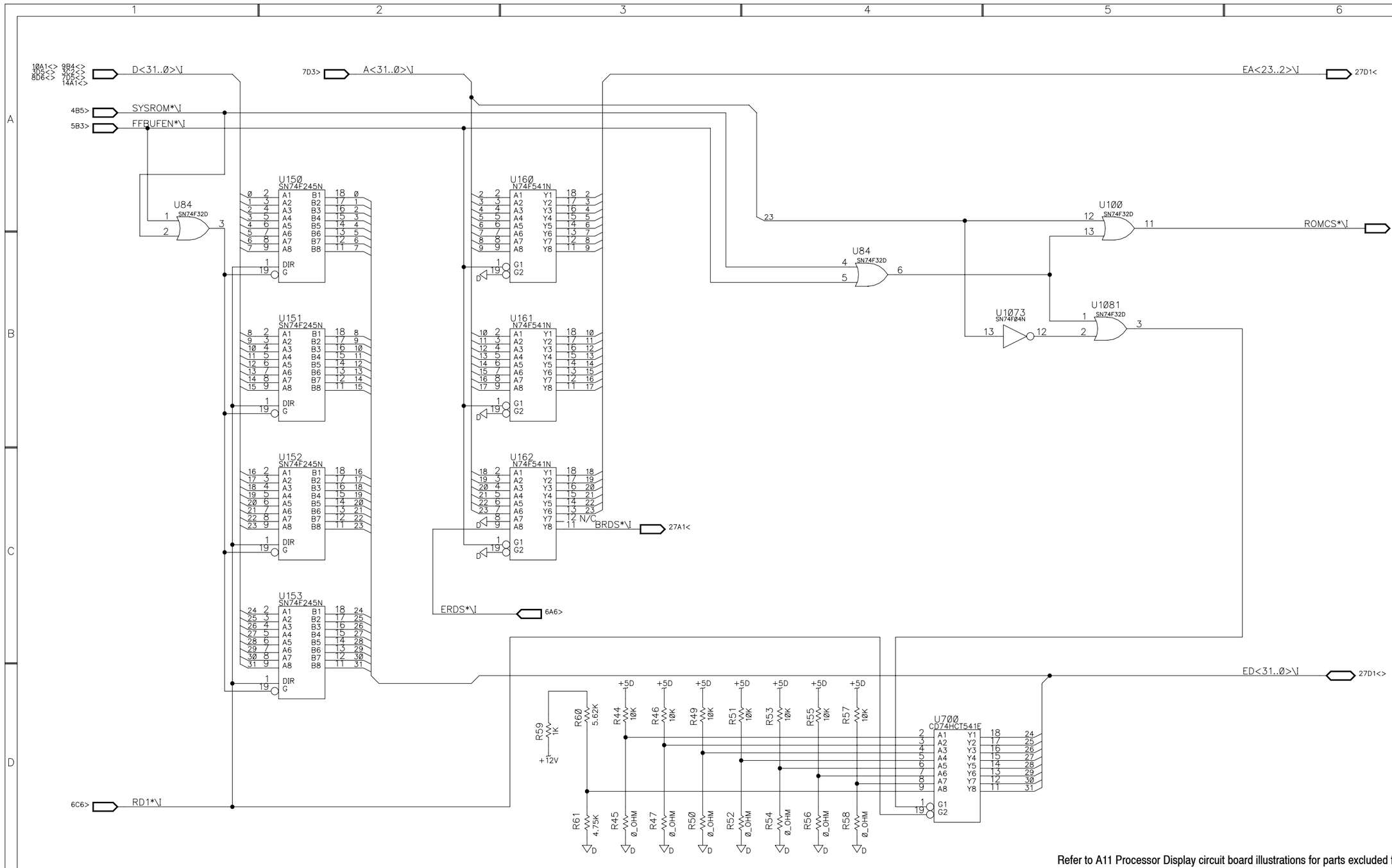
Refer to A11 Processor Display circuit board illustrations for parts excluded from the TDS 520B.



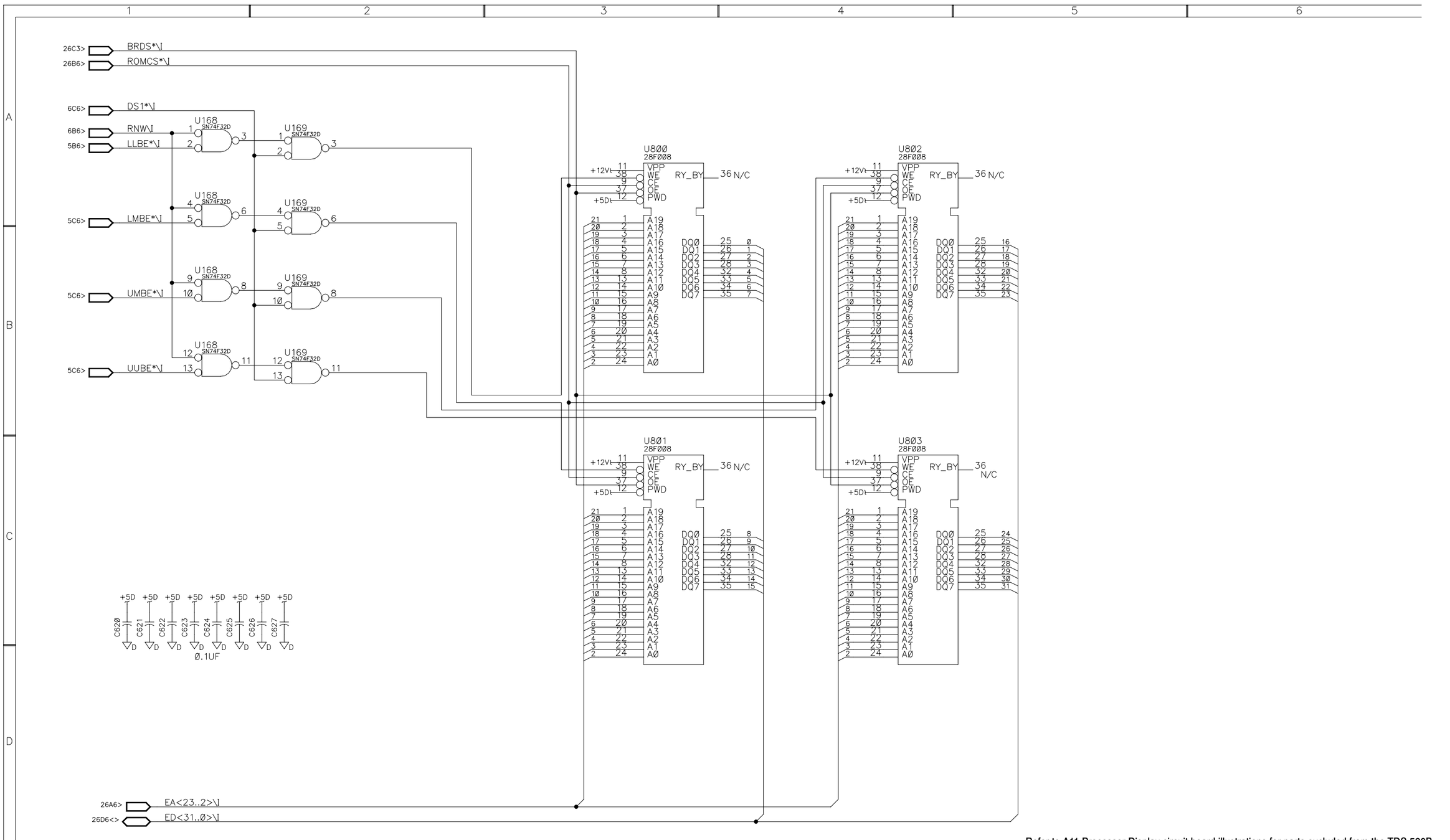
Refer to A11 Processor Display circuit board illustrations for parts excluded from the TDS 520B.



Refer to A11 Processor Display circuit board illustrations for parts excluded from the TDS 520B.



Refer to A11 Processor Display circuit board illustrations for parts excluded from the TDS 520B.



Refer to A11 Processor Display circuit board illustrations for parts excluded from the TDS 520B.

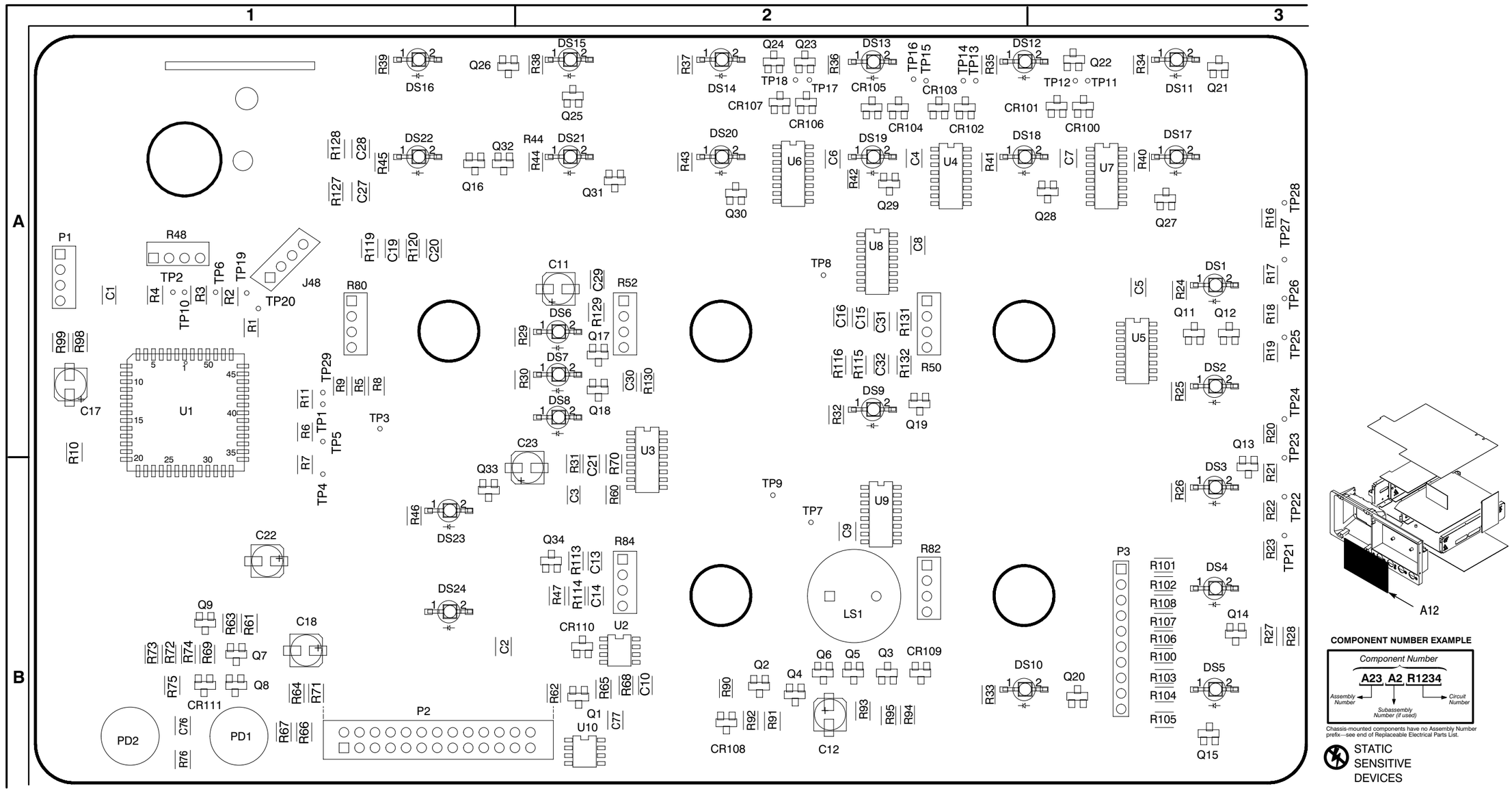


Figure 5–17: A12 Front Panel board front

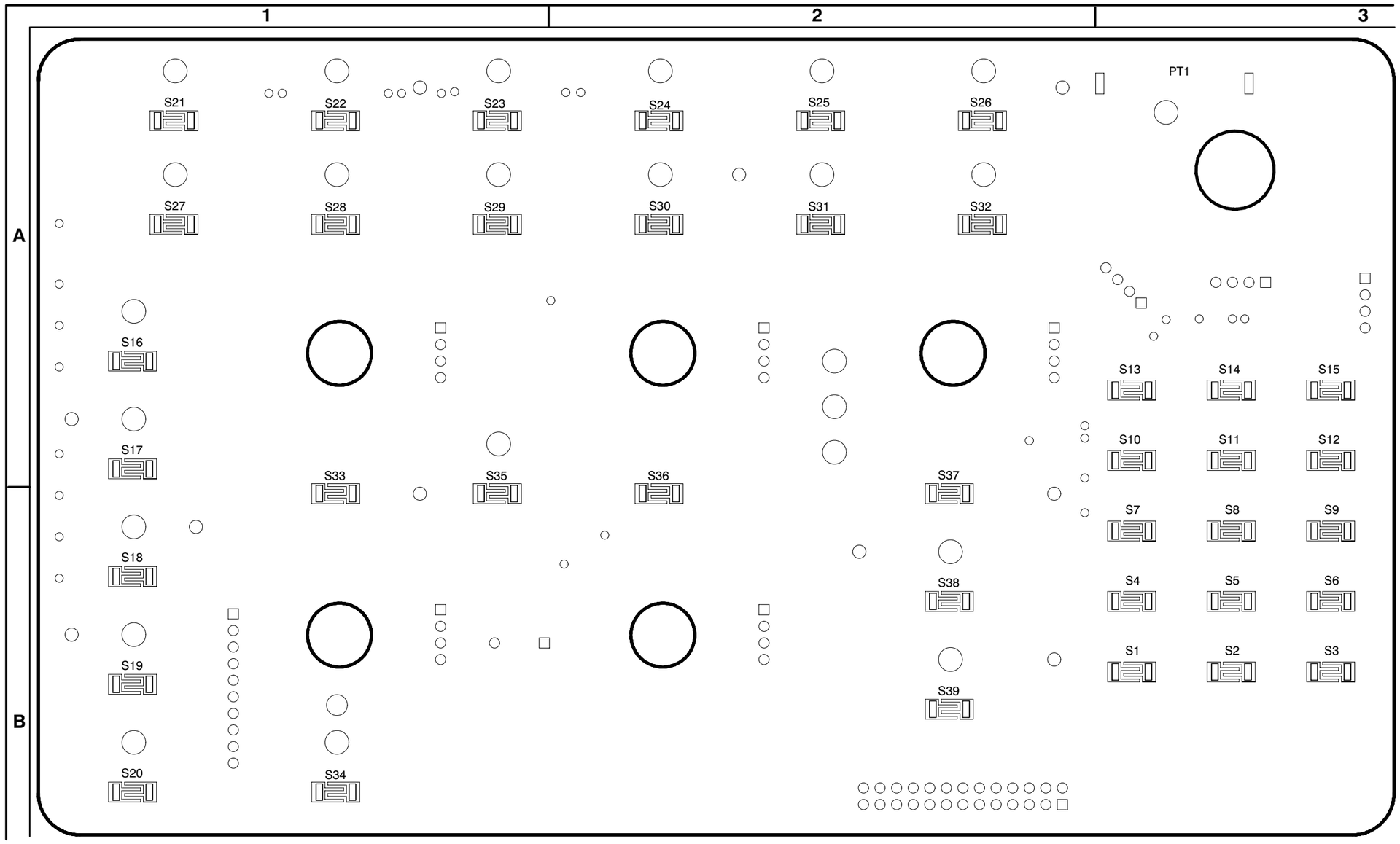


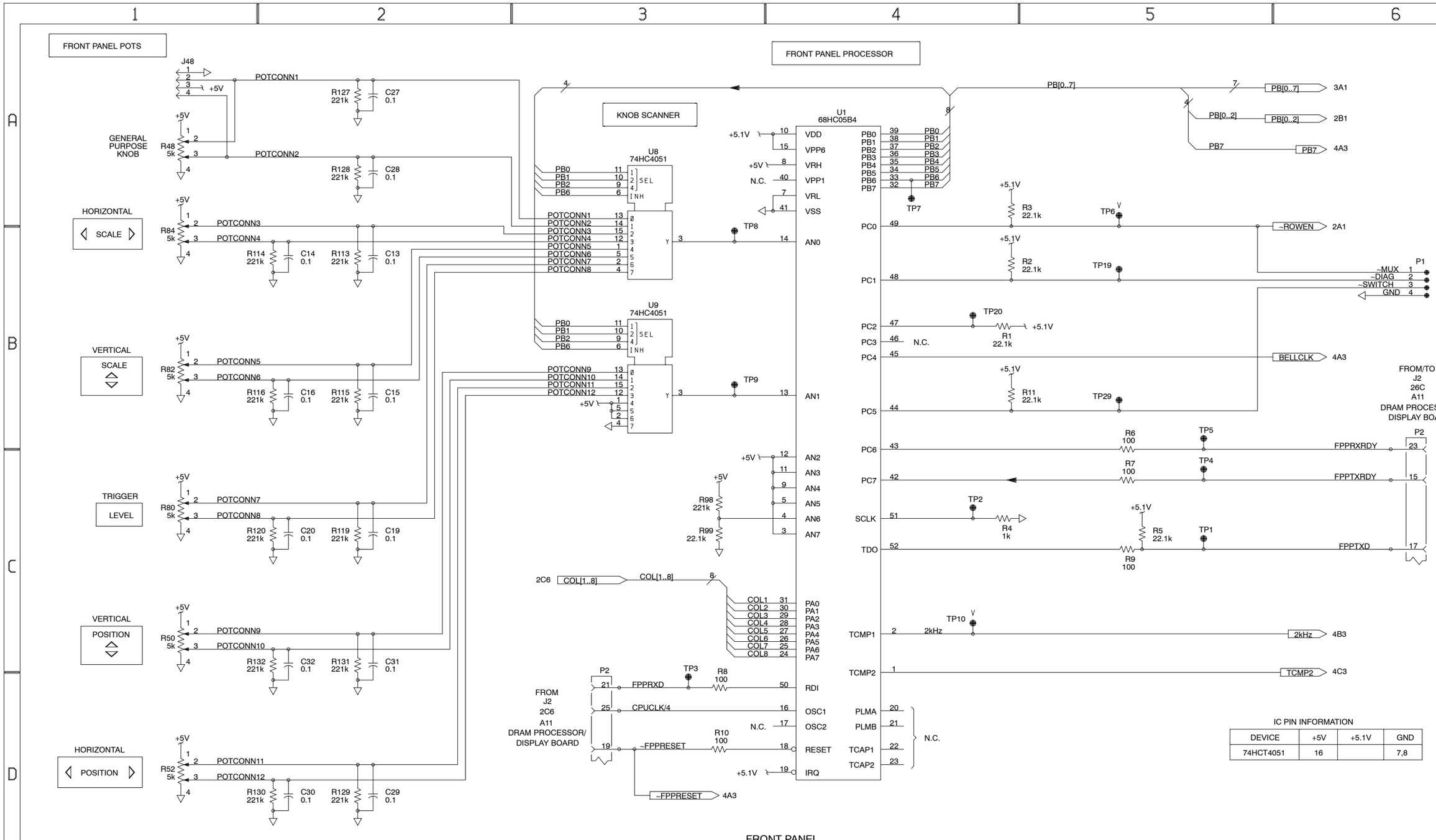
Figure 5–18: A12 Front Panel board back

A12 Front Panel Component Locator

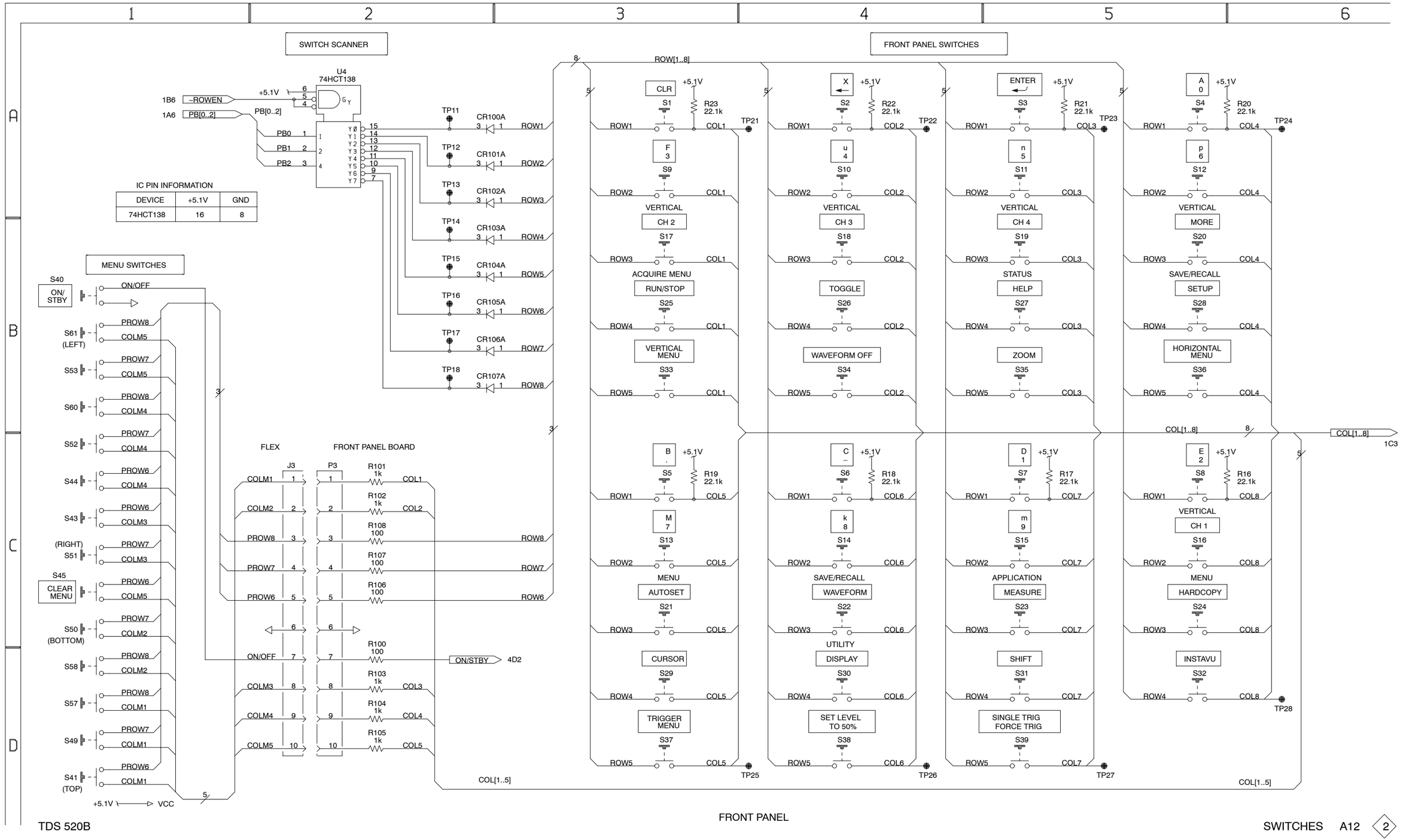
CIRCUIT NUMBER	SCHEM NUMBER	SCHEM LOCATION	BOARD NUMBER	BOARD LOCATION	CIRCUIT NUMBER	SCHEM NUMBER	SCHEM LOCATION	BOARD NUMBER	BOARD LOCATION	CIRCUIT NUMBER	SCHEM NUMBER	SCHEM LOCATION	BOARD NUMBER	BOARD LOCATION	CIRCUIT NUMBER	SCHEM NUMBER	SCHEM LOCATION	BOARD NUMBER	BOARD LOCATION	CIRCUIT NUMBER	SCHEM NUMBER	SCHEM LOCATION	BOARD NUMBER	BOARD LOCATION
C1	A12−4	2C	A12	1A	DS15	A12−3	5B	A12	2A	R6	A12−1	5C	A12	1A	R76	A12−4	5D	A12	1B	S24*	A12−2	5D	A12	2A
C2	A12−4	2C	A12	1B	DS16	A12−3	6B	A12	1A	R7	A12−1	5C	A12	1B	R80	A12−1	1C	A12	1A	S25*	A12−2	3B	A12	2A
C3	A12−4	1C	A12	2B	DS17	A12−3	3C	A12	3A	R8	A12−1	3D	A12	1A	R82	A12−1	1B	A12	2B	S26*	A12−2	4B	A12	2A
C4	A12−4	2C	A12	2A	DS18	A12−3	3C	A12	2A	R9	A12−1	5C	A12	1A	R84	A12−1	1B	A12	2B	S27*	A12−2	5B	A12	1A
C5	A12−4	2C	A12	3A	DS19	A12−3	4C	A12	2A	R10	A12−1	3D	A12	1B	R90	A12−4	4A	A12	2B	S28*	A12−2	5B	A12	1A
C6	A12−4	2C	A12	2A	DS20	A12−3	4C	A12	2A	R11	A12−1	4B	A12	1A	R91	A12−4	4A	A12	2B	S29*	A12−2	3D	A12	1A
C7	A12−4	1D	A12	3A	DS21	A12−3	4C	A12	2A	R16	A12−2	5C	A12	3A	R92	A12−4	4A	A12	2B	S30*	A12−2	4D	A12	2A
C8	A12−4	2D	A12	2A	DS22	A12−3	5C	A12	1A	R17	A12−2	5C	A12	3A	R93	A12−4	4A	A12	2B	S31*	A12−2	5D	A12	2A
C9	A12−4	2D	A12	2B	DS23	A12−3	5C	A12	1B	R18	A12−2	4C	A12	3A	R94	A12−4	5B	A12	2B	S32*	A12−2	5D	A12	2A
C10	A12−4	2D	A12	2B	DS24	A12−3	6C	A12	1B	R19	A12−2	3C	A12	3A	R95	A12−4	5A	A12	2B	S33*	A12−2	3B	A12	1A
C11	A12−4	1C	A12	2A	J48	A12−1	1A	A12	1A	R20	A12−2	5A	A12	3A	R98	A12−1	3C	A12	1A	S34*	A12−2	4B	A12	1B
C12	A12−4	4A	A12	2B	LS1	A12−4	6A	A12	2B	R21	A12−2	5A	A12	3B	R99	A12−1	3C	A12	1A	S35*	A12−2	5B	A12	1A
C13	A12−1	2B	A12	2B	P1	A12−1	6B	A12	1A	R22	A12−2	4A	A12	3B	R100	A12−2	2D	A12	3B	S36*	A12−2	5B	A12	2A
C14	A12−1	2B	A12	2B	P2	A12−1	3D	A12	1B	R23	A12−2	3A	A12	3B	R101	A12−2	2C	A12	3B	S37*	A12−2	3D	A12	2A
C15	A12−1	2B	A12	2A	P2	A12−4	1C	A12	1B	R24	A12−3	3A	A12	3A	R102	A12−2	2C	A12	3B	S38*	A12−2	4D	A12	2B
C16	A12−1	2B	A12	2A	P3	A12−2	2C	A12	3B	R25	A12−3	3A	A12	3A	R103	A12−2	2D	A12	3B	S39*	A12−2	5D	A12	2B
C17	A12−4	1C	A12	1A	PD1	A12−4	6C	A12	1B	R26	A12−3	4A	A12	3B	R104	A12−2	2D	A12	3B	TP1	A12−1	5C	A12	1A
C18	A12−4	1D	A12	1B	PD2	A12−4	6C	A12	1B	R27	A12−3	4A	A12	3B	R105	A12−2	2D	A12	3B	TP2	A12−1	4C	A12	1A
C19	A12−1	2C	A12	1A	PT1	A12−5	5B	A12	3A	R28	A12−3	4A	A12	3B	R106	A12−2	2D	A12	3B	TP3	A12−1	3D	A12	1A
C20	A12−1	2C	A12	1A	Q1	A12−4	4C	A12	2B	R29	A12−3	5A	A12	1A	R107	A12−2	2C	A12	3B	TP4	A12−1	5C	A12	1B
C21	A12−4	4C	A12	2B	Q2	A12−4	4A	A12	2B	R30	A12−3	5A	A12	1A	R108	A12−2	2C	A12	3B	TP5	A12−1	5C	A12	1B
C22	A12−4	2C	A12	1B	Q3	A12−4	5B	A12	2B	R31	A12−3	6A	A12	2A	R113	A12−1	2B	A12	2B	TP6	A12−1	5A	A12	1A
C23	A12−4	2D	A12	1A	Q4	A12−4	4A	A12	2B	R32	A12−3	3B	A12	2A	R114	A12−1	2B	A12	2B	TP7	A12−1	4A	A12	2B
C27	A12−1	2A	A12	1A	Q5	A12−4	5A	A12	2B	R33	A12−3	3B	A12	2B	R115	A12−1	2B	A12	2A	TP8	A12−1	3B	A12	2A
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CR107A	A12−2	2B	A12	2A	Q21	A12−3	4C	A12	3A	R48	A12−1	1A	A12	1A	S6*	A12−2	4C	A12	3B	TP23	A12−2	5A	A12	3A
CR108A	A12−4	4B	A12	2B	Q22	A12−3	4C	A12	3A	R50	A12−1	1C	A12	2A	S7*	A12−2	5C	A12	3B	TP24	A12−2	6A	A12	3A
CR109A	A12−4	6B	A12	2B	Q23	A12−3	4C	A12	2A	R52	A12−1	1D	A12	2A	S8*	A12−2	5C	A12	3B	TP25	A12−2	4D	A12	3A
CR110	A12−4	5C	A12	2B	Q24	A12−3	5C	A12	2A	R60	A12−4	4C	A12	2B	S9*	A12−2	3A	A12	3B	TP26	A12−2	4D	A12	3A
CR111	A12−4	5D	A12	1B	Q25	A12−3	5C	A12	2A	R61	A12−4	4C	A12	1B	S10*	A12−2	4A	A12	3A	TP27	A12−2	5D	A12	3A
DS1	A12−3	3A	A12	3A	Q26	A12−3	6C	A12	1A	R62	A12−4	4C	A12	2B	S11*	A12−2	5A	A12	3A	TP28	A12−2	6D	A12	3A
DS2	A12−3	3A	A12	3A	Q27	A12−3	3D	A12	3A	R63	A12−4	5B	A12	1B	S12*	A12−2	5A	A12	3A	TP29	A12−1	5B	A12	1A
DS3	A12−3	4A	A12	3B	Q28	A12−3	3D	A12	2A	R64	A12−4	5C	A12	1B	S13*	A12−2	3C	A12	3A	U1	A12−1	4A	A12	1A
DS4	A12−3	4A	A12	3B	Q29	A12−3	4D	A12	2A	R65	A12−4	4D	A12	2B	S14*	A12−2	4C	A12	3A	U2	A12−4	4C	A12	2B
DS5	A12−3	4A	A12	3B	Q30	A12−3	4D	A12	2A	R66	A12−4	5C	A12	1B	S15*	A12−2	5C	A12	3A	U3A	A12−4	3A	A12	2A
DS6	A12−3	5A	A12	2A	Q31	A12−3	4D	A12	2A	R67	A12−4	5C	A12	1B	S16*	A12−2	5C	A12	1A	U3B	A12−4	3C	A12	2A
DS7	A12−3	5A	A12	2A	Q32	A12−3	5D	A12	1A	R68	A12−4	5D	A12	2B	S17*	A12−2	3B	A12	1A	U4	A12−2	2A	A12	2A
DS8	A12−3	6A	A12	2A	Q33	A12−3	5D	A12	1B	R69	A12−4	5D	A12	1B	S18*	A12−2	4B	A12	1B	U5	A12−3	2A	A12	3A
DS9	A12−3	3B	A12	2A	Q34	A12−3	6D	A12	2B	R70	A12−4	4C	A12	2B	S19*	A12−2	5B	A12	1B	U6	A12−3	2B	A12	2A
DS10	A12−3	3B	A12	2B	R1	A12−1	4B	A12	1A	R71	A12−4	5C	A12	1B	S20*	A12−2	5B	A12	1B	U7	A12−3	2D	A12	3A
DS11	A12−3	4B	A12	3A	R2	A12−1	4B	A12	1A	R72	A12−4	5D	A12	1B	S21*	A12−2	3D	A12	1A	U8	A12−1	3A	A12	2A
DS12	A12−3	4B	A12	2A	R3	A12−1	4A	A12	1A	R73	A12−4	5D	A12	1B	S22*	A12−2	4D	A12	1A	U9	A12−1	3B	A12	2B
DS13	A12−3	4B	A12	2A	R4	A12−1	4C	A12	1A	R74	A12−4	5D	A12	1B	S23*	A12−2	5D	A12	1A	U10	A12−4	4D	A12	2B
DS14	A12−3	5B	A12	2A	R5	A12−1	5C	A12	1A	R75	A12−4	5D	A12	1B										

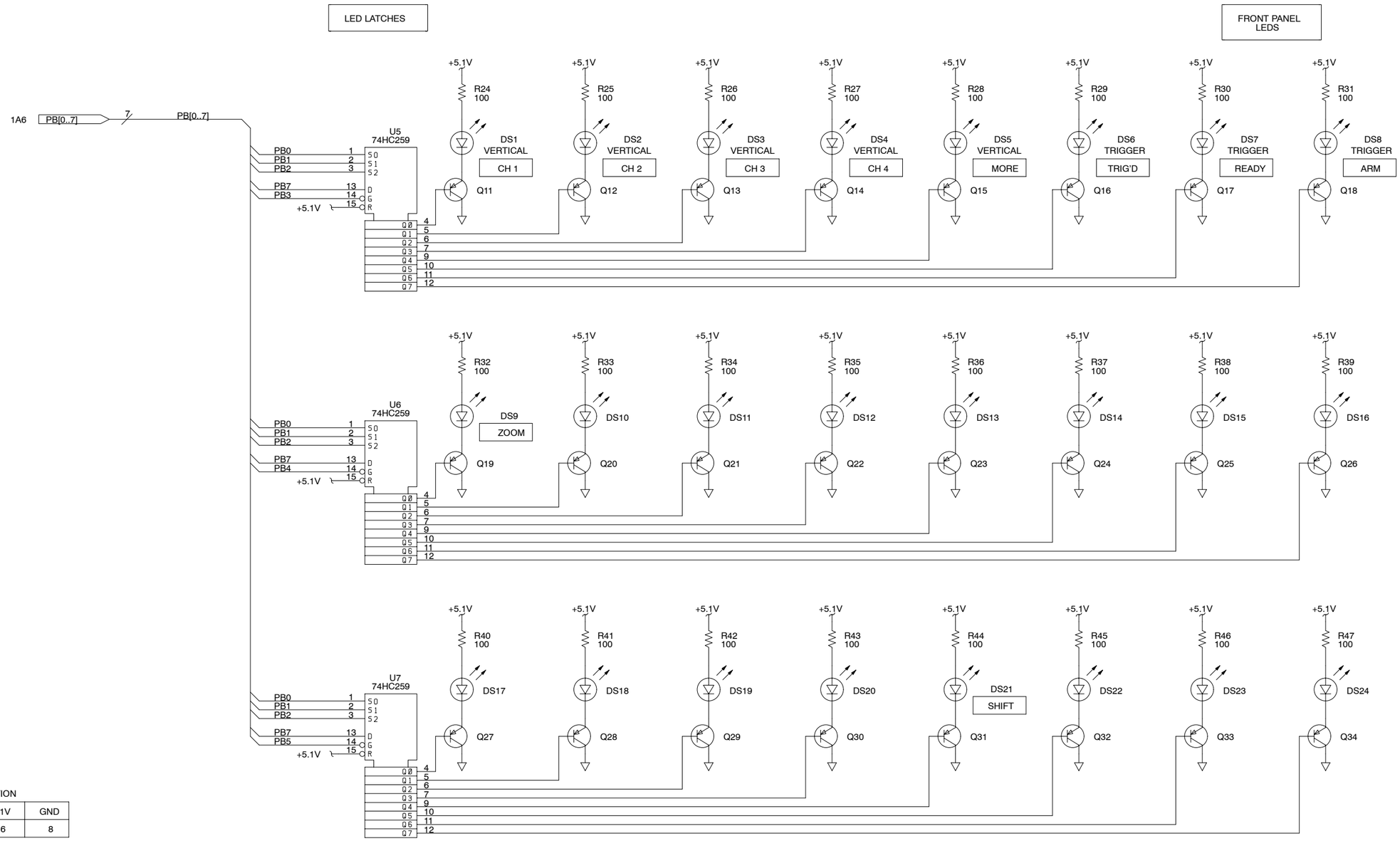
***Asterisks indicate components located on the back of the board.**

Figure 5–19: A12 component locator


FRONT PANEL POTS
FRONT PANEL PROCESSOR
KNOB SCANNER
GENERAL PURPOSE KNOB
HORIZONTAL SCALE
VERTICAL SCALE
TRIGGER LEVEL
VERTICAL POSITION
HORIZONTAL POSITION
U1 68HC05B4
U8 74HC4051
U9 74HC4051
PB[0..7]
PB[0..2]
~ROWEN
~MUX
~DIAG
~SWITCH
GND
BELLCLK
FROM/TO J2 26C A11 DRAM PROCESSOR/ DISPLAY BOARD
FPPRXRDY
FPPTXRDY
FPPTXD
2kHz
TCMP2
COL[1..8]
~FPPRESET
N.C.
IC PIN INFORMATION
DEVICE | +5V | +5.1V | GND
74HCT4051 | 16 | | 7,8

FRONT PANEL


SWITCH SCANNER
FRONT PANEL SWITCHES
MENU SWITCHES
U4
74HCT138
1B6 ~ROWEN
1A6 PB[0..2]
+5.1V
PB0
PB1
PB2
IC PIN INFORMATION
DEVICE | +5.1V | GND
74HCT138 | 16 | 8
TP11 TP12 TP13 TP14 TP15 TP16 TP17 TP18
CR100A CR101A CR102A CR103A CR104A CR105A CR106A CR107A
ROW1 ROW2 ROW3 ROW4 ROW5 ROW6 ROW7 ROW8
ROW[1..8]
CLR S1 R23 22.1k TP21
X S2 R22 22.1k TP22
ENTER S3 R21 22.1k TP23
A 0 S4 R20 22.1k TP24
F 3 S9
u 4 S10
n 5 S11
p 6 S12
VERTICAL CH 2 S17
VERTICAL CH 3 S18
VERTICAL CH 4 S19
VERTICAL MORE S20
ACQUIRE MENU RUN/STOP S25
TOGGLE S26
STATUS HELP S27
SAVE/RECALL SETUP S28
VERTICAL MENU S33
WAVEFORM OFF S34
ZOOM S35
HORIZONTAL MENU S36
COL1 COL2 COL3 COL4
COL[1..8]
COL[1..8] 1C3
B . S5 R19 22.1k TP25
C – S6 R18 22.1k TP26
D 1 S7 R17 22.1k TP27
E 2 S8 R16 22.1k TP28
M 7 S13
k 8 S14
m 9 S15
VERTICAL CH 1 S16
MENU AUTOSET S21
SAVE/RECALL WAVEFORM S22
APPLICATION MEASURE S23
MENU HARDCOPY S24
CURSOR S29
UTILITY DISPLAY S30
SHIFT S31
INSTAVU S32
TRIGGER MENU S37
SET LEVEL TO 50% S38
SINGLE TRIG FORCE TRIG S39
COL5 COL6 COL7 COL8
S40 ON/ STBY ON/OFF
S61 (LEFT) PROW8 COLM5
S53 PROW7 COLM5
S60 PROW8 COLM4
S52 PROW7 COLM4
S44 PROW6 COLM4
S43 PROW6 COLM3
(RIGHT) S51 PROW7 COLM3
S45 CLEAR MENU PROW6 COLM5
S50 (BOTTOM) PROW7 COLM2
S58 PROW8 COLM2
S57 PROW8 COLM1
S49 PROW7 COLM1
S41 (TOP) PROW6 COLM1
+5.1V VCC
FLEX
FRONT PANEL BOARD
J3 P3
COLM1 COLM2 PROW8 PROW7 PROW6 ON/OFF COLM3 COLM4 COLM5
R101 1k R102 1k R108 100 R107 100 R106 100 R100 100 R103 1k R104 1k R105 1k
ON/STBY 4D2
COL[1..5]
ROW8 ROW7 ROW6



IC PIN INFORMATION

DEVICE	+5.1V	GND
74HC259	16	8

FRONT PANEL

IC PIN INFORMATION

DEVICE	+5.1V	GND
74AC109	16	8

BELL

1A6 PB7
1B6 BELLCLK
1D3 ~FPPRESET
1C6 2kHz
1D6 TCMP2

U3A 74AC109
U3B 74AC109

+5.1V
R91 22.1k
R92 1k
R90 1k
R93 6.81k
C12 33uF
R94 1k
R95 1k
Q2
Q3
Q4
Q5
Q6
CR108A
CR109A
LS1
N.C.

C21 100
R60 825
R61 1k
R70 49.9
CALCLK 1kHz

+5V
R63 47.5
R64 392
R71 150
Q7
Q8
Q9
CR110
CR111
R66 100
R67 22.1
R68 2k
R69 100
R72 22.1
R73 22.1
R74 22.1
R75 22.1

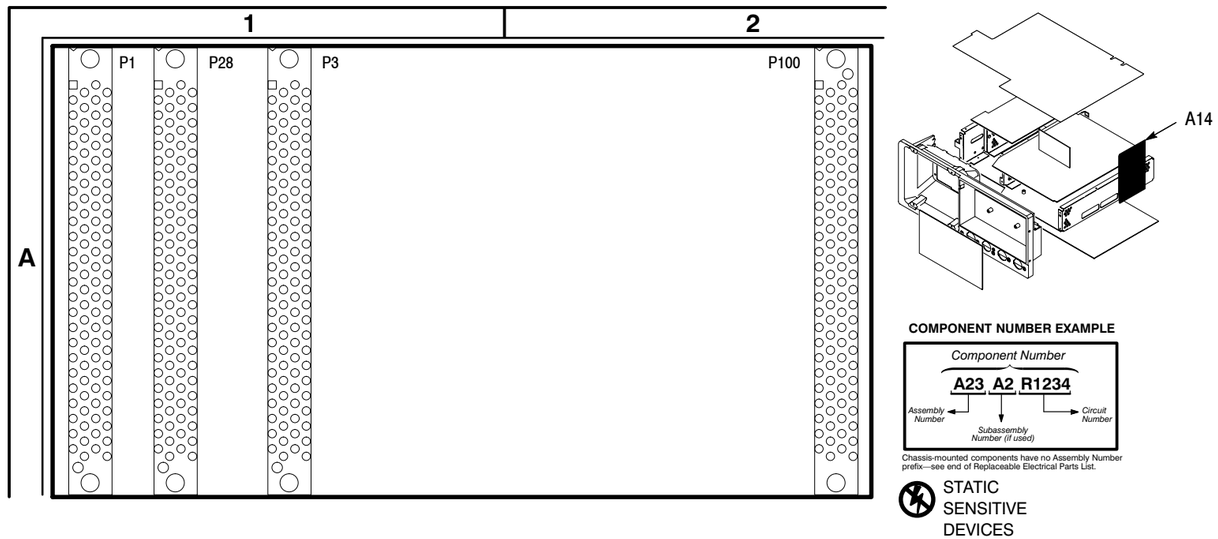
U2 OP07
Q1
R62 221
R65 681
U10 LT1021
TRIM
V IN
V OUT
GND
–15V
–5V

PROBE CALIBRATION
CALSIG
CALGND
PD1
PD2
SIGNAL
GND
R76 10
C76 0.1
C77 0.1
W76
MOUNTING POST ON CASTING

P2
FROM/TO J2 2A1 A11 PROCESSOR/ DISPLAY BOARD

+15V
+10REF
+5V
+5.1V
GND
C17 33uF
C22 33uF
C11 33uF
C1 0.1
C2 0.1
C3 0.1
C4 0.1
C5 0.1
C6 0.1
C7 0.1
C8 0.1
C9 0.1
C10 0.1
C18 33uF
C23 33uF
–5V
–15V
4.3VSB
ON/STBY
2B2

FRONT PANEL



COMPONENT NUMBER EXAMPLE

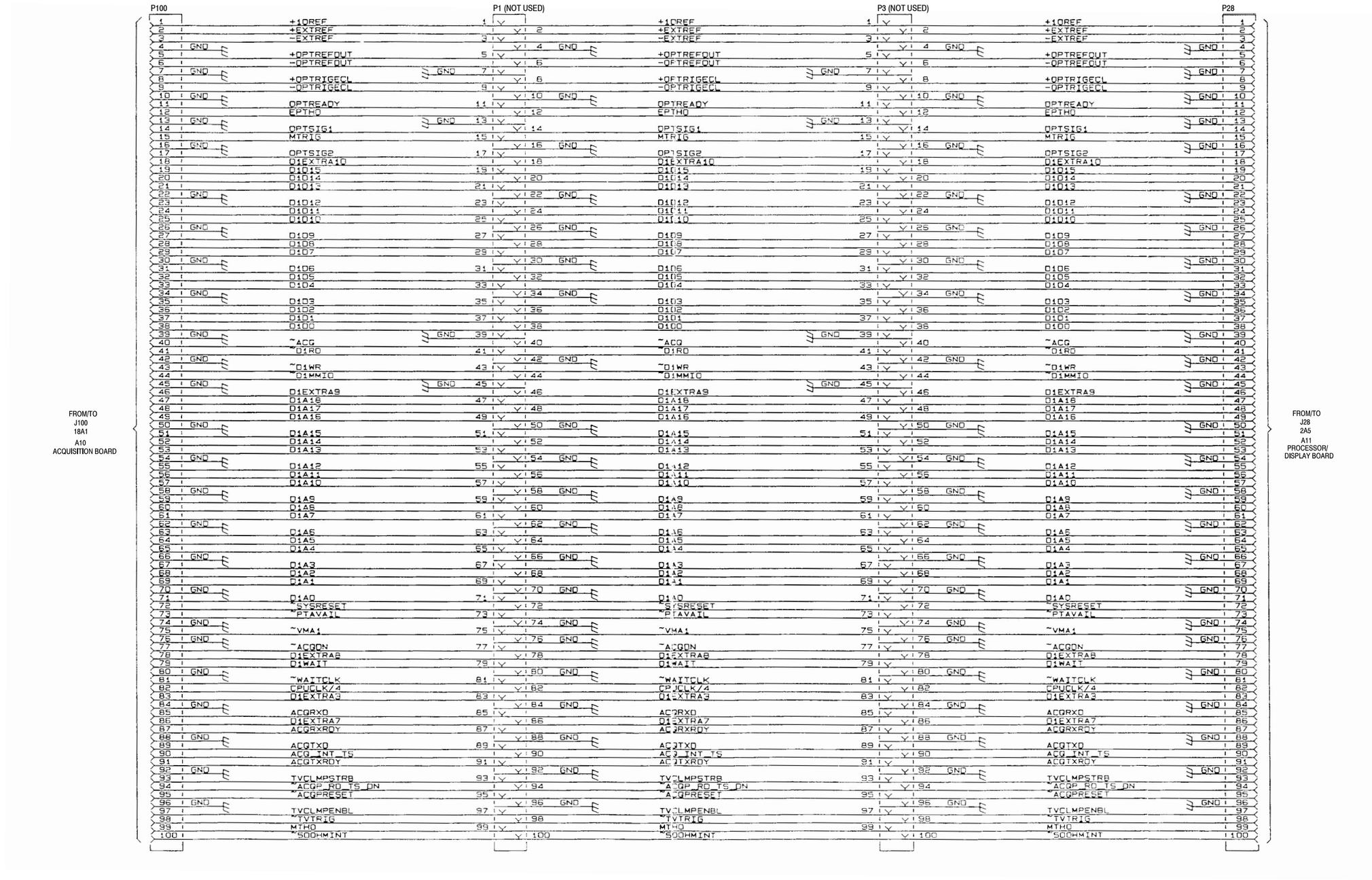
Chassis-mounted components have no Assembly Number prefix—see end of Replaceable Electrical Parts List.

STATIC SENSITIVE DEVICES

A14 D1 Bus Component Locator

CIRCUIT NUMBER	SCHEM NUMBER	SCHEM LOCATION	BOARD NUMBER	BOARD LOCATION	CIRCUIT NUMBER	SCHEM NUMBER	SCHEM LOCATION	BOARD NUMBER	BOARD LOCATION	CIRCUIT NUMBER	SCHEM NUMBER	SCHEM LOCATION	BOARD NUMBER	BOARD LOCATION	CIRCUIT NUMBER	SCHEM NUMBER	SCHEM LOCATION	BOARD NUMBER	BOARD LOCATION	CIRCUIT NUMBER	SCHEM NUMBER	SCHEM LOCATION	BOARD NUMBER	BOARD LOCATION
P3A	A14−1	4A	A14	1A	P3D	A14−1	4C	A14	1A	P28B	A14−1	6B	A14	1A	P28E	A14−1	6D	A14	1A	P100C	A14−1	1B	A14	2A
P3B	A14−1	4A	A14	1A	P3E	A14−1	4D	A14	1A	P28C	A14−1	6B	A14	1A	P100A	A14−1	1A	A14	2A	P100D	A14−1	1C	A14	2A
P3C	A14−1	4B	A14	1A	P28A	A14−1	6A	A14	1A	P28D	A14−1	6C	A14	1A	P100B	A14−1	1B	A14	2A	P100E	A14−1	1D	A14	2A

Figure 5–20: A14 D1 Bus board


P100
P1 (NOT USED)
P3 (NOT USED)
P28
FROM/TO J100 18A1 A10 ACQUISITION BOARD
FROM/TO J28 2A5 A11 PROCESSOR/ DISPLAY BOARD
+1OREF
+EXTREF
-EXTREF
GND
+OPTREFOUT
-OPTREFOUT
+OPTRIGECL
-OPTRIGECL
OPTREADY
EPTHO
OPTSIG1
MTRIG
OPTSIG2
D1EXTRA1O
D1D15
D1D14
D1D13
D1D12
D1D11
D1D1O
D1D9
D1D8
D1D7
D1D6
D1D5
D1D4
D1D3
D1D2
D1D1
D1D0
~ACQ
~D1RD
~D1WR
~D1MMIO
D1EXTRA9
D1A16
D1A17
D1A15
D1A14
D1A13
D1A12
D1A11
D1A1O
D1A9
D1A8
D1A7
D1A6
D1A5
D1A4
D1A3
D1A2
D1A1
D1A0
~SYSRESET
~PTAVAIL
~VMA1
~ACQON
D1EXTRA8
D1WAIT
~WAITCLK
CPUCLK/4
D1EXTRA3
ACQRXD
D1EXTRA7
ACQRXRDY
ACQTXD
ACQ_INT_TS
ACQTXRDY
TVCLMPSTRB
~ACQP_RD_TS_DN
~ACQPRESET
TVCLMPENBL
~TVTRIG
MTHO
~500HMINT

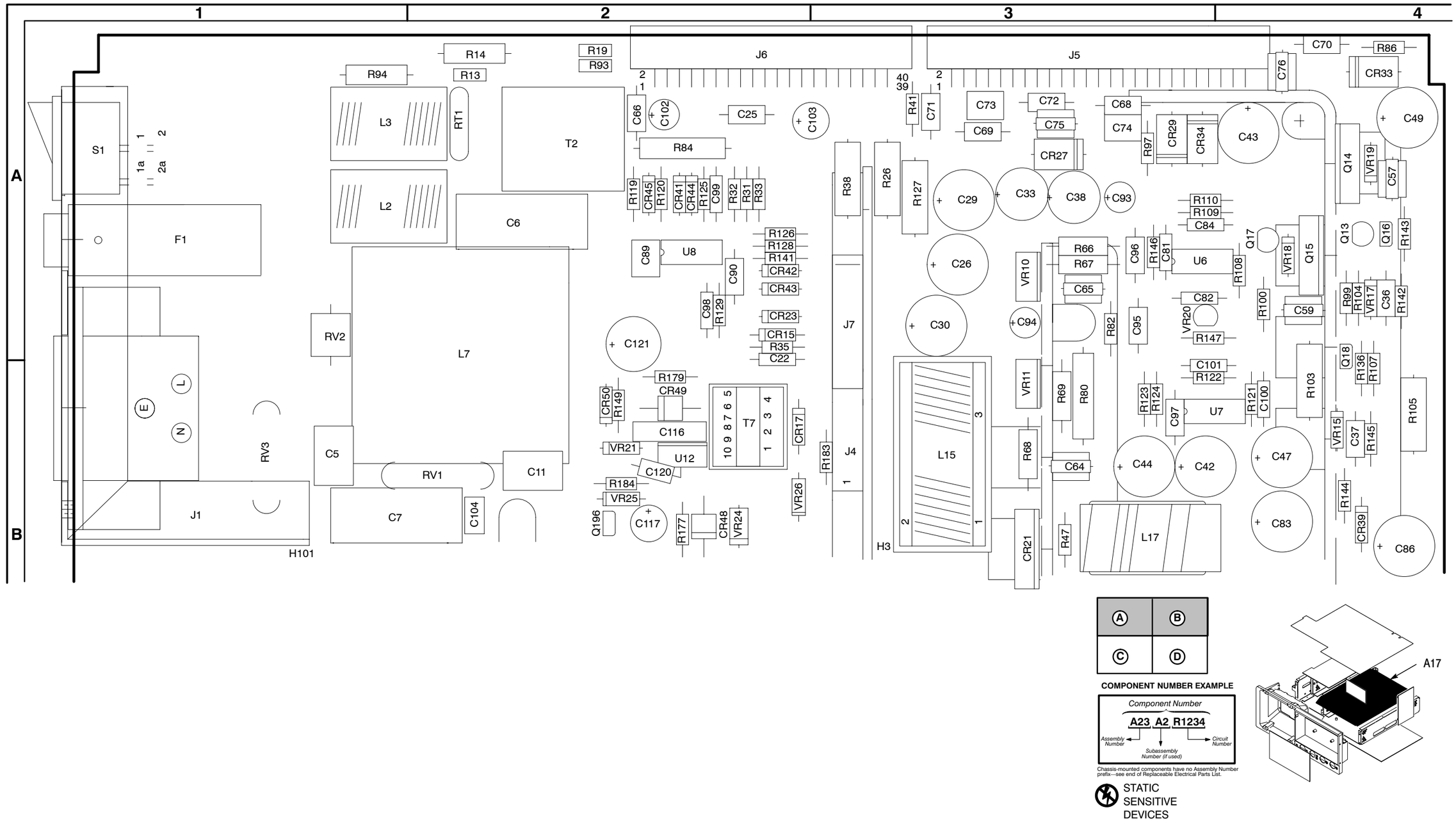


Figure 5–21: A17 RBL Mother board (sections A, B)

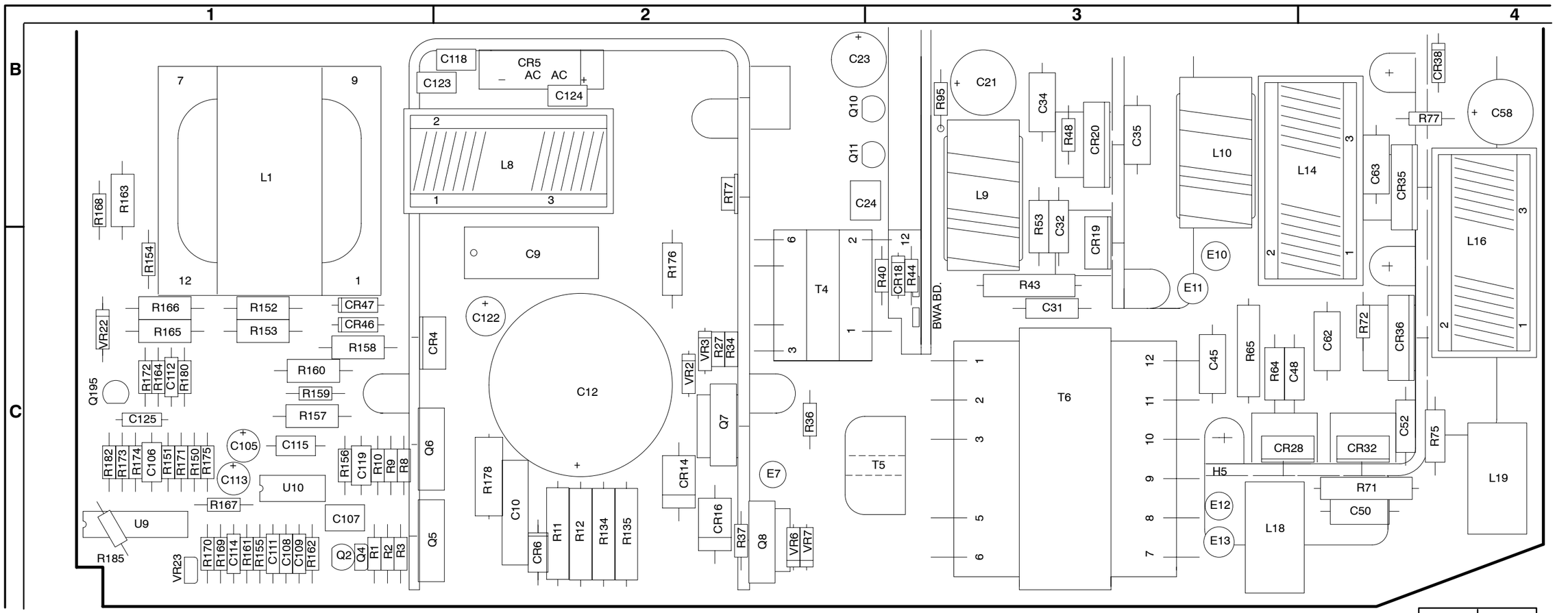
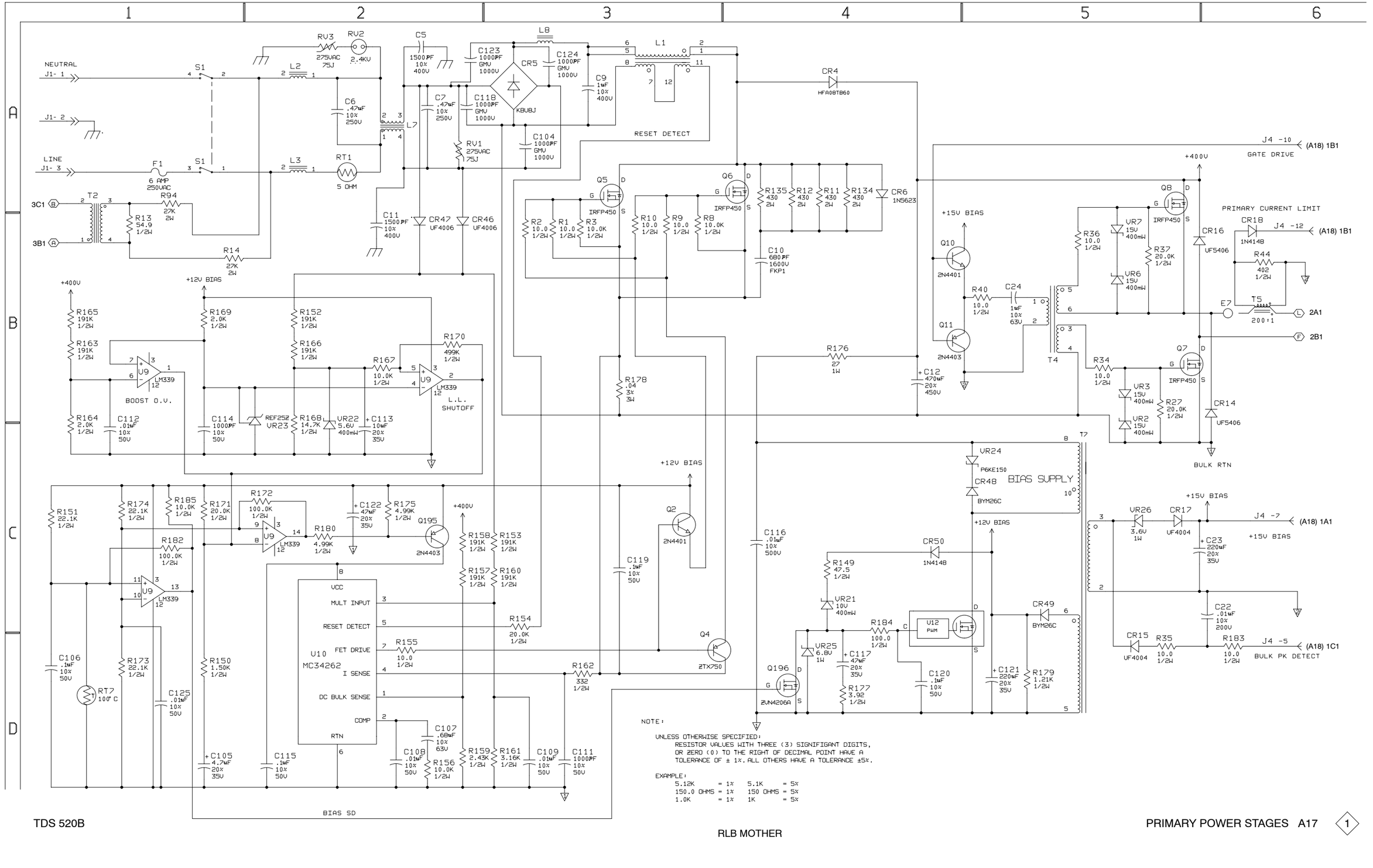


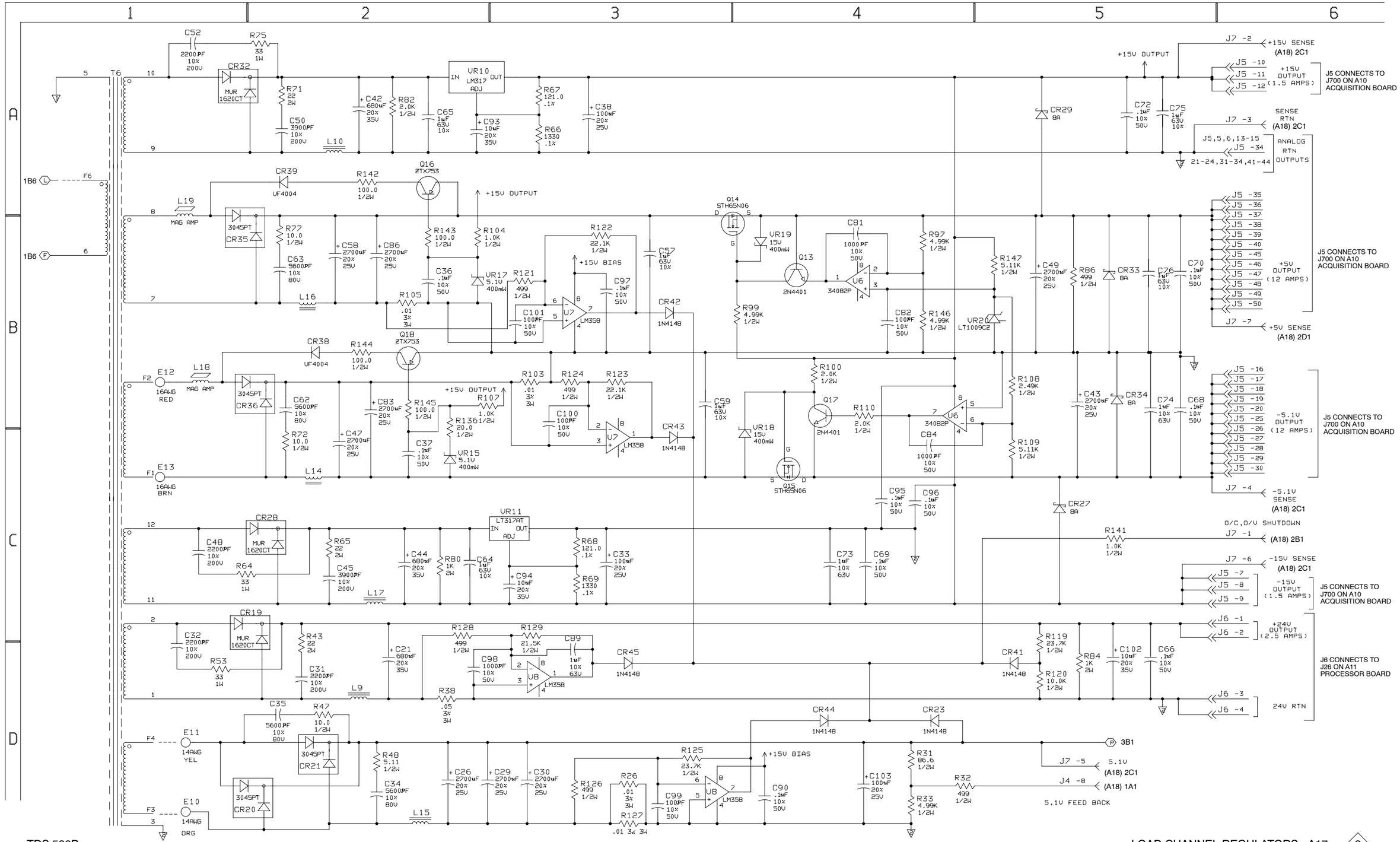
Figure 5–22: A17 RLB Mother board (sections C, D)

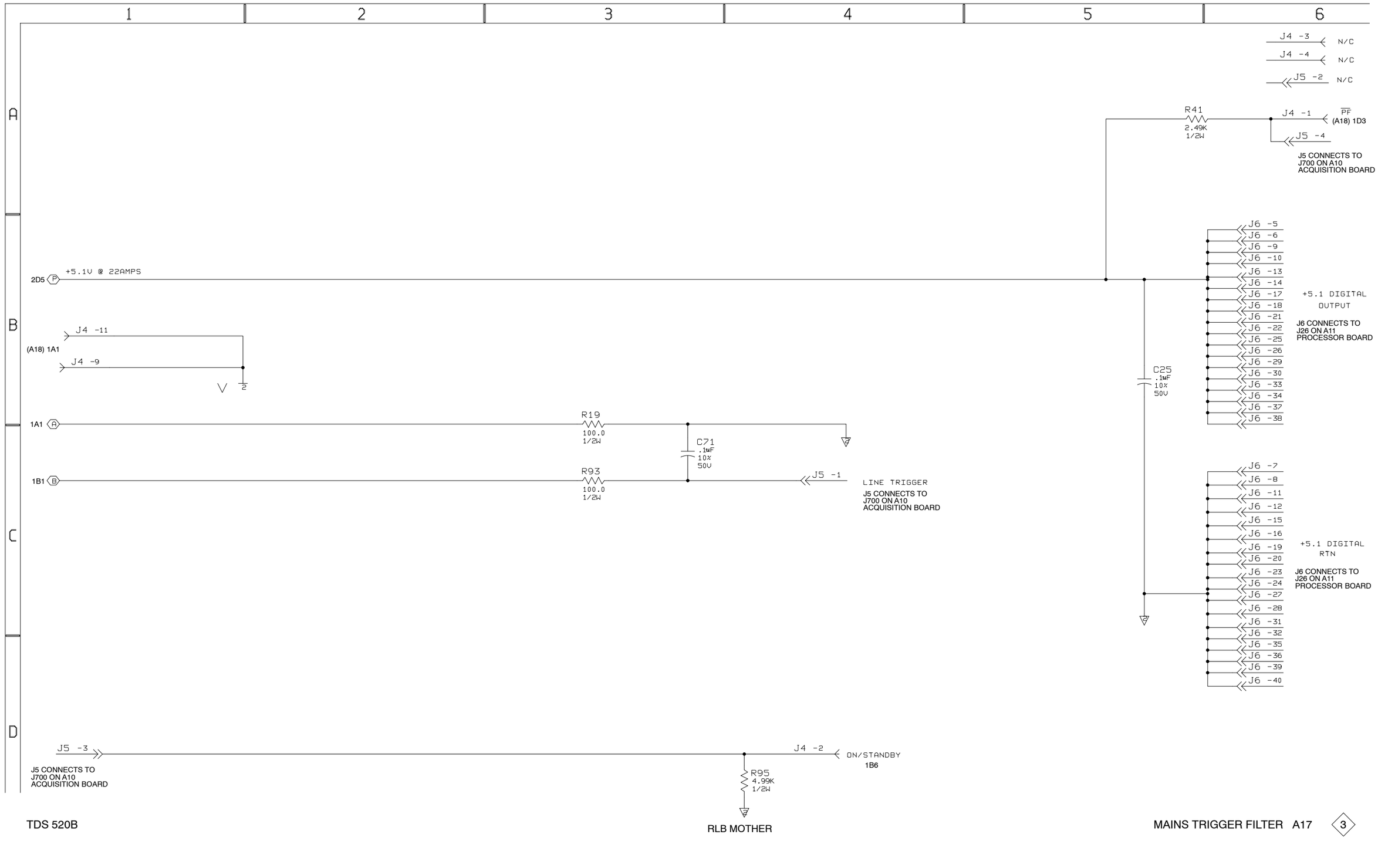
A17 RBL Mother Component Locator

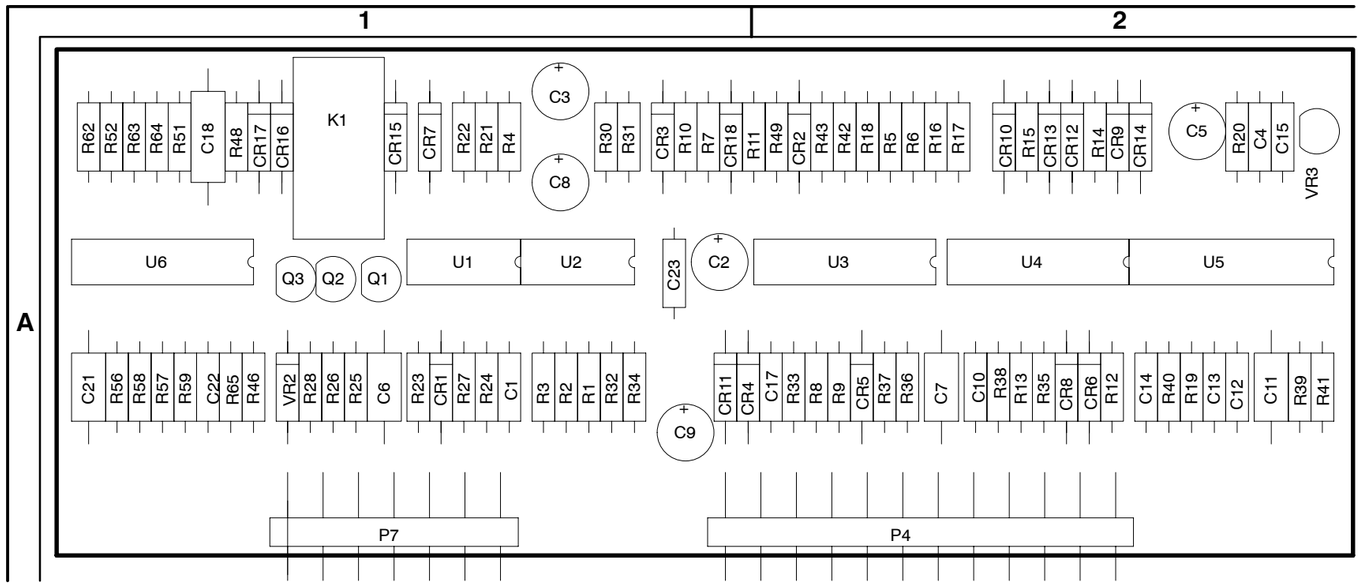
CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION
C5	B1	1A2	C69	A3	2C4	C120	B2	1D4	E12	C3	2B1	Q7	C2	1B5	R65	C3	2C2	R142	A4	2A2	R185	C1	1C1
C6	A2	1A2	C70	A4	2B5	C121	A2	1D5	E13	C3	2C1	Q8	C2	1B5	R66	A3	2A3	R143	A4	2B2	RT1	A2	1A2
C7	B1	1A2	C71	A3	3C3	C122	C2	1C2	F1	A1	1A1	Q10	B2	1B4	R67	A3	2A3	R144	B4	2B2	RT7	B2	1D1
C9	C2	1A3	C72	A3	2A5	C123	B2	1A2	J1	B1	1A1	Q11	B2	1B4	R68	B3	2C3	R145	B4	2B2	RV1	B2	1A2
C10	C2	1B4	C73	A3	2C4	C124	B2	1A3	J5	A2	2A6	Q13	A4	2B4	R69	B3	2C3	R146	A3	2B4	RV2	A1	1A2
C11	B2	1B2	C74	A3	2B5	C125	C1	1D1	J5	A2	2B6	Q14	A4	2A4	R71	C4	2A2	R147	A3	2B5	RV3	B1	1A2
C12	C2	1B4	C75	A3	2A5	CR4	C1	1A4	J5	A2	2C6	Q15	A4	2C4	R72	C4	2C2	R149	B2	1C4	S1	A1	1A1
C21	B3	2D2	C76	A4	2B5	CR5	B2	1A3	J5	A2	3A6	Q16	A4	2A2	R75	C4	2A2	R150	C1	1D1	T2	A1	1A1
C22	A2	1C6	C81	A3	2B4	CR6	C2	1A4	J5	A2	3C4	Q17	A4	2B4	R77	B4	2B2	R151	C1	1C1	T4	C2	1B5
C23	B2	1C6	C82	A3	2B4	CR14	C2	1B6	J5	A2	3D1	Q18	B4	2B2	R80	B3	2C2	R152	C1	1B2	T5	C2	1B6
C24	B2	1B5	C83	B4	2B2	CR15	A2	1C5	J4	B3	1A6	Q195	C1	1C2	R82	A3	2A2	R153	C1	1C3	T6	C3	2A1
C25	A2	3B5	C84	A3	2C4	CR16	C2	1B6	J4	B3	1C6	Q196	C1	1D4	R84	A2	2D5	R154	C1	1C3	T7	B2	1C5
C26	A3	2D2	C86	B4	2B2	CR17	B2	1C5	J4	B3	2D5	R1	C1	1B3	R86	A4	2B5	R155	C1	1D2	U6	A3	2B4
C29	A3	2D3	C89	A2	2D3	CR18	C3	1A6	J4	B3	3A6	R2	C1	1B3	R93	A2	3C3	R156	C1	1D2	U7	B3	2B3
C30	A3	2D3	C90	A2	2D4	CR19	B3	2C1	J4	B3	3B1	R3	C1	1B3	R94	A1	1A1	R157	C1	1C2	U7	B3	2C3
C31	C3	2D2	C93	A3	2A2	CR20	B3	2D1	J4	B3	3D4	R8	C1	1B3	R95	B3	3D3	R158	C1	1C2	U8	A2	2D3
C32	B3	2C1	C94	A3	2C3	CR21	B3	2D2	J6	A3	2C6	R9	C1	1B3	R97	A3	2B4	R159	C1	1D2	U9	C1	1B1
C33	A3	2C3	C95	A3	2C4	CR23	A2	2D4	J6	A3	2D5	R10	C1	1B3	R99	A4	2B4	R160	C1	1C3	U9	C1	1C1
C34	B3	2D2	C96	A3	2C4	CR27	A3	2C5	J6	A3	3B6	R11	C2	1A4	R100	A4	2B4	R161	C1	1D3	U9	C1	1C2
C35	B3	2D2	C98	A2	2D2	CR28	C3	2C2	J6	A3	3C6	R12	A2	1A4	R103	B4	2B3	R162	C1	1D3	U9	C1	1B2
C36	A4	2B2	C97	B3	2B3	CR29	A3	2A5	J7	A3	2A6	R13	A2	1A1	R104	A4	2B2	R163	B1	1B1	U10	C1	1C2
C37	B4	2B2	C99	A2	2D3	CR32	C4	2A1	J7	A3	2B6	R14	A2	1B1	R105	B4	2B2	R164	C1	1B1	U12	B2	1C4
C38	A3	2A3	C100	B4	2B3	CR33	A4	2B5	J7	A3	2C6	R19	A2	3B3	R107	B4	2B3	R165	C1	1B1	VR2	C2	1B5
C42	B3	2A2	C101	B3	2B3	CR34	A3	2B5	J7	A3	2D5	R26	A3	2D3	R108	A4	2B5	R166	C1	1B2	VR3	C2	1B5
C43	A4	2B5	C102	A2	2D5	CR35	B4	2B1	L1	B1	1A3	R27	C2	1B5	R109	A3	2C5	R167	C1	1B2	VR6	C2	1B5
C44	B3	2C2	C103	A2	2D4	CR36	C4	2B1	L2	A1	1A2	R31	A2	2D4	R110	A3	2B4	R168	B1	1B2	VR7	C2	1B5
C45	A2	2C2	C104	B2	1A3	CR38	B4	2B2	L3	A1	1A2	R32	A2	2D4	R119	A2	2C5	R169	C1	1B1	VR10	A3	2A2
C47	B4	2C2	C105	C1	1D1	CR39	B4	2A2	L7	A2	1A2	R33	A2	2D4	R120	A2	2C5	R170	C1	1B2	VR11	B3	2C3
C48	C3	2C1	C106	C1	1D1	CR41	A2	2D5	L8	B2	1A3	R34	C2	1B5	R121	B4	2B3	R171	C1	1C1	VR15	B4	2C2
C49	A4	2B5	C107	C1	1D2	CR42	A2	2B3	L9	B3	2D2	R35	C2	1C5	R122	B3	2B3	R172	C1	1C2	VR17	A4	2B2
C50	C4	2A2	C108	C1	1D2	CR43	A2	2B3	L10	B3	2A2	R36	C2	1B5	R123	B3	2B3	R173	C1	1D1	VR18	A4	2C4
C52	C4	2A1	C109	C1	1D3	CR44	A2	2D4	L14	B3	2C2	R37	C2	1B5	R124	B3	2B3	R174	C1	1C1	VR19	A4	2B4
C57	A4	2B3	C111	C1	1D3	CR45	A2	2D3	L15	B3	2A2	R38	A3	2D2	R125	A2	2D3	R175	C1	1C2	VR20	A3	2B5
C58	B4	2B2	C112	C1	1B1	CR46	C1	1B2	L16	B4	2B2	R40	C3	1B5	R126	A2	2D3	R176	C2	1B4	VR21	B2	1C4
C59	A4	2B3	C113	C1	1B2	CR47	C1	1B2	L17	B3	2C2	R41	A3	3A5	R127	A3	2D3	R177	B2	1D4	VR22	C1	1B2
C62	C4	2B2	C114	C1	1B1	CR48	B2	1C5	L18	C4	2B2	R43	C3	2C2	R128	A2	2C2	R178	C2	1B3	VR23	C1	1B2
C63	B4	2B2	C115	C1	1D2	CR49	B2	1C5	L19	C4	2A1	R44	C3	1B6	R129	A2	2C3	R179	B2	1D5	VR24	B2	1C5
C64	B3	2C2	C116	B2	1C4	CR50	B2	1C5	Q2	C1	1C3	R47	B3	2D2	R134	C2	1A4	R180	C1	1C2	VR25	B2	1C4
C65	A3	2A2	C117	B2	1D4	E7	C2	1B6	Q4	C1	1C3	R48	B3	2D2	R135	C2	1A4	R182	C1	1C1	VR26	B2	1C5
C66	A2	2D5	C118	B2	1A2	E10	C3	2D1	Q5	C2	1A3	R53	B3	2D2	R136	B4	2B2	R183	B2	1C6			
C68	A3	2B5	C119	C1	1C3	E11	C3	2D1	Q6	C2	1A4	R64	C3	2C1	R141	A2	2C5	R184	B2	1C4			

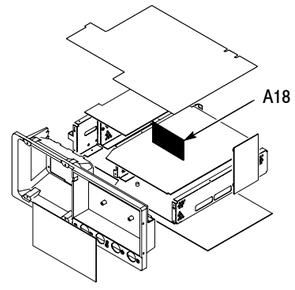
Figure 5–23: A17 RLB Mother component locator


NEUTRAL
J1- 1
J1- 2
LINE
J1- 3
F1
6 AMP
250VAC
S1
L2
L3
L7
L8
L1
C6
.47uF
10%
250V
C5
1500PF
10%
400V
C7
.47uF
10%
250V
C123
1000PF
GMV
1000V
C118
1000PF
GMV
1000V
CR5
KBU8J
C124
1000PF
GMV
1000V
C9
1uF
10%
400V
C104
1000PF
GMV
1000V
RV3
275VAC
75J
RV2
2.4KV
RV1
275VAC
75J
RT1
5 OHM
RESET DETECT
CR4
HFA08TB60
J4 -10
(A18) 1B1
GATE DRIVE
T2
3C1
3B1
R94
27K
2W
R13
54.9
1/2W
R14
27K
2W
C11
1500PF
10%
400V
CR47
UF4006
CR46
UF4006
Q5
IRFP450
Q6
IRFP450
R2
10.0
1/2W
R1
10.0
1/2W
R3
10.0K
1/2W
R10
10.0
1/2W
R9
10.0
1/2W
R8
10.0K
1/2W
R135
430
2W
R12
430
2W
R11
430
2W
R134
430
2W
CR6
1N5623
C10
680PF
1600V
FKP1
+400V
+12V BIAS
R165
191K
1/2W
R163
191K
1/2W
R164
2.0K
1/2W
C112
.01uF
10%
50V
BOOST O.V.
R169
2.0K
1/2W
R152
191K
1/2W
R166
191K
1/2W
R167
10.0K
1/2W
R170
499K
1/2W
L.L.
SHUTOFF
C114
1000PF
10%
50V
REF252
VR23
R168
14.7K
1/2W
VR22
5.6V
400mW
C113
10uF
20%
35V
R178
.04
3%
3W
R176
27
1W
C12
470uF
20%
450V
+15V BIAS
Q10
2N4401
Q11
2N4403
R40
10.0
1/2W
C24
1uF
10%
63V
T4
R36
10.0
1/2W
VR7
15V
400mW
VR6
15V
400mW
R37
20.0K
1/2W
Q8
IRFP450
PRIMARY CURRENT LIMIT
CR18
1N4148
J4 -12
(A18) 1B1
CR16
UF5406
R44
402
1/2W
E7
T5
200:1
L
2A1
F
2B1
R34
10.0
1/2W
Q7
IRFP450
VR3
15V
400mW
VR2
15V
400mW
R27
20.0K
1/2W
CR14
UF5406
BULK RTN
T7
VR24
P6KE150
CR48
BYM26C
BIAS SUPPLY
+12V BIAS
+15V BIAS
VR26
3.6V
1W
CR17
UF4004
J4 -7
(A18) 1A1
+15V BIAS
C23
220uF
20%
35V
C22
.01uF
10%
200V
CR15
UF4004
R35
10.0
1/2W
R183
10.0
1/2W
J4 -5
(A18) 1C1
BULK PK DETECT
R151
22.1K
1/2W
R174
22.1K
1/2W
R185
10.0K
1/2W
R171
20.0K
1/2W
R172
100.0K
1/2W
R182
100.0K
1/2W
R180
4.99K
1/2W
C122
47uF
20%
35V
R175
4.99K
1/2W
Q195
2N4403
Q2
2N4401
+400V
R158
191K
1/2W
R153
191K
1/2W
R157
191K
1/2W
R160
191K
1/2W
C119
.1uF
10%
50V
R154
20.0K
1/2W
Q4
ZTX750
U10
MC34262
VCC
MULT INPUT
RESET DETECT
FET DRIVE
I SENSE
DC BULK SENSE
COMP
RTN
R155
10.0
1/2W
R162
332
1/2W
C106
.1uF
10%
50V
RT7
100° C
R173
22.1K
1/2W
C125
.01uF
10%
50V
R150
1.50K
1/2W
C105
4.7uF
20%
35V
C115
.1uF
10%
50V
C107
.68uF
10%
63V
C108
.01uF
10%
50V
R156
10.0K
1/2W
R159
2.43K
1/2W
R161
3.16K
1/2W
C109
.01uF
10%
50V
C111
1000PF
10%
50V
BIAS SD
C116
.01uF
10%
500V
R149
47.5
1/2W
VR21
10V
400mW
CR50
1N4148
R184
100.0
1/2W
U12
PWM
CR49
BYM26C
VR25
6.8V
1W
C117
47uF
20%
35V
R177
3.92
1/2W
Q196
2VN4206A
C120
.1uF
10%
50V
C121
220uF
20%
35V
R179
1.21K
1/2W
NOTE:
UNLESS OTHERWISE SPECIFIED:
RESISTOR VALUES WITH THREE (3) SIGNIFIGANT DIGITS,
OR ZERO (0) TO THE RIGHT OF DECIMAL POINT HAVE A
TOLERANCE OF ± 1%. ALL OTHERS HAVE A TOLERANCE ±5%.
EXAMPLE:
5.12K = 1% 5.1K = 5%
150.0 OHMS = 1% 150 OHMS = 5%
1.0K = 1% 1K = 5%

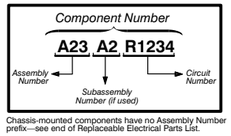

1
2
3
4
5
6
A
B
C
D
T6
C52 2200PF 10% 200V
R75 33 1W
CR32 MUR 1620CT
R71 22 2W
C50 3900PF 10% 200V
L10
C42 680uF 20% 35V
R82 2.0K 1/2W
C65 1uF 63V 10%
VR10 LM317 ADJ
C93 10uF 20% 35V
R67 121.0 .1%
R66 1330 .1%
C38 100uF 20% 25V
+15V OUTPUT
CR29 8A
C72 .1uF 10% 50V
C75 1uF 63V 10%
J7 -2 +15V SENSE (A18) 2C1
J5 -10
J5 -11
J5 -12
+15V OUTPUT (1.5 AMPS)
J5 CONNECTS TO J700 ON A10 ACQUISITION BOARD
J7 -3 SENSE RTN (A18) 2C1
J5,5,6,13-15
J5 -34
ANALOG RTN OUTPUTS
21-24,31-34,41-44
1B6 F6
1B6 F6
CR39 UF4004
R142 100.0 1/2W
Q16 ZTX753
L19 MAG AMP
3045PT CR35
R77 10.0 1/2W
C63 5600PF 10% 80V
C58 2700uF 20% 25V
C86 2700uF 20% 25V
R143 100.0 1/2W
R104 1.0K 1/2W
C36 .1uF 10% 50V
L16
R105 .01 3% 3W
VR17 5.1V 400mW
R121 499 1/2W
R122 22.1K 1/2W
+15V BIAS
C97 .1uF 10% 50V
C101 100PF 10% 50V
U7 LM358
CR42 1N4148
C57 1uF 63V 10%
Q14 STH65N06
VR19 15V 400mW
Q13 2N4401
C81 1000PF 10% 50V
U6 340B2P
R97 4.99K 1/2W
R99 4.99K 1/2W
C82 100PF 10% 50V
R146 4.99K 1/2W
R147 5.11K 1/2W
VR20 LT1009CZ
C49 2700uF 20% 25V
R86 499 1/2W
CR33 8A
C76 1uF 63V 10%
C70 .1uF 10% 50V
+5V OUTPUT (12 AMPS)
J5 -35
J5 -36
J5 -37
J5 -38
J5 -39
J5 -40
J5 -45
J5 -46
J5 -47
J5 -48
J5 -49
J5 -50
J7 -7 +5V SENSE (A18) 2D1
J5 CONNECTS TO J700 ON A10 ACQUISITION BOARD
CR38 UF4004
R144 100.0 1/2W
Q18 ZTX753
E12 16AWG RED
L18 MAG AMP
3045PT CR36
C62 5600PF 10% 80V
R72 10.0 1/2W
C83 2700uF 20% 25V
R145 100.0 1/2W
C37 .1uF 10% 50V
R107 1.0K 1/2W
R1361/2W 20.0 1/2W
VR15 5.1V 400mW
R103 .01 3% 3W
R124 499 1/2W
R123 22.1K 1/2W
C100 100PF 10% 50V
U7 LM358
CR43 1N4148
C47 2700uF 20% 25V
L14
E13 16AWG BRN
C59 1uF 63V 10%
R100 2.0K 1/2W
VR18 15V 400mW
Q17 2N4401
R110 2.0K 1/2W
U6 34082P
C84 1000PF 10% 50V
R108 2.49K 1/2W
R109 5.11K 1/2W
Q15 STH65N06
C95 .1uF 10% 50V
C96 .1uF 10% 50V
CR27 8A
C43 2700uF 20% 25V
CR34 8A
C74 1uF 10% 63V
C68 .1uF 10% 50V
J5 -16
J5 -17
J5 -18
J5 -19
J5 -20
J5 -25
J5 -26
J5 -27
J5 -28
J5 -29
J5 -30
-5.1V OUTPUT (12 AMPS)
J5 CONNECTS TO J700 ON A10 ACQUISITION BOARD
J7 -4 -5.1V SENSE (A18) 2C1
CR28 MUR 1620CT
C48 2200PF 10% 200V
R64 33 1W
R65 22 2W
C45 3900PF 10% 200V
L17
C44 680uF 20% 35V
R80 1K 2W
C64 1uF 63V 10%
VR11 LT317AT ADJ
C94 10uF 20% 35V
R68 121.0 .1%
R69 1330 .1%
C33 100uF 20% 25V
C73 1uF 10% 63V
C69 .1uF 10% 50V
R141 1.0K 1/2W
O/C,O/V SHUTDOWN
J7 -1 (A18) 2B1
J7 -6 -15V SENSE (A18) 2C1
J5 -7
J5 -8
J5 -9
-15V OUTPUT (1.5 AMPS)
J5 CONNECTS TO J700 ON A10 ACQUISITION BOARD
CR19 MUR 1620CT
C32 2200PF 10% 200V
R53 33 1W
R43 22 2W
C31 2200PF 10% 200V
L9
C21 680uF 20% 35V
R128 499 1/2W
R129 21.5K 1/2W
C89 1uF 10% 63V
C98 1000PF 10% 50V
U8 LM358
CR45 1N4148
R38 .05 3% 3W
CR41 1N4148
R119 23.7K 1/2W
R120 10.0K 1/2W
R84 1K 2W
C102 10uF 20% 35V
C66 .1uF 10% 50V
J6 -1
J6 -2
+24V OUTPUT (2.5 AMPS)
J6 -3
J6 -4
24V RTN
J6 CONNECTS TO J26 ON A11 PROCESSOR BOARD
C35 5600PF 10% 80V
R47 10.0 1/2W
E11 14AWG YEL
3045PT CR21
CR44 1N4148
CR23 1N4148
3B1
J7 -5 5.1V (A18) 2C1
J4 -8 (A18) 1A1
5.1V FEED BACK
R48 5.11 1/2W
C34 5600PF 10% 80V
C26 2700uF 20% 25V
C29 2700uF 20% 25V
C30 2700uF 20% 25V
R125 23.7K 1/2W
+15V BIAS
R126 499 1/2W
R26 .01 3% 3W
R127 .01 3% 3W
C99 100PF 10% 50V
U8 LM358
C90 .1uF 10% 50V
+C103 100uF 20% 25V
R31 86.6 1/2W
R33 4.99K 1/2W
R32 499 1/2W
E10 14AWG ORG
3045PT CR20
L15


1
2
3
4
5
6
A
B
C
D
J4 -3
N/C
J4 -4
N/C
J5 -2
N/C
R41
2.49K
1/2W
J4 -1
PF
(A18) 1D3
J5 -4
J5 CONNECTS TO
J700 ON A10
ACQUISITION BOARD
2D5
+5.1V @ 22AMPS
J6 -5
J6 -6
J6 -9
J6 -10
J6 -13
J6 -14
J6 -17
J6 -18
J6 -21
J6 -22
J6 -25
J6 -26
J6 -29
J6 -30
J6 -33
J6 -34
J6 -37
J6 -38
+5.1 DIGITAL
OUTPUT
J6 CONNECTS TO
J26 ON A11
PROCESSOR BOARD
J4 -11
(A18) 1A1
J4 -9
C25
.1uF
10%
50V
1A1
R19
100.0
1/2W
C71
.1uF
10%
50V
1B1
R93
100.0
1/2W
J5 -1
LINE TRIGGER
J5 CONNECTS TO
J700 ON A10
ACQUISITION BOARD
J6 -7
J6 -8
J6 -11
J6 -12
J6 -15
J6 -16
J6 -19
J6 -20
J6 -23
J6 -24
J6 -27
J6 -28
J6 -31
J6 -32
J6 -35
J6 -36
J6 -39
J6 -40
+5.1 DIGITAL
RTN
J6 CONNECTS TO
J26 ON A11
PROCESSOR BOARD
J5 -3
J5 CONNECTS TO
J700 ON A10
ACQUISITION BOARD
J4 -2
ON/STANDBY
1B6
R95
4.99K
1/2W
RLB MOTHER





COMPONENT NUMBER EXAMPLE



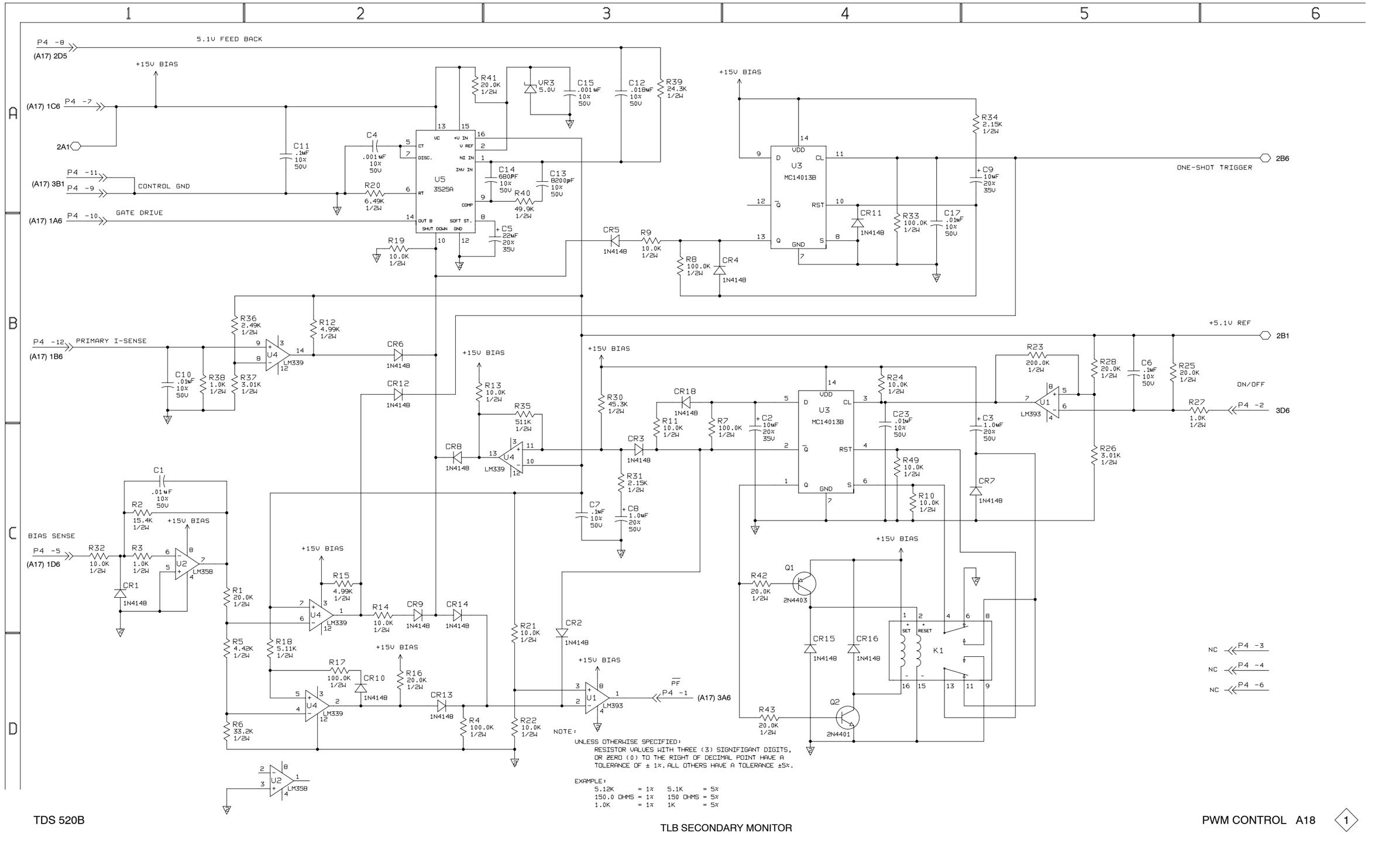
Chassis-mounted components have no Assembly Number prefix—see end of Replaceable Electrical Parts List.

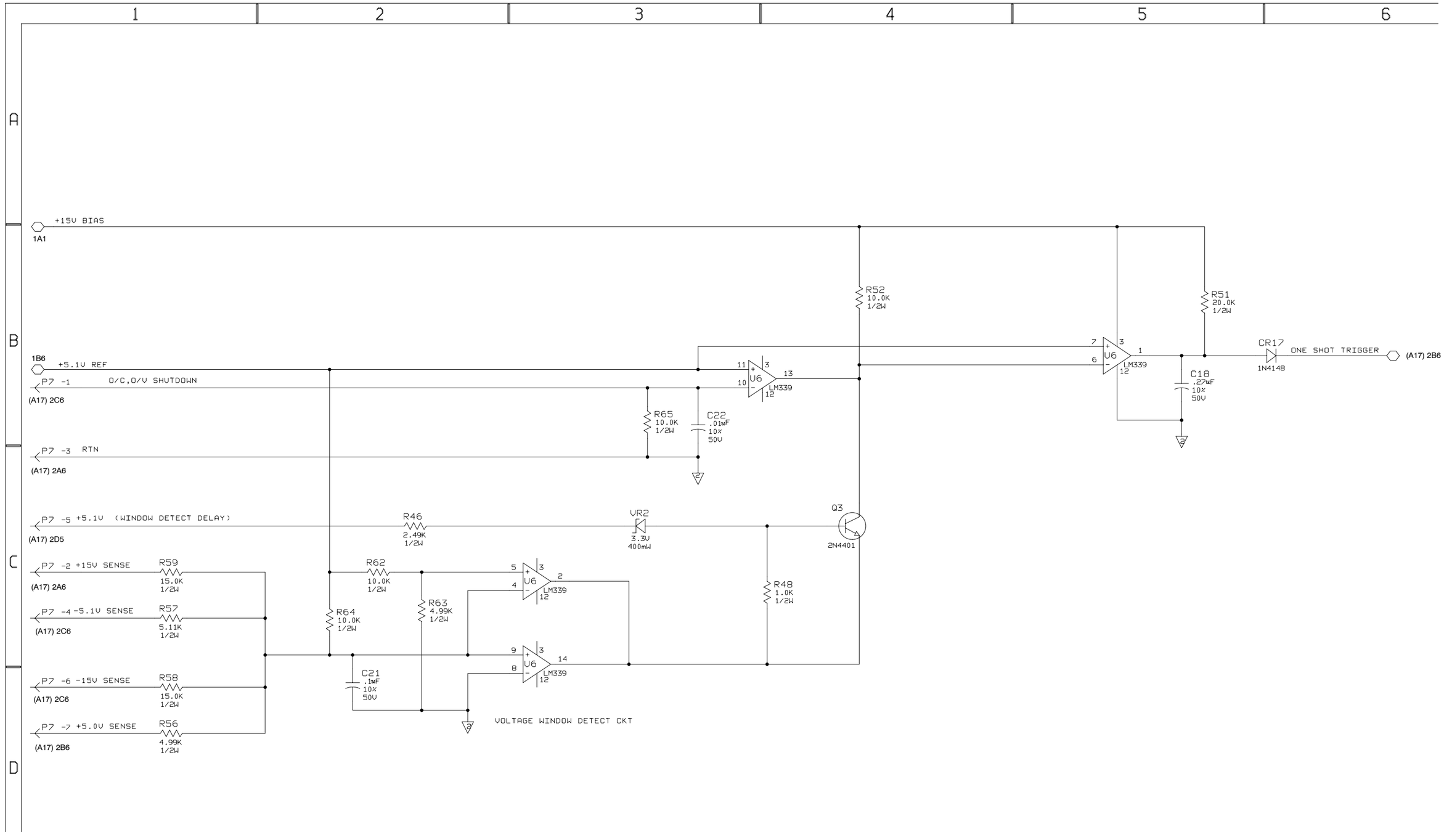
STATIC SENSITIVE DEVICES

A18 Secondary Monitor Component Locator

CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION	CIRCUIT NUMBER	BOARD LOCATION	SCHEM LOCATION
C1	A1	1C1	C17	A2	1A4	CR11	A1	1A4	Q1	A1	1C4	R13	A2	1B3	R31	A1	1C3	R49	A2	1C4	U3	A2	1A4
C2	A1	1C4	C18	A1	2B5	CR12	A2	1B2	Q2	A1	1D4	R14	A2	1C2	R32	A1	1C1	R51	A1	2B5	U3	A2	1C4
C3	A1	1C5	C21	A1	2D2	CR13	A2	1D2	Q3	A1	2C4	R15	A2	1C2	R33	A2	1B4	R52	A1	2B4	U4	A2	1B2
C4	A2	1A2	C22	A1	2B3	CR14	A2	1C2	R1	A1	1C1	R16	A2	1D2	R34	A1	1A5	R56	A1	2D1	U4	A2	1C2
C5	A2	1B3	C23	A1	1C4	CR15	A1	1D4	R2	A1	1C1	R17	A2	1D2	R35	A2	1C3	R57	A1	2C1	U4	A2	1C3
C6	A1	1B5	CR1	A1	1C1	CR16	A1	1D4	R3	A1	1C1	R18	A2	1D2	R36	A2	1B1	R58	A1	2D1	U4	A2	1D2
C7	A2	1C3	CR2	A2	1C3	CR17	A1	2B5	R4	A1	1D2	R19	A2	1B2	R37	A2	1B1	R59	A1	2C1	U5	A2	1D2
C8	A1	1C3	CR3	A1	1C3	CR18	A1	1C3	R5	A2	1D1	R20	A2	1A2	R38	A2	1B1	R62	A2	2C2	U5	A2	1C1
C9	A1	1A5	CR4	A2	1B3	K1	A1	1D4	R6	A2	1D1	R21	A1	1D3	R39	A2	1A3	R63	A1	2C2	U6	A1	2B3
C10	A2	1B1	CR5	A2	1B3	P4	A2	1A1	R7	A1	1C3	R22	A1	1D3	R40	A2	1A3	R64	A1	2C2	U6	A1	2B5
C11	A2	1A2	CR6	A2	1B2	P4	A2	1B1	R8	A2	1B3	R23	A1	1B5	R41	A2	1A2	R65	A1	2B3	U6	A1	2C2
C12	A2	1B3	CR7	A2	1C5	P4	A2	1C1	R9	A2	1B3	R24	A1	1B4	R42	A2	1C4	U1	A1	1B5	U6	A1	2D2
C13	A2	1B3	CR8	A2	1C2	P7	A1	2B1	R10	A1	1C4	R25	A1	1B5	R43	A2	1D4	U1	A1	1D3	VR2	A1	2C3
C14	A2	1B3	CR9	A2	1C2	P7	A1	2C1	R11	A2	1C3	R26	A1	1B5	R46	A1	2C2	U2	A1	1C1	VR3	A2	1A3
C15	A2	1B3	CR10	A2	1D2	P7	A1	2D1	R12	A2	1B2	R30	A1	1B3	R48	A1	2C3	U2	A1	1D3			

Figure 5–24: A18 TBL Secondary Monitor board


1
2
3
4
5
6
A
B
C
D
P4 -8
(A17) 2D5
5.1V FEED BACK
+15V BIAS
(A17) 1C6
P4 -7
2A1
P4 -11
(A17) 3B1
P4 -9
CONTROL GND
P4 -10
(A17) 1A6
GATE DRIVE
U5
3525A
VC
+V IN
CT
V REF
DISC.
NI IN
INV IN
RT
COMP
OUT B
SOFT ST.
SHUT DOWN
GND
C11 .1uF 10% 50V
C4 .001uF 10% 50V
R20 6.49K 1/2W
R41 20.0K 1/2W
VR3 5.0V
C15 .001uF 10% 50V
C12 .018uF 10% 50V
R39 24.3K 1/2W
C14 680PF 10% 50V
C13 8200pF 10% 50V
R40 49.9K 1/2W
C5 22uF 20% 35V
R19 10.0K 1/2W
CR5 1N4148
R9 10.0K 1/2W
R8 100.0K 1/2W
CR4 1N4148
+15V BIAS
U3
MC14013B
VDD
D
CL
Q
RST
S
GND
R34 2.15K 1/2W
C9 10uF 20% 35V
CR11 1N4148
R33 100.0K 1/2W
C17 .01uF 10% 50V
ONE-SHOT TRIGGER
2B6
P4 -12
(A17) 1B6
PRIMARY I-SENSE
R36 2.49K 1/2W
R12 4.99K 1/2W
U4
LM339
C10 .01uF 10% 50V
R38 1.0K 1/2W
R37 3.01K 1/2W
CR6 1N4148
CR12 1N4148
+15V BIAS
R13 10.0K 1/2W
R35 511K 1/2W
CR8 1N4148
CR3 1N4148
R31 2.15K 1/2W
C8 1.0uF 20% 50V
C7 .1uF 10% 50V
+15V BIAS
R30 45.3K 1/2W
CR18 1N4148
R11 10.0K 1/2W
R7 100.0K 1/2W
C2 10uF 20% 35V
R24 10.0K 1/2W
C23 .01uF 10% 50V
C3 1.0uF 20% 50V
CR7 1N4148
R49 10.0K 1/2W
R10 10.0K 1/2W
R23 200.0K 1/2W
U1
LM393
R28 20.0K 1/2W
C6 .1uF 10% 50V
R25 20.0K 1/2W
R27 1.0K 1/2W
+5.1V REF
2B1
ON/OFF
P4 -2
3D6
R26 3.01K 1/2W
C1 .01uF 10% 50V
R2 15.4K 1/2W
+15V BIAS
BIAS SENSE
P4 -5
(A17) 1D6
R32 10.0K 1/2W
R3 1.0K 1/2W
U2
LM358
CR1 1N4148
R1 20.0K 1/2W
R5 4.42K 1/2W
R18 5.11K 1/2W
R6 33.2K 1/2W
+15V BIAS
R15 4.99K 1/2W
R14 10.0K 1/2W
CR9 1N4148
CR14 1N4148
R21 10.0K 1/2W
CR2 1N4148
+15V BIAS
R17 100.0K 1/2W
CR10 1N4148
R16 20.0K 1/2W
CR13 1N4148
R4 100.0K 1/2W
R22 10.0K 1/2W
+15V BIAS
U1
LM393
PF
P4 -1
(A17) 3A6
Q1
2N4403
R42 20.0K 1/2W
CR15 1N4148
CR16 1N4148
K1
SET
RESET
Q2
2N4401
R43 20.0K 1/2W
NC P4 -3
NC P4 -4
NC P4 -6
NOTE:
UNLESS OTHERWISE SPECIFIED:
RESISTOR VALUES WITH THREE (3) SIGNIFIGANT DIGITS,
OR ZERO (0) TO THE RIGHT OF DECIMAL POINT HAVE A
TOLERANCE OF ± 1%. ALL OTHERS HAVE A TOLERANCE ±5%.
EXAMPLE:
5.12K = 1% 5.1K = 5%
150.0 OHMS = 1% 150 OHMS = 5%
1.0K = 1% 1K = 5%


+15V BIAS
1A1
R52
10.0K
1/2W
R51
20.0K
1/2W
CR17
ONE SHOT TRIGGER
(A17) 2B6
1N4148
1B6
+5.1V REF
P7 -1
O/C,O/V SHUTDOWN
(A17) 2C6
U6
LM339
C18
.27uF
10%
50V
R65
10.0K
1/2W
C22
.01uF
10%
50V
P7 -3 RTN
(A17) 2A6
P7 -5 +5.1V (WINDOW DETECT DELAY)
(A17) 2D5
R46
2.49K
1/2W
VR2
3.3V
400mW
Q3
2N4401
P7 -2 +15V SENSE
(A17) 2A6
R59
15.0K
1/2W
R62
10.0K
1/2W
R48
1.0K
1/2W
P7 -4 -5.1V SENSE
(A17) 2C6
R57
5.11K
1/2W
R64
10.0K
1/2W
R63
4.99K
1/2W
C21
.1uF
10%
50V
P7 -6 -15V SENSE
(A17) 2C6
R58
15.0K
1/2W
P7 -7 +5.0V SENSE
(A17) 2B6
R56
4.99K
1/2W
VOLTAGE WINDOW DETECT CKT

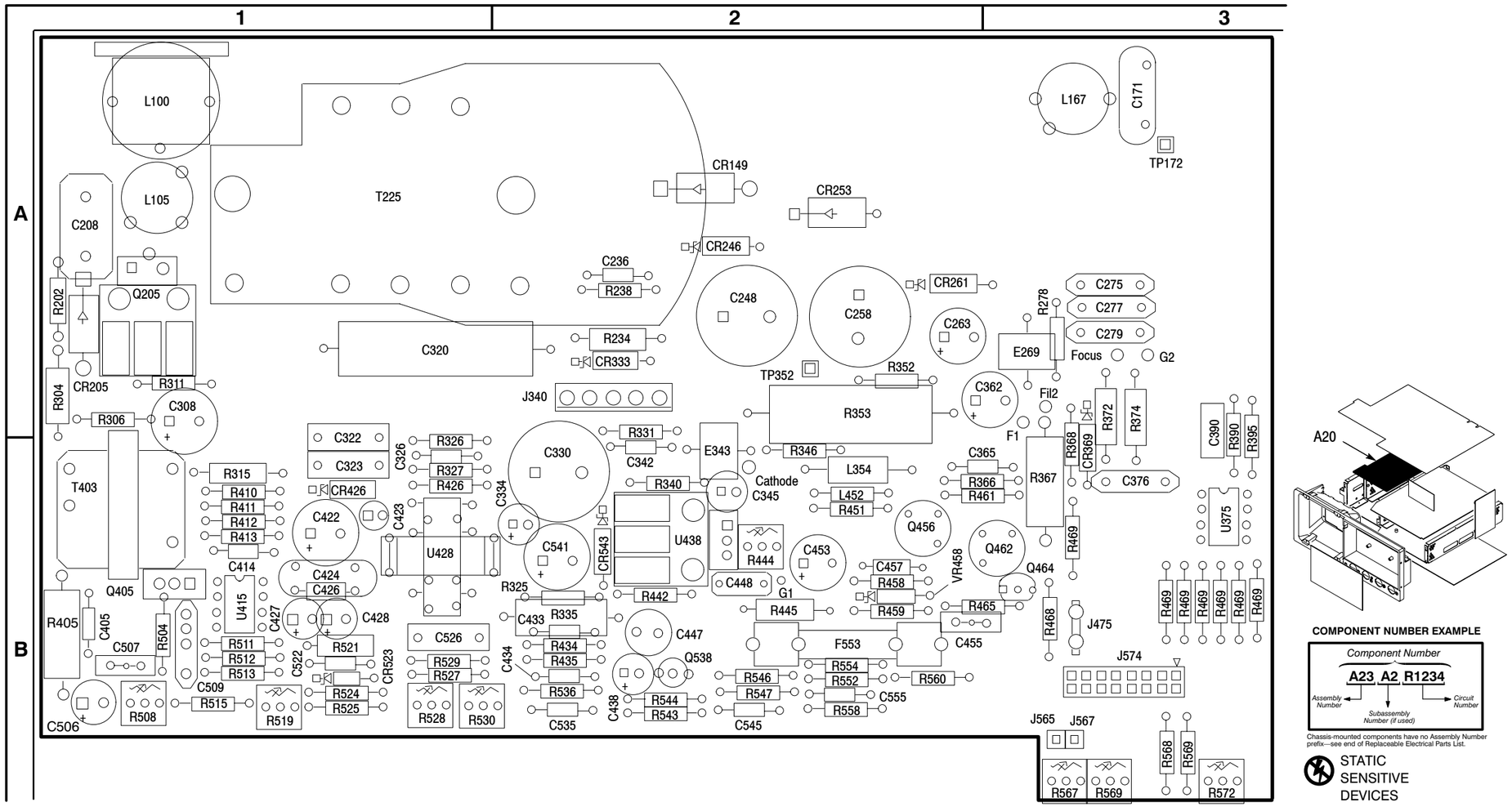
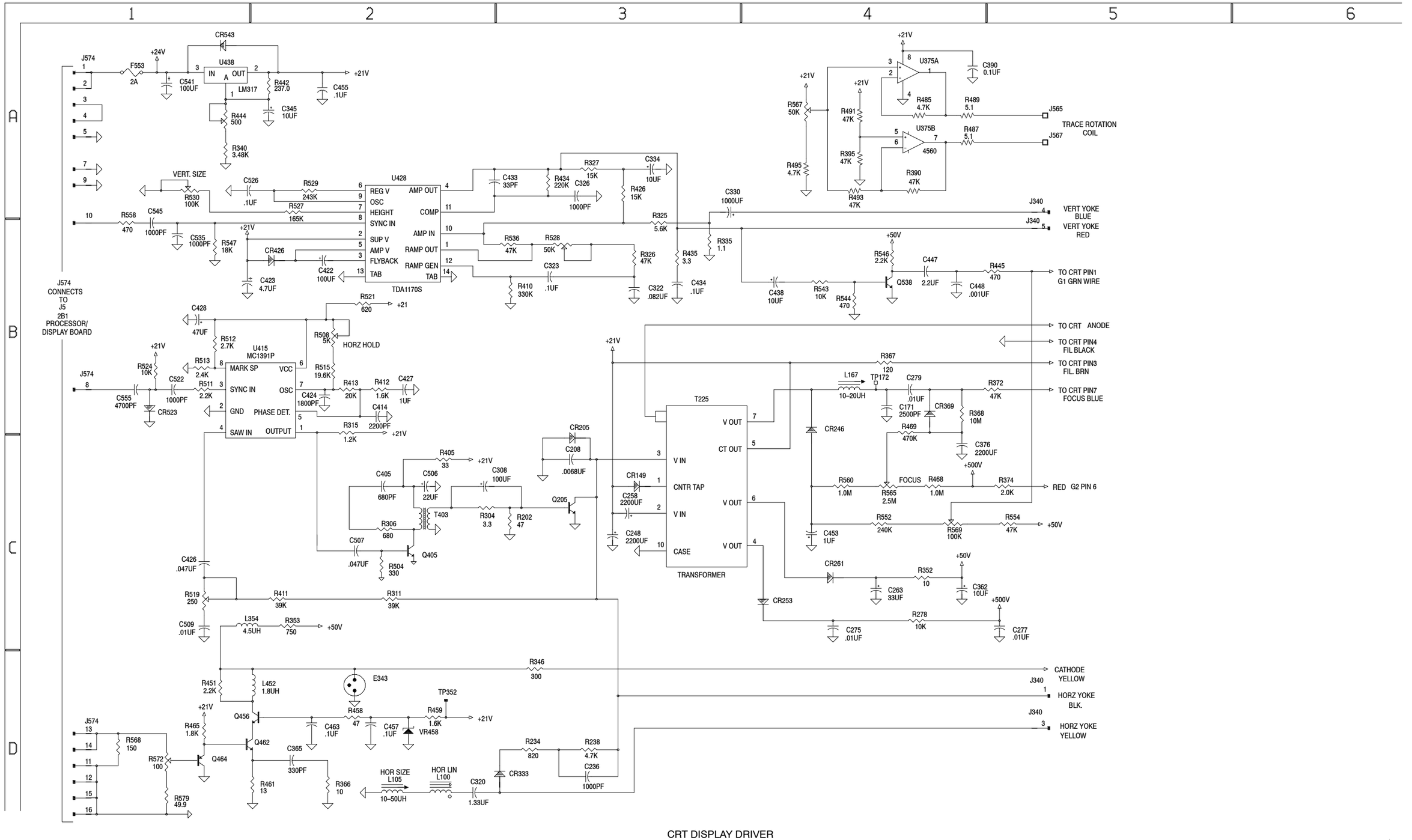


Figure 5–25: A20 CRT Driver board

A20 CRT Driver Component Locator

CIRCUIT NUMBER	SCHEM NUMBER	SCHEM LOCATION	BOARD NUMBER	BOARD LOCATION	CIRCUIT NUMBER	SCHEM NUMBER	SCHEM LOCATION	BOARD NUMBER	BOARD LOCATION	CIRCUIT NUMBER	SCHEM NUMBER	SCHEM LOCATION	BOARD NUMBER	BOARD LOCATION	CIRCUIT NUMBER	SCHEM NUMBER	SCHEM LOCATION	BOARD NUMBER	BOARD LOCATION	CIRCUIT NUMBER	SCHEM NUMBER	SCHEM LOCATION	BOARD NUMBER	BOARD LOCATION
C171	A20−1	4B	A20	3A	C438	A20−1	4B	A20	2B	L167	A20−1	4B	A20	3A	R395	A20−1	4A	A20	3A	R521	A20−1	2B	A20	1B
C208	A20−1	3C	A20	1A	C447	A20−1	4B	A20	2B	L354	A20−1	2C	A20	2B	R405	A20−1	2C	A20	1B	R524	A20−1	1B	A20	1B
C236	A20−1	3D	A20	2A	C448	A20−1	4B	A20	2B	L452	A20−1	1D	A20	2B	R410	A20−1	3B	A20	1B	R527	A20−1	2A	A20	1B
C248	A20−1	3C	A20	2A	C453	A20−1	4C	A20	2B	Q205	A20−1	3C	A20	1A	R411	A20−1	2C	A20	1B	R528	A20−1	3B	A20	1B
C258	A20−1	3C	A20	2A	C455	A20−1	2A	A20	2B	Q405	A20−1	2C	A20	1B	R412	A20−1	2B	A20	1B	R529	A20−1	2A	A20	1B
C263	A20−1	4C	A20	2A	C457	A20−1	2D	A20	2B	Q456	A20−1	1D	A20	2B	R413	A20−1	2B	A20	1B	R530	A20−1	1A	A20	1B
C275	A20−1	4C	A20	3A	C506	A20−1	2C	A20	1B	Q462	A20−1	1D	A20	3B	R426	A20−1	3A	A20	1B	R536	A20−1	3B	A20	2B
C277	A20−1	4C	A20	3A	C507	A20−1	2C	A20	1B	Q464	A20−1	1D	A20	3B	R434	A20−1	3A	A20	2B	R543	A20−1	4B	A20	2B
C279	A20−1	4B	A20	3A	C509	A20−1	2C	A20	1B	Q538	A20−1	4B	A20	2B	R435	A20−1	3A	A20	2B	R544	A20−1	4B	A20	2B
C308	A20−1	2C	A20	1A	C522	A20−1	1B	A20	1B	R202	A20−1	2C	A20	1A	R442	A20−1	2A	A20	2B	R546	A20−1	4B	A20	2B
C320	A20−1	2D	A20	1A	C526	A20−1	2B	A20	1B	R234	A20−1	3D	A20	2A	R444	A20−1	1A	A20	2B	R547	A20−1	2B	A20	2B
C322	A20−1	3B	A20	1B	C535	A20−1	1B	A20	2B	R238	A20−1	3C	A20	2A	R445	A20−1	5B	A20	2B	R552	A20−1	4C	A20	2B
C323	A20−1	3B	A20	1B	C541	A20−1	1A	A20	2B	R278	A20−1	4C	A20	3A	R451	A20−1	1D	A20	2B	R554	A20−1	4C	A20	2B
C326	A20−1	3A	A20	1B	C545	A20−1	1A	A20	2B	R304	A20−1	2C	A20	1A	R458	A20−1	2D	A20	2B	R558	A20−1	1B	A20	2B
C330	A20−1	3B	A20	2B	C555	A20−1	1B	A20	2B	R306	A20−1	2D	A20	1A	R459	A20−1	2D	A20	2B	R560	A20−1	4C	A20	2B
C334	A20−1	4A	A20	2B	CR149	A20−1	3C	A20	2A	R311	A20−1	2C	A20	1A	R461	A20−1	1D	A20	3B	R565	A20−1	4C	A20	3B
C345	A20−1	2A	A20	2B	CR205	A20−1	3C	A20	1A	R315	A20−1	2D	A20	1B	R465	A20−1	1D	A20	2B	R567	A20−1	4A	A20	3B
C362	A20−1	4C	A20	3A	CR246	A20−1	4C	A20	2A	R325	A20−1	3A	A20	2B	R468	A20−1	4C	A20	3B	R568	A20−1	1D	A20	3B
C365	A20−1	2D	A20	3B	CR253	A20−1	3C	A20	2A	R326	A20−1	3B	A20	1B	R469	A20−1	4C	A20	3B	R569	A20−1	4C	A20	3B
C376	A20−1	4C	A20	3B	CR261	A20−1	4C	A20	2A	R327	A20−1	3A	A20	1B	R485	A20−1	4A	A20	3B	R570	A20−1	4C	A20	3B
C390	A20−1	4A	A20	3A	CR333	A20−1	2D	A20	2A	R335	A20−1	3A	A20	2B	R487	A20−1	4A	A20	3B	R572	A20−1	1D	A20	3B
C405	A20−1	2C	A20	1B	CR369	A20−1	4B	A20	3B	R340	A20−1	1A	A20	2B	R489	A20−1	4A	A20	3B	R579	A20−1	1D	A20	3B
C414	A20−2	2B	A20	1B	CR426	A20−1	2B	A20	1B	R346	A20−1	3D	A20	2B	R491	A20−1	4A	A20	3B	T225	A20−1	3B	A20	1A
C422	A20−1	2B	A20	1B	CR523	A20−1	1B	A20	1B	R352	A20−1	4C	A20	2A	R495	A20−1	4A	A20	3B	T403	A20−1	2C	A20	1B
C423	A20−1	2B	A20	1B	CR543	A20−1	1A	A20	2B	R353	A20−1	2C	A20	2A	R504	A20−1	2C	A20	1B	TP172	A20−1	4B	A20	3A
C424	A20−1	2B	A20	1B	E343	A20−1	2D	A20	2B	R366	A20−1	2D	A20	3B	R508	A20−1	2B	A20	1B	TP352	A20−1	2D	A20	2A
C426	A20−1	2C	A20	1B	F553	A20−1	1A	A20	2B	R367	A20−1	4B	A20	3B	R511	A20−1	1B	A20	1B	U415	A20−1	2B	A20	1B
C427	A20−1	2B	A20	1B	J340	A20−1	5A	A20	2A	R368	A20−1	4B	A20	3B	R512	A20−1	1B	A20	1B	U428	A20−1	2A	A20	1B
C428	A20−1	1B	A20	1B	J574	A20−1	1A	A20	3B	R372	A20−1	4C	A20	3A	R513	A20−1	1B	A20	1B	U438	A20−1	1A	A20	2B
C433	A20−1	3A	A20	2B	L100	A20−1	2D	A20	1A	R374	A20−1	4D	A20	3A	R515	A20−1	2B	A20	1B	U375	A20−1	4A	A20	3B
C434	A20−1	3B	A20	2B	L105	A20−1	3D	A20	1A	R390	A20−1	4A	A20	3A	R519	A20−1	2C	A20	1B	VR458	A20−1	2D	A20	2B

Figure 5–26: A20 component locator



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