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1260 VXI
SWITCHING CARD

1260-18
HIGH DENSITY BASIC SWITCH

PUBLICATION NO. 980673-040

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1. Product serial number
2. Product model number
3. Your company and contact information

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RETURN of PRODUCT

Authorization is required from Racal Instruments before you send us your product for service or calibration. Call your nearest Racal Instruments support facility. A list is located on the last page of this manual. If you are unsure where to call, contact Racal Instruments, Inc. Customer Support Department in Irvine, California, USA at 1-800-722-3262 or 1-949-859-8999 or via fax at 1-949-859-7139. We can be reached at: helpdesk@racalinstruments.com.

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FOR YOUR SAFETY

Before undertaking any troubleshooting, maintenance or exploratory procedure, read carefully the **WARNINGS** and **CAUTION** notices.

This equipment contains voltage hazardous to human life and safety, and is capable of inflicting personal injury.

If this instrument is to be powered from the AC line (mains) through an autotransformer, ensure the common connector is connected to the neutral (earth pole) of the power supply.

Before operating the unit, ensure the conductor (green wire) is connected to the ground (earth) conductor of the power outlet. Do not use a two-conductor extension cord or a three-prong/two-prong adapter. This will defeat the protective feature of the third conductor in the power cord.

Maintenance and calibration procedures sometimes call for operation of the unit with power applied and protective covers removed. Read the procedures and heed warnings to avoid “live” circuit points.

Before operating this instrument:

1. Ensure the instrument is configured to operate on the voltage at the power source. See Installation Section.

2. Ensure the proper fuse is in place for the power source to operate.

3. Ensure all other devices connected to or in proximity to this instrument are properly grounded or connected to the protective third-wire earth ground.

If the instrument:

- fails to operate satisfactorily
- shows visible damage
- has been stored under unfavorable conditions
- has sustained stress

Do not operate until performance is checked by qualified personnel.

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NOTE FOR SYSTEMS WITH 1260-OPT 01T

The “Module-Specific Syntax” section of this manual shows the command syntax for the 1260-01S Smart Card. If you are using the newer 1260-01T Smart Card, the commands will NOT work as shown.

Consult the 1260-01T Manual for a description of the commands that may be used with the 1260-01T Smart Card.

The channel numbers described in this manual are valid for the 1260-01T. The channel numbers continue to be used for the 1260-01T.

The syntax of the commands that use channel numbers has changed for those cards controlled by the 1260-01T.

The new syntax used to close a channel is:

CLOSE (@ <module address> (<channel>))

For example, for a relay module whose <module address> is set to 7, closing <channel> 0 is performed with the command:

CLOSE (@7 (0))

Using the older 1260-01S, the command would be (as shown in this manual):

CLOSE 7.0

Many other command syntax differences exist. Please consult chapter 2 of the 1260-01T manual for a description of the commands that are available for the 1260-01T.

Control Information for the 1260-18

The following information describes the control-register-to-relay-channel mapping for a 1260-18 Relay Module. This information may be used to control a 1260-18 when using a 1260-01T in the register-based mode of operation.

Each relay on this module is controlled by setting or clearing a single bit within a Control Register. Control Registers on the module operate 8 channels simultaneously. There are eight control bits per Control Register. Setting the bit to a 1 closes the relay; setting the bit to a 0 opens the relay.

The table below shows the mapping from logical channels to control bits. The logical channels are used when operating the relay module in message-based mode. The control bits within the Control Registers are used to operate the module in register-based mode.

Each Control Register is located 2 addresses from the previous Control Register. That is, each Control Register is located at an odd address. This is shown in Table 2-2 of the 1260-01T manual. Control Register 0 is located at the "Base A24 Address" for the module. Consult the "Register-Based Operation" Section of Chapter 2 of the 1260-01T manual for a description of calculating control register addresses

Channel	Control Register	Control Bit
0	0	0
1	0	1
2	0	2
3	0	3
4	0	4
5	0	5
6	0	6
7	0	7
8	1	0
9	1	1
10	1	2
11	1	3
12	1	4
13	1	5
14	1	6
15	1	7
16	2	0
17	2	1
18	2	2
19	2	3
20	2	4
21	2	5
22	2	6
23	2	7
24	3	0
25	3	1
26	3	2
27	3	3
28	3	4
29	3	5
30	3	6
31	3	7
32	4	0
33	4	1
34	4	2
35	4	3
36	4	4
37	4	5
38	4	6
39	4	7
40	5	0
41	5	1

Channel	Control Register	Control Bit
42	5	2
43	5	3
44	5	4
45	5	5
46	5	6
47	5	7
48	6	0
49	6	1
50	6	2
51	6	3
52	6	4
53	6	5
54	6	6
55	6	7
56	7	0
57	7	1
58	7	2
59	7	3
60	7	4
61	7	5
62	7	6
63	7	7
64	8	0
65	8	1
66	8	2
67	8	3
68	8	4
69	8	5
70	8	6
71	8	7
72	9	0
73	9	1
74	9	2
75	9	3
76	9	4
77	9	5
78	9	6
79	9	7
80	10	0
81	10	1
82	10	2
83	10	3
84	10	4
85	10	5
86	10	6
87	10	7
88	11	0
89	11	1
90	11	2
91	11	3
92	11	4
93	11	5
94	11	6
95	11	7
96	12	0
97	12	1
98	12	2
99	12	3
100	12	4
101	12	5
102	12	6
103	12	7
104	13	0
105	13	1
106	13	2

Channel	Control Register	Control Bit
107	13	3
108	13	4
109	13	5
110	13	6
111	13	7
112	14	0
113	14	1
114	14	2
115	14	3
116	14	4
117	14	5
118	14	6
119	14	7
120	15	0
121	15	1
122	15	2
123	15	3
124	15	4
125	15	5
126	15	6
127	15	7
128	16	0
129	16	1
130	16	2
131	16	3
132	16	4
133	16	5
134	16	6
135	16	7
136	17	0
137	17	1
138	17	2
139	17	3
140	17	4
141	17	5
142	17	6
143	17	7
144	18	0
145	18	1
146	18	2
147	18	3
148	18	4
149	18	5
150	18	6
151	18	7
152*	19	0
153*	19	1
154*	19	2
155*	19	3
156*	19	4
157*	19	5
158*	19	6
159*	19	7

*These control bits exist, but the relays are not normally populated on the module.

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Chapter 1

MODULE SPECIFICATION

Module Specification

The 1260-18 high density basic switch is a 152 channel single-wire device capable of being configured in many ways. For example, it can be configured as 152 SPST switches, or 76 SPDT switches, or 50 SP3T switches, etc. It can also be configured as any combination of switches. For example, it could have 10 SP8T's, 5 SP6T's, 10 SP2T's and 22 SPST's.

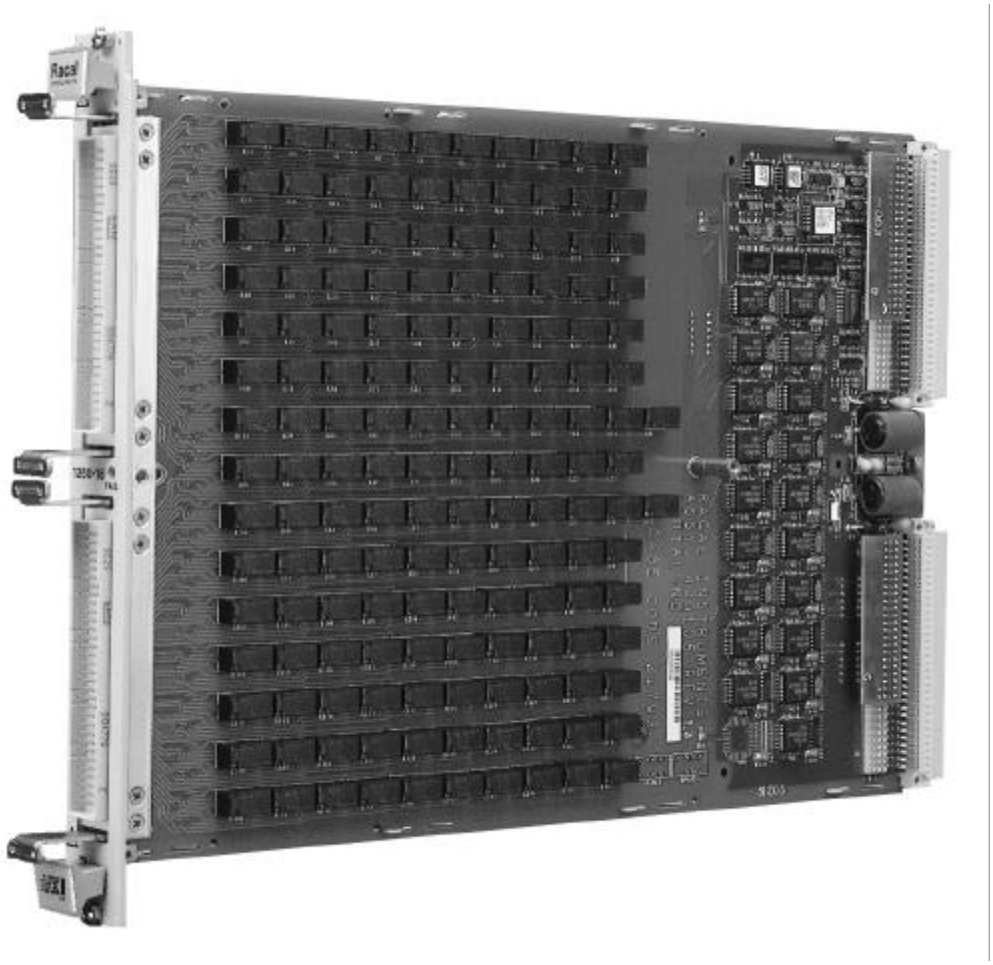


Figure 1-1, 1260-18 High Density Basic Switch

Specifications

Maximum Switch Power	125VA, 60W
Maximum Switch Voltage	250VAC, 220VDC
Maximum Switch Current	2A AC, 2A DC
Bandwidth (50Ω)	> 50MHz
Insertion Loss (50Ω)	< 3dB @ 50MHz < 2dB to 10MHz < 1dB to 1MHz
Crosstalk (50Ω)	< -60dB to 100kHz < -50dB to 1MHz < -40dB at 10MHz
Isolation (50Ω)	> 70dB to 100kHz > 60dB to 1 MHz > 50dB at 10 MHz
Path Resistance	< 0.75Ω
Thermal EMF	< 20µV
Impedance	
Input-Chassis	> 2000MΩ
Output to Chassis	> 2000MΩ
Characteristic Impedance	50Ω Nominal
Capacitance	
Input to Chassis	< 5pF
Output to Chassis	< 5pF
Temperature	
Operating	0°C to +55°C
Non-Operating	-40°C to +71°C
Relative Humidity <30°C	95 +/-5% RH Non-Condensing 75+/-5 % RH > 30°C 45+/-5 % RH > 40°C
Altitude	
Operating	10,000 ft
Non-Operating	15,000 ft
Vibration	0.013" double amplitude, 5-55Hz
Shock, functional	30g, 11 msec, ½ sine wave

Bench Handling 4 inch drop

Cooling Requirement
- Without Option 01 installed
  - Airflow 1.0 liters/sec
  - Backpressure 0.05mm H_20
- With Option 01 installed
  - Airflow 2.0 liters/sec
  - Backpressure 0.2mm H_20

Power Requirement
- Without Option 01 installed
  - +5V Static Current, I_{pm} 0.4A
  - +5V Dynamic Current, I_{dm} 0.075A
- With Option 01 installed
  - +5V Static Current, I_{pm} 2.5A
  - +5V Dynamic Current, I_{dm} 0.225A

- +24V Static Current, I_{pm} 6mA per energized relay
- +24V Dynamic Current, I_{dm} 0A

MTBF
- >55,000 Hours (per MIL-HBK-217, ground benign, +30°C)

Weight
- Without Option 01 installed 3.2lb (1.45kg)
- With Option 01 installed 3.5lb (1.60kg)

Minimum Option 01 Firmware Revision 29.1 (T)

Ordering Information

Listed below are part numbers for both the 1260-18 Switch Module and available mating connector accessories (see also **Chapter 3**). Each switch card uses 2 mating connectors.

Item	Description	Part #
1260-18 Switch Module	152 Channel SPST, 1 Amp	407493
160-Pin Mating Connector	160-Pin Conn. Kit w/backshell and pins	407407
Cable Assy, 6ft, sleeved	160-Pin Cable Assy, 6ft, 24GA	407408
Cable Assy, 12ft, sleeved	160-Pin Cable Assy, 12ft, 24GA	407409
Additional Manual		980673-040

Safety

Refer to the "**FOR YOUR SAFETY**" page preceding the Table of Contents. Follow all **NOTES, CAUTIONS** and **WARNINGS** to ensure personal safety and prevent damage to the instrument.

Product Support

Racal Instruments has a complete Service and Parts Department. If you need technical assistance or should it be necessary to return your product for servicing, call 1-800-722-3262 or 1-949-859-8999 and ask for Customer Support. You may also contact Customer Support via E-Mail at:

helpdesk@racalate.com

If parts are required to repair the product at your facility, call 1-800-722-3262 or 714-859-8999 and ask for the Parts Department.

When sending your instrument in for repair, complete the form in the back of this manual and enclose it with the instrument.

Chapter 2
INSTALLATION INSTRUCTIONS

Unpacking and Inspection

1. Before unpacking the switching module, check the exterior of the shipping carton for any signs of damage. All irregularities should be noted on the shipping bill.
2. Remove the instrument from its carton, preserving the factory packaging as much as possible.
3. Inspect the switching module for any defect or damage. Immediately notify the carrier if any damage is apparent.
4. Have a qualified person check the instrument for safety before use.

CAUTION

Proper ESD handling procedures must always be used when packing, unpacking or installing any 1260 Series cards. Failure to do so may cause damage to the unit.

Reshipment Instructions

1. Use the original packing material when returning the switching module to Racal Instruments for calibration or servicing. The original shipping carton and the instrument's plastic foam will provide the necessary support for safe reshipment.
2. If the original packing material is unavailable, wrap the switching module in ESD Shielding and use plastic spray foam to surround and protect the instrument.
3. Reship in either the original or a new shipping carton.

Option 01 Installation

Installation of the Option 01 to the 1260-18 is described in the Installation section of the 1260 Series VXI Switching Cards Manual, under the Option 01 installation section..

Module Installation

Installation of the 1260-18 Switching Module into a VXI mainframe, including the setting of switches SW1-1 through SW1-4, SW2 and SW3, is described in the Installation section of the 1260 Series VXI Switching Cards Manual. Configuration of switches SW1-5 and SW1-6 must be configured in the OFF state.

Chapter 3
MODULE OPERATION

Module Configuration

The 1260-18 is a 152 channel single wire module consisting of 152 individual SPST relay switches. These individual relays allow the 1260-18 module to be configured via software in any configuration from 152 - SPST's to 1 - 152PST or any combination thereof (by use of include command) without the use of hardware jumpers. This is the same as being automatically configurable as a 1-wire, 2-wire, ... n-wire switch.

Reference should be made to **Figure 3-1**, 1260-18 Module Configuration Block Diagram

Front Panel Connectors

The 1260-18 front panel connectors are labeled J200 and J201. The connector type is 5 x 32 (160-pin) DIN 41 612 male. **Figure 3-2** shows the pin numbering. Signal ground pins are provided for terminating shields and to allow the use of coaxial cable when using higher frequency signals (i.e., above 10MHz). The mapping of channel numbers to connector pins and the available mating connector cable is given in **Table 3-1**.

Mating Connectors

Mating connectors are available for the 1260-18 module. Racal Instruments also offers the following accessories for mating connectors (see ordering information for part numbers):

- 160-Pin Connector Kit w/ backshell and pins P/N 407407
- 160-Pin Cable Assy, 6ft, 24GA P/N 407408
- 160-Pin Cable Assy, 12ft, 24GA P/N 407409

The 160-Pin Connector kit consists of a connector housing, customized backshell and 170 crimp pins. The backshell design has been optimized for system integration. The connector kit has been designed for 22 to 26 gauge cable. The crimp pin will lock or 'click' into the connector housing only when installed correctly. The assembler should ensure that the crimp pin is locked by tugging

on the cable after insertion.

The suggested hand crimp tool for loose crimp contacts is Erni Part Number 014 374. The corresponding disassembly tool is Erni Part Number 471 555.

The cable assemblies (optional lengths of 6ft. or 12ft.) use the 160-Pin Connector kit along with two 80-wire multi-colored 24 gauge cables. One end is unterminated. Refer to **Table 3.1** for the mapping of channels to connector and cable.

1260-18 Module Specific Syntax

The 1260-18 card supports nearly all of the 1260 commands described in **Section 3.4** of the 1260 Option 01 manual. The only commands which are **NOT** supported are the READ and WRITE commands.

In addition, an INCL (include) command is supported by this module. The INCL command may be used to equate two or more relays within a single 1260-18 command. When any of the equated relays is operated, all of the equated relays are operated. For more information, consult Page 3-3 (“1260-18 INCL Command”) of this manual.

The following 1260 commands use “relay descriptors” to identify one or more relays:

OPEN
CLOSE
EXCL
SLIST
INCL

Relay descriptors are always unique for each 1260 module. The following paragraph describes the relay descriptor syntax for the 1260-18 module.

1260-18 Relay Descriptors

A "relay descriptor" identifies a relay (or range of relays) to be operated. The "relay descriptor" is unique for each 1260 module type.

The "relay descriptor" for the 1260-18 has the form:

<module address> . <channel range>

where:

<module address> is an integer from 1 to 12, inclusive.

NOTE:

The <module address> used here is not the VXIbus defined Logical Address of the 1260 Series Master. It is unique to the 1260 Series and describes the switching module in relation to the Master. This address corresponds to the binary value of the switch setting of SW1 on the switching module PCB. Refer to the Installation Section of the 1260 Series VXI Switching Cards Manual for more information.

<channel range> is a single relay, or a list of relays. A comma or a hyphen may be used to separate relays in a <channel range>. When a comma is used, only the specific relays are operated. When a hyphen is used, all relays between the specified relay numbers are operated.

Each relay is identified by a single number in the range 0 to 151. The following examples, using the CLOSE command, show the various formats which are used for 1260-18 relay descriptors. Each of the samples shows a module address of 7 for the 1260-18

```
CLOSE 7.0           -- close channel 0

CLOSE 7.0,5         -- close channels 0 and 5

CLOSE 7.0-5         -- close channels 0, 1, 2, 3, 4, and 5

CLOSE 7.11-13,34    -- close channels 11, 12, 13, and 34

CLOSE 7.28,40-44,98-- close channels 28, 40, 41, 42, 43,
                                                  44, and 98
```

When a relay is closed, the two front panel connector pins associated with that relay are connected. When the relay is opened, the connection is broken and the two front panel connector pins are isolated.

Refer to **Table 3-1,** which shows channel to front panel pin-out mapping.

1260-18 INCL Command

The 1260-18 uses the command INCL to equate two or more relays within a single module. When a relay is included with other relays, then closing that relay will close all relays included with the closed relay. Likewise, opening the relay will open all relays included with that relay.

When a relay is included with other relays on a module, those relays are said to be in an “include group”. Multiple include groups may be defined, but no relay may be in more than one include group.

NOTE:

The INCL command is not to be confused with the EQU (Equate) command which operates across boundaries only as described in the 1260 Option 01 manual.

There are three command syntaxes used with INCL command. The first command syntax is:

INCL 0

This command instructs the 1260 to discard all existing include groups. The RESET command will also discard all existing include groups.

The second syntax is used to define a new include group. This command uses the syntax:

INCL <include group>

where:

<include group> is a list of relays to be equated on an include group. This uses the “relay descriptor” syntax as defined on Page **3-2** (“1260-18 Relay Descriptors”) of this manual.

The following examples show several uses of the INCL command. Again, assume that the 1260-18 has a module address of 7:

INCL 7.0,13,29,147-- equate relays 0, 13, 29 and 147

INCL 7.40-42,50-52-- equate relays 40, 41, 42, 50, 51, and 52

Multiple include groups may be defined using a single INCL command. The individual include groups must be separated using the characters “I;”. For example, the following command defines 3

include groups:

INCL 7.20-23I;7.24-27I;7.28-30

This example defines 3 include groups. The first consists of relays 20, 21, 22, and 23; the second consists of relays 24, 25, 26, and 27; the third consists of relays 28, 29, and 30.

Each time the INCL command is used, one (or more) new include group is added to the list of include groups.

NOTE:

When the relays of a 1260-18 are specified in an include group, ALL relays in that group MUST reside on a single 1260-18 module. There is no "cross module" inclusion of relays.

The limitations for include groups (across all switch modules controlled by a single 1260 Option 01) are:

- A maximum of 255 include groups may be defined.
- The maximum number of relays that may be listed discretely in any single INCL command is 62. Larger INCL groups may be defined by the specification of a range (or ranges) of relay channels. This would allow the definition of a SP152T relay on a 1260-18 at module address 7 as follows:

INCL 7.0-151

- This limitation is due to the input command buffer size of the 1260 Option 01.

The final use of the INCL command is to query the existing include groups. The syntax for this use is:

INCL

When the INCL command is used with no parameters, the 1260 Option 01 will reply with a series of reply lines. Each reply line will correspond to a single include group. The final reply line will be the string:

END

and will be terminated with an ASCII carriage return and linefeed.

The example below shows a typical reply to the INCL command:

7.000,001,002,003
7.018,019,020,021

```
7.023,025,027,029
7.034,057,110,151
7.004,033,034,035,036,037,038,039
END
```

This example shows that 5 include groups have been defined.

If the reply to this command takes more than 80 characters to indicate a single include group, then the reply line will be terminated with a semicolon before the carriage return and linefeed. For example:

```
7.000,002,004,006,...,020,022;
7.022,024,026
```

This example indicates that the relays 022, 024, and 026 are on the same include group as those on the previous reply line, since the previous reply line was terminated with a semicolon.

CLOSE Command

The CLOSE command is used to close a channel.

Example:

```
CLOSE 7.002
```

This CLOSE command will close channel 2 of the module at switch card module address 7.

Example:

```
CL 7.028-036
```

This CLOSE command will close channels 28 through 36 of the module at switch card module address 7.

Example:

```
CL 7.066,071,072,073
```

This CLOSE command will close channels 66, 71, 72, and 73 of the module at switch card module address 7.

Note that channels remain closed until one of the following occurs:

- an OPEN command is used to specifically open the relay
- a RESET command is executed, opening all relays
- a VXI Word Serial Clear command is received, opening all

relays

- a VXI hard or soft reset is received
- a relay on the same exclude list (see EXCL Command) is closed
- power to the VXI chassis is turned off.

OPEN Command

The OPEN command is used to open a channel.

Example:

OP 7.014

This OPEN command will open channel 14 of the module at switch card module address 7.

Example:

OP 7.3-151

This OPEN command will open all of the channels between 003 and 151 of the module at switch card module address 7.

Example:

OP 7.110-120,122-144

This OPEN command will open all channels between 110 and 144, except channel 121.

EXCL Command

The EXCL command is used to define an “exclude group”. Two or more relays may be defined on a single exclude group. Multiple exclude groups may be defined.

Relays in an exclude group are considered mutually exclusive from each other. When a relay in an exclude group is closed, all other relays in the same exclude group are opened.

The EXCL command uses the syntax:

EXCL <exclude list> [E; <exclude list>]

where:

<exclude list> is a list of two or more relay descriptors.
The relays do **NOT** have to be on the same 1260 module, nor do

they have to be the same type of module.

Example:

Assume the 1260 Option 01 controls a 1260-40A card with module address 2, and a 1260-18 card with module address 7.

EXCL 2.0000-0123E;7.000-110E;2.0200-0323;7.111-151

This example defines three exclude groups. The first consists solely of 1260-40A relays, channels 0000 through 0123. The second consists solely of 1260-18 relays, channels 000 through 110. The third consists of a mix of 1260-40A relays and 1260-18 relays.

After an EXCL command is executed, the 1260 Option 01 will ensure that at most one relay in any exclude group is closed at one time. For example, suppose relay 7.103 is presently closed. Closing relay 7.000 will cause the 1260 Option 01 to first open relay 7.103 before closing relay 7.000. Similarly, if relay 7.111 is presently closed, then closing relay 2.0319 will cause the 1260 Option 01 to first open relay 7.111 before closing relay 2.0319.

PDATAOUT and PSETUP Module Identification

The first line of the reply to the PDATAOUT and PSETUP commands for the 1260-18 shall be:

XXX. 1260-18 HIGH DENSITY BASIC SWITCH MODULE

where:

XXX is the module address of the 1260-18 ("001" to "012"). All other reply lines for these commands shall follow the syntax used for all of the other 1260 series relay cards. Note that the lines of the reply for the PDATAOUT command will contain relay descriptors which follow the syntax described in this chapter.

PDATAOUT Command

The PDATAOUT command causes the specified module to reply with a list of relays which are closed on that module. The syntax for the PDATAOUT command is:

PD[ATAOUT] <module list> [; <module list> ...]

where:

<module list> ::= <module> | <module> - <module>
<module> ::= 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12

For example:

PD 1;3-6;9

causes each of the modules with module addresses 1, 3, 4, 5, 6, and 9 to reply with a list of closed relays.

The reply to the PDATAOUT consists of three or more reply lines, each of which is terminated with a carriage return followed by a linefeed. A minimum of three reply lines are returned.

The FIRST line is as follows:

<module>. 1260-18 HIGH DENSITY BASIC SWITCH MODULE

where module is the module address of the 1260-18 card ("000" to "012").

The LAST line is as follows:

<module>.END

Note that there is no space character between the period and the "E" of the "END" string.

Lines 2 through N-1 will have the form:

<module>. [<channel range> [,<channel range> ...]] [,]

where:

<module> ::= 001 | 002 | 003 | ... | 011 | 012
<channel range> ::= <channel> | <channel> - <channel>
<channel> ::= 000 | 001 | 002| ... | 150 | 151

If there are no closed relays, the second line will consist solely of the module addresses and the period. There will be no channels

listed, and there will be a total of three lines returned. For example:

```
007. 1260-18 HIGH DENSITY BASIC SWITCH MODULE
007.
007.END
```

If the second line can hold all of the closed relays, there will be a total of three lines returned. For example:

```
007. 1260-18 HIGH DENSITY BASIC SWITCH MODULE
007. 000,005-013,102,103,106-114
007.END
```

If the second line cannot hold all of the closed relays, the last character on the line before the carriage return/linefeed will be a comma. This indicates that more data is to follow on the third line. If the third line cannot hold all of the remaining closed relays, it too will be terminated with a comma, and more data will follow on the fourth line. The last line before the "END" line will NOT have a comma at the end. For example:

```
007. 1260-18 HIGH DENSITY BASIC SWITCH MODULE
007. 000,001,004,005,007,009,011,013,015,016,018,022,033,041,
007. 042,051-058,060,062,063-074,077,078,081,082,100,101,103,
007. 114-120,124,126,130,132-140,150
007.END
```

PSETUP Command

The PSETUP command causes the specified module setup to be transmitted to the VXI Controller. The syntax used is:

PS[ETUP] <module address>[;<module address>][;<module address>].....

where:

<module address> is the switch card address.

The response to the PSETUP command for the 1260-18 consists of three lines. Each line consists of a three-digit module address, followed by some information. A sample reply to the PSETUP command is shown below:

```
007. 1260-18 HIGH DENSITY BASIC SWITCH MODULE
007. BBM
007. END
```

The first line of the response to the PSETUP command is a header line. The header describes the model number.

The second reply line designates the setup mode for scanning. By default, this is Break-Before-Make (“BBM”). The other setup modes which may be returned on the second line include Make-

Before-Break (“MBB”), and Immediate (“IMM”). The setup mode may be changed using the “SETUP” command, described in section 3.4 of the 1260 Option 01 manual.

The last line containing the "END" characters denotes no more information to report.

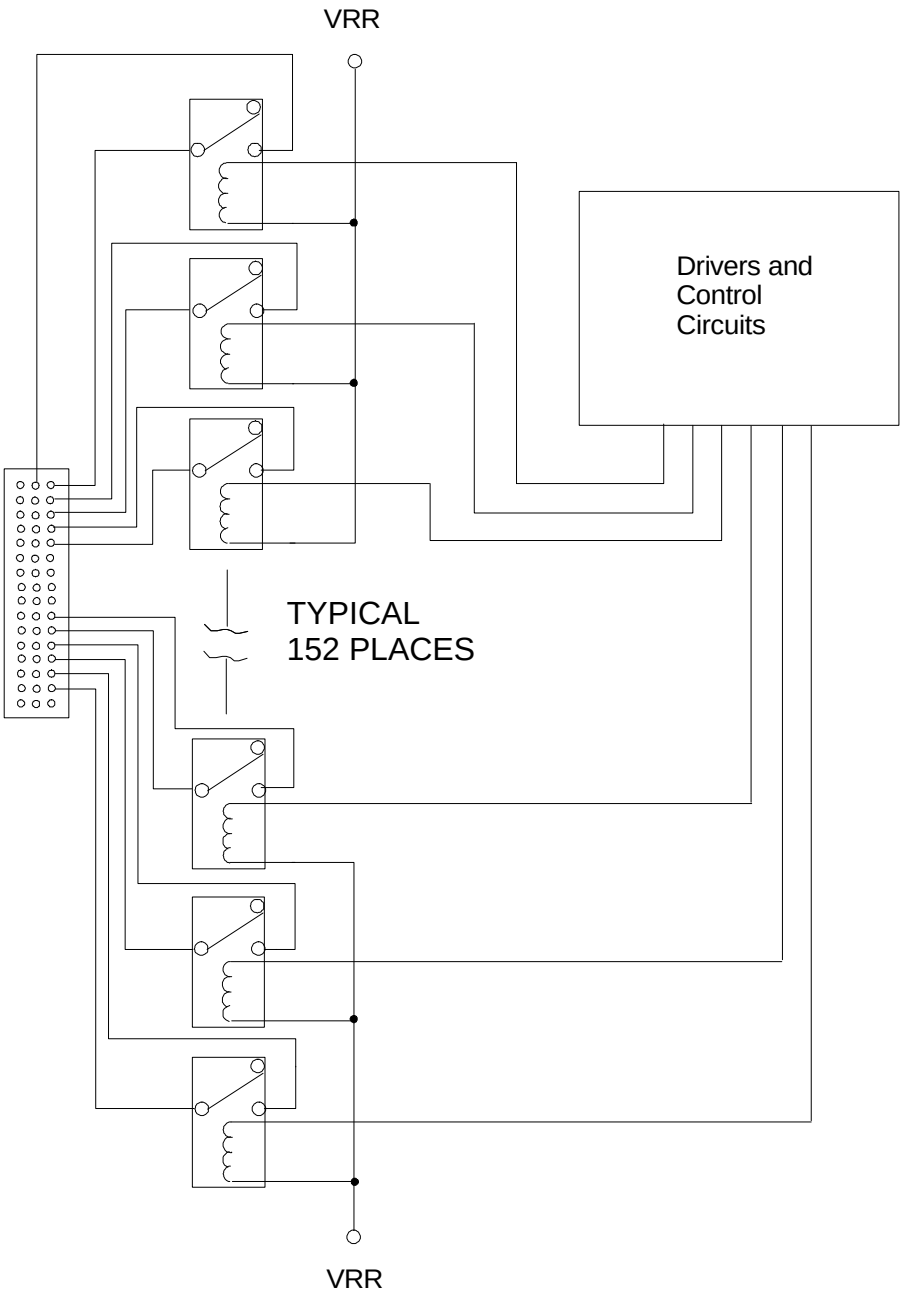


Figure 3-1, Module Configuration Block Diagram

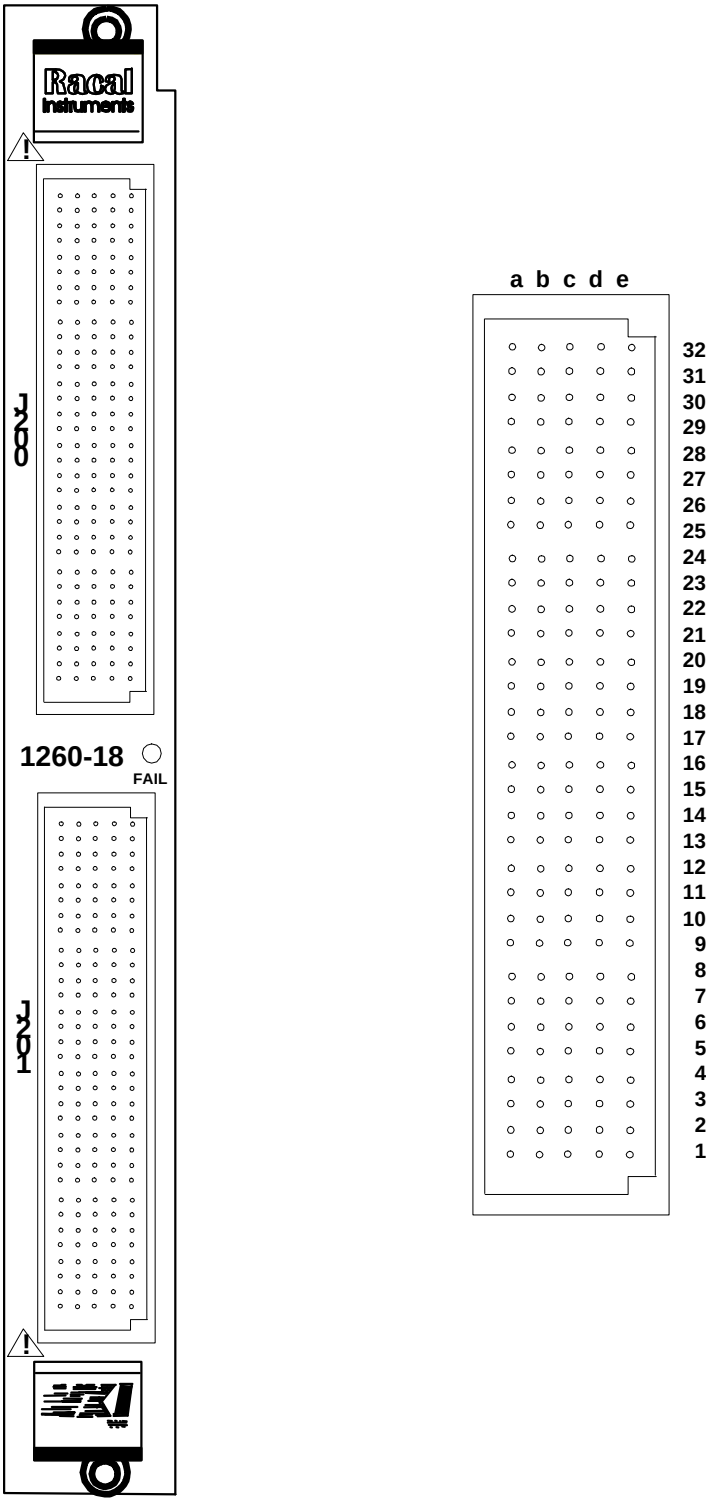


Figure 3-2, 1260-18 Pin Connections, Front View

Table 3-1. 1260-18 Channel Number/Connection Pin/Cable Mapping

Channel #	Connector Pin #	Cable # / Color
0000 In	J200-P31A	C1 white/black/orange/violet
0000 Out	J200-P29A	C1 white/black/brown/violet
0001 In	J200-P30A	C1 white/black/red/violet
0001 Out	J200-P28A	C1 white/black/brown/red
0002 In	J200-P31B	C1 white/black/orange/grey
0002 Out	J200-P29B	C1 white/black/brown/grey
0003 In	J200-P30B	C1 white/black/red/grey
0003 Out	J200-P28B	C1 white/black/brown/orange
0004 In	J200-P31C	C1 white/black/yellow/green
0004 Out	J200-P29C	C1 white/black/red/yellow
0005 In	J200-P30C	C1 white/black/orange/yellow
0005 Out	J200-P28C	C1 white/black/brown/yellow
0006 In	J200-P31D	C1 white/black/yellow/blue
0006 Out	J200-P29D	C1 white/black/red/green
0007 In	J200-P30D	C1 white/black/orange/green
0007 Out	J200-P28D	C1 white/black/brown/green
0008 In	J200-P31E	C1 white/black/yellow/violet
0008 Out	J200-P29E	C1 white/black/red/blue
0009 In	J200-P30E	C1 white/black/orange/blue
0009 Out	J200-P28E	C1 white/black/brown/blue
0010 In	J200-P27A	C1 white/green/violet
0010 Out	J200-P25A	C1 white/orange/yellow
0011 In	J200-P26A	C1 white/yellow/green
0011 Out	J200-P24A	C1 white/red/yellow

Table 3-1. 1260-18 Channel Number/Connection Pin/Cable Mapping

Channel #	Connector Pin #	Cable # / Color
0012 In	J200-P27B	C1 white/green/grey
0012 Out	J200-P25B	C1 white/orange/green
0013 In	J200-P26B	C1 white/yellow/blue
0013 Out	J200-P24B	C1 white/red/green
0014 In	J200-P27C	C1 white/blue/violet
0014 Out	J200-P25C	C1 white/orange/blue
0015 In	J200-P26C	C1 white/yellow/violet
0015 Out	J200-P24C	C1 white/red/blue
0016 In	J200-P27D	C1 white/blue/grey
0016 Out	J200-P25D	C1 white/orange/violet
0017 In	J200-P26D	C1 white/yellow/grey
0017 Out	J200-P24D	C1 white/red/violet
0018 In	J200-P27E	C1 white/violet/grey
0018 Out	J200-P25E	C1 white/orange/grey
0019 In	J200-P26E	C1 white/green/blue
0019 Out	J200-P24E	C1 white/red/grey
0020 In	J200-P23A	C1 white/brown/green
0020 Out	J200-P21A	C1 white/black/red
0021 In	J200-P22A	C1 white/black/violet
0021 Out	J200-P20A	C1 white/green
0022 In	J200-P23B	C1 white/brown/blue
0022 Out	J200-P21B	C1 white/black/orange
0023 In	J200-P22B	C1 white/black/grey
0023 Out	J200-P20B	C1 white/blue

Table 3-1. 1260-18 Channel Number/Connection Pin/Cable Mapping

Channel #	Connector Pin #	Cable # / Color
0024 In	J200-P23C	C1 white/brown/violet
0024 Out	J200-P21C	C1 white/black/yellow
0025 In	J200-P22C	C1 white/brown/red
0025 Out	J200-P20C	C1 white/violet
0026 In	J200-P23D	C1 white/brown/grey
0026 Out	J200-P21D	C1 white/black/green
0027 In	J200-P22D	C1 white/brown/orange
0027 Out	J200-P20D	C1 white/grey
0028 In	J200-P23E	C1 white/red/orange
0028 Out	J200-P21E	C1 white/black/blue
0029 In	J200-P22E	C1 white/brown/yellow
0029 Out	J200-P20E	C1 white/black/brown
0030 In	J200-P19A	C1 white/black
0030 Out	J200-P17A	C1 black
0031 In	J200-P18A	C1 green
0031 Out	J200-P16A	C2 white/black/yellow/grey
0032 In	J200-P19B	C1 white/brown
0032 Out	J200-P17B	C1 brown
0033 In	J200-P18B	C1 blue
0033 Out	J200-P16B	C2 white/black/green/blue
0034 In	J200-P19C	C1 white/red
0034 Out	J200-P17C	C1 red
0035 In	J200-P18C	C1 violet
0035 Out	J200-P16C	C2 white/black/green/violet

Table 3-1. 1260-18 Channel Number/Connection Pin/Cable Mapping

Channel #	Connector Pin #	Cable # / Color
0036 In	J200-P19D	C1 white/orange
0036 Out	J200-P17D	C1 orange
0037 In	J200-P18D	C1 grey
0037 Out	J200-P16D	C2 white/black/green/grey
0038 In	J200-P19E	C1 white/yellow
0038 Out	J200-P17E	C1 yellow
0039 In	J200-P18E	C1 white
0039 Out	J200-P16E	C2 white/black/blue/violet
0040 In	J200-P15A	C2 white/black/orange/violet
0040 Out	J200-P13A	C2 white/black/brown/violet
0041 In	J200-P14A	C2 white/black/red/violet
0041 Out	J200-P12A	C2 white/black/brown/red
0042 In	J200-P15B	C2 white/black/orange/grey
0042 Out	J200-P13B	C2 white/black/brown/grey
0043 In	J200-P14B	C2 white/black/red/grey
0043 Out	J200-P12B	C2 white/black/brown/orange
0044 In	J200-P15C	C2 white/black/yellow/green
0044 Out	J200-P13C	C2 white/black/red/yellow
0045 In	J200-P14C	C2 white/black/orange/yellow
0045 Out	J200-P12C	C2 white/black/brown/yellow
0046 In	J200-P15D	C2 white/black/yellow/blue
0046 Out	J200-P13D	C2 white/black/red/green
0047 In	J200-P14D	C2 white/black/orange/green
0047 Out	J200-P12D	C2 white/black/brown/green

Table 3-1. 1260-18 Channel Number/Connection Pin/Cable Mapping

Channel #	Connector Pin #	Cable # / Color
0048 In	J200-P15E	C2 white/black/yellow/violet
0048 Out	J200-P13E	C2 white/black/red/blue
0049 In	J200-P14E	C2 white/black/orange/blue
0049 Out	J200-P12E	C2 white/black/brown/blue
0050 In	J200-P11A	C2 white/green/violet
0050 Out	J200-P09A	C2 white/orange/yellow
0051 In	J200-P10A	C2 white/yellow/green
0051 Out	J200-P08A	C2 white/red/yellow
0052 In	J200-P11B	C2 white/green/grey
0052 Out	J200-P09B	C2 white/orange/green
0053 In	J200-P10B	C2 white/yellow/blue
0053 Out	J200-P08B	C2 white/red/green
0054 In	J200-P11C	C2 white/blue/violet
0054 Out	J200-P09C	C2 white/orange/blue
0055 In	J200-P10C	C2 white/yellow/violet
0055 Out	J200-P08C	C2 white/red/blue
0056 In	J200-P11D	C2 white/blue/grey
0056 Out	J200-P09D	C2 white/orange/violet
0057 In	J200-P10D	C2 white/yellow/grey
0057 Out	J200-P08D	C2 white/red/violet
0058 In	J200-P11E	C2 white/violet/grey
0058 Out	J200-P09E	C2 white/orange/grey
0059 In	J200-P10E	C2 white/green/blue
0059 Out	J200-P08E	C2 white/red/grey

Table 3-1. 1260-18 Channel Number/Connection Pin/Cable Mapping

Channel #	Connector Pin #	Cable # / Color
0060 In	J200-P07A	C2 white/brown/green
0060 Out	J200-P05A	C2 white/black/red
0061 In	J200-P06A	C2 white/black/violet
0061 Out	J200-P04A	C2 white/green
0062 In	J200-P07B	C2 white/brown/blue
0062 Out	J200-P05B	C2 white/black/orange
0063 In	J200-P06B	C2 white/black/grey
0063 Out	J200-P04B	C2 white/blue
0064 In	J200-P07C	C2 white/brown/violet
0064 Out	J200-P05C	C2 white/black/yellow
0065 In	J200-P06C	C2 white/brown/red
0065 Out	J200-P04C	C2 white/violet
0066 In	J200-P07D	C2 white/brown/grey
0066 Out	J200-P05D	C2 white/black/green
0067 In	J200-P06D	C2 white/brown/orange
0067 Out	J200-P04D	C2 white/grey
0068 In	J200-P07E	C2 white/red/orange
0068 Out	J200-P05E	C2 white/black/blue
0069 In	J200-P06E	C2 white/brown/yellow
0069 Out	J200-P04E	C2 white/black/brown
0070 In	J200-P03A	C2 white/black
0070 Out	J201-P31A	C1 white/black/orange/violet
0071 In	J200-P02A	C2 green
0071 Out	J201-P30A	C1 white/black/red/violet

Table 3-1. 1260-18 Channel Number/Connection Pin/Cable Mapping

Channel #	Connector Pin #	Cable # / Color
0072 In	J200-P03B	C2 white/brown
0072 Out	J201-P31B	C1 white/black/orange/grey
0073 In	J200-P02B	C2 blue
0073 Out	J201-P30B	C1 white/black/red/grey
0074 In	J200-P03C	C2 white/red
0074 Out	J201-P31C	C1 white/black/yellow/green
Grounds	J200-P01A	C2 black
	J200-P01C	C2 red
	J200-P01E	C2 yellow
	J200-P32A	C1 white/black/yellow/grey
	J200-P32C	C1 white/black/green/violet
	J200-P32E	C1 white/black/blue/violet
0075 In	J200-P02C	C2 violet
0075 Out	J201-P30C	C1 white/black/orange/yellow
0076 In	J200-P03D	C2 white/orange
0076 Out	J201-P31D	C1 white/black/yellow/blue
0077 In	J200-P02D	C2 grey
0077 Out	J201-P30D	C1 white/black/orange/green
0078 In	J200-P03E	C2 white/yellow
0078 Out	J201-P31E	C1 white/black/yellow/violet
0079 In	J200-P02E	C2 white
0079 Out	J201-P30E	C1 white/black/orange/blue
0080 In	J201-P29A	C1 white/black/brown/violet
0080 Out	J201-P27A	C1 white/green/violet

Table 3-1. 1260-18 Channel Number/Connection Pin/Cable Mapping

Channel #	Connector Pin #	Cable # / Color
0081 In	J201-P28A	C1 white/black/brown/red
0081 Out	J201-P26A	C1 white/yellow/green
0082 In	J201-P29B	C1 white/black/brown/grey
0082 Out	J201-P27B	C1 white/green/grey
0083 In	J201-P28B	C1 white/black/brown/orange
0083 Out	J201-P26B	C1 white/yellow/blue
0084 In	J201-P29C	C1 white/black/red/yellow
0084 Out	J201-P27C	C1 white/blue/violet
0085 In	J201-P28C	C1 white/black/brown/yellow
0085 Out	J201-P26C	C1 white/yellow/violet
0086 In	J201-P29D	C1 white/black/red/green
0086 Out	J201-P27D	C1 white/blue/grey
0087 In	J201-P28D	C1 white/black/brown/green
0087 Out	J201-P26D	C1 white/yellow/grey
0088 In	J201-P29E	C1 white/black/red/blue
0088 Out	J201-P27E	C1 white/violet/grey
0089 In	J201-P28E	C1 white/black/brown/blue
0089 Out	J201-P26E	C1 white/green/blue
0090 In	J201-P25A	C1 white/orange/yellow
0090 Out	J201-P23A	C1 white/brown/green
0091 In	J201-P24A	C1 white/red/yellow
0091 Out	J201-P22A	C1 white/black/violet
0092 In	J201-P25B	C1 white/orange/green
0092 Out	J201-P23B	C1 white/brown/blue

Table 3-1. 1260-18 Channel Number/Connection Pin/Cable Mapping

Channel #	Connector Pin #	Cable # / Color
0093 In	J201-P24B	C1 white/red/green
0093 Out	J201-P22B	C1 white/black/grey
0094 In	J201-P25C	C1 white/orange/blue
0094 Out	J201-P23C	C1 white/brown/violet
0095 In	J201-P24C	C1 white/red/blue
0095 Out	J201-P22C	C1 white/brown/red
0096 In	J201-P25D	C1 white/orange/violet
0096 Out	J201-P23D	C1 white/brown/grey
0097 In	J201-P24D	C1 white/red/violet
0097 Out	J201-P22D	C1 white/brown/orange
0098 In	J201-P25E	C1 white/orange/grey
0098 Out	J201-P23E	C1 white/red/orange
0099 In	J201-P24E	C1 white/red/grey
0099 Out	J201-P22E	C1 white/brown/yellow
0100 In	J201-P 21A	C1 white/black/red
0100 Out	J201-P19A	C1 white/black
0101 In	J201-P20A	C1 white/green
0101 Out	J201-P18A	C1 green
0102 In	J201-P21B	C1 white/black/orange
0102 Out	J201-P19B	C1 white/brown
0103 In	J201-P20B	C1 white/blue
0103 Out	J201-P18B	C1 blue
0104 In	J201-P21C	C1 white/black/yellow
0104 Out	J201-P19C	C1 white/red

Table 3-1. 1260-18 Channel Number/Connection Pin/Cable Mapping

Channel #	Connector Pin #	Cable # / Color
0105 In	J201-P20C	C1 white/violet
0105 Out	J201-P18C	C1 violet
0106 In	J201-P21D	C1 white/black/green
0106 Out	J201-P19D	C1 white/orange
0107 In	J201-P20D	C1 white/grey
0107 Out	J201-P18D	C1 grey
0108 In	J201-P21E	C1 white/black/blue
0108 Out	J201-P19E	C1 white/yellow
0109 In	J201-P20E	C1 white/black/brown
0109 Out	J201-P18E	C1 white
0110 In	J201-P17A	C1 black
0110 Out	J201-P15A	C2 white/black/orange/violet
0111 In	J201-P16A	C2 white/black/yellow/grey
0111 Out	J201-P14A	C2 white/black/red/violet
0112 In	J201-P17B	C1 brown
0112 Out	J201-P15B	C2 white/black/orange/grey
0113 In	J201-P16B	C2 white/black/green/blue
0113 Out	J201-P14B	C2 white/black/red/grey
0114 In	J201-P17C	C1 red
0114 Out	J201-P15C	C2 white/black/yellow/green
0115 In	J201-P16C	C2 white/black/green/violet
0115 Out	J201-P14C	C2 white/black/orange/yellow
0116 In	J201-P17D	C1 orange
0116 Out	J201-P15D	C2 white/black/yellow/blue

Table 3-1. 1260-18 Channel Number/Connection Pin/Cable Mapping

Channel #	Connector Pin #	Cable # / Color
0117 In	J201-P16D	C2 white/black/green/grey
0117 Out	J201-P14D	C2 white/black/orange/green
0118 In	J201-P17E	C1 yellow
0118 Out	J201-P15E	C2 white/black/yellow/violet
0119 In	J201-P16E	C2 white/black/blue/violet
0119 Out	J201-P14E	C2 white/black/orange/blue
0120 In	J201-P13A	C2 white/black/brown/violet
0120 Out	J201-P11A	C2 white/green/violet
0121 In	J201-P12A	C2 white/black/brown/red
0121 Out	J201-P10A	C2 white/yellow/green
0122 In	J201-P13B	C2 white/black/brown/grey
0122 Out	J201-P11B	C2 white/green/grey
0123 In	J201-P12B	C2 white/black/brown/orange
0123 Out	J201-P10B	C2 white/yellow/blue
0124 In	J201-P13C	C2 white/black/red/yellow
0124 Out	J201-P11C	C2 white/blue/violet
0125 In	J201-P12C	C2 white/black/brown/yellow
0125 Out	J201-P10C	C2 white/yellow/violet
0126 In	J201-P13D	C2 white/black/red/green
0126 Out	J201-P11D	C2 white/blue/grey
0127 In	J201-P12D	C2 white/black/brown/green
0127 Out	J201-P10D	C2 white/yellow/grey
0128 In	J201-P13E	C2 white/black/red/blue
0128 Out	J201-P11E	C2 white/violet/grey

Table 3-1. 1260-18 Channel Number/Connection Pin/Cable Mapping

Channel #	Connector Pin #	Cable # / Color
0129 In	J201-P12E	C2 white/black/brown/blue
0129 Out	J201-P10E	C2 white/green/blue
0130 In	J201-P09A	C2 white/orange/yellow
0130 Out	J201-P07A	C2 white/brown/green
0131 In	J201-P08A	C2 white/red/yellow
0131 Out	J201-P06A	C2 white/black/violet
0132 In	J201-P09B	C2 white/orange/green
0132 Out	J201-P07B	C2 white/brown/blue
0133 In	J201-P08B	C2 white/red/green
0133 Out	J201-P06B	C2 white/black/grey
0134 In	J201-P09C	C2 white/orange/blue
0134 Out	J201-P07C	C2 white/brown/violet
0135 In	J201-P08C	C2 white/red/blue
0135 Out	J201-P06C	C2 white/brown/red
0136 In	J201-P09D	C2 white/orange/violet
0136 Out	J201-P07D	C2 white/brown/grey
0137 In	J201-P08D	C2 white/red/violet
0137 Out	J201-P06D	C2 white/brown/orange
0138 In	J201-P09E	C2 white/orange/grey
0138 Out	J201-P07E	C2 white/red/orange
0139 In	J201-P08E	C2 white/red/grey
0139 Out	J201-P06E	C2 white/brown/yellow

Table 3-1. 1260-18 Channel Number/Connection Pin/Cable Mapping

Channel #	Connector Pin #	Cable # / Color
0140 In	J201-P05A	C2 white/black/red
0140 Out	J201-P03A	C2 white/black
0141 In	J201-P04A	C2 white/green
0141 Out	J201-P02A	C2 green
0142 In	J201-P05B	C2 white/black/orange
0142 Out	J201-P03B	C2 white/brown
0143 In	J201-P04B	C2 white/blue
0143 Out	J201-P02B	C2 blue
0144 In	J201-P05C	C2 white/black/yellow
0144 Out	J201-P03C	C2 white/red
0145 In	J201-P04C	C2 white/violet
0145 Out	J201-P02C	C2 violet
0146 In	J201-P05D	C2 white/black/green
0146 Out	J201-P03D	C2 white/orange
0147 In	J201-P04D	C2 white/grey
0147 Out	J201-P02D	C2 grey
0148 In	J201-P05E	C2 white/black/blue
0148 Out	J201-P03E	C2 white/yellow
0149 In	J201-P04E	C2 white/black/brown
0149 Out	J201-P02E	C2 white
0150 In	J200-P01B	C2 brown
0150 Out	J201-P32B	C1 white/black/green/blue

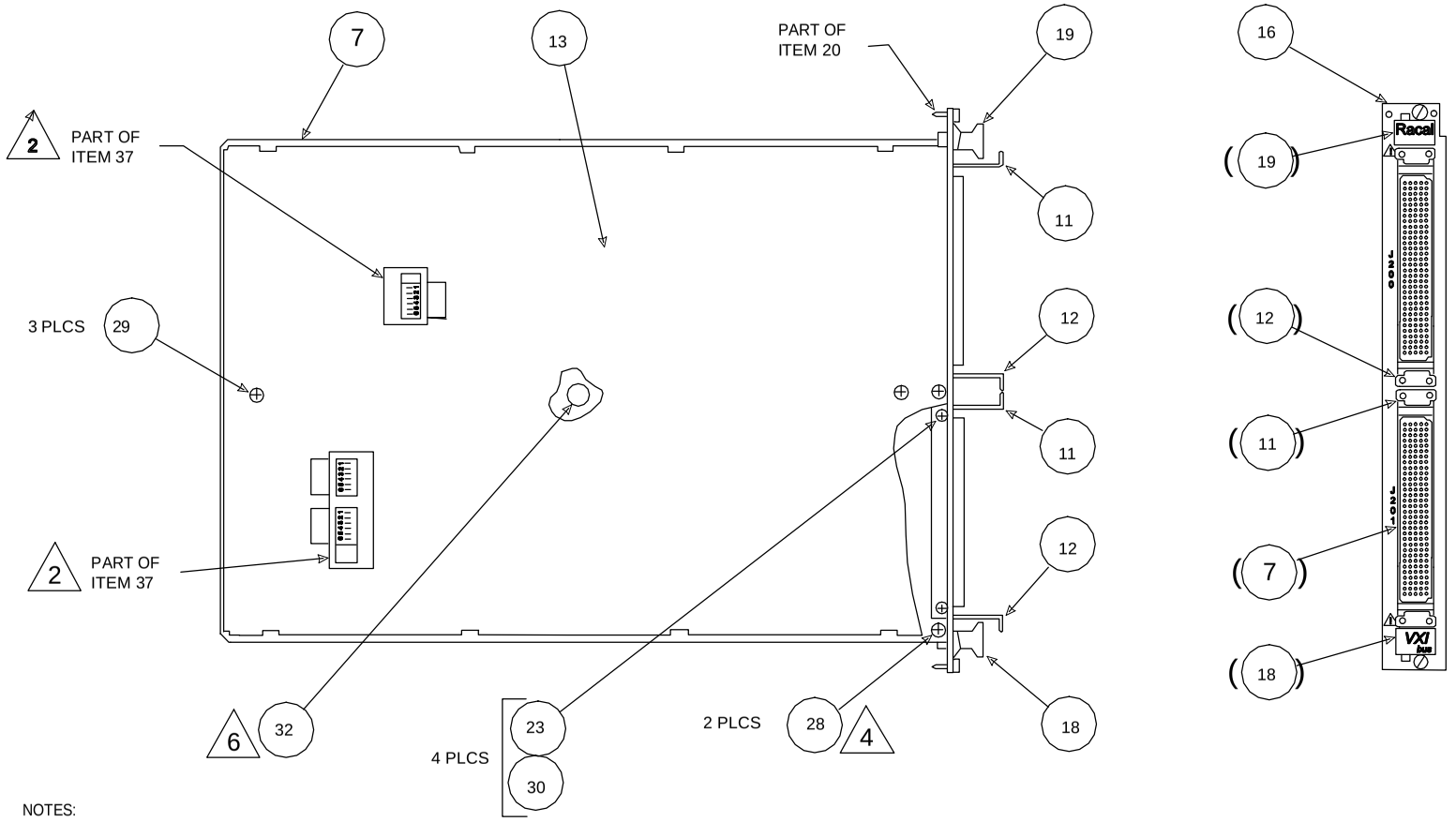
Table 3-1. 1260-18 Channel Number/Connection Pin/Cable Mapping

Channel #	Connector Pin #	Cable # / Color
0151 In	J200-P01D	C2 orange
0151 Out	J201-P32D	C1 white/black/green/grey
Ground	J201-P01A	C2 black
	J201-P01C	C2 red
	J201-P01E	C2 yellow
	J201-P32A	C1 white/black/yellow/grey
	J201-P32C	C1 white/black/green/violet
	J201-P32E	C1 white/black/blue/violet

Chapter 4
DRAWINGS

407493	Final Assy, 1260-18	4-3
405105	PCB Assy, 1260-18	4-4
435105	Schematic, 1260-18	4-5
407407	160-Pin Connector Kit with backshell and pins	4-30
437408	160-Pin Cable Assy, 6ft, 24GA	4-31
437409	160-Pin Cable Assy, 12ft, 24GA	4-31

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NOTES:

1. DISCARD UNUSED HARDWARE PART OF ITEM 20.
2. AFFIX LABELS (PART OF ITEM 37) AS SHOWN. ALIGN LABEL TEXT WITH APPROPRIATE SWITCH ACTUATORS.
3. NOTE NOT USED.
4. APPLY LOCTITE (ITEM 33) SPARINGLY TO ALL SCREWS THAT DO NOT USE MECHANICAL LOCKING HARDWARE. DO NOT ALLOW CONTACT WITH EJECTOR HANDLES (ITEM 19 TOP). AND (ITEM 18 BOT).
5. LOCATE APPROPRIATE VXI LABEL WHERE SHOWN. REFERENCE 921410 FOR SPECIFIC LABEL INFORMATION.
6. AT TACH BUMPER (ITEM 32) TO CIRCUIT SIDE OF PCB ASSEMBLY (ITEM 7) APPROXIMATELY WHERE SHOWN.
7. SHIPPING KIT ITEM 6 TO BE SHIPPED WITH UNIT.

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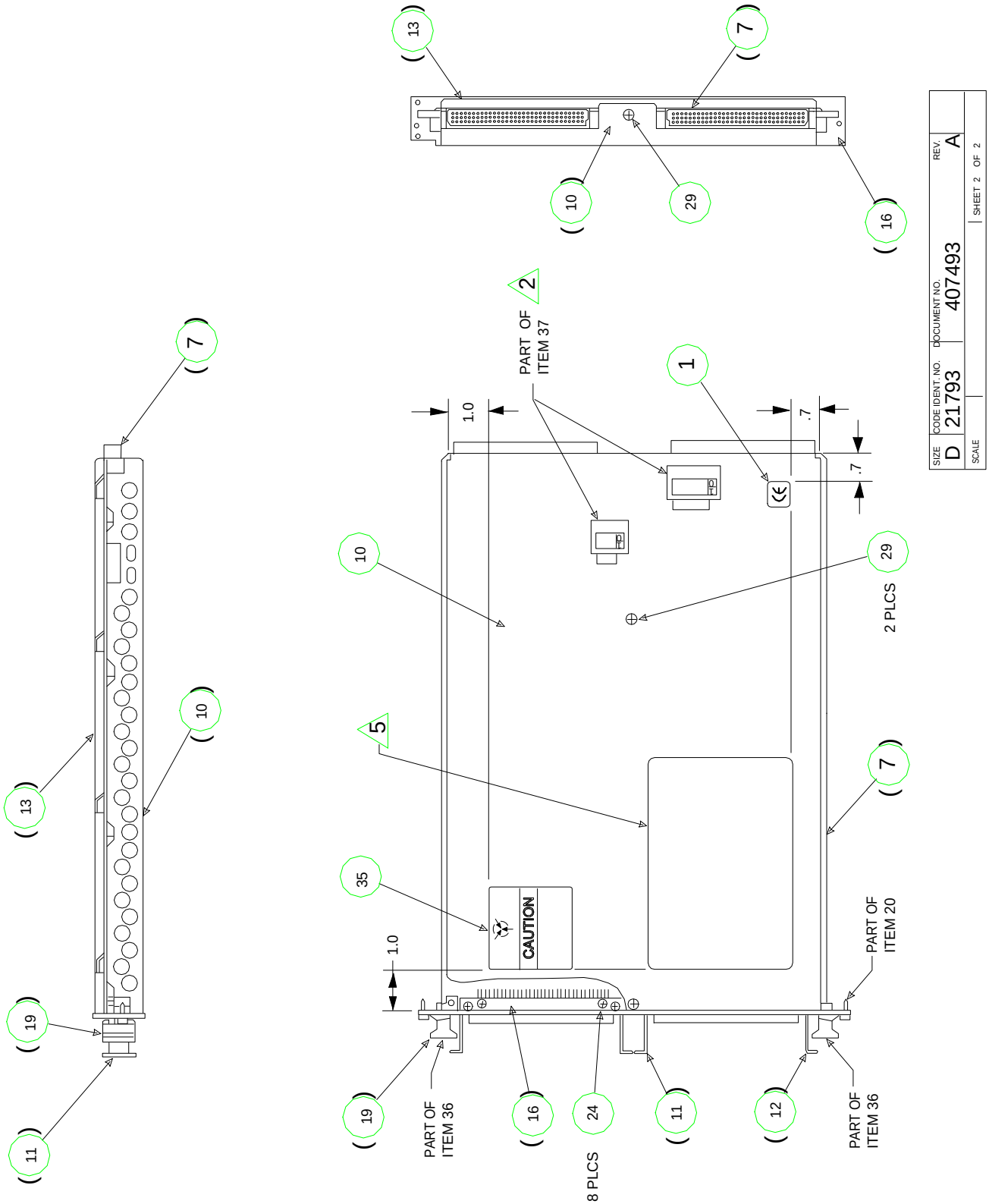
RACAL Instruments, Inc.
4 Goodyear St., Irvine, Ca 92718-2002

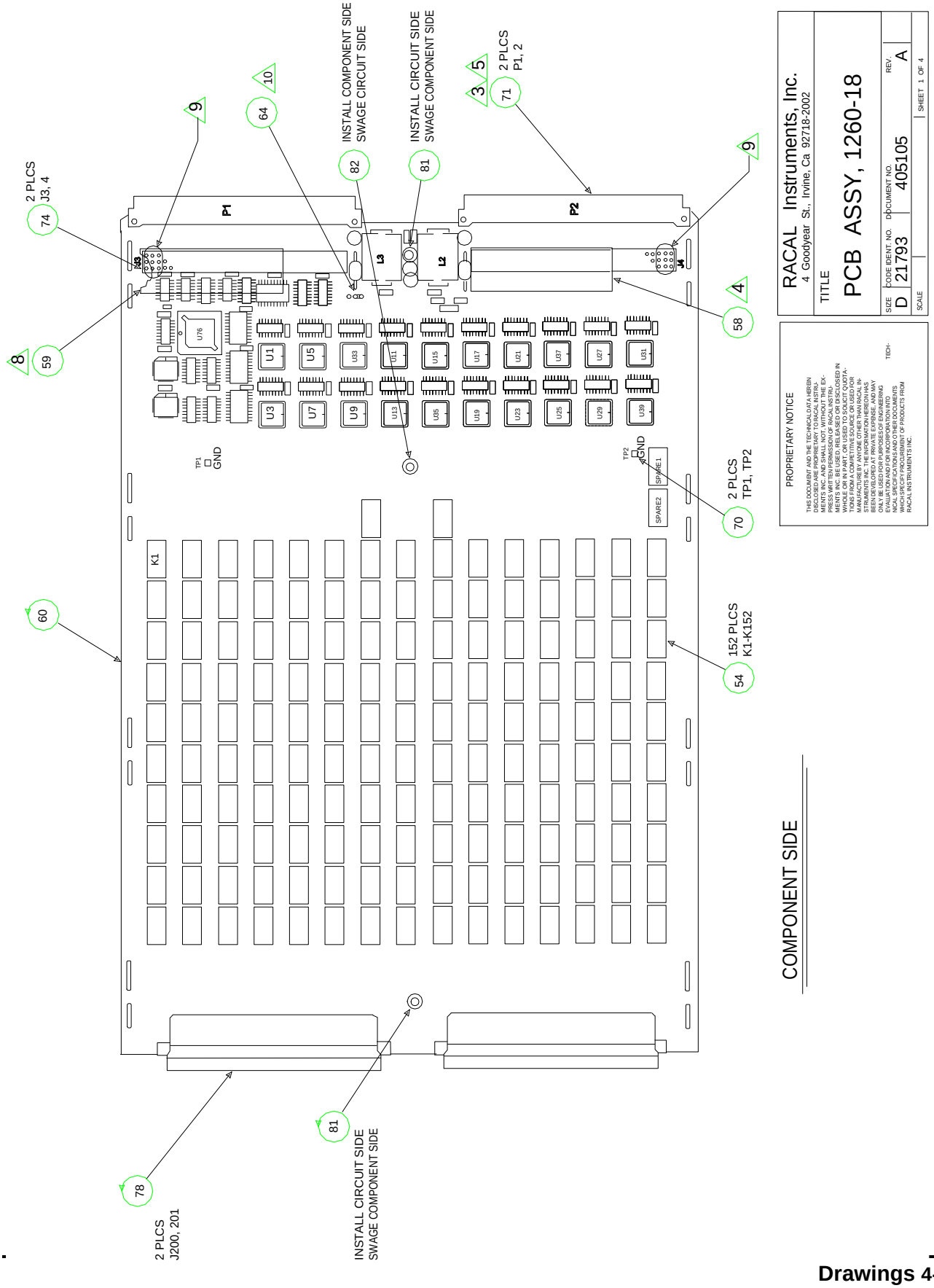
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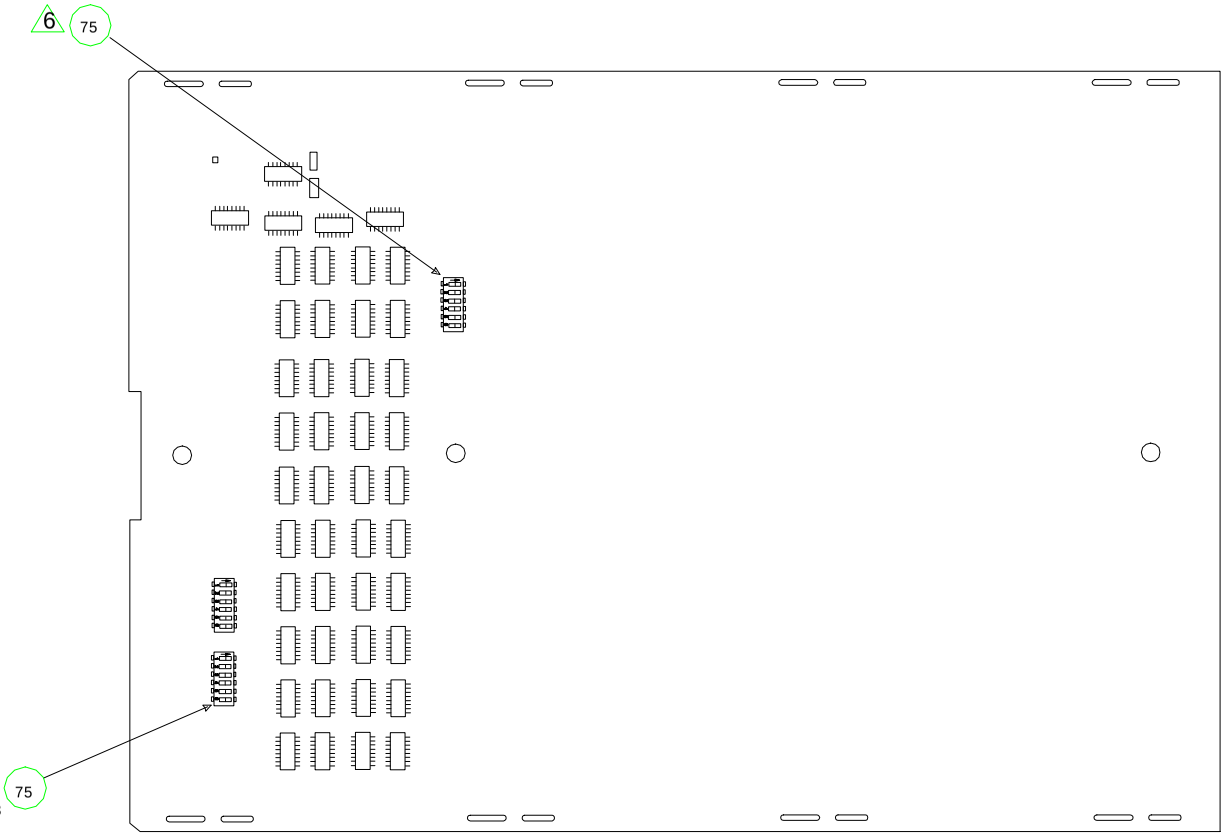
FINAL ASSY, 1260-18

SIZE	CODE IDENT. NO.	DOCUMENT NO.	REV.
D	21793	407493	A

SCALE | SHEET 1 OF 2


13
7
10
29
16
2
PART OF
ITEM 37
1
1.0
.7
.7
10
29
2 PLCS
5
7
35
CAUTION
1.0
PART OF
ITEM 20
19
PART OF
ITEM 36
16
24
8 PLCS
11
12
PART OF
ITEM 36
7
10
13
19
11
SIZE
D
CODE IDENT. NO.
21793
DOCUMENT NO.
407493
REV.
A
SCALE
SHEET 2 OF 2


2 PLCS J3, 4
74
8
59
9
64
10
INSTALL COMPONENT SIDE SWAGE CIRCUIT SIDE
82
INSTALL CIRCUIT SIDE SWAGE COMPONENT SIDE
81
3
5
2 PLCS P1, 2
71
9
58
4
P1
P2
J3
J4
L3
L2
U76
U1
U3
U5
U7
U9
U11
U13
U15
U17
U19
U21
U23
U25
U27
U29
U31
U39
TP1
GND
TP2
GND
SPARE1
SPARE2
2 PLCS TP1, TP2
70
K1
60
152 PLCS K1-K152
54
78
2 PLCS J200, 201
81
INSTALL CIRCUIT SIDE SWAGE COMPONENT SIDE
COMPONENT SIDE
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TITLE
PCB ASSY, 1260-18
SIZE D
CODE IDENT. NO. 21793
DOCUMENT NO. 405105
REV. A
SCALE
SHEET 1 OF 4



CIRCUIT SIDE

NOTES:

1. REFERENCE SCHEMATIC 435105.
2. INK STAMP SERIAL NUMBER & CURRENT REVISION ON COMPONENT SIDE APPROX. WHERE SHOWN.
3. SOLDER TAILS ON CIRCUIT SIDE OF PCB FOR P1 & P2 (ITEM 71) TO BE TRIMMED TO A MAXIMUM HEIGHT OF .045
4. INSTALL (ITEM 58) PCB INTO (ITEM 74) J4.
5. P1 AND P2 MUST BE INSTALLED FLUSH AT RIGHT ANGLE TO PCB.
6. SET SW1 (ITEM 75) POSITION 4 TO "ON", ALL OTHER POSITIONS TO "OFF". DO NOT WAVE SOLDER.
7. SET SW2 AND SW3 (ITEM 75) TO "O N" POSITION. DO NOT WAVE SOLDER.
8. INSTALL (ITEM 59) PCB INTO (ITEM 74) J3.
9. SOLDER TAILS ON CIRCUIT SIDE OF PCB FOR J3 & J4 (ITEM 74) 3 ROWS (9 PINS) NEAREST EDGE OF PC BOARD TO BE TRIMMED TO A MAXIMUM HEIGHT OF .045.
10. INSTALL JUMPER W1 PIN 1 TO W1 PIN 2 USING ITEM 64.
11. U39, U40, Z39, Z40, W2, W3, W4 & C144 ARE NOT INSTALLED.

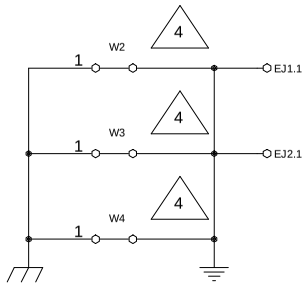
SIZE	CODE IDENT. NO.	DOCUMENT NO.	REV.
D	21793	405105	A
SCALE		SHEET 2 OF 4	

1. CAPACITOR VALUES ARE IN MICROFARADS, 50V, +/-20% UNLESS OTHERWISE SPECIFIED.
2. RESISTOR VALUES ARE IN OHMS, 1/16W, +/-5% UNLESS OTHERWISE SPECIFIED.
3. RESISTOR NETWORK VALUES ARE IN OHMS, +/-2%.
4. PARTS INDICATED ARE NOT INSTALLED.
5. RELAYS K1-K152 ARE RACAL INSTRUMENTS P/N 310256.

CHASSIS GROUND

Digital / VXI Ground

RF / Shield Ground
(may be tied to chassis ground)



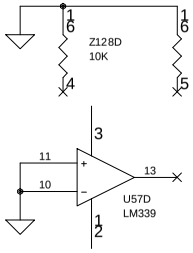
HIGHEST REF.DES.
Z128
W4
U83
TP2
SW3
R20
Q1
P2
L5
K152
J201
EJ2
C167

CAD CURRENT REV. LTR
FOR SHEETS 1 THRU 23.
REVISION A.

CAD FILENAMES

|LINK
|SHEET2.SCH
|SHEET3.SCH
|SHEET4.SCH
|SHEET5.SCH
|SHEET6.SCH
|SHEET7.SCH
|SHEET8.SCH
|SHEET9.SCH
|SHEET10.SCH
|SHEET11.SCH
|SHEET12.SCH
|SHEET13.SCH
|SHEET14.SCH
|SHEET15.SCH
|SHEET16.SCH
|SHEET17.SCH
|SHEET18.SCH
|SHEET19.SCH
|SHEET20.SCH
|SHEET21.SCH
|SHEET22.SCH
|SHEET23.SCH

DRAWN WITH ORCAD 4.10



UNUSED GATES

REF. DES.	IC TYPE	+5V PIN NO.	VRR PIN NO.	GND PIN NO.
U82	74HC299	20		10
U79,80,81	74HC240	20		10
U76	231154(22V10H)	28		14
U75	26LS31	16		8
U73,74	26LS32	16		8
U71,72,77,83	74HCT253	16		8
U70	231152-002(16L8Q)	20		10
U61,62	74HCT164	14		7
U57	LM339	3		12
U56	74HCT85	16		8
U54,55,78	74HCT138	16		8
U53	231153-001(16R4)	20		10
U2,4,6,8,10,12,14,16, 18,20,22,24,26,28,30, 32,34,36,38,40,60	74HCT166	16		8
U1,3,5,7,9,11,13, 15,17,19,21,23,25, 27,29,31,33,35,37,39	5801BV	27	15	16,17

IC POWER CONNECTIONS

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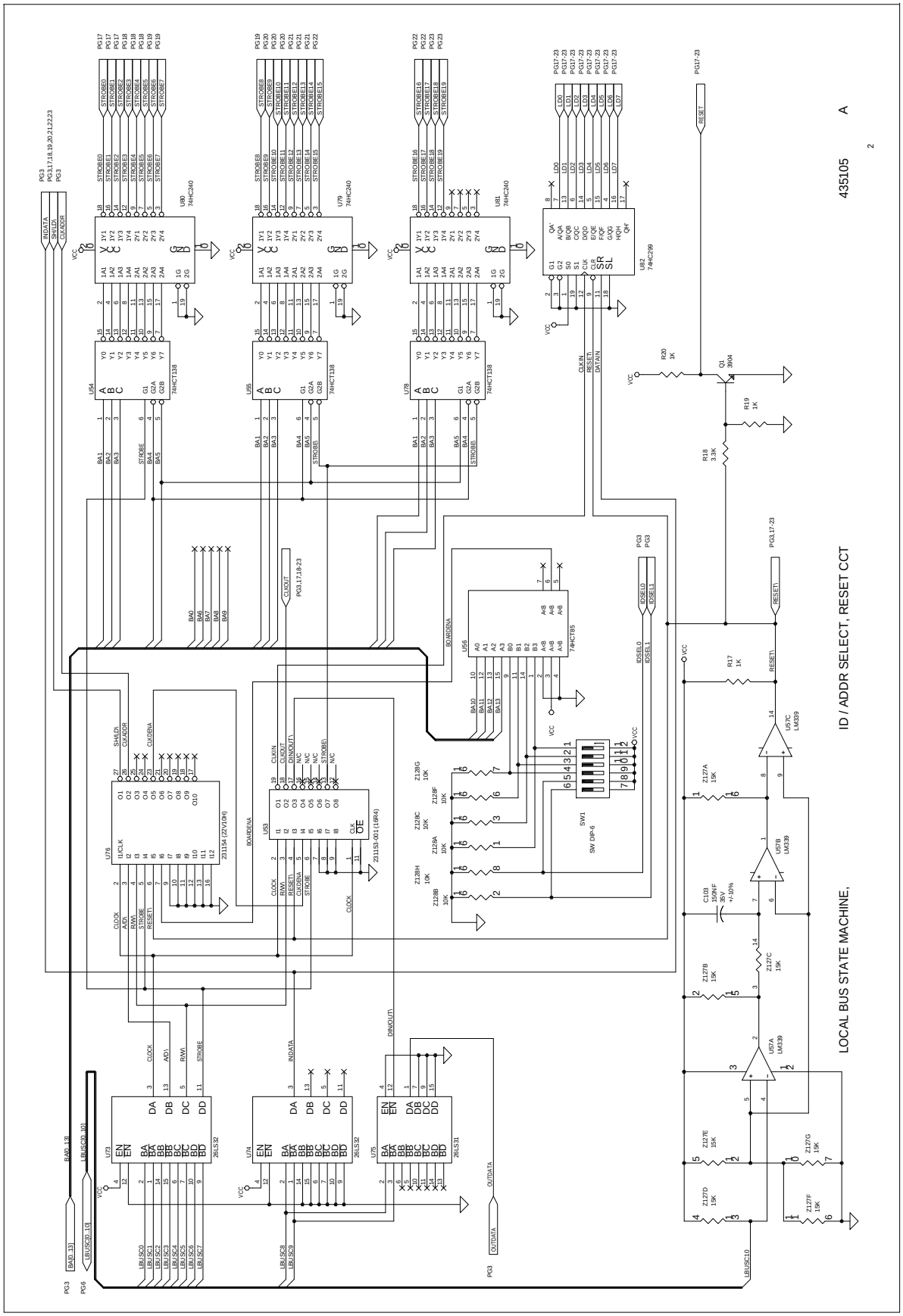
RACAL Instruments, Inc.
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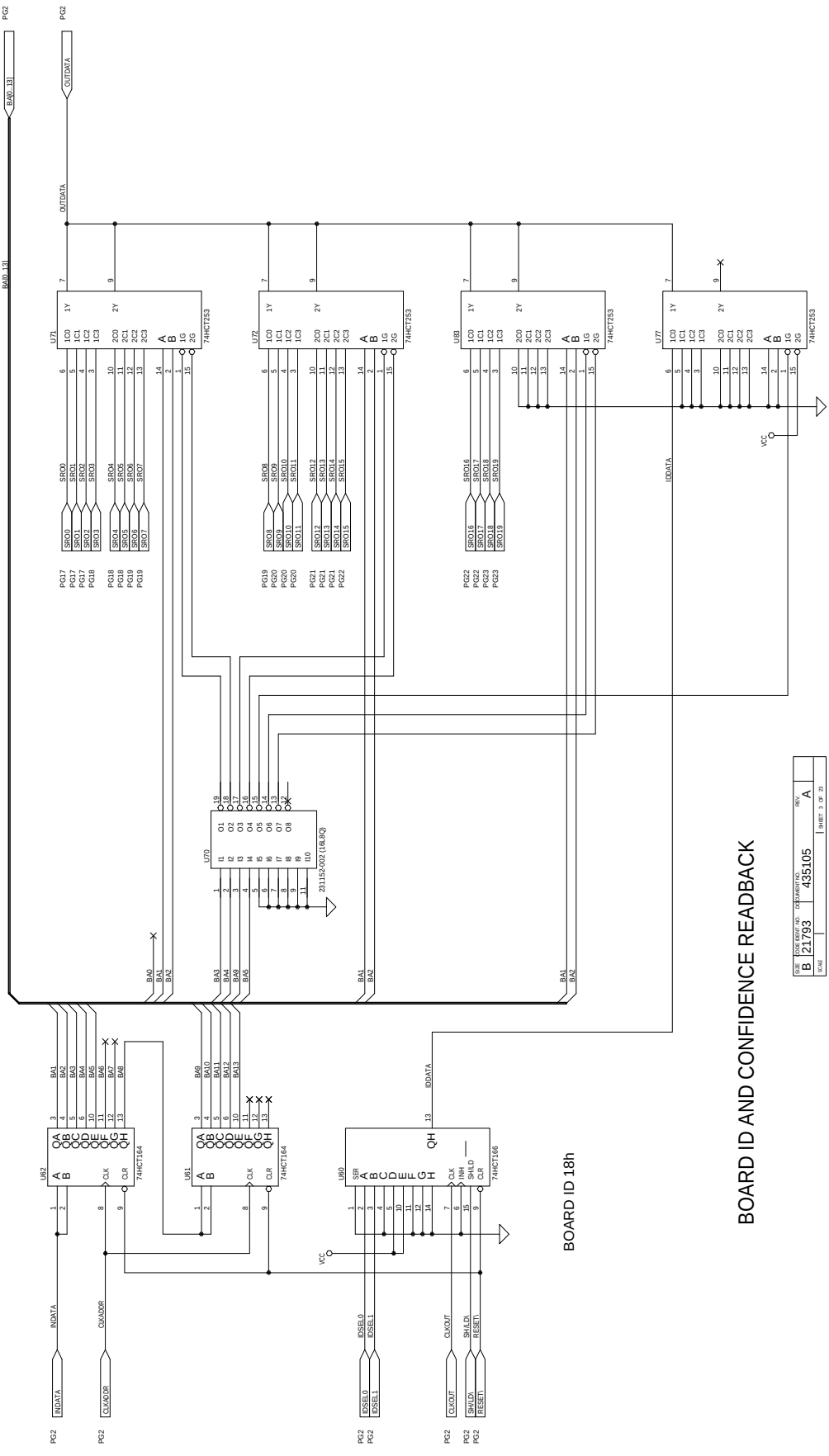
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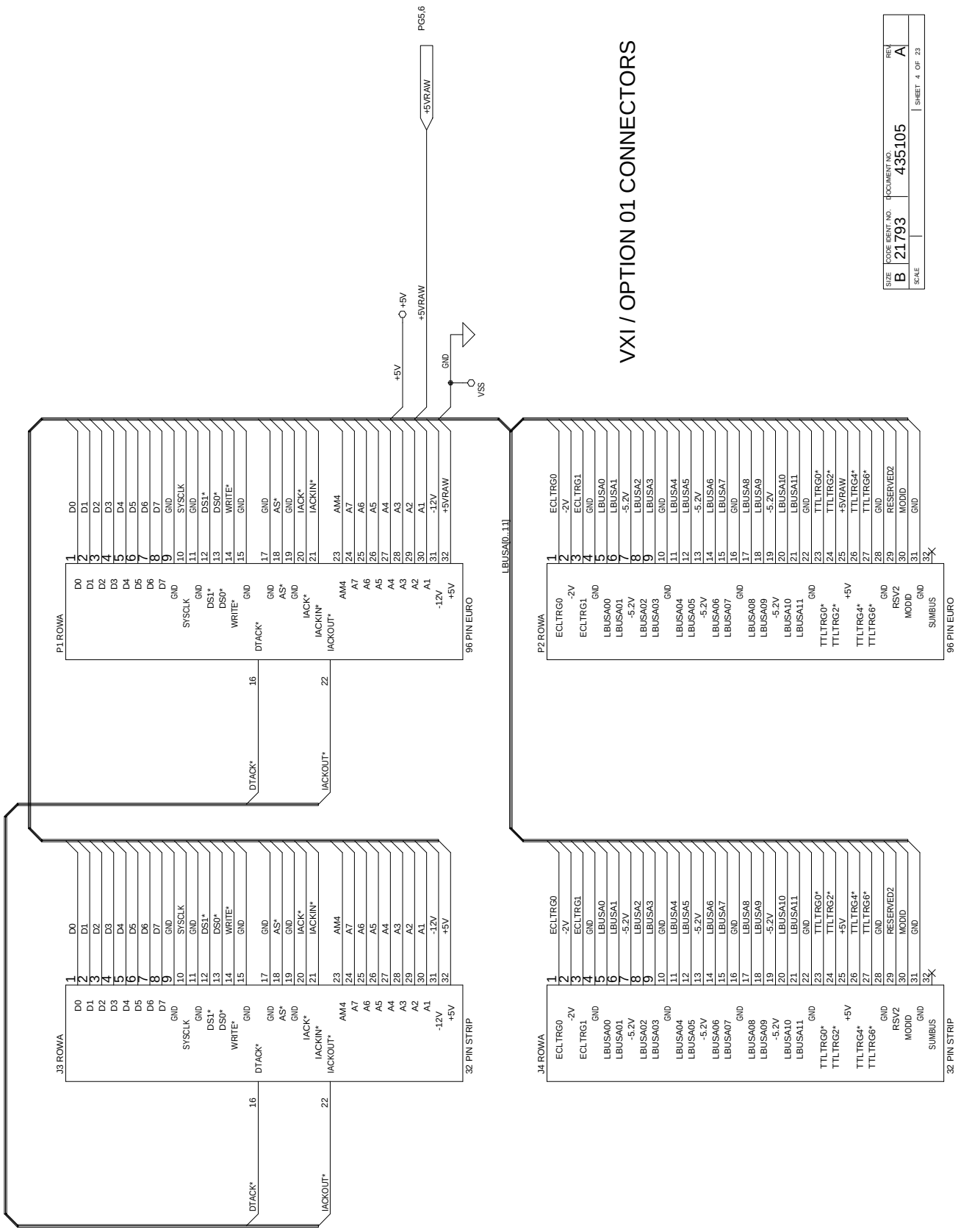
SCHEM., 1260-18

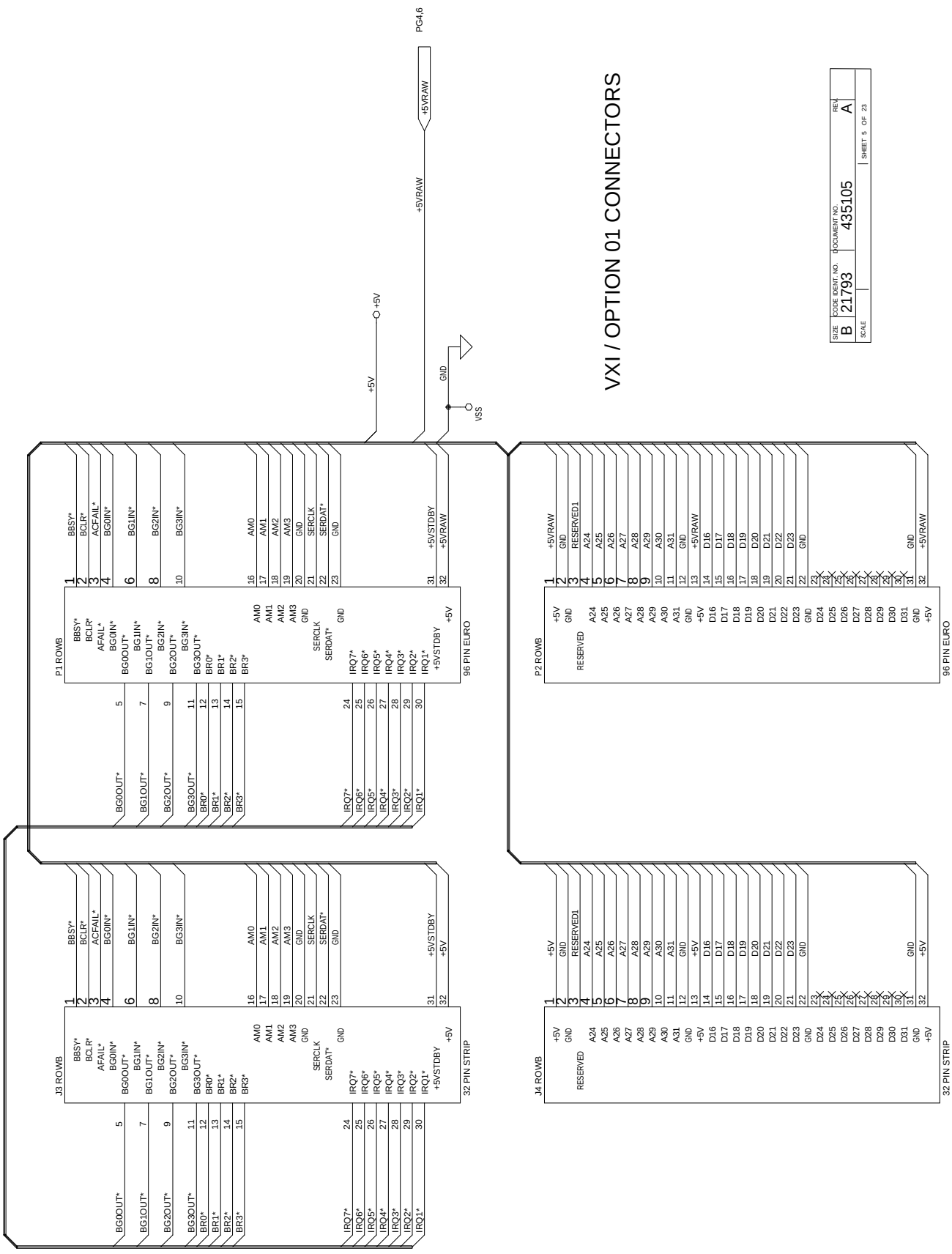
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D	21793	435105	A

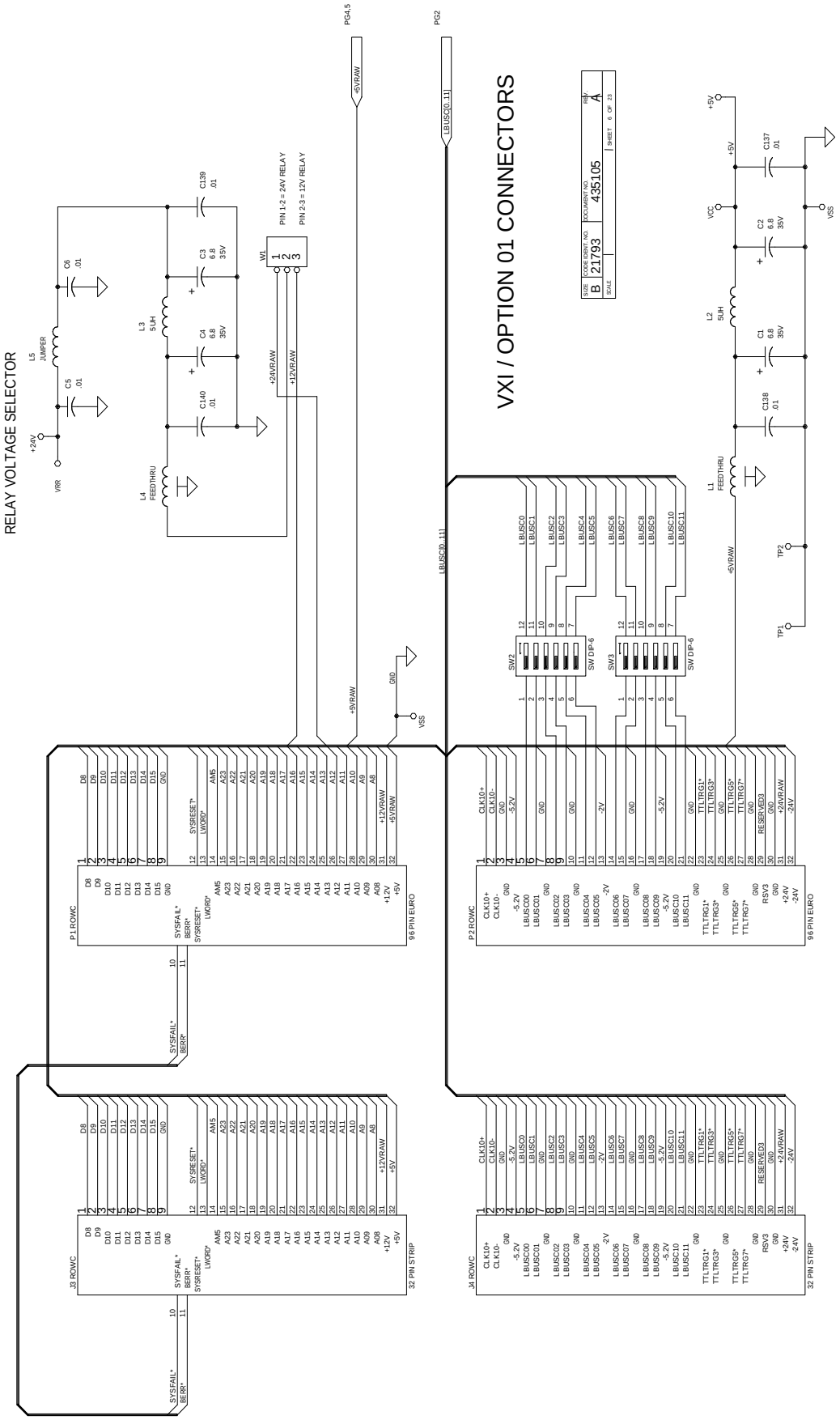
SCALE | SHEET 1 OF 23

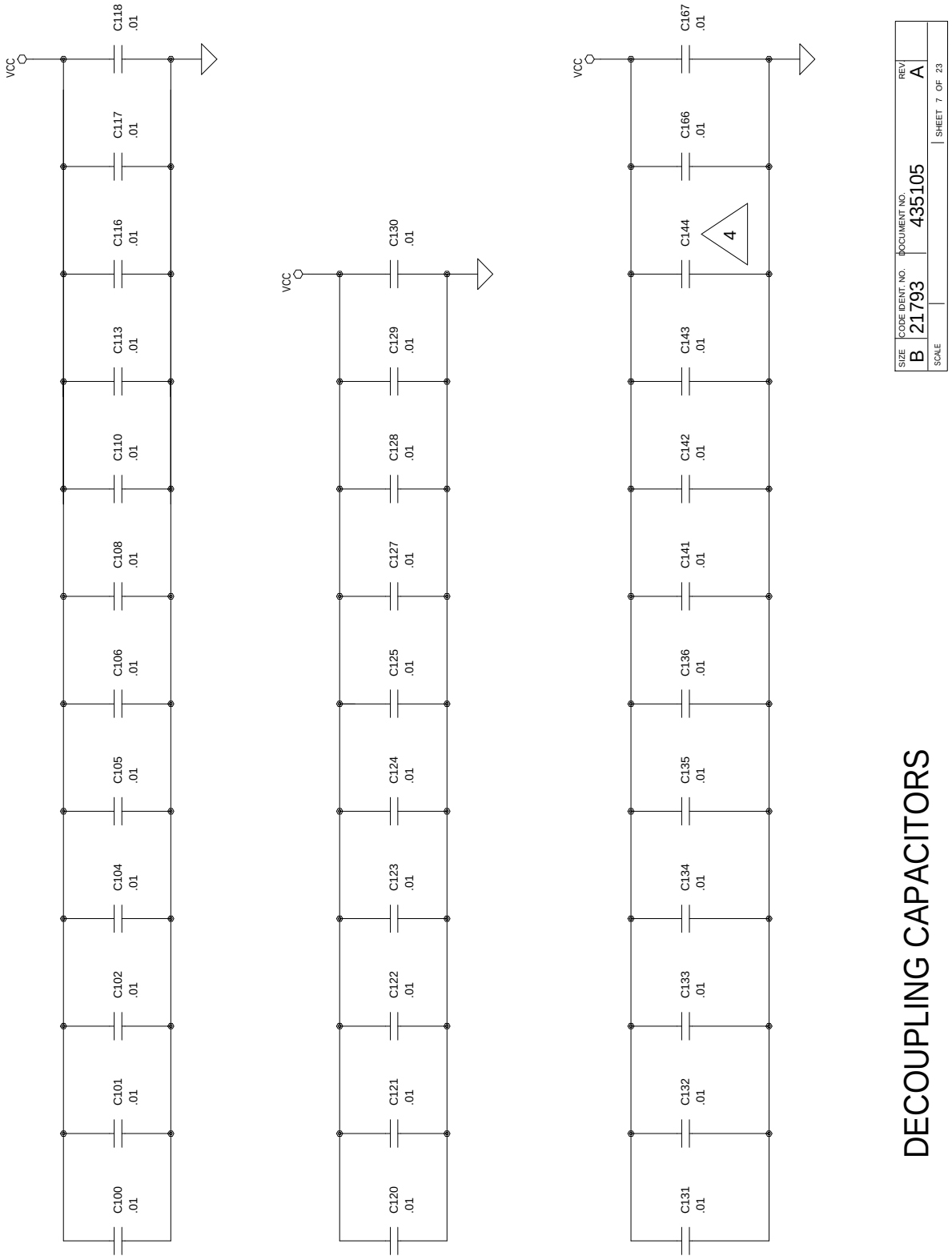

ID / ADDR SELECT, RESET CCT
LOCAL BUS STATE MACHINE,
435105
A
2


BOARD ID AND CONFIDENCE READBACK
BOARD ID 18h
SIZE B
DOC ENT. NO. 21793
DOCUMENT NO. 435105
REV. A
SHEET 3 OF 23
U71
U72
U83
U77
U70
U62
U61
U60
74HCT253
74HCT164
74HCT166
231152-002 (16L8Q)
VCC
INDATA
CLKADDR
IDSEL0
IDSEL1
CLKOUT
SHLD\
RESET\
IDDATA
OUTDATA
BA00_13\

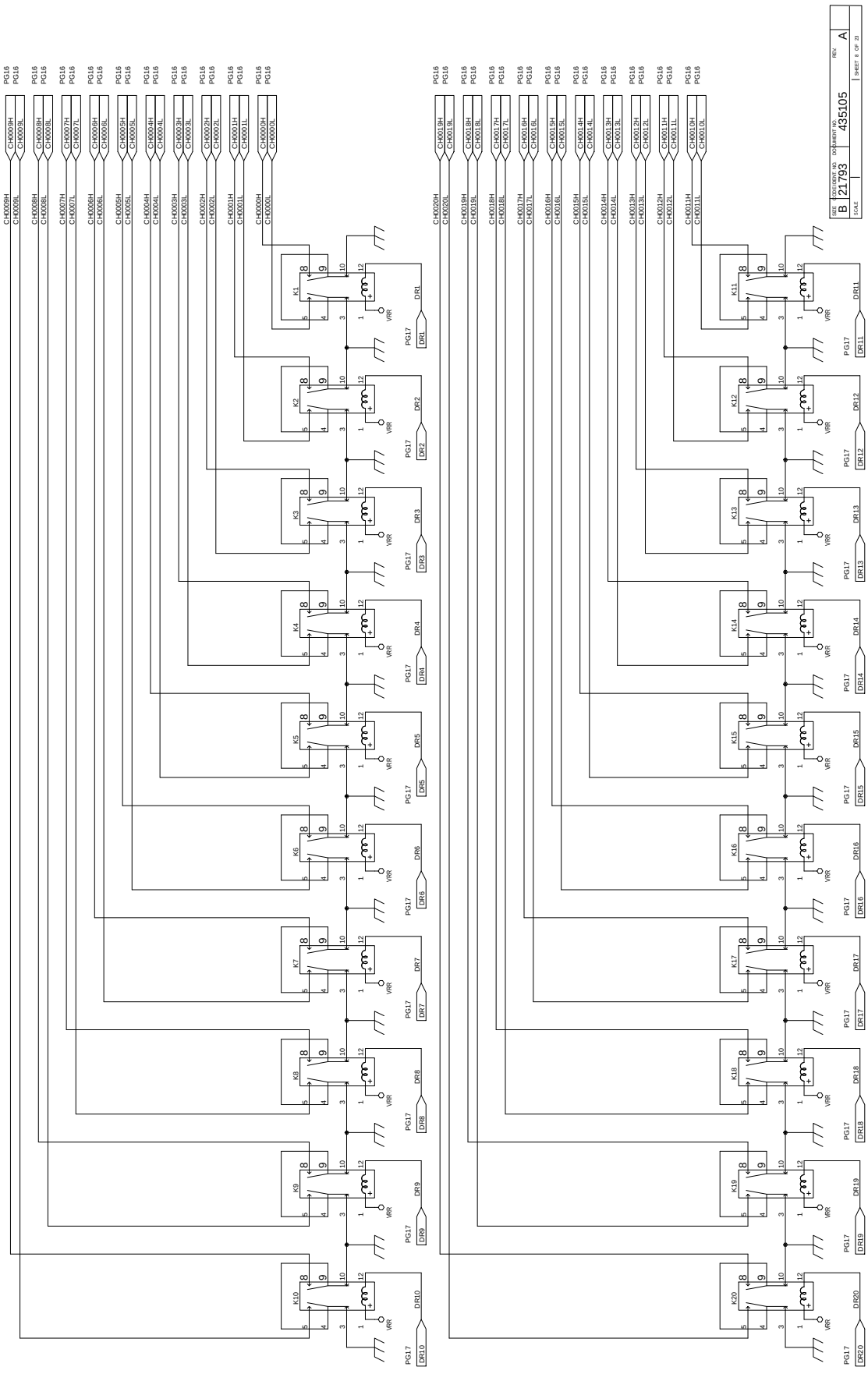

VXI / OPTION 01 CONNECTORS
SIZE B
CODE IDENT. NO. 21793
DOCUMENT NO. 435105
REV. A
SCALE
SHEET 4 OF 23
PG5.6
+5VRAW
+5V
+5VRAW
GND
VSS
LBUSA[0..11]
P1 ROWA
D0 D1 D2 D3 D4 D5 D6 D7 GND SYSCLK GND DS1* DS0* WRITE* GND DTACK* GND AS* GND IACK* IACKIN* IACKOUT* AM4 A7 A6 A5 A4 A3 A2 A1 -12V +5V
96 PIN EURO
P2 ROWA
ECLTRG0 -2V ECLTRG1 GND LBUSA00 LBUSA01 -5.2V LBUSA02 LBUSA03 GND LBUSA04 LBUSA05 -5.2V LBUSA06 LBUSA07 GND LBUSA08 LBUSA09 -5.2V LBUSA10 LBUSA11 GND TTLTRG0* TTLTRG2* +5V TTLTRG4* TTLTRG6* GND RSV2 MODID GND SUMBUS
96 PIN EURO
J3 ROWA
D0 D1 D2 D3 D4 D5 D6 D7 GND SYSCLK GND DS1* DS0* WRITE* GND DTACK* GND AS* GND IACK* IACKIN* IACKOUT* AM4 A7 A6 A5 A4 A3 A2 A1 -12V +5V
32 PIN STRIP
J4 ROWA
ECLTRG0 -2V ECLTRG1 GND LBUSA00 LBUSA01 -5.2V LBUSA02 LBUSA03 GND LBUSA04 LBUSA05 -5.2V LBUSA06 LBUSA07 GND LBUSA08 LBUSA09 -5.2V LBUSA10 LBUSA11 GND TTLTRG0* TTLTRG2* +5V TTLTRG4* TTLTRG6* GND RSV2 MODID GND SUMBUS
32 PIN STRIP

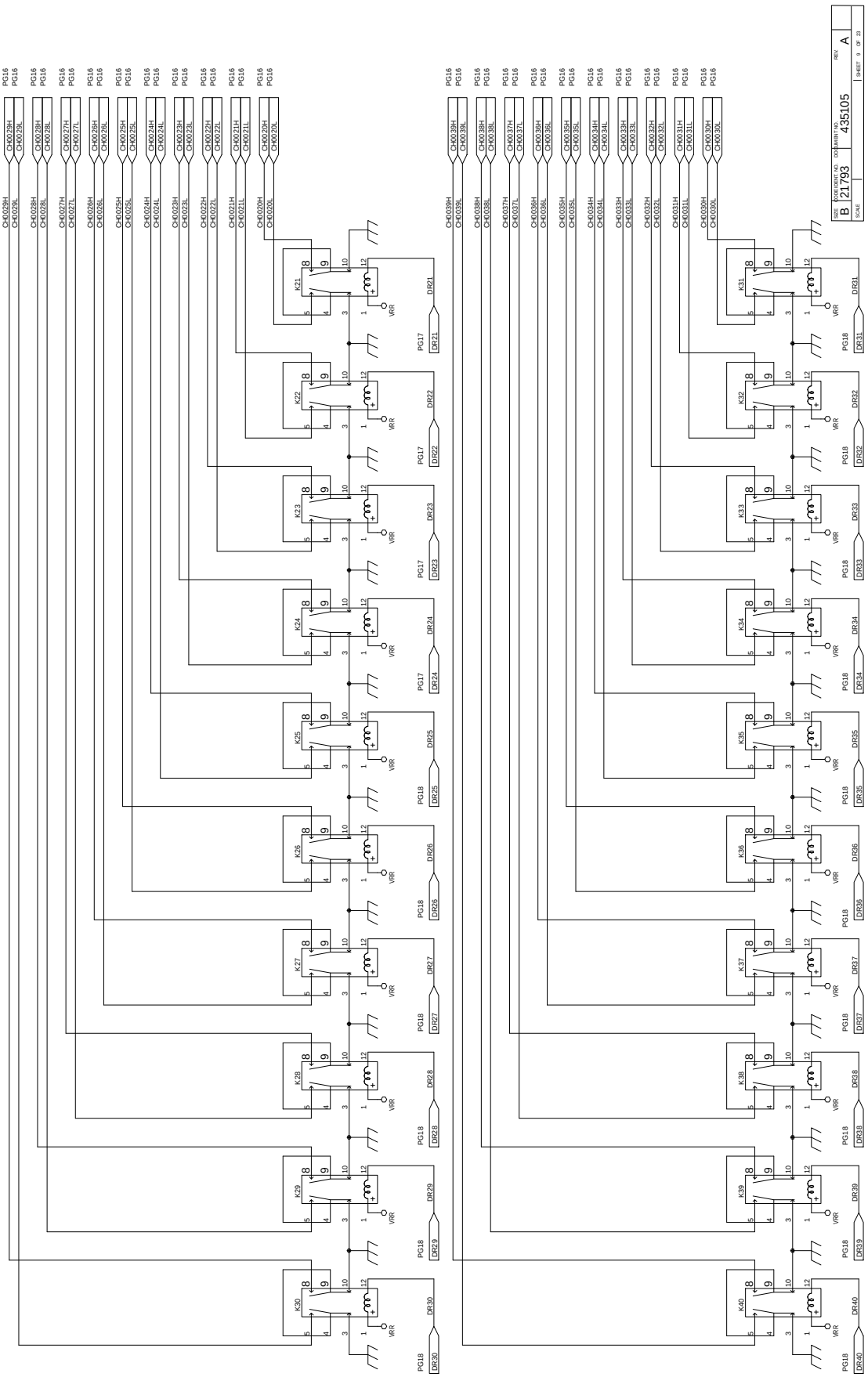

VXI / OPTION 01 CONNECTORS
SIZE B
CODE IDENT. NO. 21793
DOCUMENT NO. 435105
REV A
SCALE
SHEET 5 OF 23
PG4.6
+5VRAW
+5V
GND
VSS
P1 ROWB
P2 ROWB
J3 ROWB
J4 ROWB
96 PIN EURO
32 PIN STRIP
BBSY*
BCLR*
ACFAIL*
BG0IN*
BG0OUT*
BG1IN*
BG1OUT*
BG2IN*
BG2OUT*
BG3IN*
BG3OUT*
BR0*
BR1*
BR2*
BR3*
AM0
AM1
AM2
AM3
GND
SERCLK
SERDAT*
IRQ7*
IRQ6*
IRQ5*
IRQ4*
IRQ3*
IRQ2*
IRQ1*
+5VSTDBY
+5V
RESERVED
RESERVED1
A24
A25
A26
A27
A28
A29
A30
A31
D16
D17
D18
D19
D20
D21
D22
D23
D24
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D26
D27
D28
D29
D30
D31

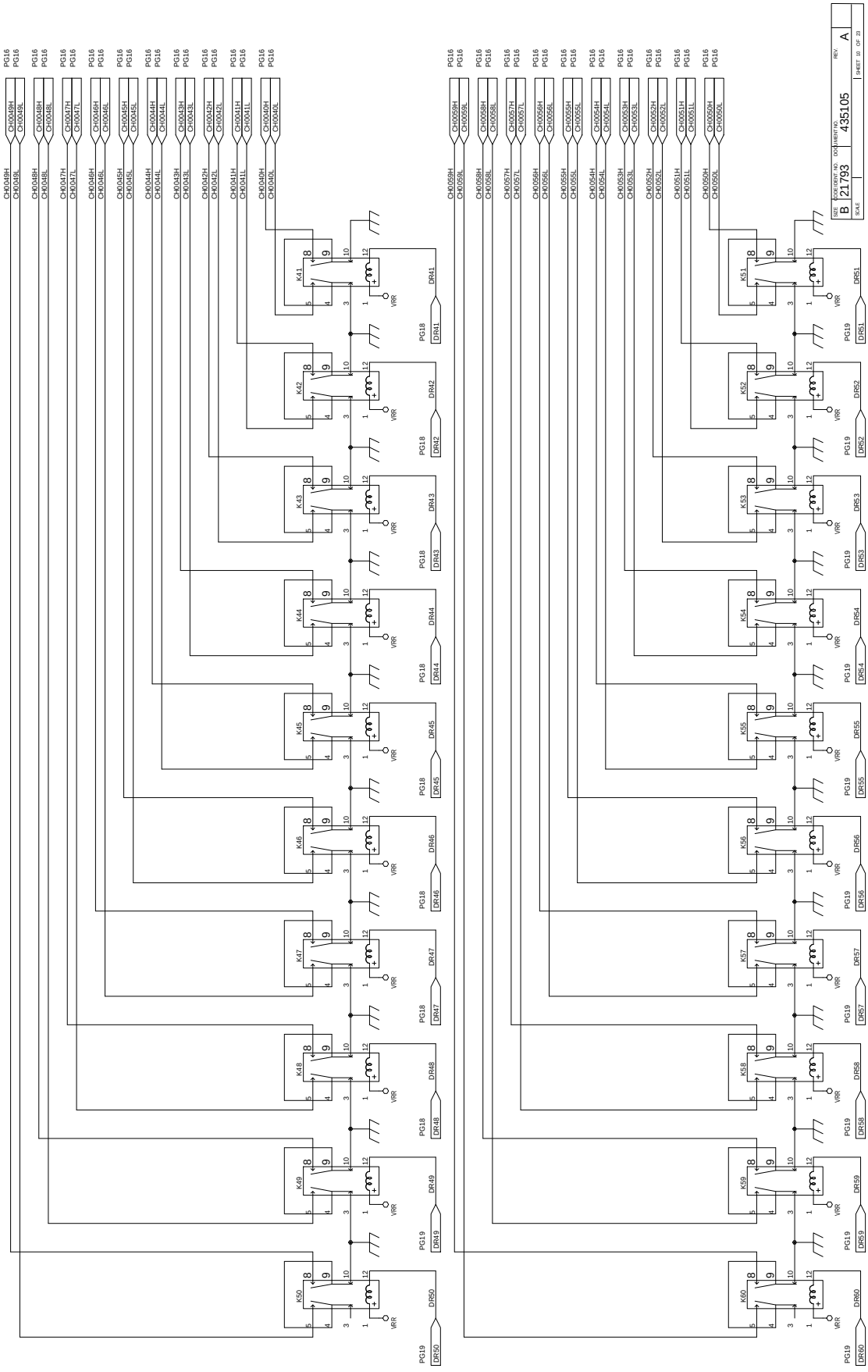

RELAY VOLTAGE SELECTOR
VXI / OPTION 01 CONNECTORS
SIZE B
FSCM NO 21793
DOCUMENT NO 435105
REV A
SHEET 6 OF 23
PIN 1-2 = 24V RELAY
PIN 2-3 = 12V RELAY
+24V
VRR
L5 JUMPER
C5 .01
C6 .01
L3 5UH
C4 6.8 35V
C3 6.8 35V
C139 .01
C140 .01
L4 FEEDTHRU
W1
+24VRAW
+12VRAW
+5VRAW
PG4,5
PG2
LBUSC(0..11)
GND
VSS
SW2
SW3
SW DIP-6
L2 5UH
C1 6.8 35V
C2 6.8 35V
C138 .01
C137 .01
L1 FEEDTHRU
TP1
TP2
VCC
+5V
P1 ROW C
P2 ROW C
J3 ROW C
J4 ROW C
96 PIN EURO
32 PIN STRIP
SYSFAIL*
BERR*
SYSRESET*
LWORD*
+12V
+5V
-5.2V
-2V
+24V
-24V
RESERVED3
RSV3

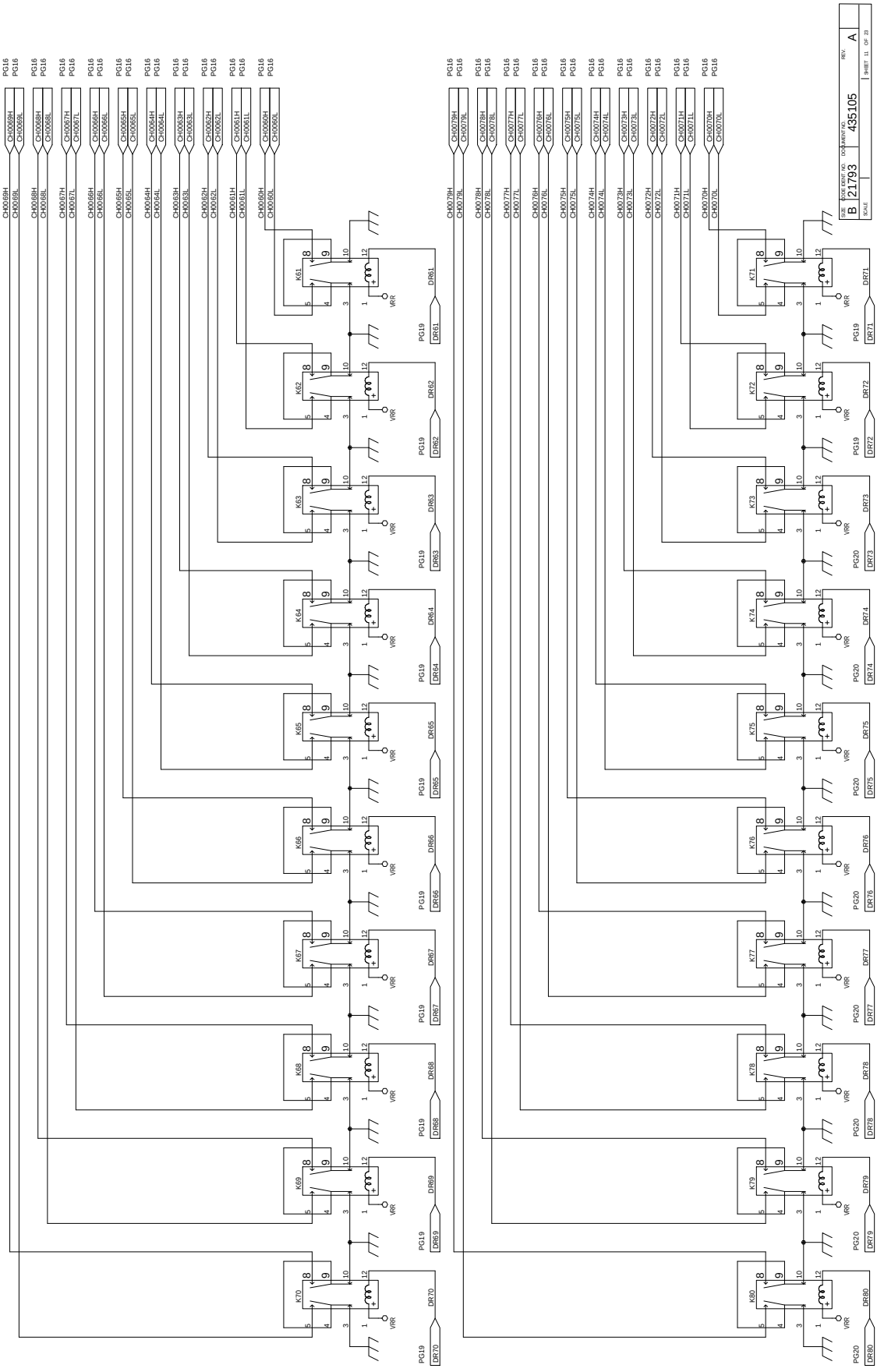


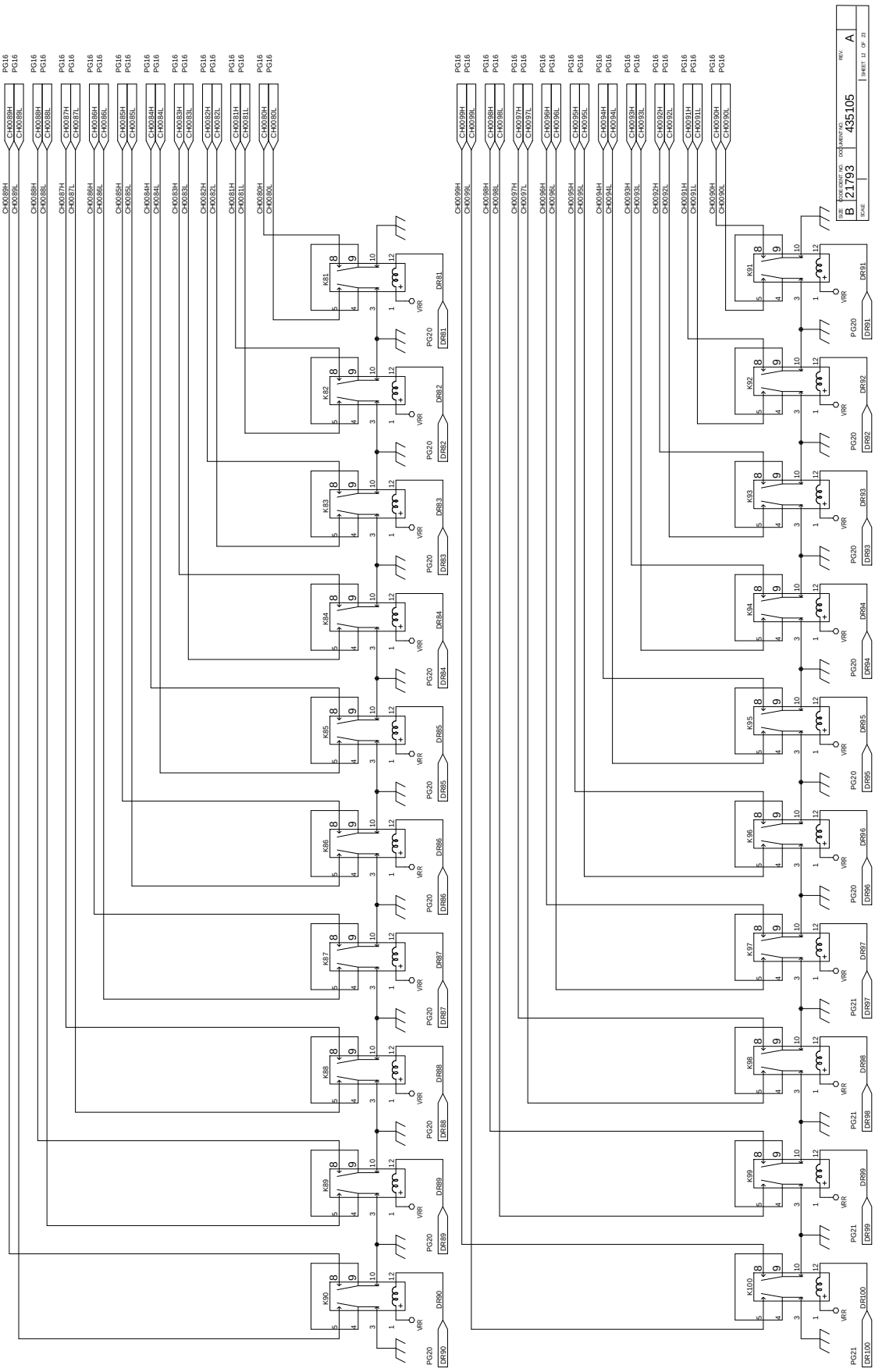
DECOUPLING CAPACITORS

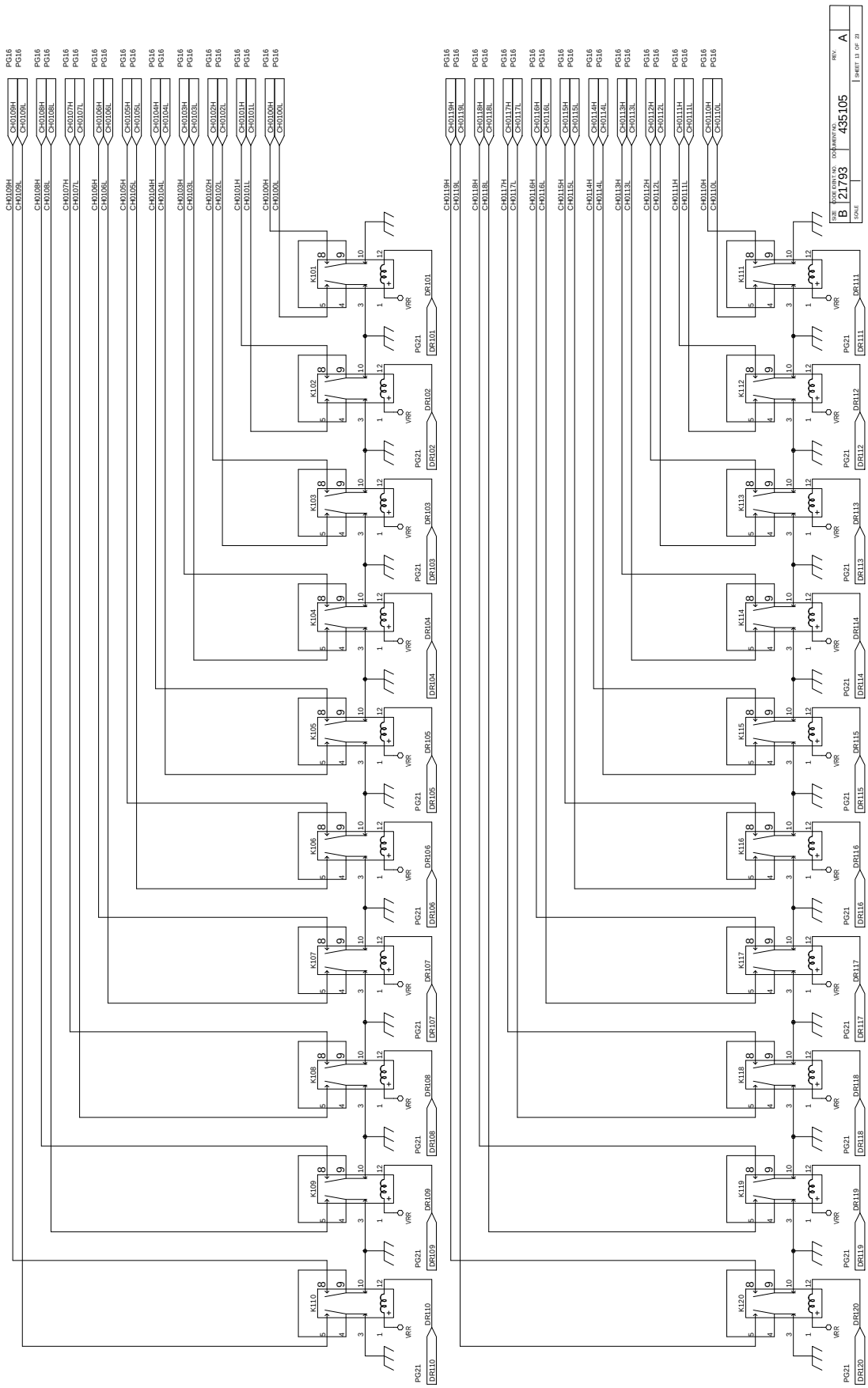

SIZE B
DOCUMENT NO 435105
REV A
SCALE
SHEET 8 OF 23

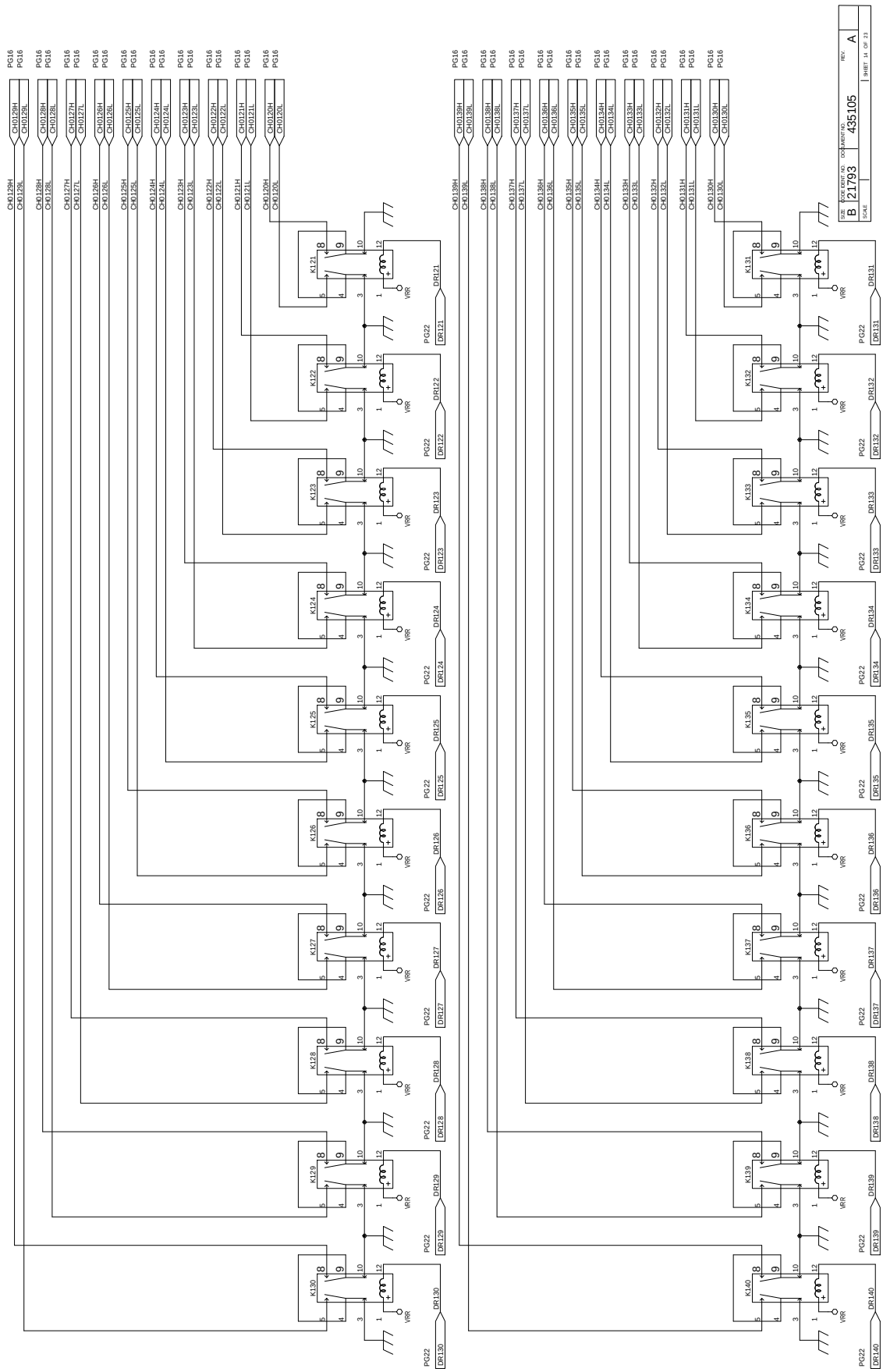


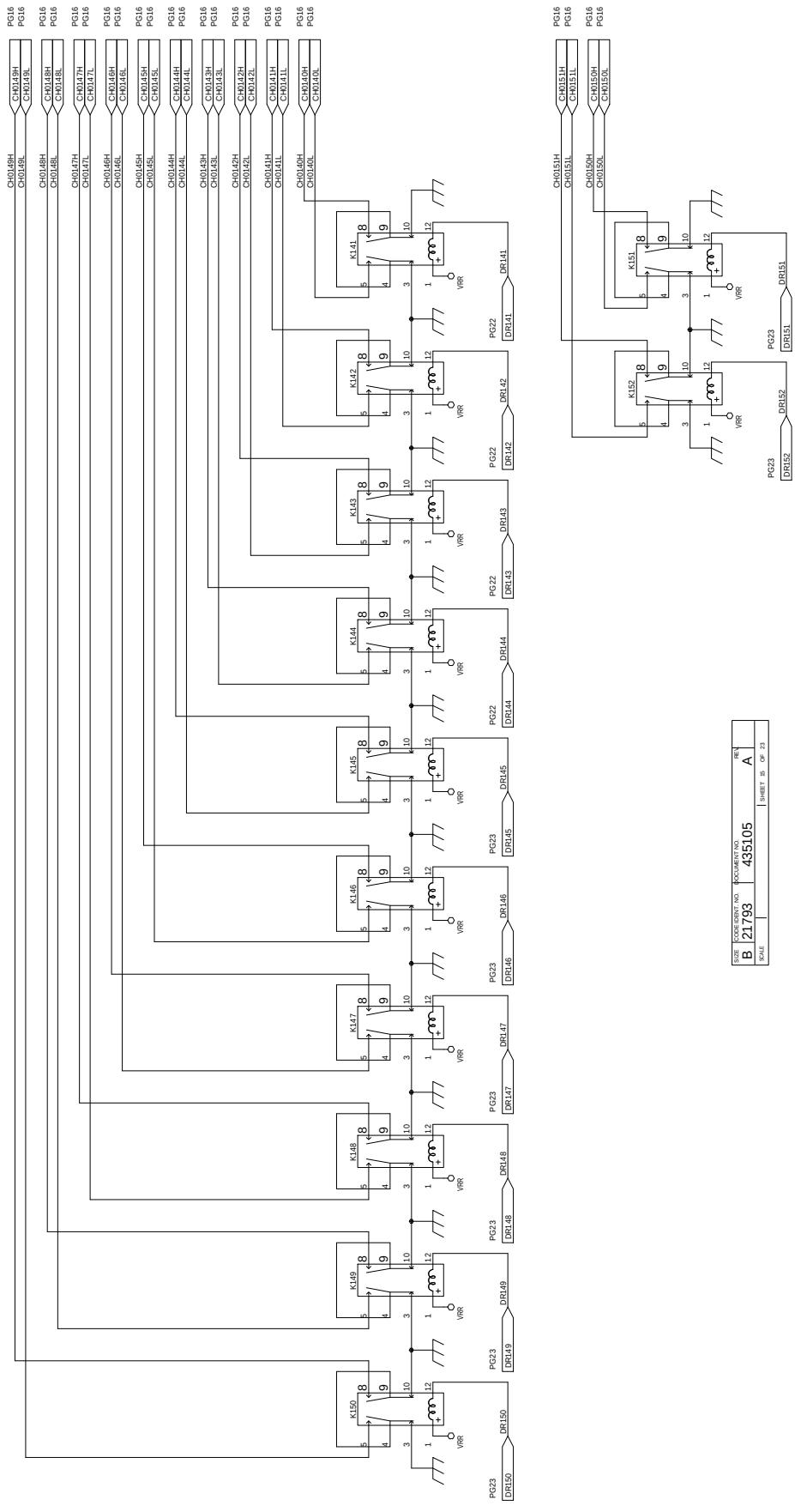

SIZE
B
DOCUMENT NO.
21793
435105
REV.
A
SCALE
SHEET 10 OF 23

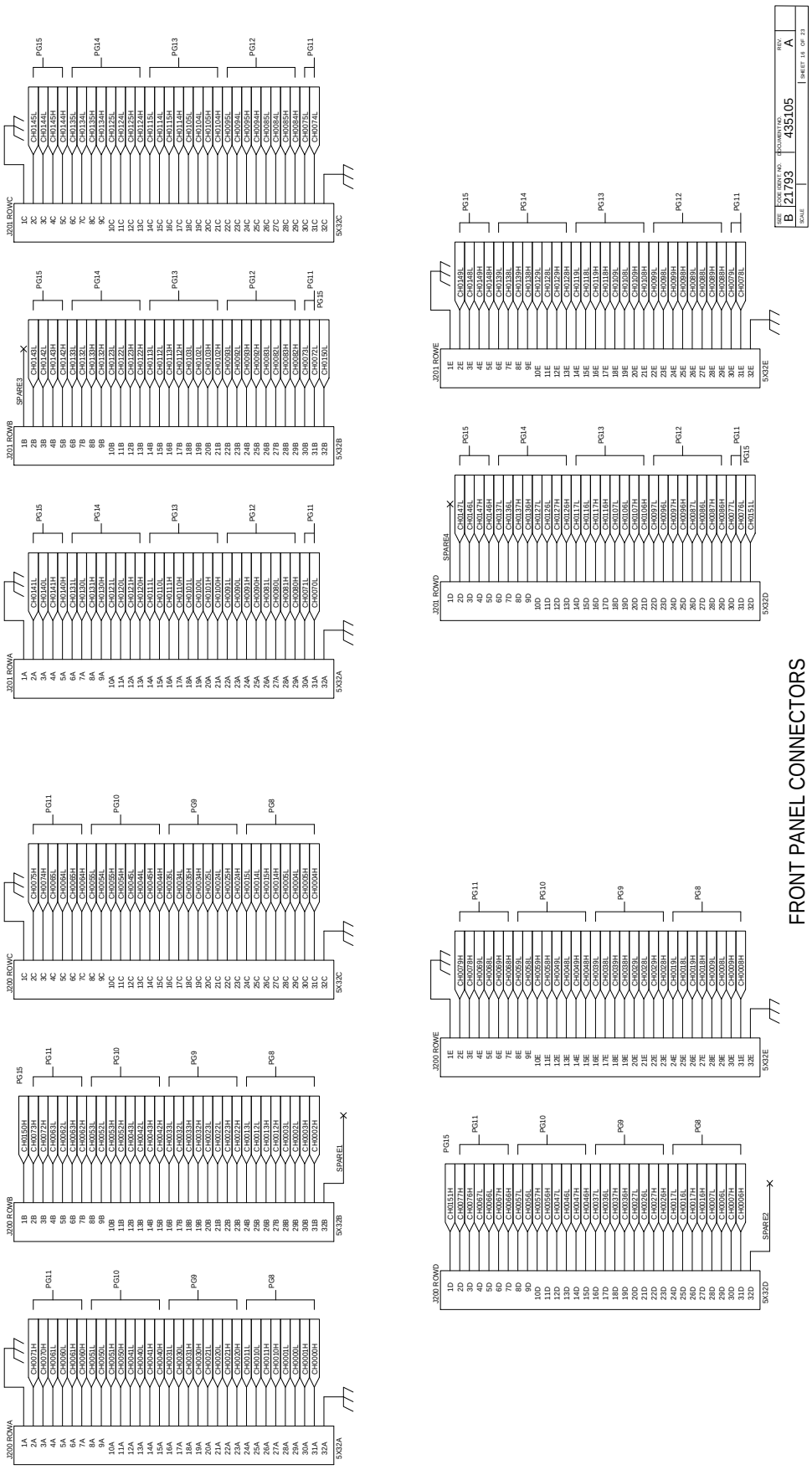

SIZE B
CODE IDENT. NO. 21793
DWG NO. 435105
REV A
SCALE
SHEET 11 OF 23

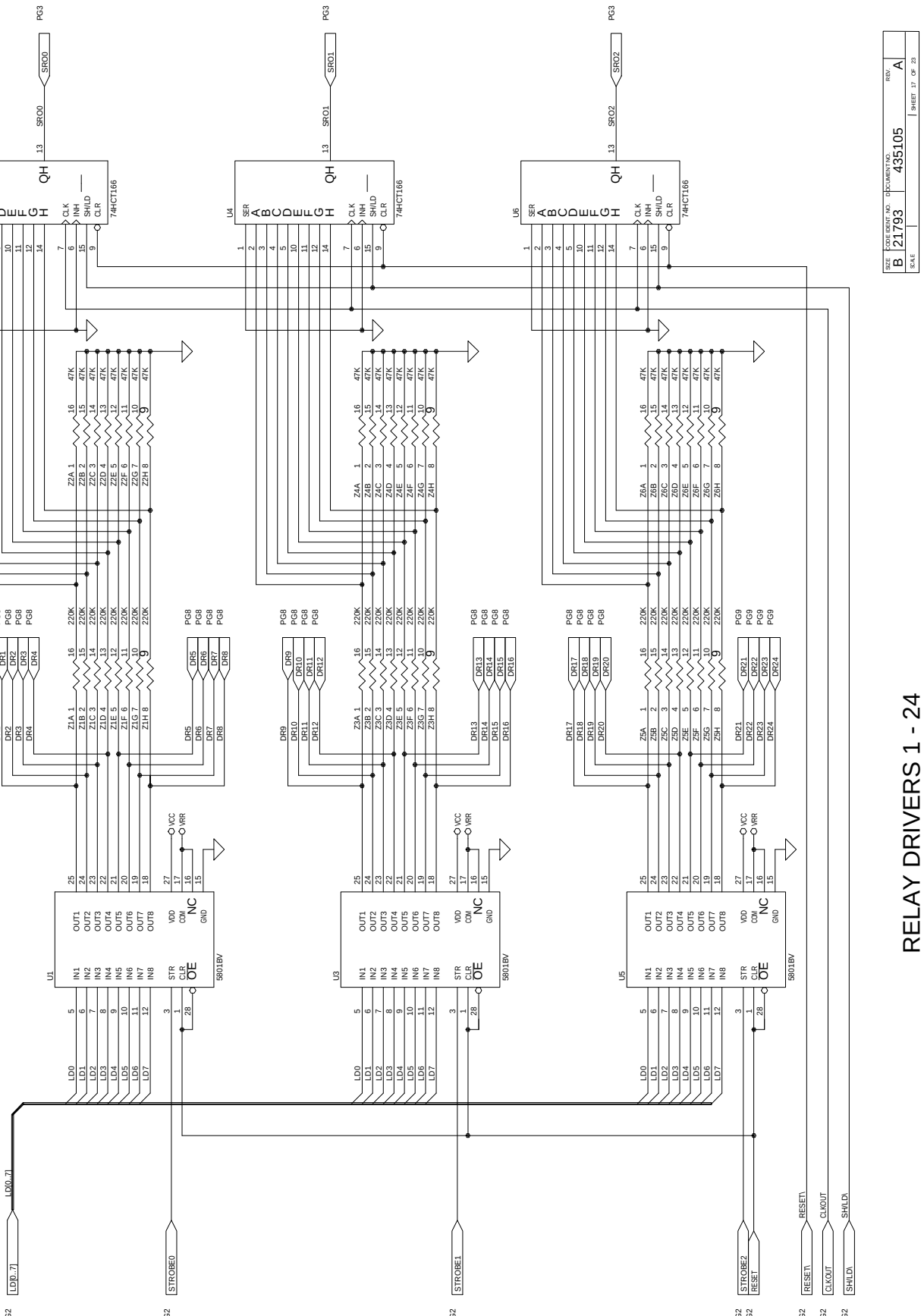

SIZE B
DOCUMENT NO. 21793
CAGE
DRAWING NO. 435105
REV A
SHEET 12 OF 23
K81
K82
K83
K84
K85
K86
K87
K88
K89
K90
K91
K92
K93
K94
K95
K96
K97
K98
K99
K100
DR81
DR82
DR83
DR84
DR85
DR86
DR87
DR88
DR89
DR90
DR91
DR92
DR93
DR94
DR95
DR96
DR97
DR98
DR99
DR100
PG20
PG21
VRR

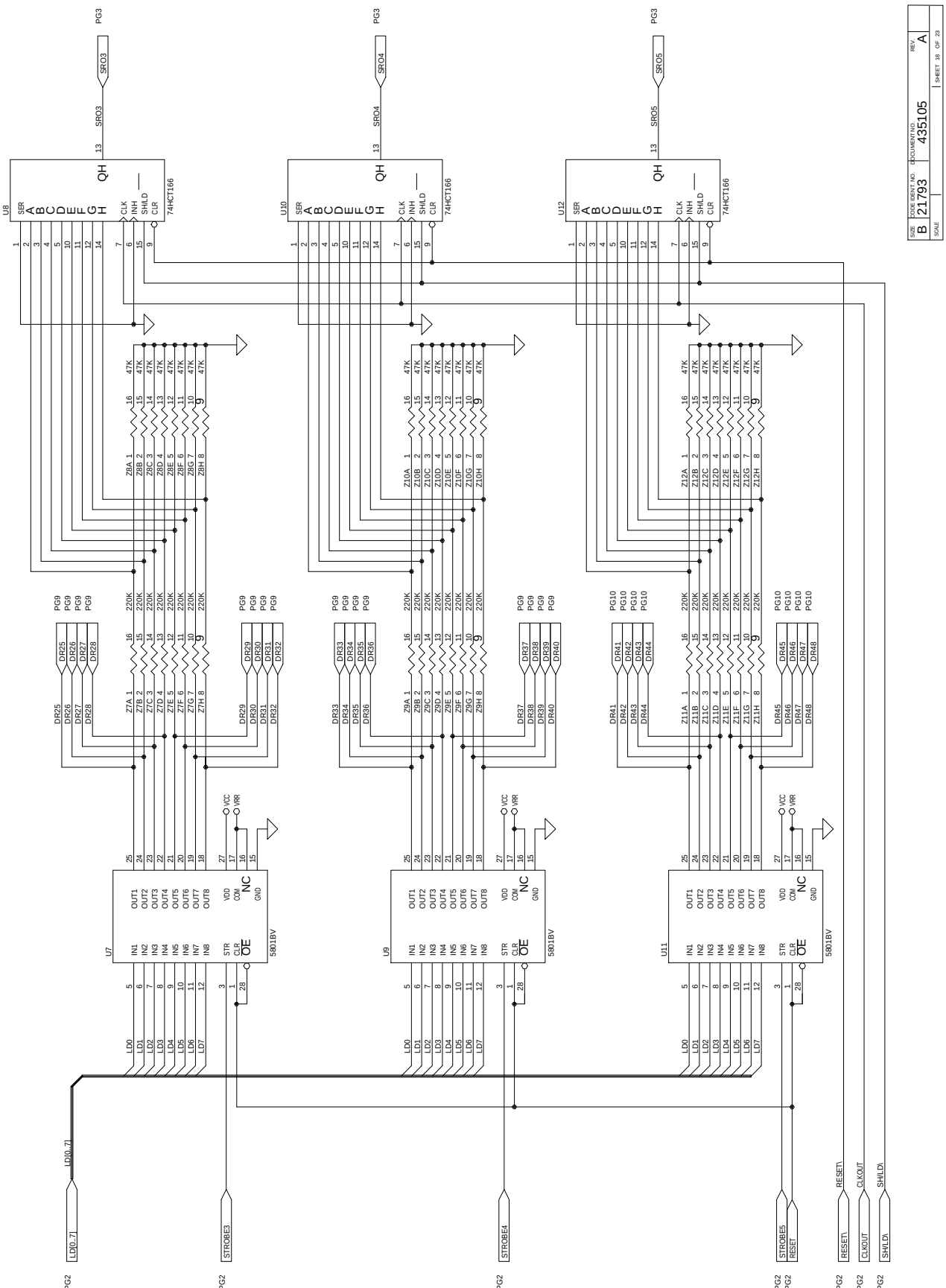

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CAGE CODE NO. 21793
DOCUMENT NO. 435105
REV. A
SCALE
SHEET 13 OF 23

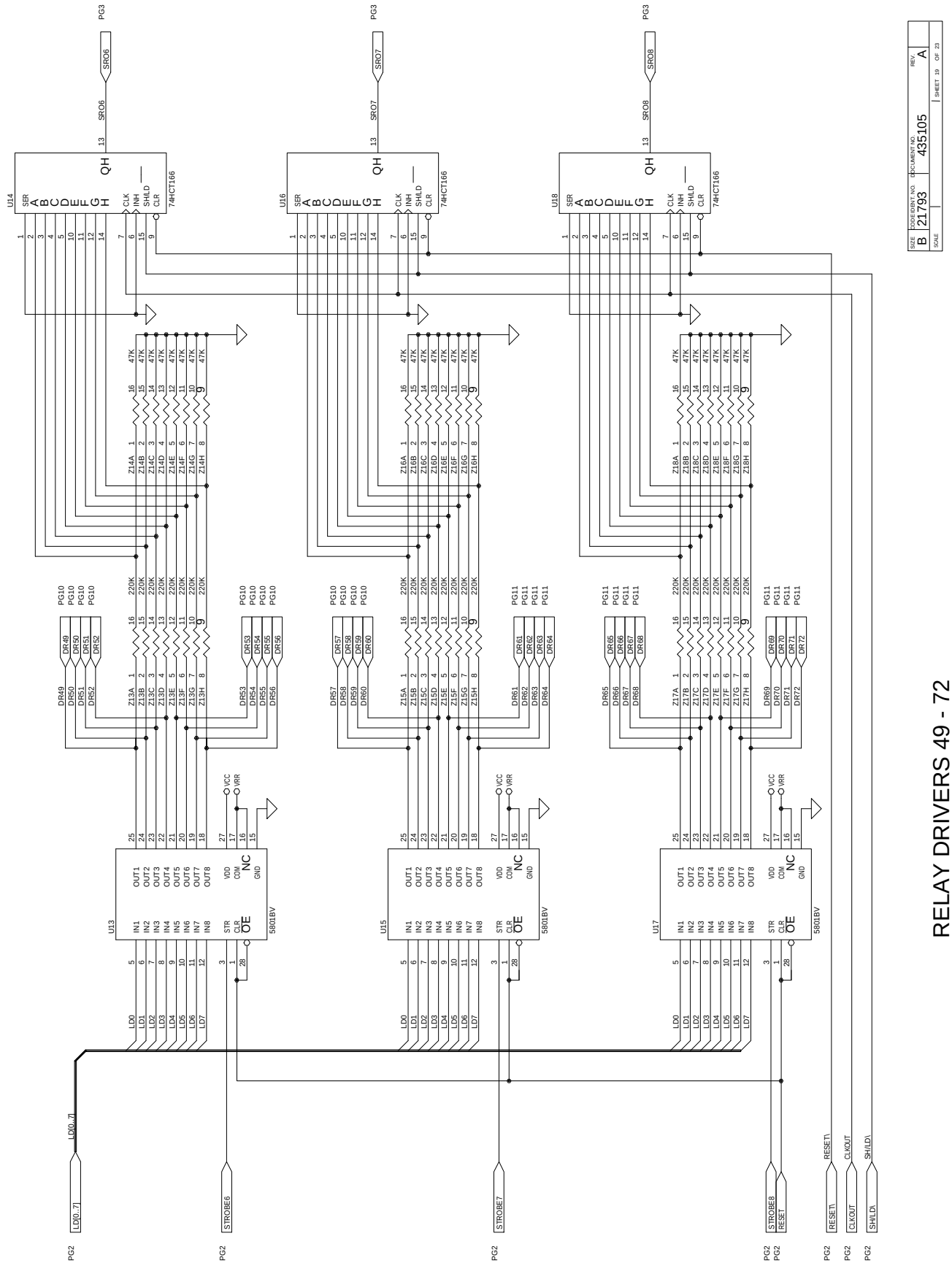

SIZE
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21793
DOCUMENT NO.
435105
REV.
A
SCALE
SHEET 14 OF 23

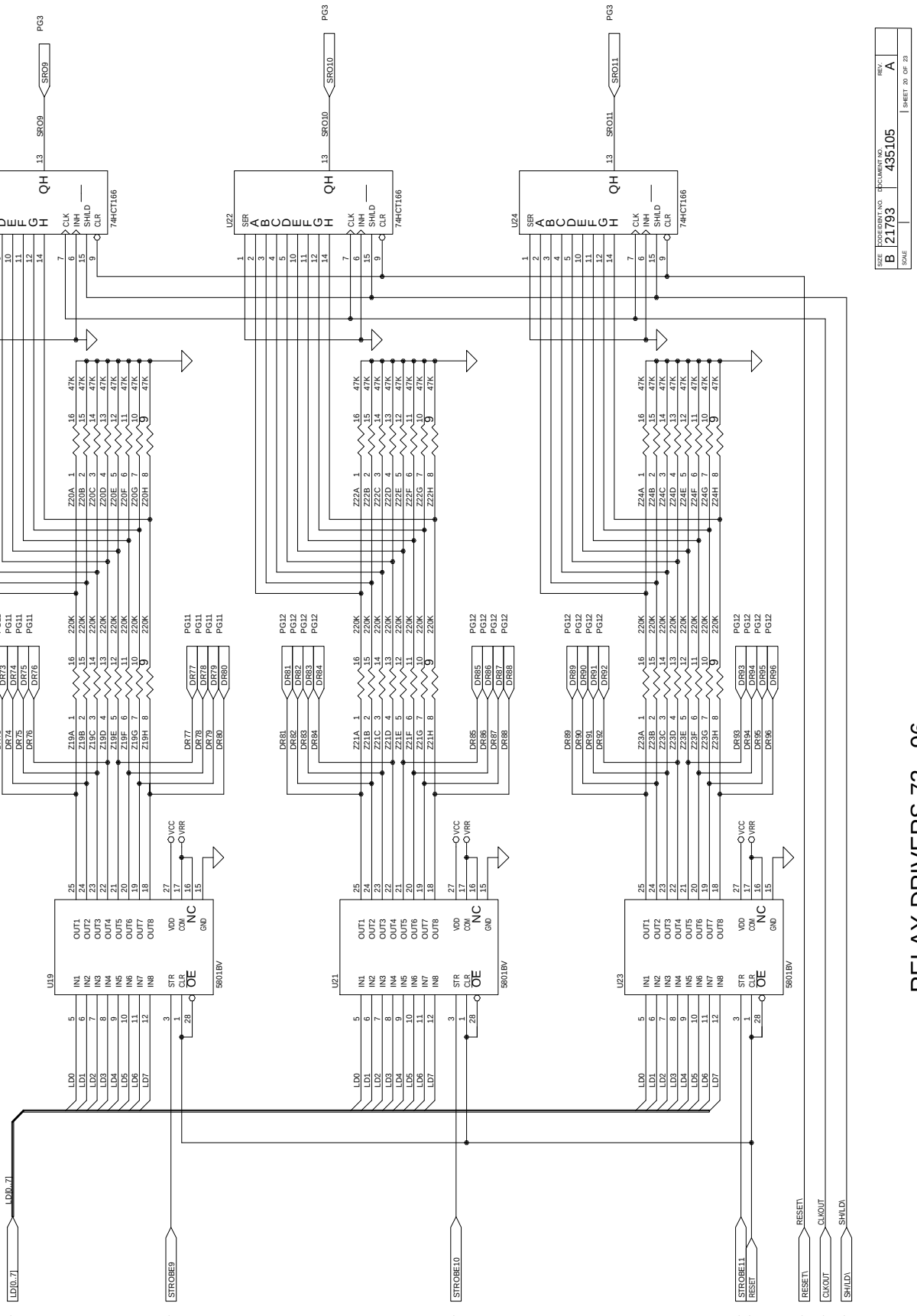

K141
K142
K143
K144
K145
K146
K147
K148
K149
K150
K151
K152
DR141
DR142
DR143
DR144
DR145
DR146
DR147
DR148
DR149
DR150
DR151
DR152
VRR
PG22
PG23
CH0149H
CH0149L
CH0148H
CH0148L
CH0147H
CH0147L
CH0146H
CH0146L
CH0145H
CH0145L
CH0144H
CH0144L
CH0143H
CH0143L
CH0142H
CH0142L
CH0141H
CH0141L
CH0140H
CH0140L
CH0151H
CH0151L
CH0150H
CH0150L
PG16
SIZE
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CODE IDENT NO.
21793
DOCUMENT NO.
435105
REV.
A
SCALE
SHEET 15 OF 23

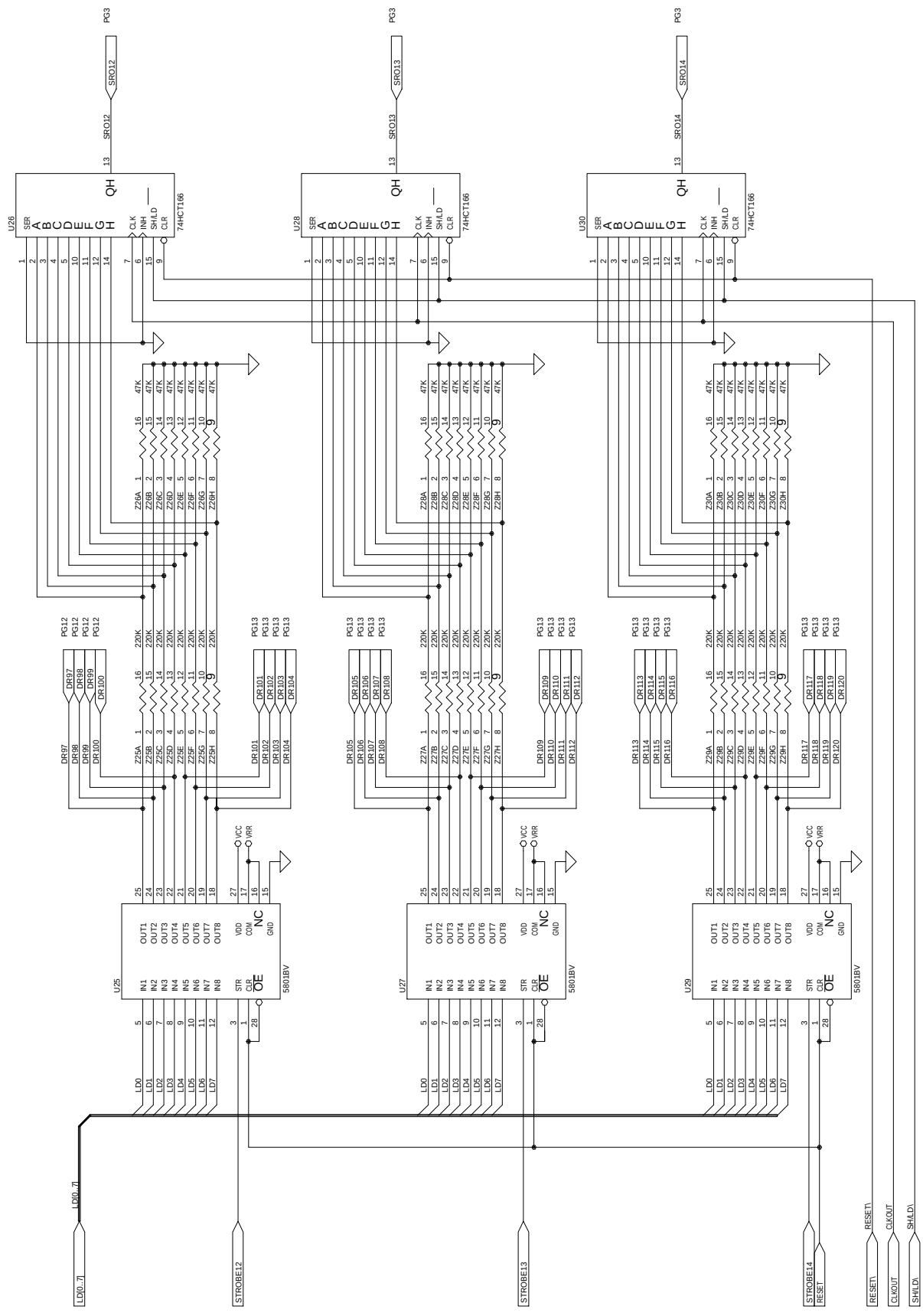

FRONT PANEL CONNECTORS
J200 ROWA
J200 ROWB
J200 ROWC
J200 ROWD
J200 ROWE
J201 ROWA
J201 ROWB
J201 ROWC
J201 ROWD
J201 ROWE
SPARE1
SPARE2
SPARE3
5X32A
5X32B
5X32C
5X32D
5X32E
PG8
PG9
PG10
PG11
PG12
PG13
PG14
PG15
SIZE B
CODE IDENT NO. 21793
DOCUMENT NO. 435105
REV A
SCALE
SHEET 18 OF 23

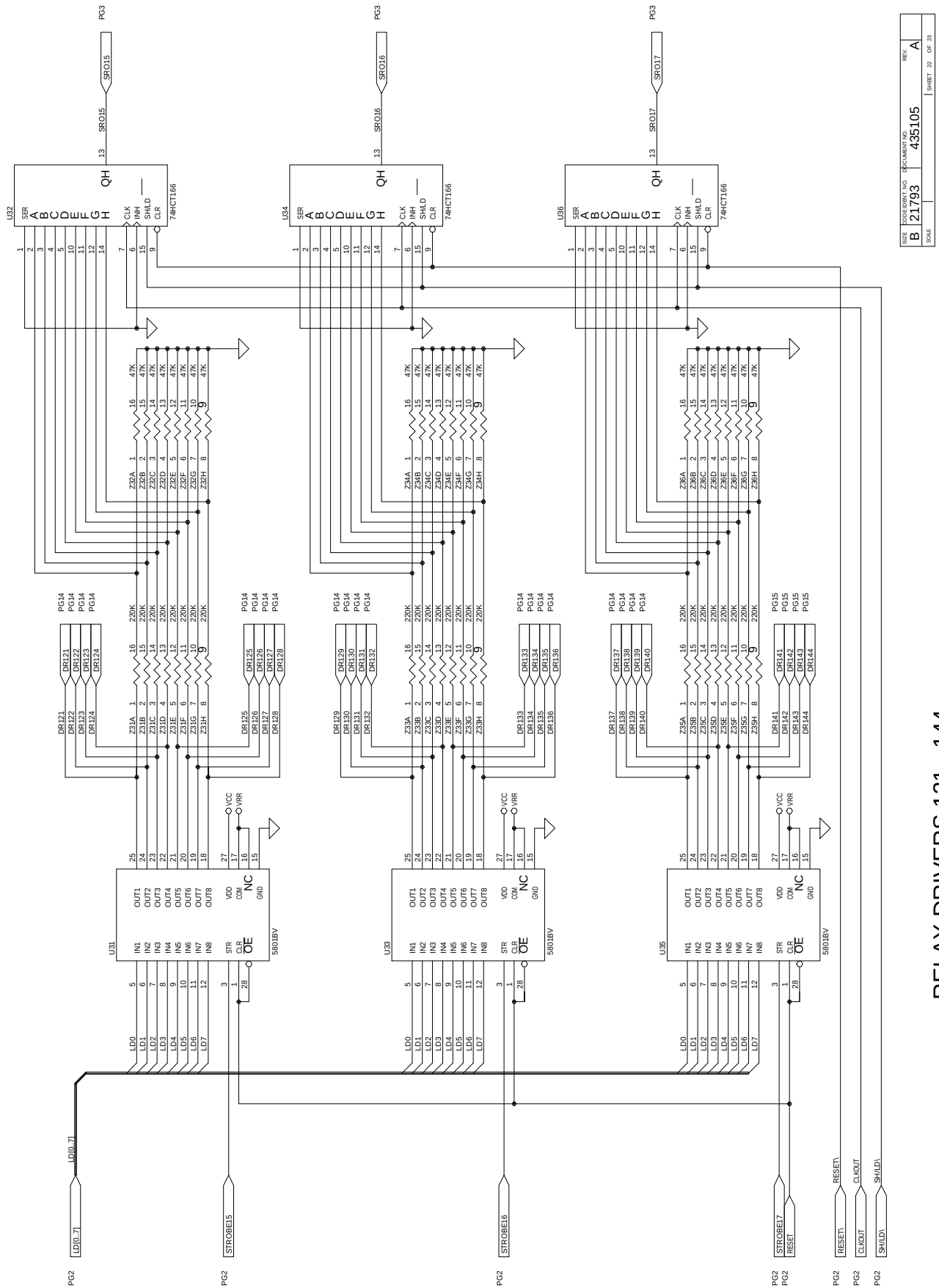

RELAY DRIVERS 1 - 24
SIZE B
DOCUMENT NO. 21793
OPCUMENT NO. 435105
REV. A
SHEET 17 OF 23
SCALE
74HCT166
5801BV
220K
47K
LD0..7
STROBE0
STROBE1
STROBE2
RESET\
CLKOUT
SHLD\

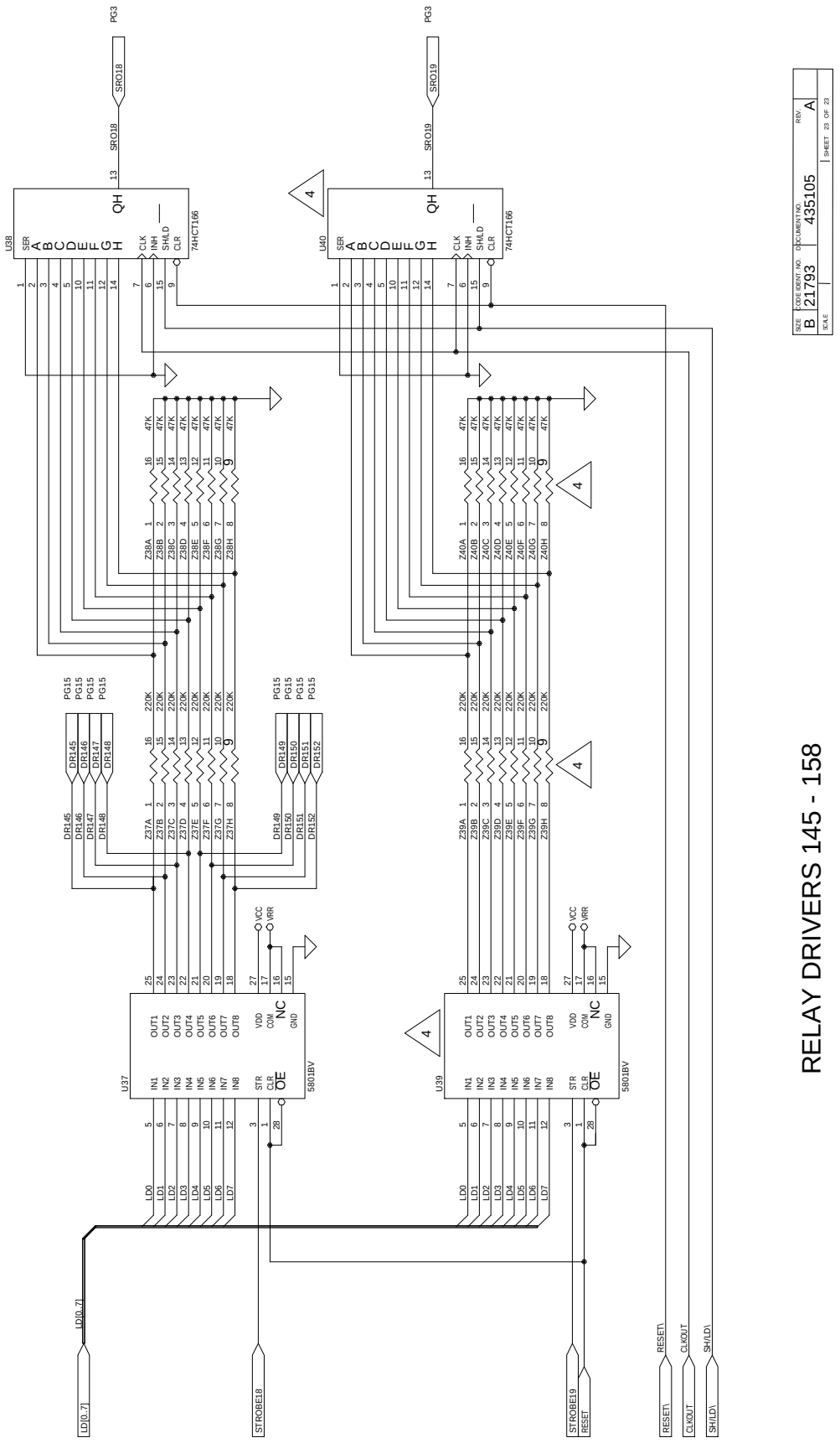

RELAY DRIVERS 25 - 48
SIZE B
CODE IDENT NO. 21793
DOCUMENT NO. 435105
REV. A
SCALE
SHEET 18 OF 23
U8
U10
U12
74HCT166
U7
U9
U11
5801BV
LD[0..7]
STROBE3
STROBE4
STROBE5
RESET
RESET\
CLKOUT
SHLD\

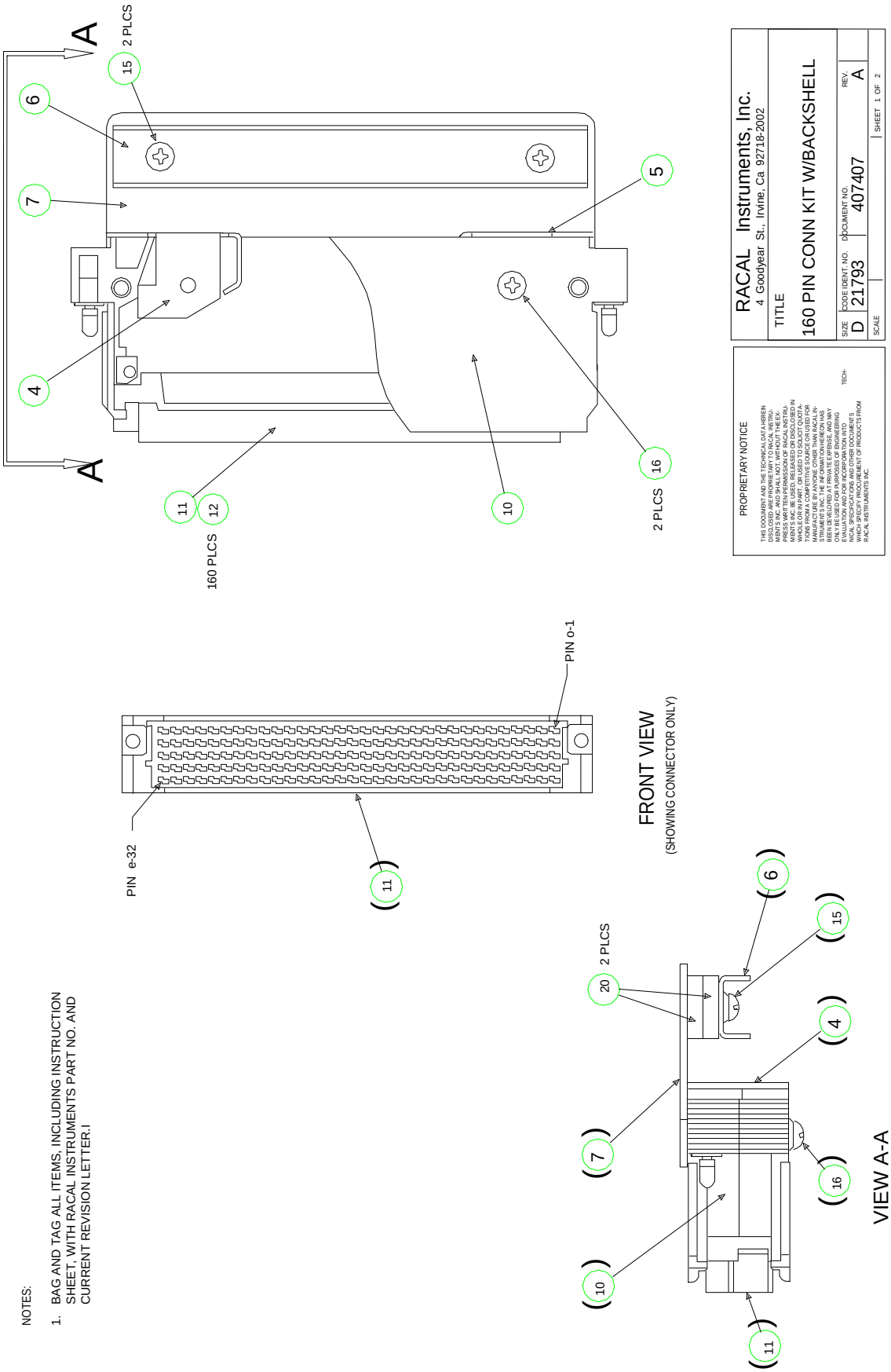

RELAY DRIVERS 49 - 72
SIZE B
CODE IDENT NO. 21793
DOCUMENT NO. 435105
REV. A
SHEET 19 OF 23
SCALE
U14
U16
U18
74HCT166
U13
U15
U17
5801BV
LD[0..7]
STROBE6
STROBE7
STROBE8
RESET
RESET\
CLKOUT
SHLD\
PG2
PG3
PG10
PG11
47K
220K


RELAY DRIVERS 73 - 96
SIZE B
DOCUMENT NO 21793
DOCUMENT NO 435105
REV A
SHEET 20 OF 23
U20
U22
U24
74HCT166
U19
U21
U23
5801BV
SRO9
SRO10
SRO11
LD0..7
STROBE9
STROBE10
STROBE11
RESET
RESET\
CLKOUT
SHLD\


RELAY DRIVERS 97 - 120
SIZE B
CODE IDENT NO. 21793
DOCUMENT NO. 435105
REV. A
SCALE
SHEET 21 OF 23
U26
U28
U30
74HCT166
SRO12
SRO13
SRO14
U25
U27
U29
5801BV
LD[0..7]
STROBE12
STROBE13
STROBE14
RESET
RESET\
CLKOUT
SH/LD\

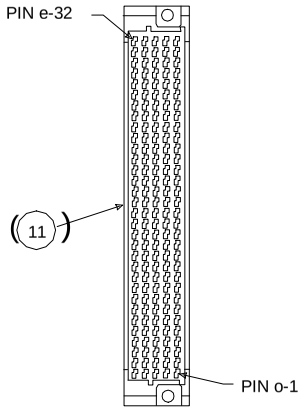

RELAY DRIVERS 121 - 144
U32
U34
U36
74HCT166
U31
U33
U35
5801BV
SRO15
SRO16
SRO17
DR121
DR122
DR123
DR124
DR125
DR126
DR127
DR128
DR129
DR130
DR131
DR132
DR133
DR134
DR135
DR136
DR137
DR138
DR139
DR140
DR141
DR142
DR143
DR144
LD(0..7)
STROBE15
STROBE16
STROBE17
RESET
RESET\
CLKOUT
SH/LD\
SIZE B
CODE IDENT NO. 21793
DOCUMENT NO. 435105
REV. A
SHEET 22 OF 23


RELAY DRIVERS 145 - 158
SIZE B
CODE IDENT NO. 21793
DOCUMENT NO. 435105
REV. A
SCALE
SHEET 23 OF 23
U38
U40
U37
U39
74HCT166
5801BV
SRO18
SRO19
LD[0..7]
STROBE18
STROBE19
RESET
RESET\
CLKOUT
SH/LD\
PG2
PG3
PG15
DR145
DR146
DR147
DR148
DR149
DR150
DR151
DR152



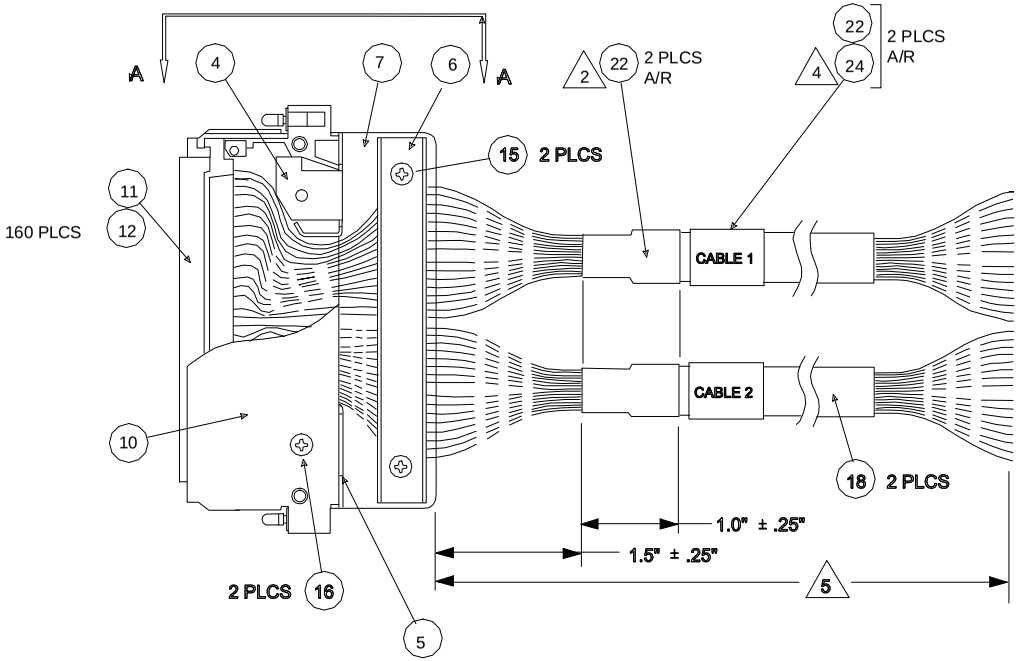
NOTES:

1. BAG AND TAG ALL ITEMS, INCLUDING INSTRUCTION SHEET, WITH RACAL INSTRUMENTS PART NO. AND CURRENT REVISION LETTER.I



FRONT VIEW

(SHOWING CONNECTOR ONLY)



NOTES:

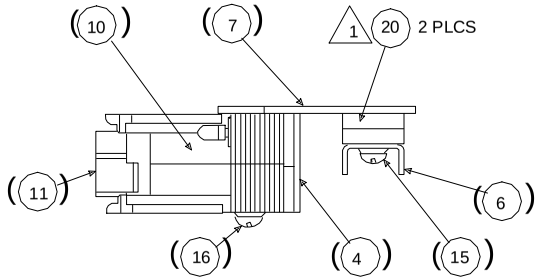
1. STICK ONE SPONGE (ITEM 20) TO THE STRAIN RELIEF (ITEM 6), AND THE OTHER ONE TO THE PLATE (ITEM 7).

2. TERMINATE CABLE INSULATION AS SHOWN, USING SHRINK TUBING (ITEM 22).

3. CABLES ARE TO BE BUILT IN PAIRS FOR EASE OF TESTING. TEST CABLE ASSY. USING TEST PROCEDURE 951016. AFTER ASSY. PASSES TEST, CUT THE CABLE IN HALF, MAKING TWO SEPARATE CABLE ASSEMBLIES.

4. IDENTIFY CABLES AS SHOWN USING INDELIBLE BLACK INK ON SHRINK TUBING (ITEM 24). COVER WITH SHRINK TUBING (ITEM 22) FOR IDENTIFICATION PROTECTION.

5. CABLE LENGTH: 6 FEET - P/N 407408
12 FEET - P/N 407409



VIEW A-A

PROPRIETARY NOTICE

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RACAL Instruments, Inc.
4 Goodyear St., Irvine, Ca 92718-2002

TITLE

160 PIN CABLE ASSY, 24 GA

SIZE	CODE IDENT. NO.	DOCUMENT NO	REV.
C	21793	407408, 407409	A

SCALE | SHEET 1 OF 18

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Chapter 5
PARTS LIST

407493 – FINAL ASSY, 1260-18 5-3
407495 - SHIPPING KIT, 1260-18 5-3
405105 – PCB ASSY, 1260-18 5-4
407407 - 160 PIN CONNECTOR KIT W/BACKSHELL 5-7
407408, 407409 – 160 PIN CABLE ASSY, 24G 5-8
List of Suppliers 5-9

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407493 – FINAL ASSY, 1260-18

REF DESIG	RACAL INST P/N	DESCRIPTION	FSC	MANUFACTURER'S P/N
(1)1	921423	LABEL, CE-96	21793	921423
(6)1	407495	SHIP KIT, 1260-18	21793	407495
(7)1	405105	PCB ASSY, 1260-18	21793	405105
(10)1	456238-002	PANEL, RIGHT, 1260 SERIES	21793	456238-002
(11)2	456438-001	BRACKET, CONNECTOR MOUNTING, TOP	21793	456438-001
(12)2	456438-002	BRACKET, CONNECTOR MOUNTING, BOTTOM	21793	456438-002
(13)1	456239-002	PANEL, LEFT, 1260 SERIES	21793	456239-002
16)1	456512	PANEL, FRONT, 1260-18	21793	456512
{18)1	611264	HANDLE, EXTRACTOR, BOTTOM	62559	20817-327
(19)1	611265	HANDLE, EXTRACTOR, TOP	162559	20817-328
(20)0	611266	MOUNTING HARDWARE, HANDLE	62559	21100-745
(23)4	616305	SCREW, PPH, M2.SX.045X12	-	-
(24)8	616400	SCREW, PFL, M2.SX.45	-	-
(28)2	616405	SCREW, PFH, M2.5-.45 X 12	-	-
(29)6	616414	SCREW, PFL, M3X.50X5	-	-
(30)4	617127	WASHER, LOCK, #4, LIGHT SERIES	-	-
{32)1	920927	BUMPER, ADHESIVE BACK	53387	SJ-5003BUMPON
(33)A/R	920962	LOCTITE, 242, MED STR.	05972	272
(35)1	921059	LABEL, CAUTION, STATIC	21793	921059
(36)1	921148-001	LABEL SET VXI	21793	921148-001
(37)1	921309	LAHEL, VXI SWITCH ID	21793	921309

407495 - SHIPPING KIT, 1260-18

REF DESIG	RACAL INST P/N	DESCRIPTION	FSC	MANUFACTURER'S P/N
(1)2	455540	KEY, LOCKOUT, TTL, A/C	21793	455540
(2)2	455541	KEY, LOCKOUT, TTL, C	21793	455541
(3)2	455542	KEY, LOCKOUT, TTL, A	21793	455542
(4)3	615013	SCREW, PPF, 2-56 X 188	-	-
(5)1	980673-040	MANUAL, 1260-18	21793	980673-040

405105 – PCB ASSY, 1260-18

REF DESIG	RACAL INST P/N	DESCRIPTION	FSC	MANUFACTURER'S P/N
C1-C4	110126	CAP, TANTA, 6.8UF, 35V, 20 PERCENT	05397	T355F685M035A5
C5	R-21-1801	CAP, CHIP, 10 NF	95275	VJ1206Y103MF
C6	R-21-1801	CAP, CHIP, 10 NF	95275	VJ1206Y103MF
C100-C102	R-21-1801	CAP, CHIP, 10 NF	95275	VJ1206Y103MF
C103	130198	CAP, CHIP, 150NF, 35V, 10PCT	04222	TAJA1S4K03SR
C104-C106	R-21-1801	CAP, CHIP, 10 NF	95275	VJ1206Y103MF
C108	R-21-1801	CAP, CHIP, 10 NF	95275	VJ1206Y103MF
C110	R-21-1801	CAP, CHIP, 10 NF	95275	VJ1206Y103MF
C113	R-21-1801	CAP, CHIP, 10 NF	95275	VJ1206Y103MF
C116-C118	R-21-1801	CAP, CHIP, 10 NF	95275	VJ1206Y103MF
C120-C125	R-21-1801	CAP, CHIP, 10 NF	95275	VJ1206Y103MF
C127-C143	R-21-1801	CAP, CHIP, 10 NF	95275	VJ1206Y103MF
C166	R-21-1801	CAP, CHIP, 10 NF	95275	VJ1206Y103MF
C167	R-21-1801	CAP, CHIP, 10 NF	95275	VJ1206Y103MF
J3	601925	CONNECTOR, PCB, RECEPT, 3 ROW, 96P	52072	618008
J4	601925	CONNECTOR, PCB, RECEPT, 3 ROW, 96P	52072	618008
J200	602249-116	CONNECTOR, PCB, PLUG, 160 PIN, 5 ROW	58730	MVC160-0122-2
J201	602249-116	CONNECTOR, PCB, PLUG, 160 PIN, 5 ROW	58730	MVC160-0122-2
K1-K152	310256	RELAY, ELECTRO-MECH, 2P2T, 2A, 24V	61529	TX2-24V
L1	100164	CAP, FEED-THRU, 800PF, 50V	00779	842448-2
L2	310193	CHOKE, SHIELDED, 5UH	91637	IH-5-5-10
L3	310193	CHOKE, SHIELDED, 5UH	91637	IH-5-5-10
L4	100164	CAP, FEED-THRU, 800PF, 50V	00779	842448-2
L5	600245	JUMPER, INSULATED	52210	L-2007-1
P1	601675	CONNECTOR, EUROCARD TYPE C, 96-PIN	00779	532505-1
P2	601675	CONNECTOR, EUROCARD TYPE C, 96-PIN	00779	532505-1
Q1	200320	TRANSISTOR, NPN	04713	MMBT3904
R17	050000-102	RES, CHIP, 1K, .06W, SPCT	91637	CRCW-0805SERIES
R18	050000-332	RES, CHIP, 3.3K, .06W, SPCT	91637	CRCW-085SERIES
R19	050000-102	RES, CHIP, 1K, .06W, SPCT	91637	CRCW-0805SERIES
R20	050000-102	RES, CHIP, 1K, .06W, SPCT	91637	CRCW-0805SERIES
SW1-5W3	601969	SWITCH, DIP 6 POS, LOW PROFILE	65832	K4065
TP1	601197	POST, TEST, .025 SQ	00779	6-87022-6
TP2	601197	POST, TEST, .025 SQ	00779	6-87022-6
U1	231555	IC, BIT PARALLEL-INPUT LATCHED DRIVERS	60496	MICS801BV
U2	231120	IC, 8-BIT, PARALLEL/SERIAL OUT S.R.	18324	74HCT166D
U3	231555	IC, BIT PARALLEL-INPUT LATCHED DRIVERS	60496	MICS801BV
U4	231120	IC, 8-BIT, PARALLEL/SERIAL OUT S.R.	18324	74HCT166D
U5	231555	IC, BIT PARALLEL-INPUT LATCHED DRIVERS	60496	MICS801BV
U6	231120	IC, 8-BIT, PARALLEL/SERIAL OUT S.R.	18324	74HCT166D
U7	231555	IC, BIT PARALLEL-INPUT LATCHED DRIVERS	60496	MICS801BV
U8	231120	IC, 8-BIT, PARALLEL/SERIAL OUT S.R.	18324	74HCT166D
U9	231555	IC, BIT PARALLEL-INPUT LATCHED DRIVERS	60496	MICS801BV
U10	231120	IC, 8-BIT, PARALLEL/SERIAL OUT S.R.	18324	74HCT166D
U11	231555	IC, BIT PARALLEL-INPUT LATCHED DRIVERS	60496	MICS801BV
U12	231120	IC, 8-BIT, PARALLEL/SERIAL OUT S.R.	18324	74HCT166D
U13	231555	IC, BIT PARALLEL-INPUT LATCHED DRIVERS	60496	MIC5801BV
U14	231120	IC, 8-BIT, PARALLEL/SERIAL OUT S.R.	18324	74HCT166D
U15	231555	IC, BIT PARALLEL-INPUT LATCHED DRIVERS	60496	MIC5801BV
U16	231120	IC, 8-BIT, PARALLEL/SERIAL OUT S.R.	18324	74HCT166D
U17	231555	IC, BIT PARALLEL-INPUT LATCHED DRIVERS	60496	MICS801BV
U18	231120	IC, 8-BIT, PARALLEL/SERIAL OUT S.R.	18324	74HCT166D
U19	231555	IC, BIT PARALLEL-INPUT LATCHED DRIVERS	60496	MICS801BV
U20	231120	IC, 8-BIT, PARALLEL/SERIAL OUT S.R.	18324	74HCT166D
U21	231555	IC, BIT PARALLEL-INPUT LATCHED DRIVERS	60496	MICS801BV
U22	231120	IC, 8-BIT, PARALLEL/SERIAL OUT S.R.	18324	74HCT166D
U23	231555	IC, BIT PARALLEL-INPUT LATCHED DRIVERS	60496	MICS801BV
U24	231120	IC, 8-BIT, PARALLEL/SERIAL OUT S.R.	18324	74HCT166D
U25	231555	IC, BIT PARALLEL-INPUT LATCHED DRIVERS	60496	MICS801BV

405105 - PCB ASSY, 1260-18

REF DESIG	RACAL INST P/N	DESCRIPTION	FSC	MANUFACTURER'S P/N
U26	231120	IC, 8-BIT, PARALLEL/SERIAL OUT S.R.	18324	74HCT166D
U27	231555	IC, BIT PARALLEL-INPUT LATCHED DRIVERS	60496	MICS8O1BV
U28	231120	IC, 8-BIT, PARALLEL/SERIAL OUT S.R.	18324	74HCT166D
U29	231555	IC, BIT PARALLEL-INPUT LATCHED DRIVERS	60496	MICS8O1BV
U30	231120	IC, 8-BIT, PARALLEL/SERIAL OUT S.R.	18324	74HCT166D
U31	231555	IC, BIT PARALLEL-INPUT LATCHED DRIVERS	60496	MIC58O1BV
U32	231120	IC, 8-BIT, PARALLEL/SERIAL OUT S.R.	18324	74HCT166D
U33	231555	IC, BIT PARALLEL-INPUT LATCHED DRIVERS	60496	MICS8O1BV
U34	231120	IC, 8-BIT, PARALLEL/SERIAL OUT S.R.	18324	74HCT166D
U35	231555	IC, BIT PARALLEL-INPUT LATCHED DRIVERS	60496	MICS8O1BV
U36	231120	IC, 8-BIT, PARALLEL/SERIAL OUT S.R.	18324	74HCT166D
U37	231555	IC, BIT PARALLEL-INPUT LATCHED DRIVERS	60496	MIC58O1BV
U38	231120	IC, 8-BIT, PARALLEL/SERIAL OUT S.R.	18324	74HCT166D
U53	231153-001	IC, PROGRAMMED, PAL	21793	231153-001
U54	231445	IC, 3-TO-8 LINE DECODER/MUX	18324	74HCT138D
USS	231445	IC, 3-TO-8 LINE DECODER/MUX	18324	74HCT138D
U56	231135	IC, DIGITAL, 4-BIT COMPARATOR	18324	PC74HCT8SD
U57	231093	IC, QUAD COMPARATOR	04713	LM339D
U60	231120	IC, 8-BIT, PARALLEL/SERIAL OUT S.R.	18324	74HCT166D
U61	231131	IC, DIGITAL, SHIFT REGISTER	18324	PC74HCT164D
U62	231131	IC, DIGITAL, SHIFT REGISTER	18324	PC74HCT164D
U70	231152-002	IC, PROGRAMMED, PAL	21793	231152-002
U71	231147	IC, MULTIPLEXER	04713	74HC253D
U72	231147	IC, MULTIPLEXER	04713	74HC253D
U73	231096	IC, QUAD DIFF RECEIVER	01295	AM26LS32ACD
U74	231096	IC, QUAD DIFF RECEIVER	01295	AM2 6L53 2ACD
U75	231125	IC, DIGITAL, LINE DRIVER	27014	D526L531MN
U76	231154	IC, PROGRAMMED PLA	21793	231154
U77	231147	IC, MULTIPLEXER	04713	74HC253D
U78	231445	IC, 3-TO-8 LINE DECODER/MUX	18324	74HCT138D
U79	231091	IC, OCTAL BUFFER	18324	74HC240D
U80	231091	IC, OCTAL BUFFER	18324	74HC240D
U81	231091	IC, OCTAL BUFFER	18324	74HC240D
U82	231119	IC, SHIFT REGISTER	18324	74HCT299D
U83	231147	IC, MULTIPLEXER	04713	74HC253D
Z1	080119	RES NETWORK, 220K	91637	SOMC-1603-224K
Z2	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z3	080119	RES NETWORK, 220K	91637	SOMC-1603-224K
Z4	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z5	080119	RES NETWORK, 220K	91637	SOMC-1603-224K
Z6	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z7	080119	RES NETWORK, 220K	91637	SOMC-1603-224K
Z8	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z9	080119	RES NETWORK, 220K	91637	SOMC-1603-224K
Z10	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z11	080119	RES NETWORK, 220K	91637	SOMC-1603-224K
Z12	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z13	080119	RES NETWORK, 220K	91637	SOMC-1603-224K
Z14	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z15	080119	RES NETWORK, 220K	91637	SOMC-1603-224K
Z16	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z17	080119	RES NETWORK, 220K	91637	SOMC-1603-224K
Z18	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z19	080119	RES NETWORK, 220K	91637	SOMC-1603-224K
Z20	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z21	080119	RES NETWORK, 220K	91637	SOMC-1603-224K
Z22	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z23	080119	RES NETWORK, 220K	91637	SOMC-1603-224K
Z24	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J

405105 - PCB ASSY, 1260-18

REF DESIG	RACAL INST P/N	DESCRIPTION	FSC	MANUFACTURER'S P/N
Z25	080119	RES NETWORK, 220K	91637	SOMC-1603-224K
Z26	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z27	080119	RES NETWORK, 220K	91637	SOMC-1603-224K
Z28	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z29	080119	RES NETWORK, 220K	91637	SOMC-1603-224K
Z30	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z31	080119	RES NETWORK, 220K	91637	SOMC-1603-224K
Z32	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z33	080119	RES NETWORK, 220K	91637	SOMC-1603-224K
Z34	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z35	080119	RES NETWORK, 220K	91637	SOMC-1603-224K
Z36	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z37	080119	RES NETWORK, 220K	91637	SOMC-1603-224K
Z38	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z127	080114	RES NETWORK, 16P8R, 15K	73138	628-AL-153J
Z128	080120	RES NETWORK, 10K	11236	767-161R10K
(58)1	401951	PCB ASSY., LBUE JUMPER	21793	401951
(59)1	401951-003	PCB ASSY., P3 JUMPER	21793	401951-003
(60)1	415105	PCB, 1260-18 (UNLOADED)	21793	415105
(64)A/R	500022	WIRE, BARE COPPER/TIN, 22 GA	21793	500022
(81)2	611367	STANDOFF, ROUND SWAGE, M3XO.5X4.3	06540	21003B-B-0350-28(L4.3)
(82)1	611366	STANDOFF, ROUND EWAGE, M3XO.5X19	06540	21017-B-0350-28

407407 - 160 PIN CONNECTOR KIT W/BACKSHELL

REF DESIG	RACAL INST P/N	DESCRIPTION	FSC	MANUFACTURER'S P/N
(4)1	456437-001	BRACKET, STIFFENER, TOP	21793	456437-001
(5)1	456437-002	BRACKET, STIFFENER, BOTTOM	21793	456437-002
(6)1	456439	STRAIN RELIEF	21793	456439
(7)1	456440	PLATE, SHELL MOUNTING	21793	456440
(10)1	602255-001	HOUSING CABLE, MODIFIED	21793	602255-001
(11)1	602258-116	CONNECTOR, CABLE, RECEPTACLE, 160 PIN	6V439	024070
(12)170	602258-900	TERMINAL, CRIMP, SNAP-IN, 26-20 GA	6V439	014728
(15)2	616252	SCREW, PPH, SEMS ASSY, 4-40X.312	78189	SEMS W/EQ CONE WA.
(16)2	616254	SCREW, PPH, SEMS ASSY., 4-40 X .500	78189	SEMS W/SQ CONE WA.
(20)2	456502	SPONGE, PRESSURE, 1260-38	21793	456502
(24)1	980785	INSTRUCTION SHEET, 160 PIN KIT	21793	980785

407408, 407409 – 160 PIN CABLE ASSY, 24G

REF DESIG	RACAL INST P/N	DESCRIPTION	FSC	MANUFACTURER'S P/N
(4)1	456437-001	BRACKET, STIFFENER, TOP	21793	456437-001
(5)1	456437-002	BRACKET, STIFFENER, BOTTOM	21793	456437-002
(6)1	456439	STRAIN RELIEF	21793	456439
(7)1	456440	PLATE, SHELL MOUNTING	21793	456440
(10)1	602255-001	HOUSING CABLE, MODIFIED	21793	602255-001
(11)1	602258-116	CONNECTOR, CABLE, RECEPTACLE, 160 PIN	6V439	024070
(12)160	602258-900	TERMINAL, CRIMP, SNAP-IN, 26-20 GA	6V439	014728
(15)2	616252	SCREW, PPH, SEMS ASSY, 4-40X.312	78189	SEMS W/SQ CONE WA.
(16)1	616254	SCREW, PPH, SEMS ASSY., 4-40 X .500	78189	SEMS W/SQ CONE WA.
(18)A/R	500319	CABLE, 40 CONDUCTOR, 24 GA UNSHIELDED	92194	5020/80C
(19)2	456502	SPONGE, PRESSURE, 1260-38	21793	456502
(22)A/R	M23053/5-109-0	SELEEVING, INSUL. HEAT SHRINK, .75D, CLR	81349	M23053/5-109-0
(24)A/R	M23053/5-109-4	SLEEVING, INSUL. HEAT SHRINK, .75D, YEL	81349	M23053/5-109-4

List of Suppliers

FSC	SUPPLIER
00779	AMP, INC. HARRISBURG, PA
01121	ALLEN BRADLEY CO. MILWAUKEE, WI
01295	TEXAS INSTRUMENTS, INC. DALLAS, TX
04222	AEROVOX CORP. (HI-Q DIV.) MYRTLE BEACH, SC
04713	MOTOROLA, INC. (SEMICONDUCTOR PRODUCTS DIV.) PHOENIX, AZ
05397	UNION CARBIDE CORP. (MATERIALS SYSTEMS DIV.) CLEVELAND, OH
06540	AMATOM ELECTRONIC HARDWARE NEW ROCHELLE, NY
11236	CTS OF BERNE, INC. BEENE, IN
18324	EIGNETICE, INC. SUNNYVALE, CA
21793	RACAL INSTRUMENTS INC. IRVINE, CA
27014	NATIONAL SEMI-CONDUCTOR CORP. SANTA CLARA, CA
52072	CIRCUIT ASSY. CORP. COSTA MESA, CA
52210	GETTING ENGRG. & MFG. CO. SPRING MILLS, PA
53387	THREE M (3M) CO. ST. PAUL, MN
58730	THOMAS & BETTE CO. ELIZABETH, NJ
60496	MICREL INC. SUNNYVALE, CA
61529	AROMAT CORP. CUPERTINO, CA
62559	ECHROFF, INC. WARWICK, RI
65832	AMERICAN RESEARCH & ENGINEERING ELGIN, IL
6V439	ERNI COMPONENTS INC. RICHMOND, VA
73138	BECKMAN INSTRUMENTS FULLERTON, CA

FSC	SUPPLIER
78189	ILLINOIS TOOL WORKS, INC. (SHAKEPROOF DIV.) ELGIN, IL
91637	DALE ELECTRONICS, INC. COLUMBUS, NE
92194	ALPHA WIRE ELIZABETH, NJ
95275	VITRAMON, INC. BRIDGEPORT, CT

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Chapter 6

OPTIONAL HARNESS ASSEMBLIES

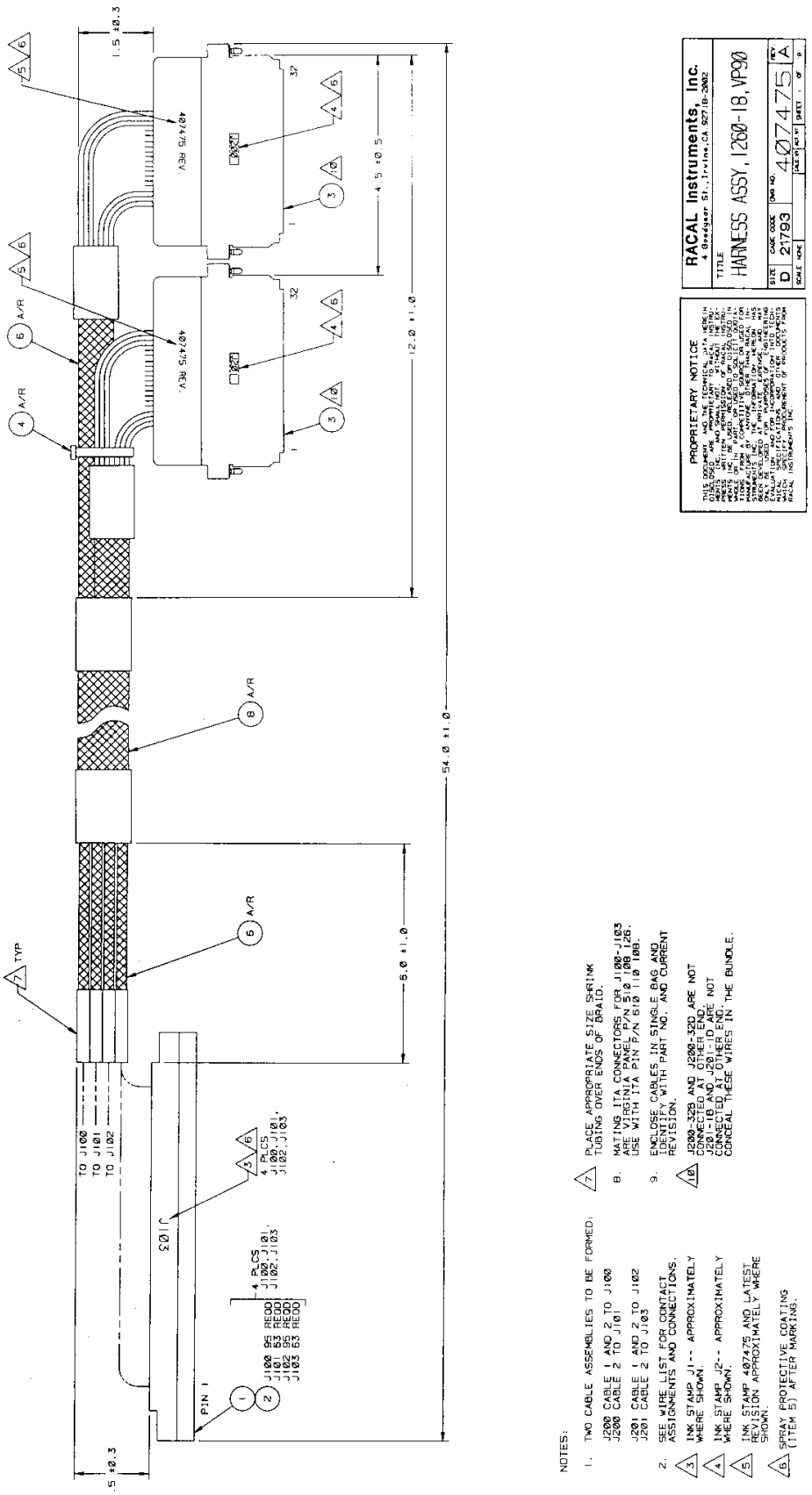
The following harness assemblies are used to connect Racal Instruments Model 1260-18 to Freedom Series Test Receiver Interfaces.

Each harness documentation consists of an assembly drawing, parts list, system wire list and wire list.

407475	Virginia Panel, Inc. Series VP90 Interface Harness
407476	TTI Testron, Inc. Interface Harness

For more information on Racal Instruments complete line of Test Receivers Interface solution, contact your Sales Representative.

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RACAL Instruments, Inc.
4 Goodyear St., Irvine, CA 92718-2002
TITLE
HARNESS ASSY, 1260-18, VP90
SIZE
D
CAGE CODE
21793
DWG NO.
407475
REV
A
SCALE NONE
SHEET 1 OF 8
PROPRIETARY NOTICE
THIS DOCUMENT AND THE TECHNICAL DATA HEREIN DISCLOSED ARE CONFIDENTIAL AND PROPRIETARY TO RACAL INSTRUMENTS, INC. AND SHALL NOT BE REPRODUCED OR TRANSMITTED IN WHOLE OR IN PART, USED OR DISCLOSED FOR MANUFACTURE OR PROCUREMENT OF ITEMS OR SERVICES WITHOUT THE PRIOR WRITTEN PERMISSION OF RACAL INSTRUMENTS, INC. THIS RESTRICTION DOES NOT LIMIT THE RIGHT TO USE INFORMATION OBTAINED FROM ANOTHER SOURCE LAWFULLY IN THE PUBLIC DOMAIN. ALL RECIPIENTS OF THIS DOCUMENT, BY ACCEPTANCE, AGREE TO RESPECT THE PROPRIETARY INTERESTS OF RACAL INSTRUMENTS, INC. AND WILL NOT COPY OR REPRODUCE THIS DOCUMENT OR INCORPORATE ANY INFORMATION CONTAINED IN IT IN ANY OTHER DOCUMENTS WITHOUT THE PRIOR WRITTEN CONSENT OF RACAL INSTRUMENTS, INC.
NOTES:
1. TWO CABLE ASSEMBLIES TO BE FORMED:
J200 CABLE 1 AND 2 TO J100
J200 CABLE 2 TO J101
J201 CABLE 1 AND 2 TO J102
J201 CABLE 2 TO J103
2. SEE WIRE LIST FOR CONTACT ASSIGNMENTS AND CONNECTIONS.
3. INK STAMP J1-- APPROXIMATELY WHERE SHOWN.
4. INK STAMP J2-- APPROXIMATELY WHERE SHOWN.
5. INK STAMP 407475 AND LATEST REVISION APPROXIMATELY WHERE SHOWN.
6. SPRAY PROTECTIVE COATING (ITEM 5) AFTER MARKING.
7. PLACE APPROPRIATE SIZE SHRINK TUBING OVER ENDS OF BRAID.
8. MATING ITA CONNECTORS FOR J100-J103 ARE VIRGINIA PANEL P/N 510 108 126. USE WITH ITA PIN P/N 610 110 105.
9. ENCLOSE CABLES IN SINGLE BAG AND IDENTIFY WITH PART NO. AND CURRENT REVISION.
10. J200-32S AND J200-32D ARE NOT CONNECTED AT OTHER END. J200-32S AND J200-32D ARE NOT CONNECTED AT OTHER END. CONCEAL THESE WIRES IN THE BUNDLE.
TO J100
TO J101
TO J102
4 PLCS
J100,J101,
J102,J103
J100 S5 RED
J101 S3 RED
J102 S5 RED
J103 S3 RED
PIN 1
J201
54.0 ±1.0
12.0 ±1.0
4.5 ±0.5
5.0 ±1.0
1.5 ±0.3
1.5 ±0.3
407475 REV.
407475 REV.
TYP
A/R

ENGINEERING PARTS LIST

ITEM	REV	PART NO.	DESCRIPTION	QTY	REFERENCE
1		602201-003	CON-RCV-PL6096.---D	4	J100, J101, J102, J103
2		602201-906	CONTACT, SIGNAL, 22AWG, VP90	316	(w/J100, J101, J102, J103)
3		407408	160 PIN CABLE ASSY, 6Ff, 246	2	J200,J201
4		610777	TIE-CA-LKG-.062-.075	A/R	
5		910541	POLYURETHANE CONF. COAT	A/R	
6		GRP-l 10-1/2	SLEEVING,BRAIDED POLY,I/2	A/R	
7					
8		GRP-1 10-3/4	SLEEVING,BRAIDED POLY,3/4	A/R	

RACAL Instruments Inc., 4 Goodyear St., Irvine, CA 92718				
DOCUMENT TITLE	SIZE	CODE NO.	DOCUMENT NO.	REV
	A	21793	407475	A
HARNESS ASSY, 1260-12, VP90	DRN			SHEET 2 of 18

ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART	WIRE LEN	REFERENCE
	BLK AA (J100)	Uxx-SLOT yy (J200)	CABLE	407475		SYSTEM WIRE LIST
	BLK AA (J101)	Uxx-S LOT yy (J200)	CABLE	407475		
	BLK AA (J102)	Uxx-SLOT yy (J201)	CABLE	407475		
	BLK AA (J103)	Uxx-S LOT yy (J201)	CABLE	407475		

This system wirelist serves as a template for incorporating this harness assembly into the overall system wirelist. It does not in any way affect the fabrication of this harness assembly.

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HARNESS ASSY, 1260-12, VP90	A	21793	407475	A
	DRN			SHEET 3 of 18

ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
1	J100-1	J200-32A	WHT/BLK	407408	54"	GROUND
	602201-906		YEL/GRY	CABLE 1		
2	J100-2	J200-32C	WHT/BLK	407408	54"	GROUND
	602201-906		GRN/VIO	CABLE 1		
3	J100-3	J200-32E	WHT/BLK	407408	54"	GROUND
	602201-906		BLU/VIO	CABLE 1		
4	J100-4	J200-31A	WHT/BLK	407408	54"	0000 IN
	602201-906		ORN/VIO	CABLE 1		
5	J100-5	J200-29A	WHT/BLK	407408	54"	0000 OUT
	602201-906		BRN/VIO	CABLE 1		
6	J100-6	J200-30A	WHT/BLK	407408	54"	0001 IN
	602201-906		RED/VIO	CABLE 1		
7	J100-7	J200-28A	WHT/BLK	407408	54"	0001 OUT
	602201-906		BRN/RED	CABLE 1		
8	J100-8	J200-31B	WHT/BLK	407408	54"	0002 IN
	602201-906		ORN/GRY	CABLE 1		
9	J100-9	J200-29B	WHT/BLK	407408	54"	0002 OUT
	602201-906		BRN/GRY	CABLE 1		
10	J100-10	J200-30B	WHT/BLK	407408	54"	0003 IN
	602201-906		RED/GRY	CABLE 1		
11	J100-11	J200-28B	WHT/BLK	407408	54"	0003 OUT
	602201-906		BRN/ORN	CABLE 1		
12	J100-12	J200-31C	WHT/BLK	407408	54"	0004 IN
	602201-906		YEL/GRN	CABLE 1		
13	J100-13	J200-29C	WHT/BLK	407408	54"	0004 OUT
	602201-906		RED/YEL	CABLE 1		
14	J100-14	J200-30C	WHT/BLK	407408	54"	0005 IN
	602201-906		ORN/YEL	CABLE 1		
15	J100-15	J200-28C	WHT/BLK	407408	54"	0005 OUT
	602201-906		BRN/YEL	CABLE 1		
16	J100-16	J200-31D	WHT/BLK	407408	54"	0006 IN
	602201-906		YEL/BLU	CABLE 1		
17	J100-17	J200-29D	WHT/BLK	407408	54"	0006 OUT
	602201-906		RED/GRN	CABLE 1		
18	J100-18	J200-30D	WHT/BLK	407408	54"	0007 IN
	602201-906		ORN/ORN	CABLE 1		
19	J100-19	J200-28D	WHT/BLK	407408	54"	0007 OUT
	602201-906		BRN/GRN	CABLE 1		
20	J100-20	J200-31E	WHT/BLK	407408	54"	0008 IN
	602201-906		YEL/VIO	CABLE 1		
21	J100-21	J200-29E	WHT/BLK	407408	54"	0008 OUT
	602201-906		RED/BLU	CABLE 1		
22	J100-22	J200-30E	WHT/BLK	407408	54"	0009 IN
	602201-906		ORN/BLU	CABLE 1		
23	J100-23	J200-28E	WHT/BLK	407408	54"	0009 OUT
	602201-906		BRN/BLU	CABLE 1		
24	J100-24	J200-27A	WHT/GRN	407408	54"	0010 IN
	602201-906		VIO	CABLE 1		
25	J100-25	J200-25A	WHT/ORG	407408	54"	0010 OUT
	602201-906		YEL	CABLE 1		

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DOCUMENT TITLE	SIZE	CODE NO.	DOCUMENT NO.	REV
	A	21793	407475	A
HARNESS ASSY, 1260-12, VP90	DRN			SHEET 4 of 18

ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
26	J100-26	J200-26A	WHT/YEL	407408	54"	0011 IN
	602201-906		GRN	CABLE 1		
27	J100-27	J200-24A	WHT/RED	407408	54"	0011 OUT
	602201-906		YEL	CABLE 1		
28	J100-28	J200-27B	WHT/GRN	407408	54"	0012 IN
	602201-906		GRY	CABLE 1		
29	J100-29	J200-25B	WHT/ORN	407408	54"	0012 OUT
	602201-906		ORN	CABLE 1		
30	J100-30	J200-26B	WHT/YEL	407408	54"	0013 IN
	602201-906		BLU	CABLE 1		
31	J100-31	J200-24B	WHT/RED	407408	54"	0013 OUT
	602201-906		GRN	CABLE 1		
32	J100-32	J200-27C	WHT/BLU	407408	54"	0014 IN
	602201-906		VIO	CABLE 1		
33	J100-33	J200-25C	WHT/ORN	407408	54"	0014 OUT
	602201-906		BLU	CABLE 1		
34	J100-34	J200-26C	WHT/YEL	407408	54"	0015 IN
	602201-906		VIO	CABLE 1		
35	J100-35	J200-24C	WHT/RED	407408	54"	0015 OUT
	602201-906		BLU	CABLE 1		
36	J100-36	J200-27D	WHT/BLU	407408	54"	0016 IN
	602201-906		GRY	CABLE 1		
37	J100-37	J200-25D	WHT/ORN	407408	54"	0016 OUT
	602201-906		VIO	CABLE 1		
38	J100-38	J200-26D	WHT/YEL	407408	54"	0017 IN
	602201-906		GRY	CABLE 1		
39	J100-39	J200-24D	WHT/RED	407408	54"	0017 OUT
	602201-906		VIO	CABLE 1		
40	J100-40	J200-27E	WHT/VIO	407408	54"	0018 IN
	602201-906		GRY	CABLE 1		
41	J100-41	J200-25E	WHT/ORN	407408	54"	0018 OUT
	602201-906		GRY	CABLE 1		
42	J100-42	J200-26E	WHT/GRN	407408	54"	0019 IN
	602201-906		BLU	CABLE 1		
43	J100-43	J200-24E	WHT/RED	407408	54"	0019 OUT
	602201-906		GRY	CABLE 1		
44	J100-44	J200-23A	WHT/BRN	407408	54"	0020 IN
	602201-906		GRN	CABLE 1		
45	J100-45	J200-21A	WHT/BLK	407408	54"	0020 OUT
	602201-906		RED	CABLE 1		
46	J10046	J200-22A	WHT/BLK	407408	54"	0021 IN
	602201-906		VIO	CABLE 1		
47	J10047	J200-20A	WHT/GRN	407408	54"	0021 OUT
	602201-906			CABLE 1		
48	J10048	J200-23B	WHT/BRN	407408	54"	0022 IN
	602201-906		BLU	CABLE 1		
49	J100-49	J200-21B	WHT/BLK	407408	54"	0022 OUT
	602201-906		ORN	CABLE 1		
50	J100-50	J200-22B	WHT/BLK	407408	54"	0023 IN
	602201-906		GRY	CABLE 1		

RACAL Instruments Inc., 4 Goodyear St., Irvine, CA 92718

DOCUMENT TITLE	SIZE	CODE NO.	DOCUMENT NO.	REV
	A	21793	407475	A
HARNESS ASSY, 1260-12, VP90	DRN			SHEET 5 of 18

ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
51	J100-51	J200-20B	WHT/BLU	407408	54"	0023 OUT
	602201-906			CABLE 1		
52	J100-52	J200-23C	WHT/BRN	407408	54"	0024 IN
	602201-906		VIO	CABLE 1		
53	J100-53	J200-21C	WHT/BLK	407408	54"	0024 OUT
	602201-906		YEL	CABLE 1		
54	J100-54	J200-22C	WHT/BRN	407408	54"	0025 IN
	602201-906		RED	CABLE 1		
55	J100-55	J200-2OC	WHT/VIO	407408	54"	0025 OUT
	602201-906			CABLE 1		
56	J100-56	J200-23D	WHT/BRN	407408	54"	0026 IN
	602201-906		GRY	CABLE 1		
57	J100-57	J200-21D	WHT/BLK	407408	54"	0026 OUT
	602201-906		ORN	CABLE 1		
58	J100-58	J200-22D	WHT/BRN	407408	54"	0027 IN
	602201-906		ORN	CABLE 1		
59	J100-59	J200-20D	WHT/GRY	407408	54"	0027 OUT
	602201-906			CABLE 1		
60	J100-60	J200-23E	WHT/RED	407408	54"	0028 IN
	602201-906		ORN	CABLE 1		
61	J100-61	J200-21E	WHT/BLK	407408	54"	0028 OUT
	6022~-906		BLU	CABLE 1		
62	J100-62	J200-22E	WHT/BRN	407408	54"	0029 IN
	602201-906		YEL	CABLE 1		
63	J100-63	J200-20E	WHT/BLK	407408	54"	0029 OUT
	602201-906		BRN	CABLE 1		
64	J100-64	J200-19A	WHT/BLK	407408	54"	0030 IN
	602201-906			CABLE 1		
65	J100-65	J200-17A	BLK	407408	54"	0030 OUT
	602201-906			CABLE 1		
66	J100-66	J200-18A	ORN	407408	54"	0031 IN
	602201-906			CABLE 1		
67	J100-67	J200-1 6A	WHT/BLK	407408	54"	0031 OUT
	602201-906		YEL/GRY	CABLE 2		
68	J100-68	J200-19B	WHT/BRN	407408	54"	0032 IN
	602201-906			CABLE 1		
69	J100-69	J200-17B	BRN	407408	54"	0032 OUT
	602201-906			CABLE 1		
70	J100-70	J200-18B	BLU	407408	54"	0033 IN
	602201-906			CABLE 1		
71	J100-71	J200-16B	WHT/BLK	407408	54"	0033 OUT
	602201-906		GRN/BLU	CABLE 2		
72	J100-72	J200-19C	WHT/RED	407408	54"	0034 IN
	602201-906			CABLE 1		
73	J100-73	J200-17C	RED	407408	54"	0034 OUT
	602201-906			CABLE 1		
74	J100-74	J200-18C	VIO	407408	54"	0035 IN
	602201-906			CABLE 1		
75	J100-75	J200-16C	WHT/BLK	407408	54"	0035 OUT
	602201-906		GRN/VIO	CABLE 2		

RACAL Instruments Inc., 4 Goodyear St., Irvine, CA 92718

DOCUMENT TITLE	SIZE	CODE NO.	DOCUMENT NO.	REV
	A	21793	407475	A
HARNESS ASSY, 1260-12, VP90	DRN			SHEET 6 of 18

ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
76	J100-76 602201-906	J200-19D	WHT/ORN	407408 CABLE 1	54"	0036 IN
77	J100-77 602201-906	J200-17D	ORN	407408 CABLE]	54"	0036 OUT
78	J100-78 602201-906	J200-18D	GRY	407408 CABLE I	54"	0037 IN
79	J100-79 602201-906	J200-16D	WHT/BLK GRN/GRY	407408 CABLE 2	54"	0037 OUT
80	J100-80 602201-906	J200-19E	WHT/YEL	407408 CABLE I	54"	0038 IN
81	J100-81 602201-906	J200-17E	YEL	407408 CABLE 1	54"	00380UT
82	J100-82 602201-906	J200-18E	WHT	407408 CABLE 1	54"	00391N
83	J100-83 602201-906	J200-16E	WHT/BLK BLU/VIO	407408 CABLE 2	54"	0039 OUT
84	J100-84 602201-906	J200-15A	WHT/BLK ORN/VIO	407408 CABLE 2	54"	0040 IN
85	J100-85 602201-906	J200-13A	WHT/BLK BRN/VIO	4()7408 CABLE 2	54"	0040 OUT
86	J100-86 602201-906	J200-14A	WHT/BLK RED/VIO	407408 CABLE 2	54"	0041 IN
87	J100-87 602201-906	J200-12A	WHT/BLK BRN/RED	407408 CABLE 2	54"	0041 OUT
88	J100-88 602201-906	J200-15B	WHT/BLK ORN/GRY	407408 CABLE 2	54"	0042 IN
89	J100-89 602201-906	J200-13B	WHT/BLK BRN/GRY	407408 CABLE 2	54"	0042 OUT
90	J100-90 602201-906	J200-14B	WHT/BLK RED/GRY	407408 CABLE 2	54"	0043 IN
91	J10091 602201-906	J200-12B	WHT/BLK BRN/ORN	407408 CABLE 2	54"	0043 OUT
92	J100-92 602201-906	J200-15C	WHT/BLK YEL/ORN	407408 CABLE 2	54"	0044 IN
93	J100-93 602201-906	J200-13C	WHT/BLK RED/YEL	407408 CABLE 2	54"	0044 OUT
94	J100-94 602201-906	J200-14C	WHT/BLK ORN/YEL	407408 CABLE 2	54"	0045 IN
95	J100-95 602201-906	J200-12C	WHT/BLK BRN/YEL	407408 CABLE 2	54"	0045 OUT
96	J100-96	NO CONNECT				
97	J101-1 602201-906	J200-15D	WHT/BLK YEL/BLU	407408 CABLE 2	54"	0046 IN
98	J101-2 602201-906	J200-13D	WHT/BLK RED/GRN	407408 CABLE 2	54"	0046 OUT
99	J101-3 602201-906	J200-14D	WHT/BLK ORN/GRN	407408 CABLE 2	54"	0047 IN

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ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
100	J101-4	J200-12D	WHT/BLK	407408	54"	0047 OUT
	602201-906		BRN/GRN	CABLE 2		
101	J101-5	J200-15E	WHT/BLK	407408	54"	0048 IN
	602201-906		YEL/VIO	CABLE 2		
102	J101-6	J200-13E	WHT/BLK	407408	54"	0048 OUT
	602201-906		RED/BLU	CABLE 2		
103	J101-7	J200-14E	WHT/BLK	407408	54"	0049 IN
	602201-906		ORN/BLU	CABLE 2		
104	J101-8	J200-12E	WHT/BLK	407408	54"	0049 OUT
	602201-906		BRN/BLU	CABLE 2		
105	J101-9	J200-11A	WHT/GRN	407408	54"	0050 IN
	602201-906		VIO	CABLE 2		
106	J101-10	J200-09A	WHT/ORN	407408	54"	0050 OUT
	602201-906		YEL	CABLE 2		
107	J101-11	J200-10A	WHT/YEL	407408	54"	OOS1IN
	602201-906		ORN	CABLE 2		
108	J101-12	J200-08A	WHT/RED	407408	54"	0051 OUT
	602201-906		YEL	CABLE 2		
109	J101-13	J200-11B	WHT/GRN	407408	54"	0052IN
	602201-906		GRY	CABLE 2		
110	J101-14	J200-09B	WHT/ORN	407408	54"	OOS2OUT
	602201-906		GRN	CABLE 2		
111	J101-15	J200-10B	WHT/YEL	407408	54"	0053IN
	602201-906		BLU	CABLE 2		
112	J101-16	J200-08B	WHT/RED	407408	54"	0053 OUT
	602201-906		GRN	CABLE 2		
113	J101-17	J200-11C	WHT/BLU	407408	54"	0054IN
	602201-906		VIO	CABLE 2		
114	J101-18	J200-09C	WHT/ORN	407408	54"	0054 OUT
	602201-906		BLU	CABLE 2		
115	J101-19	J200-10C	WHT/YEL	407408	54"	OOSSIN
	602201-906		VIO	CABLE2		
116	J101-20	J200-08C	WHT/RED	407408	54"	0055 OUT
	602201-906		BLU	CABLE 2		
117	J101-21	J200-11D	WHT/BLU	407408	54"	0056IN
	602201-906		GRY	CABLE 2		
118	J101-22	J200-09D	WHT/ORN	407408	54"	0056 OUT
	602201-906		VIO	CABLE 2		
119	J101-23	J200-10D	WHT/YEL	407408	54"	0057 IN
	602201-906		GRY	CABLE 2		
120	J101-24	J200-08D	WHT/RED	407408	54"	0057 OUT
	602201-906		VIO	CABLE 2		
121	J101-25	J200-11E	WHT/VIO	407408	54"	0058IN
	602201-906		GRY	CABLE 2		
122	J101-26	J200-09E	WHT/ORN	407408	54"	0058 OUT
	602201-906		GRY	CABLE 2		
123	J101-27	J200-10E	WHT/GRN	407408	54"	0059 IN
	602201-906		BLU	CABLE 2		
124	J101-28	J200-08E	WHT/RED	407408	54"	0059 OUT
	602201-906		GRY	CABLE 2		

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ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
125	J101-29	J200-07A	WHT/BRN	407408	54"	0060 IN
	602201-906		GRN	CABLE 2		
126	J101-30	J200-05A	WHT/BLK	407408	54"	0060 OUT
	602201-906		RED	CABLE 2		
127	J101-31	J200-06A	WHT/BLK	407408	54"	0061 IN
	602201-906		VIO	CABLE 2		
128	J101-32	J200-04A	WHT/GRN	407408	54"	0061 OUT
	602201-906			CABLE 2		
129	J101-33	J200-07B	WHT/BRN	407408	54"	0062 IN
	602201-906		BLU	CABLE 2		
130	J101-34	J200-05B	WHT/BLK	407408	54"	0062 OUT
	602201-906		ORN	CABLE 2		
131	J101-35	J200-06B	WHT/BLK	407408	54"	0063 IN
	602201-906		GRY	CABLE 2		
132	J101-36	J200-04B	WHT/BLU	407408	54"	0063 OUT
	602201-906			CABLE 2		
133	J101-37	J200-07C	WHT/BRN	407408	54"	0064 IN
	602201-906		VIO	CABLE2		
134	J101-38	J200-05C	WHT/BLK	407408	54"	0064 OUT
	602201-906		YEL	CABLE 2		
135	J101-39	J200-06C	WHT/BRN	407408	54"	0065 IN
	602201-906		RED	CABLE 2		
136	J101-40	J200-04C	WHT/VIO	407408	54"	0065 OUT
	602201-906			CABLE 2		
137	J101-41	J200-07D	WHT/BRN	407408	54"	0066 IN
	602201-906		GRY	CABLE 2		
138	J101-42	J200-05D	WHT/BLK	407408	54"	0066 OUT
	602201-906		GRN	CABLE 2		
139	J101-43	J200-06D	WHT/BRN	407408	54"	0067 IN
	602201-906		ORN	CABLE 2		
140	J101-44	J200-04D	WHT/GRY	407408	54"	0067 OUT
	602201-906			CABLE 2		
141	J101-45	J200-07E	WHT/RED	407408	54"	0068 IN
	602201-906		ORN	CABLE 2		
142	J101-46	J200-05E	WHT/BLK	407408	54"	0068 OUT
	602201-906		BLU	CABLE 2		
143	J101-47	J200-06E	WHT/BRN	407408	54"	0069 IN
	602201-906		YEL	CABLE 2		
144	J101-48	J200-04E	WHT/BLK	407408	54"	0069 OUT
	602201-906		BRN	CABLE 2		
145	J101-49	J200-03A	WHT/BLK	407408	54"	0070 IN
	602201-906			CABLE2		
146	J101-50	J200-02A	GRN	407408	54"	0071 IN
	602201-906			CABLE 2		
147	J101-51	J200-03B	WHT/BRN	407408	54"	0072 IN
	602201-906			CABLE2		
148	J101-52	J200-02B	BLU	407408	54"	0073IN
	602201-906			CABLE 2		
149	J101-53	J200-03C	WHT/RED	407408	54"	0074 IN
	602201-906			CABLE2		

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ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
150	J101-54 602201-906	J200-02C	VIO	407408 CABLE 2	54"	0075 IN
151	J101-55 602201-906	J200-03D	WHT/ORN	407408 CABLE 2	54"	0076 IN
152	J101-56 602201-906	J200-02D	GRY	407408 CABLE 2	54"	0077 IN
153	J101-57 602201-906	J200-03E	WHT/YEL	407408 CABLE 2	54"	0078 IN
154	J101-58 602201-906	J200-02E	WHT	407408 CABLE 2	54"	0079 IN
155	J103-59 602201-906	J200-01B	BRN	407408 CABLE 2	54"	0150 IN
156	J101-60 602201-906	J200-01D	ORN	407408 CABLE 2	54"	0151 IN
157	J101-61 602201-906	J200-01A	BLK	407408 CABLE 2	54"	GROUND
158	J101-62 602201-906	J200-01C	RED	407408 CABLE 2	54"	GROUND
159	J101-63 602201-906	J200-01E	YEL	407408 CABLE2	54"	GROUND
160 161	J101-64 J101-65	NO CONNECT NO CONNECT				
162 163	J101-66 J101-67	NO CONNECT NO CONNECT				
164 165	J101-68 J101-69	NO CONNECT NO CONNECT				
166 167	J101-70 J101-71	NO CONNECT NO CONNECT				
168 169	J101-72 J101-73	NO CONNECT NO CONNECT				
170 171	J101-74 J101-75	NO CONNECT NO CONNECT				
172 173	J101-76 J1O1-77	NO CONNECT NO CONNECT				
174 175	J101-78 J101-79	NO CONNECT NO CONNECT				
176 177	J101-80 J101-81	NO CONNECT NO CONNECT				
178 179	J101-82 J101-83	NO CONNECT NO CONNECT				
180 181	J101-84 J101-85	NO CONNECT NO CONNECT				
182 183	J101L86 J1O1-87	NO CONNECT NO CONNECT				
184 185	J101-88 J101-89	NO CONNECT NO CONNECT				
186 187	J101-90 J101-91	NO CONNECT NO CONNECT				
188 189	J101-92 J101-93	NO CONNECT NO CONNECT				

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ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
190 191	J101-94 J101-95	NO CONNECT NO CONNECT				
192	J101-96	NO CONNECT				
193	J102-1 602201-906	J201-32A	WHT/BLK YEL/GRY	407408 CABLE 1	54"	GROUND
194	J102-2 602201-906	J201-32C	WHT/BLK GRN/VIO	407408 CABLE 1	54"	GROUND
195	J102-3 602201-906	J201-32E	WHT/BLK BLU/VIO	407408 CABLE 1	54"	GROUND
196	J1024 602201-906	J201-32B	WHT/BLK GRN/BLU	407408 CABLE 1	54"	0150 OUT
197	J102-5 602201-906	J201-32D	WHT/BLK GRN/GRY	407408 CABLE 1	54"	0151 OUT
198	J102-6 602201-906	J201-31A	WHT/BLK ORN/VIO	407408 CABLE 1	54"	0070 OUT
199	J102-7 602201-906	J201-30A	WHT/BLK RED/VIO	407408 CABLE 1	54"	0071 OUT
200	J102-8 602201-906	J201-31B	WHT/BLK ORN/GRY	407408 CABLE 1	54"	0072 OUT
201	J102-9 602201-906	J201-30B	WHT/BLK RED/GRY	407408 CABLE 1	54"	0073 OUT
202	J102-10 602201-906	J201-31C	WHT/BLK YEL/GRN	407408 CABLE 1	54"	0074 OUT
203	J102-11 602201-906	J201-3OC	WHT/BLK ORN/YEL	407408 CABLE 1	54"	0075 OUT
204	J102-12 602201-906	J201-31D	WHT/BLK YEL/BLU	407408 CABLE 1	54"	0076 OUT
205	J102-13 602201-906	J201-30D	WHT/BLK ORN/GRN	407408 CABLE 1	54"	0077 OUT
206	J102-14 602201-906	J201-31E	WHT/BLK YEL/VIO	407408 CABLE 1	54"	00780UT
207	J102-15 602201-906	J201-30E	WHT/BLK ORN/BLU	407408 CABLE 1	54~'	0079 OUT
208	J102-16 602201-906	J201-29A	WHT/BLK BRN/VIO	407408 CABLE 1	54"	0080 IN
209	J102-17 602201-906	J201-27A	WHT/GRN VIO	407408 CABLE 1	54"	0080 OUT
210	J102-18 602201-906	J201-28A	WHT/BLK BRN/RED	407408 CABLE 1	54"	0081 IN
211	J102-19 602201-906	J201-26A	WHT/YEL ORN	407408 CABLE 1	54"	0081 OUT
212	J102-20 602201-906	J201-29B	WHT/BLK BRN/GRY	407408 CABLE 1	54"	0082 IN
213	J102-21 602201-906	J201-27B	WHT/GRN GRY	407408 CABLE 1	54"	0082 OUT
214	J102-22 602201-906	J201-28B	WHT/BLK BRN/ORN	407408 CABLE 1	54"	0083 IN

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ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
215	J102-23	J201-26B	WHT/YEL	407408	54"	0083 OUT
	602201-906		BLU	CABLE 1		
216	J102-24	J201-29C	WHT/BLK	407408	54"	0084 IN
	602201-906		RED/YEL	CABLE 1		
217	J102-25	J201-27C	WHT/BLU	407408	54"	0084 OUT
	602201-906		VIO	CABLE 1		
218	J102-26	J201-28C	WHT/BLK	407408	54'	0085 IN
	602201-906		BRN/YEL	CABLE 1		
219	J102-27	J201-26C	WHT/YEL	407408	54"	0085 OUT
	602201-906		VIO	CABLE 1		
220	J102-28	J201-29D	WHT/BLK	407408	54"	0086 IN
	602201-906		RED/GRN	CABLE 1		
221	J102-29	J201-27D	WHT/BLU	407408	54"	0086 OUT
	602201-906		GRY	CABLE 1		
222	J102-30	J201-28D	WHT/BLK	407408	54"	0087 IN
	602201-906		BRN/GRN	CABLE 1		
223	J102-31	J201-26D	WHT/YEL	407408	54"	0087 OUT
	602201-906		GRY	CABLE 1		
224	J102-32	J201-29E	WHT/BLK	407408	54"	0088 IN
	602201-906		RED/BLU	CABLE 1		
225	J102-33	J201-27E	WHT/VIO	407408	54"	0088 OUT
	602201-906		GRY	CABLE 1		
226	J102-34	J201-28E	WHT/BLK	407408	54"	0089 IN
	602201-906		BRN/BLU	CABLE 1		
227	J102-35	J201-26E	WHT/GRN	407408	54"	00890UT
	602201-906		BLU	CABLE 1		
228	J102-36	J201-25A	WHT/ORN	407408	54"	0090 IN
	602201-906		YEL	CABLE 1		
229	J102-37	J201-23A	WHT/BRN	407408	54"	0090 OUT
	602201-906		GRN	CABLE 1		
230	J102-38	J201-24A	WHT/RED	407408	54"	0091 IN
	602201-906		YEL	CABLE 1		
231	J102-39	J201-22A	WHT/BLK	407408	54"	0091 OUT
	602201-906		VIO	CABLE 1		
232	J102-40	J201-25B	WHT/ORN	407408	54"	0092 IN
	602201-906		GRN	CABLE 1		
233	J102-41	J201-23B	WHT/BRN	407408	54"	0092 OUT
	602201-906		BLU	CABLE 1		
234	J102-42	J201-24B	WHT/RED	407408	54"	0093 IN
	602201-906		GRN	CABLE 1		
235	J102-43	J201-22B	WHT/BLK	407408	54"	0093 OUT
	602201-906		GRY	CABLE 1		
236	J102-44	J201-25C	WHT/ORN	407408	54"	0094 IN
	602201-906		BLU	CABLE 1		
237	J102-45	J201-23C	WHT/BRN	407408	54"	0094 OUT
	602201-906		VIO	CABLE 1		
238	J102-46	J201-24C	WHT/RED	407408	54"	0095 IN
	602201-906		BLU	CABLE 1		
239	J102-47	J201-22C	WHT/BRN	407408	54"	0095 OUT
	602201-906		RED	CABLE 1		

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ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
240	J102-48	J201-25D	WHT/ORN	407408	54"	0096 IN
	602201-906		VIO	CABLE 1		
241	J102-49	J201-23D	WHT/BRN	407408	54"	0096 OUT
	602201-906		GRY	CABLE 1		
242	J102-50	J201-24D	WHT/RED	407408	54"	0097 IN
	602201-906		VIO	CABLE 1		
243	J102-51	J201-22D	WHT/BRN	407408	54"	0097 OUT
	602201-906		ORN	CABLE 1		
244	J102-52	J201-25E	WHT/ORN	407408	54"	0098 IN
	602201-906		GRY	CABLE 1		
245	J102-53	J201-23E	WHT/RED	407408	54"	0098 OUT
	602201-906		ORN	CABLE 1		
246	J102-54	J201-24E	WHT/RED	407408	54"	0099 IN
	602201-906		GRY	CABLE 1		
247	J102-55	J201-22E	WHT/BRN	407408	54"	0099 OUT
	602201-906		YEL	CABLE 1		
248	J102-56	J201-21A	WHT/BLK	407408	54"	0100 IN
	602201-906		RED	CABLE 1		
249	J102-57	J201-19A	WHT/BLK	407408	54"	0100 OUT
	602201-906			CABLE 1		
250	J102-58	J201-20A	WHT/GRN	407408	54"	0101 IN
	602201-906			CABLE 1		
251	J102-59	J201-18A	ORN	407408	54"	0101 OUT
	602201-906			CABLE 1		
252	J102-60	J201-2 lB	WHT/BLK	407408	54"	0102 IN
	602201-906		ORN	CABLE 1		
253	J102-61	J201-19B	WHT/BRN	407408	54"	0120 OUT
	602201-906			CABLE 1		
254	J102-62	J201-20B	WHT/BLU	407408	54"	0103 IN
	602201-906			CABLE 1		
255	J102-63	J201-18B	BLU	407408	54"	0103 OUT
	602201-906			CABLE 1		
256	J102-64	J201-21C	WHT/BLK	407408	54'	0104 IN
	602201-906		YEL	CABLE 1		
257	J102-65	J201-19C	WHT/RED	407408	54"	01040UT
	602201-906			CABLE 1		
258	J102-66	J201-2OC	WHT/VIO	407408	54"	0105 IN
	602201-906			CABLE 1		
259	J102-67	J201-18C	VIO	407408	54"	0105 OUT
	602201-906			CABLE 1		
260	J102-68	J201-21D	WHT/BLK	407408	54"	0106 IN
	602201-906		GRN	CABLE 1		
261	J102-69	J201-19D	WHT/ORN	407408	54"	01060UT
	602201-906			CABLE 1		
262	J102-70	J201-20D	WHT/GRY	407408	54"	0107 IN
	602201-906			CABLE I		
263	J102-71	J201-18D	GRY	407408	54"	0107 0UT
	602201-906			CABLE 1		
264	J102-72	J201-21E	WHT/BLK	407408	54"	0108 IN
	602201-906		BLU	CABLE 1		

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ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
265	J102-73	J201-19E	WHT/YEL	407408	54"	0108 OUT
	602201-906			CABLE 1		
266	J102-74	J201-20E	WHT/BLK	407408	54"	0109 IN
	602201-906		BRN	CABLE 1		
267	J102-75	J201-18E	WHT	407408	54"	0109 OUT
	602201-906			CABLE 1		
268	J102-76	J201-17A	BLK	407408	54"	0110 IN
	602201-906			CABLE 1		
269	J102-77	J201-15A	WHT/BLK	407408	54"	0110 OUT
	602201-906		ORN/VIO	CABLE 2		
270	J102-78	J201-16A	WHT/BLK	407408	54"	0111 IN
	602201-906		YEL/GRY	CABLE 2		
271	J102-79	J201-14A	WHT/BLK	407408	54"	0111 OUT
	602201-906		RED/VIO	CABLE 2		
272	J102-80	J201-17B	BRN	407408	54"	0112 IN
	602201-906			CABLE 1		
273	J102-81	J201-15B	WHT/BLK	407408	54"	O112 OUT
	602201-906		ORN/GRY	CABLE 2		
274	J102-82	J201-16B	WHT/BLK	407408	54"	0113 IN
	602201-906		GRN/BLU	CABLE 2		
275	J102-83	J201-14B	WHT/BLK	407408	54"	0113 OUT
	602201-906		RED/GRY	CABLE 2		
276	J102-84	J201-17C	RED	407408	54"	0114 IN
	602201-906			CABLE 1		
277	J102-85	J201-15C	WHT/BLK	407408	54"	0114 OUT
	602201-906		YEL/GRN	CABLE 2		
278	J102-86	J201-16C	WHT/BLK	407408	54'	0115 IN
	602201-906		GRN/VIO	CABLE 2		
279	J102-87	J201-14C	WHT/BLK	407408	54"	0115 OUT
	602201-906		ORN/YEL	CABLE 2		
280	J102-88	J201-17D	ORN	407408	54"	0116 IN
	602201-906			CABLE 1		
281	J102-89	J201-15D	WHT/BLK	407408	54"	0116 OUT
	602201-906		YEL/BLU	CABLE 2		
282	J102-90	J201-16D	WHT/BLK	407408	54"	0117 IN
	602201-906		GRN/GRY	CABLE 2		
283	J102-91	J201-14D	WHT/BLK	407408	54"	0117 OUT
	602201-906		ORN/GRN	CABLE 2		
284	J102-92	J201-17E	YEL	407408	54"	0118 IN
	602201-906			CABLE 1		
285	J102-93	J201-iSE	WHT/BLK	407408	54"	0118 OUT
	602201-906		YEL/VIO	CABLE 2		
286	J102-94	J201-16E	WHT/BLK	407408	54"	0119 IN
	602201-906		BLU/VIO	CABLE 2		
287	J102-95	J201-14E	WHT/BLK	407408	54"	0119 OUT
	602201-906		ORN/BLU	CABLE 2		
288	J102-96	NO CONNECT				

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	A	21793	407475	A
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ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
289	J103-i	J201-13A	WHT/BLK	407408	54"	0120 1N
	602201-906		BRN/VIO	CABLE 2		
290	J103-2	J201-11A	WHT/GRN	407408	54"	0120 OUT
	602201-906		VIO	CABLE 2		
291	J103-3	J201-12A	WHT/BLK	407408	54"	0121 IN
	602201-906		BRN/RED	CABLE 2		
292	J103-4	J201-10A	WHT/YEL	407408	54"	0121 OUT
	602201-906		GRN	CABLE 2		
293	J103-5	J201-13B	WRT/BLK	407408	54"	0122 IN
	602201-906		BRN/GRY	CABLE 2		
294	J103-6	J201-11B	WHT/GRN	407408	54"	0122 OUT
	602201-906		GRY	CABLE 2		
295	J103-7	J201-12B	WHT/BLK	407408	54"	0123 IN
	602201-906		BRN/ORN	CABLE 2		
296	J103-8	J201-10B	WHT/YEL	407408	54"	0123 OUT
	602201-906		BLU	CABLE 2		
297	J103-9	J201-13C	WHT/BLK	407408	54"	0124 IN
	602201-906		RED/YEL	CABLE 2		
298	J103-10	J201-11C	WHT/BLU	407408	54"	0124 OUT
	602201-906		VIO	CABLE 2		
299	J103-11	J201-12C	WHT/BLK	407408	54"	0125 IN
	602201-906		BRN/YEL	CABLE 2		
300	J103-12	J201-10C	WHT/YEL	407408	54"	0125 OUT
	602201-906		VIO	CABLE 2		
301	J103-13	J201-13D	WHT/BLK	407408	54"	0126 IN
	602201-906		RED/GRN	CABLE 2		
302	J103-14	J201-11D	WHT/BLU	407408	54"	0126 OUT
	602201-906		GRY	CABLE 2		
303	J103-15	J201-12D	WHT/BLK	407408	54"	0127 IN
	602201-906		BRN/GRN	CABLE 2		
304	J103-16	J201-10D	WHT/YEL	407408	54"	0127 OUT
	602201-906		GRY	CABLE 2		
305	J103-17	J201-13E	WHT/BLK	407408	54"	0128 IN
	602201-906		RED/BLU	CABLE 2		
306	J103-18	J201-11E	WHT/VIO	407408	54"	0128 OUT
	602201-906		GRY	CABLE 2		
307	J103-19	J201-12E	WHT/BLK	407408	54"	0129 IN
	602201-906		BRN/BLU	CABLE 2		
308	J103-20	J201-10E	WHT/GRN	407408	54"	0129 OUT
	602201-906		BLU	CABLE 2		
309	J103-21	J201-09A	WHT/ORN	407408	54"	0130 IN
	602201-906		YEL	CABLE 2		
310	J103-22	J201-07A	WHT/BRN	407408	54"	0130 OUT
	602201-906		ORN	CABLE 2		
311	J103-23	J201-08A	WHT/RED	407408	54"	0131 IN
	602201-906		YEL	CABLE 2		
312	J103-24	J201-06A	WHT/BLK	407408	54"	0131 OUT
	602201-906		VIO	CABLE 2		
313	J103-25	J201-09B	WHT/ORN	407408	54"	0132 IN
	602201-906		GRN	CABLE 2		

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	A	21793	407475	A
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ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
314	J103-26	J201-07B	WHT/BRN	407408	54"	0132 OUT
	602201-906		BLU	CABLE 2		
315	J103-27	J201-08B	WHT/RED	407408	54"	0133 IN
	602201-906		ORN	CABLE 2		
316	J103-28	J201-06B	WHT/BLK	407408	54"	0133 OUT
	602201-906		GRY	CABLE 2		
317	J103-29	J201-09C	WHT/ORN	407408	54"	0134 IN
	602201-906		BLU	CABLE 2		
318	J103-30	J201-07C	WHT/BRN	407408	54"	0134 OUT
	602201-906		VIO	CABLE 2		
319	J103-31	J201-08C	WHT/RED	407408	54"	0135 IN
	602201-906		BLU	CABLE 2		
320	J103-32	J201-06C	WHT/BRN	407408	54"	0135 OUT
	602201-906		RED	CABLE 2		
321	J103-33	J201-09D	WHT/ORN	407408	54"	0136 IN
	602201-906		VIO	CABLE2		
322	J103-34	J201-07D	WHT/BRN	407408	54"	0136 OUT
	602201-906		GRY	CABLE 2		
323	J103-35	J201-08D	WHT/RED	407408	54"	0137 IN
	602201-906		VIO	CABLE 2		
324	J103-36	J201-06D	WHT/BRN	407408	54"	0137 OUT
	602201-906		ORN	CABLE 2		
325	J103-37	J201-09E	WHT/ORN	407408	54"	0138 IN
	602201-906		GRY	CABLE 2		
326	J103-38	J201-07E	WHT/RED	407408	54"	0138 OUT
	602201-906		ORN	CABLE 2		
327	3103-39	J201-08E	WHT/RED	407408	54"	0139 IN
	602201-906		GRY	CABLE 2		
328	J103-40	J201-06E	WHT/BRN	407408	54"	0139 OUT
	602201-906		YEL	CABLE 2		
329	J103-41	J201-05A	WHT/BLK	407408	54"	0140 IN
	602201-906		RED	CABLE 2		
330	J103-42	J201-03A	WHT/BLK	407408	54"	0140 OUT
	602201-906			CABLE 2		
331	J103-43	J201-04A	WHT/GRN	407408	54"	0141 IN
	602201-906			CABLE 2		
332	J103-44	J201-02A	GRN	407408	54"	0141 OUT
	602201-906			CABLE 2		
333	J103-45	J201-05B	WHT/BLK	407408	54"	0142 IN
	602201-906		ORN	CABLE 2		
334	J103-46	J201-03B	WHT/BRN	407408	54"	0142 OUT
	602201-906			CABLE 2		
335	J103-47	J201-04B	WHT/BLU	407408	54"	0143 IN
	602201-906			CABLE 2		
336	J103-48	J201-02B	BLU	407408	54"	0143 OUT
	602201-906			CABLE 2		
337	J103-49	J201-05C	WHT/BLK	407408	54"	0144 IN
	602201-906		YEL	CABLE 2		
338	J103-50	J201-03C	WHT/RED	407408	54"	0144 OUT
	602201-906			CABLE2		

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	A	21793	407475	A
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ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
339	J103-51 602201-906	J201-04C	WHT/VIO	407408 CABLE 2	54”	0145 1N
340	J103-52 602201-906	J201-02C	VIO	407408 CABLE 2	54”	0145 OUT
341	J103-53 602201-906	J201-05D	WHT/BLK GRN	407408 CABLE 2	54”	0146 IN
342	J103-54 602201-906	J201-03D	WHT/ORN	407408 CABLE 2	54”	0146 OUT
343	J103-55 602201-906	J201-04D	WHT/GRY	407408 CABLE 2	54”	0147 IN
344	J103-56 602201-906	J201-02D	GRY	407408 CABLE 2	54’	0147 OUT
345	J103-57 602201-906	J201-05E	WHT/BLK BLU	407408 CABLE 2	54”	0148 IN
346	J103-58 602201-906	J201-03E	WHT/YEL	407408 CABLE 2	54”	0148 OUT
347	J103-59 602201-906	J201-04E	WHT/BLK BRN	407408 CABLE 2	54”	0149 IN
348	J103-60 602201-906	J201-02E	WHT	407408 CABLE 2	54”	0149 OUT
349	J103-61 602201-906	J201-01A	BLK	407408 CABLE 2	54”	GROUND
350	J103-62 602201-906	J201-01C	RED	407408 CABLE 2	54”	GROUND
351	J103-63 602201-906	J201-01E	YEL	407408 CABLE 2	54”	GROUND
352 353	J103-64 J103-65	NO CONNECT NO CONNECT				
354 355	J103-66 J103-67	NO CONNECT NO CONNECT				
356 357	J103-68 J103-69	NO CONNECT NO CONNECT				
358 359	J103-70 J103-71	NO CONNECT NO CONNECT				
360 361	J103-72 J103-73	NO CONNECT NO CONNECT				
362 363	J103-74 J103-75	NO CONNECT NO CONNECT				
364 365	J103-76 J103-77	NO CONNECT NO CONNECT				
366 367	J103-78 J103-79	NO CONNECT NO CONNECT				
368 369	J103-80 J103-81	NO CONNECT NO CONNECT				
370 371	J103-82 J103-83	NO CONNECT NO CONNECT				
372 373	J103-84 J103-85	NO CONNECT NO CONNECT				
374 375	J103-86 J103-87	NO CONNECT NO CONNECT				

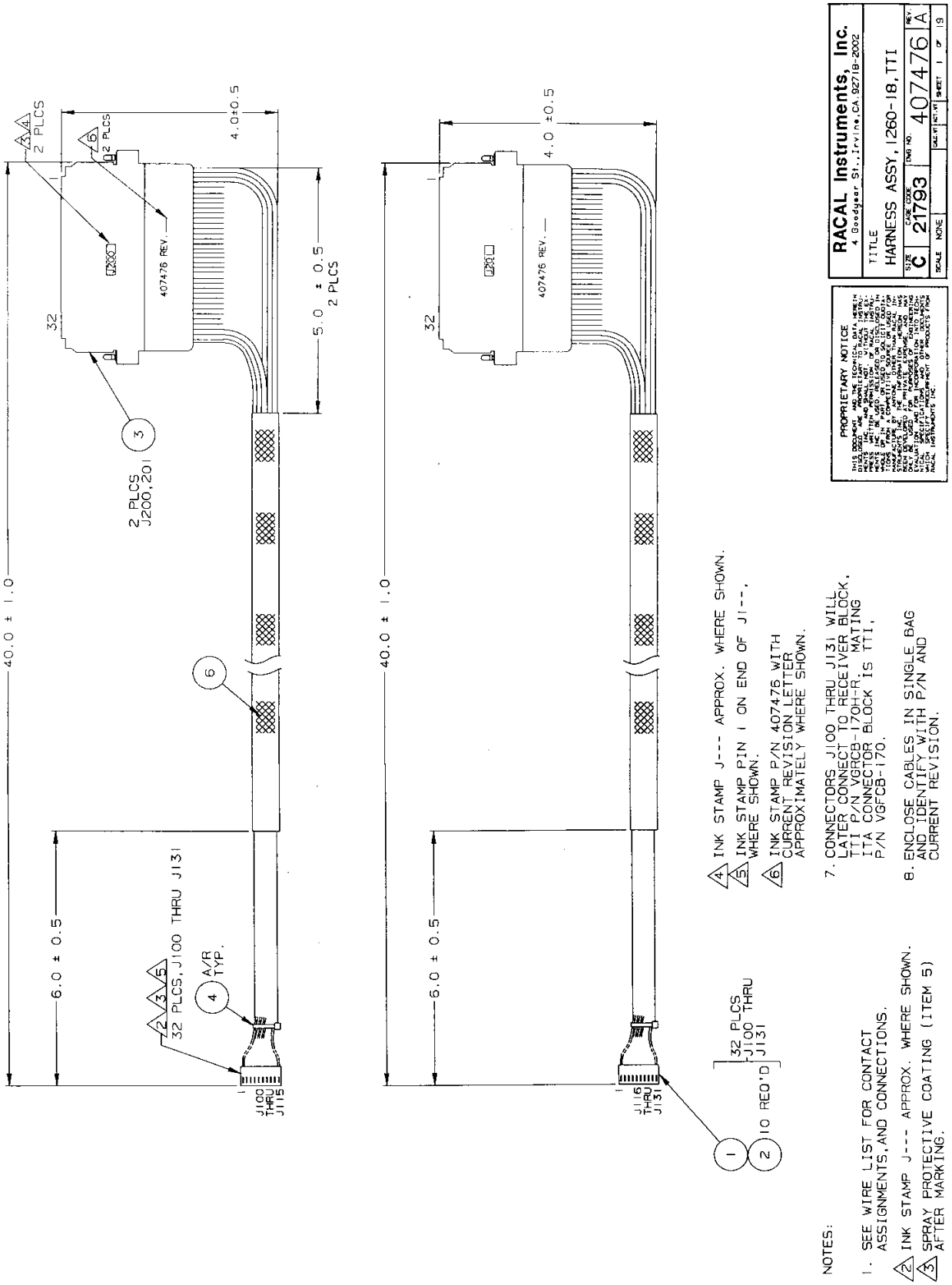
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DOCUMENT TITLE	SIZE	CODE NO.	DOCUMENT NO.	REV
	A	21793	407475	A
HARNESS ASSY, 1260-12, VP90	DRN			SHEET 17 of 18

ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
376	J103-88	NO CONNECT				
377	J103-89	NO CONNECT				
378	J103-90	NO CONNECT				
379	J103-91	NO CONNECT				
380	J103-92	NO CONNECT				
381	J103-93	NO CONNECT				
382	J103-94	NO CONNECT				
383	J103-95	NO CONNECT				
384	J103-96	NO CONNECT				

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DOCUMENT TITLE	SIZE	CODE NO.	DOCUMENT NO.	REV
	A	21793	407475	A
HARNESS ASSY, 1260-12, VP90	DRN			SHEET 18 of 18



NOTES:

1. SEE WIRE LIST FOR CONTACT ASSIGNMENTS, AND CONNECTIONS.
2. INK STAMP J--- APPROX. WHERE SHOWN.
3. SPRAY PROTECTIVE COATING (ITEM 5) AFTER MARKING.
4. INK STAMP J--- APPROX. WHERE SHOWN.
5. INK STAMP PIN 1 ON END OF J1--, WHERE SHOWN.
6. INK STAMP P/N 407476 WITH CURRENT REVISION LETTER APPROXIMATELY WHERE SHOWN.
7. CONNECTORS J100 THRU J131 WILL LATER CONNECT TO RECEIVER BLOCK, TTI P/N VGRCB-170H-R, MATING ITA CONNECTOR BLOCK IS TTI, P/N VGFCB-170.
8. ENCLOSE CABLES IN SINGLE BAG AND IDENTIFY WITH P/N AND CURRENT REVISION.

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RACAL Instruments, Inc.
4 Goodyear St., Irvine, CA 92718-2002

TITLE
HARNESS ASSY, 1260-18, TTI

SIZE	CAGE CODE	DWG NO	REV
C	21793	407476	A

SCALE NONE | SHEET 1 OF 19

ENGINEERING PARTS LIST

ITEM	REV	PART NO.	DESCRIPTION	QTY	REFERENCE
1		602193-010	CON-CAB-RCP010C.100S	32	J100-J131
2		602199-001	CONTACT,CRIMP,RECPT,28-22GA	320	(J100-J131)
3		407408	160 PIN CABLE ASSY, 6FT, 24G	2	
4		610777	TIE-CA-LKG-.062-.075	A/R	
5		910541	POLYURETHANE CONF. COAT	A/R	
6		GRP-110-1/2	SLEEVING,BRAIDED,POLY,1/2	A/R	

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DOCUMENT TITLE	SIZE	CODE NO.	DOCUMENT NO.	REV
	A	21793	407476	A
HARNESS ASSY, 1260-18, TTI	DRN			SHEET 2 of 19

ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
	BLK AAx RW 01 (J100)	Uxx-SLOT yy (J200)	CABLE	407476		SYSTEM WIRE LIST
	BLK AAx RW 02 (J101)	Uxx-SLOT yy (J200)	CABLE	407476		
	BLK AAx RW 03 (J102)	Uxx-SLOT yy (J200)	CABLE	407476		
	BLK AAx RW 04 (J103)	Uxx-SLOT yy (J200)	CABLE	407476		
	BLK AAx RW 05 (J104)	Uxx-SLOT yy (J200)	CABLE	407476		
	BLK AAx RW 06 (J105)	Uxx-S LOT yy (J200)	CABLE	407476		
	BLK AAx RW 07 (J106)	Uxx-S LOT yy (J200)	CABLE	407476		
	BLK AAx RW 08 (J107)	Uxx-S LOT yy (J200)	CABLE	407476		
	BLK AAx RW 09 (J108)	Uxx-SLOT yy (J200)	CABLE	407476		
	BLK AAx RW 10 (J109)	Uxx-S LOT yy (J200)	CABLE	407476		
	BLK AAx RW 11 (J110)	Uxx-S LOT yy (J200)	CABLE	407476		
	BLK AAx RW 12 (J111)	Uxx-S LOT yy (J200)	CABLE	407476		
	BLK AAx RW 13 (J112)	Uxx-SLOT yy (J200)	CABLE	407476		
	BLK AAx RW 14 (J113)	Uxx-SLOT yy (J200)	CABLE	407476		
	BLK AAx RW 15 (J114)	Uxx-SLOT yy (J200)	CABLE	407476		
	BLK AAx RW 16 (J115)	Uxx-S LOT yy (J200)	CABLE	407476		
	BLK AAx RW 17 (J116)	Uxx-SLOT yy (J201)	CABLE	407476		
	BLK AAx RW 18 (J117)	Uxx-SLOT yy (J201)	CABLE	407476		
	BLK AAx RW 19 (J118)	Uxx-S LOT yy (J201)	CABLE	407476		
	BLK AAx RW 20 (J119)	Uxx-SLOT yy (J201)	CABLE	407476		
	BLK AAx RW 21 (J120)	Uxx-SLOT yy (J201)	CABLE	407476		
	BLK AAx RW 22 (J121)	Uxx-SLOT yy (J201)	CABLE	407476		
	BLK AAx RW 23 (J122)	Uxx-S LOT yy (J201)	CABLE	407476		
	BLK AAx RW 24 (J123)	Uxx-SLOT yy (J201)	CABLE	407476		
	BLK AAx RW 25 (J124)	Uxx-S LOT yy (J201)	CABLE	407476		

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	A	21793	407476	A
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ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	LEN	REFERENCE
	BLK AAx RW 26 (J125)	Uxx-S LOT yy (J201)	CABLE	407476		
	BLK AAx RW 27 (J126)	Uxx-SLOT yy (J201)	CABLE	407476		
	BLK AAx RW 28 (J127)	Uxx-SLOT yy (J201)	CABLE	407476		
	BLK AAx RW 29 (J128)	Uxx-SLOT yy (J201)	CABLE	407476		
	BLK AAx RW 30 (J129)	Uxx-SLOT yy (J201)	CABLE	407476		
	BLK AAx RW 31 (J130)	Uxx-SLOT yy (J201)	CABLE	407476		
	BLK AAx RW 32 (J131)	Uxx-SLOT yy (J201)	CABLE	407476		

This system wirelist serves as a template for incorporating this harness assembly into the overall system wirelist. It does not in any way affect the fabrication of this harness assembly.

RACAL Instruments Inc., 4 Goodyear St., Irvine, CA 92718				
DOCUMENT TITLE	SIZE	CODE NO.	DOCUMENT NO.	REV
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	DRN			SHEET 4 of 19

ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	LEN	REFERENCE
1	J100-1	J200-32A	WHT/BLK	407408	40"	GROUND
	602199-001		YEL/GRY	CABLE 1		
2	J100-2	J200-32C	WHT/BLK	407408	40"	GROUND
	602199-001		GRN/VIO	CABLE 1		
3	J100-3	J200-32E	WHT/BLK	407408	40"	GROUND
	602199-001		BLU/VIO	CABLE 1		
4	J100-4	J200-31A	WHT/BLK	407408	40"	0000 IN
	602199-001		ORN/VIO	CABLE 1		
5	J100-5	J200-29A	WHT/BLK	407408	40"	0000 OUT
	602199-001		BRN/VIO	CABLE 1		
6	J100-6	J200-30A	WHT/BLK	407408	40"	0001 IN
	602199-001		RED/VIO	CABLE 1		
7	J100-7	J200-28A	WHT/BLK	407408	40"	0001 OUT
	602199-001		BRN/RED	CABLE 1		
8	J100-8	J200-31B	WHT/BLK	407408	40"	0002 IN
	602199-001		ORN/GRY	CABLE 1		
9	J100-9	J200-29B	WHT/BLK	407408	40"	0002 OUT
	602199-001		BRN/GRY	CABLE 1		
10	J100-10	J200-30B	WHT/BLK	407408	40"	0003 IN
	602199-001		RED/GRY	CABLE 1		
11	J101-1	J200-28B	WHT/BLK	407408	40"	0003 OUT
	602199-001		BRN/ORN	CABLE 1		
12	J101-2	J200-31C	WHT/BLK	407408	40"	0004 IN
	602199-001		YEL/GRN	CABLE 1		
13	J101-3	J200-29C	WHT/BLK	407408	40"	0004 OUT
	602199-001		RED/YEL	CABLE 1		
14	J101-4	J200-30C	WHT/BLK	407408	40"	0005 IN
	602199-001		ORN/YEL	CABLE 1		
15	J101-5	J200-28C	WHT/BLK	407408	40"	0005 OUT
	602199-001		BRN/YEL	CABLE 1		
16	J101-6	J200-31D	WHT/BLK	407408	40"	0006 IN
	602199-001		YEL/BLU	CABLE 1		
17	J101-7	J200-29D	WHT/BLK	407408	40"	0006 OUT
	602199-001		RED/GRN	CABLE 1		
18	J101-8	J200-30D	WHT/BLK	407408	40"	0007 IN
	602199-001		ORN/ORN	CABLE 1		
19	J101-9	J200-28D	WHT/BLK	407408	40"	0007 OUT
	602199-001		BRN/GRN	CABLE 1		
20	J101-10	J200-31E	WHT/BLK	407408	40"	0008 IN
	602199-001		YEL/VIO	CABLE 1		
21	J102-1	J200-29E	WHT/BLK	407408	40"	0008 OUT
	602199-001		RED/BLU	CABLE 1		
22	J102-2	J200-30E	WHT/BLK	407408	40"	0009 IN
	602199-001		ORN/BLU	CABLE 1		
23	J102-3	J200-28E	WHT/RLK	407408	40"	0009 OUT
	602199-001		BRN/BLU	CABLE 1		

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	A	21793	407476	A
HARNESS ASSY, 1260-18, TTI	DRN			SHEET 5 of 19

ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
24	J102-4 602199-001	J200-27A	WHT/GRN VIO	407408 CABLE 1	40"	0010 IN
25	J102-5 602199-001	J200-25A	WHT/ORG YEL	407408 CABLE 1	40"	0010 OUT
26	J102-6 602199-001	J200-26A	WRT/YEL GRN	407408 CABLE 1	40"	0011 IN
27	J102-7 602199-001	J200-24A	WHT/RED YEL	407408 CABLE 1	40"	0011 OUT
28	J102-8 602199-001	J200-27B	WHT/GRN GRY	407408 CABLE 1	40"	0012 IN
29	J102-9 602199-001	J200-25B	WHT/ORN GRN	407408 CABLE 1	40"	0012 OUT
30	J102-10 602199-001	J200-26B	WHT/YEL BLU	407408 CABLE 1	40"	0013 IN
31	J103-1 602199-001	J200-24B	WHT/RED GRN	407408 CABLE 1	40"	0013 OUT
32	J103-2 602199-001	J200-27C	WHT/BLU VIO	407408 CABLE 1	40"	0014 IN
33	J103-3 602199-001	J200-25C	WHT/ORN BLU	407408 CABLE 1	40"	0014 OUT
34	J103-4 602199-001	J200-26C	WHT/YEL V1O	407408 CABLE 1	40"	0015 IN
35	J103-5 602199-001	J200-24C	WHT/RED BLU	407408 CABLE 1	40"	0015 OUT
36	J103-6 602199-001	J200-27D	WHT/BLU GRY	407408 CABLE 1	40"	0016 IN
37	J103-7 602199-001	J200-25D	WHT/ORN VIO	407408 CABLE 1	40"	0016 OUT
38	J103-8 602199-001	J200-26D	WHT/YEL GRY	407408 CABLE 1	40"	0017 IN
39	J103-9 602199-001	J200-24D	WHT/RED VIO	407408 CABLE 1	40"	0017 OUT
40	J103-10 602199-001	3200-27E	WHT/VIO GRY	407408 CABLE 1	40"	0018 IN
41	J104-1 602199001	J200-25E	WHT/ORN GRY	407408 CABLE 1	40"	0018 OUT
42	J104-2 602199-001	J200-26E	WHT/GRN BLU	407408 CABLE 1	40"	0019 IN
43	J104-3 602199-001	J200-24E	WHT/RED GRY	407408 CABLE 1	40"	0019 OUT
44	J104-4 602199-001	J200-23A	WHT/BRN GRN	407408 CABLE 1	40"	0020 IN
45	J104-5 602199-001	J200-21A	WHT/BLK RED	407408 CABLE 1	40"	0020 OUT
46	J104-6 602199-001	J200-22A	WHT/BLK VIO	407408 CABLE 1	40"	0021 IN

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WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
47	J104-7	J200-20A	WHT/GRN	407408	40"	0021 OUT
	602199-001			CABLE 1		
48	J104-8	J200-23B	WHT/BRN	407408	40"	0022 IN
	602199-001		BLU	CABLE 1		
49	J104-9	J200-21B	WHT/BLK	407408	40"	0022 OUT
	602199-001		ORN	CABLE 1		
50	J104-10	J200-22B	WHT/BLK	407408	40"	0023 IN
	602199-001		GRY	CABLE 1		
51	J105-1	J200-20B	WHT/BLU	407408	40"	0023 OUT
	602199-001			CABLE 1		
52	J105-2	J200-23C	WHT/BRN	407408	40"	0024 IN
	602199-001		VIO	CABLE 1		
53	J105-3	J200-21C	WHT/BLK	407408	40"	0024 OUT
	602199-001		YEL	CABLE 1		
54	J105-4	J200-22C	WHT/BRN	407408	40"	0025 IN
	602199-001		RED	CABLE 1		
55	J105-5	J200-20C	WHT/VIO	407408	40"	0025 OUT
	602199-001			CABLE 1		
56	J105-6	J200-23D	WHT/BRN	407408	40"	0026 IN
	602199-001		GRY	CABLE 1		
57	J105-7	J200-21D	WHT/BLK	407408	40"	0026 OUT
	602199-001		GRN	CABLE 1		
58	J105-8	J200-22D	WHT/BRN	407408	40"	0027 IN
	602199-001		ORN	CABLE 1		
59	J105-9	J200-20D	WHT/GRY	407408	40"	0027 OUT
	602199-001			CABLE 1		
60	J105-10	J200-23E	WHT/RED	407408	40"	0028 IN
	602199-001		ORN	CABLE 1		
61	J106-1	J200-21E	WHT/BLK	407408	40"	0028 OUT
	602199-001		BLU	CABLE 1		
62	J106-2	J200-22E	WHT/BRN	407408	40"	0029 IN
	602199-001		YEL	CABLE 1		
63	J106-3	J200-20E	WHT/BLK	407408	40"	0029 OUT
	602199-001		BRN	CABLE 1		
64	J106-4	J200-19A	WHT/BLK	407408	40"	0030 IN
	602199-001			CABLE 1		
65	J106-5	J200-17A	BLK	407408	40"	0030 OUT
	602199-001			CABLE 1		
66	J106-6	J200-18A	GRN	407408	40"	0031 IN
	602199-001			CABLE 1		
67	J106-7	J200-16A	WHT/BLK	407408	40"	0031 OUT
	602199-001		YEL/GRY	CABLE 2		
68	J106-8	J200-19B	WHT/BRN	407408	40"	0032 IN
	602199-001			CABLE 1		
69	J106-9	J200-17B	BRN	407408	40"	0032 OUT
	602199-001			CABLE 1		

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WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
70	J106-10 602199-001	J200-18B	BLU	407408 CABLE 1	40”	0033 IN
71	J107-1 602199-001	J200-16B	WHT/BLK ORN/BLU	407408 CABLE 2	40’	0033 OUT
72	J107-2 602199-001	J200-19C	WHT/RED	407408 CABLE 1	40”	0034 IN
73	J107-3 602199-001	J200-17C	RED	407408 CABLE 1	40”	0034 OUT
74	J107-4 602199-001	J200-18C	VIO	407408 CABLE 1	40”	0035 IN
75	J107-5 602199-001	J200-16C	WHT/BLK GRN/V1O	407408 CABLE 2	40”	0035 OUT
76	J107-6 602199-001	J200-19D	WHT/ORN	407408 CABLE 1	40”	0036 IN
77	J107-7 602199-001	J200-17D	ORN	407408 CABLE 1	40”	0036 OUT
78	J107-8 602199-001	J200-18D	GRY	407408 CABLE 1	40”	0037 IN
79	J107-9 602199-001	J200-16D	WHT/BLK GRN/GRY	407408 CABLE 2	40”	0037 OUT
80	J107-10 602199-001	J200-19E	WHT/YEL	407408 CABLE 1	40”	0038 IN
81	J108-1 602199-001	J200-17E	YEL	407408 CABLE 1	40”	0038 OUT
82	J108-2 602199-001	J200-18E	WHT	407408 CABLE 1	40”	0039 IN
83	J108-3 602199-001	J200-16E	WHT/BLK BLU/VIO	407408 CABLE 2	40”	0039 OUT
84	J108-4 602199-001	J200-15A	WHT/BLK ORN/VIO	407408 CABLE 2	40”	0040 IN
85	J108-5 602199-001	J200-13A	WHT/BLK BRN/VIO	407408 CABLE 2	40”	0040 OUT
86	J108-6 602199-001	J200-14A	WHT/BLK RED/VIO	407408 CABLE 2	40”	0041 IN
87	J108-7 602199-001	J200-12A	WHT/BLK BRN/RED	407408 CABLE 2	40”	0041 OUT
88	J108-8 602199-001	J200-15B	WHT/BLK ORN/GRY	407408 CABLE 2	40”	0042 IN
89	J108-9 602199-001	J200-13B	WHT/BLK BRN/GRY	407408 CABLE 2	40”	0042 OUT
90	J108-10 602199-001	J200-14B	WHT/BLK RED/GRY	407408 CABLE 2	40”	0043 IN
91	J109-1 602199-001	J200-12B	WHT/BLK BRN/ORN	407408 CABLE 2	40”	0043 OUT

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ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
92	J109-2 602199-001	J200-15C	WHT/BLK YEL/ORN	407408 CABLE 2	40'.	0044 IN
93	J109-3 602199-001	J200-13C	WHT/BLK RED/YEL	407408 CABLE 2	40'	0044 OUT
94	J109-4 602199-001	J200-14C	WHT/BLK ORN/YEL	407408 CABLE 2	40"	0045 IN
95	J109-5 602199-001	J200-12C	WHT/BLK BRN/YEL	407408 CABLE 2	40"	0045 OUT
96	J109-6 602199-001	J200-15D	WHT/BLK YEL/BLU	407408 CABLE 2	40"	0046 IN
97	J109-7 602199-001	J200-13D	WHT/BLK RED/ORN	407408 CABLE 2	40"	0046 OUT
98	J109-8 602199-001	J200-14D	WHT/BLK ORN/GRN	407408 CABLE 2	40"	0047 IN
99	J109-9 602199-001	J200-12D	WHT/BLK BRN/GRN	407408 CABLE 2	40"	0047 OUT
100	J109-10 602199-001	J200-15E	WHT/BLK YEL/VIO	407408 CABLE 2	40"	0048 IN
101	J110-1 602199-001	J200-13E	WHT/BLK RED/BLU	407408 CABLE 2	40"	0048 OUT
102	J110-2 602199-001	J200-14E	WHT/BLK ORN/BLU	407408 CABLE 2	40"	0049 IN
103	J110-3 602199-001	J200-12E	WHT/BLK BRN/BLU	407408 CABLE 2	40"	0049 OUT
104	J110-4 602199-001	J200-11A	WHT/GRN VIO	407408 CABLE 2	40"	0050 IN
105	J110-5 602199-001	J200-09A	WHT/ORN YEL	407408 CABLE 2	40"	0050 OUT
106	J110-6 602199-001	J200-10A	WHT/YEL GRN	407408 CABLE 2	40"	0051 IN
107	J110-7 602199-001	J200-08A	WHT/RED YEL	407408 CABLE 2	40'.	0051 OUT
108	J110-8 602199-001	J200-11B	WHT/GRN GRY	407408 CABLE 2	40"	0052 IN
109	J110-9 602199-001	J200-09B	WHT/ORN ORN	407408 CABLE 2	40'.	0052 OUT
110	J100-10 602199-001	J200-10B	WHT/YEL BLU	407408 CABLE 2	40"	0053 IN
111	J111-1 602199-001	J200-08B	WHT/RED ORN	407408 CABLE 2	40"	0053 OUT
112	J111-2 602199-001	J200-11C	WHT/BLU VIO	407408 CABLE 2	40'.	0054 IN
113	J111-3 602199-001	J200-09C	WHT/ORN BLU	407408 CABLE 2	40"	0054 OUT
114	J111-4 602199-001	J200-10C	WHT/YEL VIO	407408 CABLE 2	40"	0055 IN

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WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
115	J111-5 602199-001	J200-08C	WHT/RED BLU	407408 CABLE 2	40"	0055 OUT
116	J111-6 602199-001	J200-11D	WHT/BLU GRY	407408 CABLE 2	40"	0056 IN
117	J111-7 602199-001	J200-09D	WHT/ORN VIO	407408 CABLE 2	40'.	0056 OUT
118	J111-8 602199-001	J200-10D	WHT/YEL GRY	407408 CABLE 2	40"	0057 IN
119	J111-9 602199-001	J200-08D	WHT/RED VIO	407408 CABLE 2	40"	0057 OUT
120	J111-10 602199-001	J200-11E	WHT/VIO GRY	407408 CABLE 2	40	0058 IN
121	J112-1 602199-001	J200 09E	WHT/ORN GRY	407408 CABLE 2	40"	0058 OUT
122	J112-2 602199-001	J200-10E	WHT/GRN BLU	407408 CABLE 2	40"	0059 IN
123	J112-3 602199-001	J200-08E	WHT/RED GRY	407408 CABLE 2	40"	0059 OUT
124	J112-4 602199-001	J200-07A	WHT/BRN GRN	407408 CABLE 2	40"	0060 IN
125	J112-5 602199-001	J200-05A	WHT/BLK RED	407408 CABLE 2	40"	0060 OUT
126	J112-6 602199-001	J200-06A	WHT/BLK V1O	407408 CABLE 2	40"	0061 IN
127	J112-7 602199-001	J200-04A	WHT/GRN	407408 CABLE 2	40"	0061 OUT
128	J112-8 602199-001	J200-07B	WHT/BRN BLU	407408 CABLE 2	40.'	0062 IN
129	J112-9 602199-001	J200-05B	WHT/BLK ORN	407408 CABLE 2	40"	0062 OUT
130	J112-10 602199-001	J200-06B	WHT/BLK GRY	407408 CABLE 2	40"	0063 IN
131	J113-1 602199-001	J200-04B	WHT/BLU	407408 CABLE 2	40"	0063 OUT
132	J113-2 602199-001	J200-07C	WHT/BRN VIO	407408 CABLE 2	40"	0064 IN
133	J113-3 602199-001	J200-05C	WHT/BLK YEL	407408 CABLE 2	40"	0064 OUT
134	J113-4 602199-001	J200-06C	WHT/BRN RED	407408 CABLE 2	40"	0065 IN
135	J113-5 602199-001	J200-04C	WHT/VIO	407408 CABLE 2	40"	0065 OUT
136	J113-6 602199-001	J200-07D	WHT/BRN GRY	407408 CABLE 2	40"	0066 IN
137	J113-7 602199-001	J200-05D	WHT/BLK GRN	407408 CABLE 2	40"	0066 OUT

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WIRE	FROM	TO	TYPE	PART	WIRE LEN	REFERENCE
138	J113-8 602199-001	J200-06D	WHT/BRN ORN	407408 CABLE 2	40"	0067 IN
139	J113-9 602199-001	J200-04D	WHT/GRY	407408 CABLE 2	40"	0067 OUT
140	J113-10 602199-001	J200-07E	WHT/RED ORN	407408 CABLE 2	40"	0068 IN
141	J114-1 602199-001	J200-05E	WHT/BLK BLU	407408 CABLE 2	40"	0068 OUT
142	J114-2 602199-001	J200-06E	WHT/BRN YEL	407408 CABLE 2	40"	0069 IN
143	J114-3 602199-001	J200-04E	WHT/BLK BRN	407408 CABLE 2	40"	0069 OUT
144	J114-4 602199-001	J200-03A	WHT/BLK	407408 CABLE 2	40"	0070 IN
145	J114-5 602199-001	J200-02A	GRN	407408 CABLE 2	40"	0071 IN
146	J114-6 602199-001	J200-03B	WHT/BRN	407408 CABLE 2	40"	0072 IN
147	J114-7 602199-001	J200-02B	BLU	407408 CABLE 2	40"	0073 IN
148	J114-8 602199-001	J200-03C	WHT/RED	407408 CABLE 2	40"	0074 IN
149	J114-9 602199-001	J200-02C	VIO	407408 CABLE 2	40"	0075 IN
150	J114-10 602199-001	J200-03D	WHT/ORN	407408 CABLE 2	40"	0076 IN
151	J115-1 602199-001	J200-02D	GRY	407408 CABLE 2	40"	0077IN
152	J115-2 602199-001	J200-03E	WHT/YEL	407408 CABLE 2	40"	0078 IN
153	J115-3 602199-001	J200-02E	WHT	407408 CABLE 2	40"	0079 IN
154	J115-4 602199-001	J200-01B	BRN	407408 CABLE 2	40"	0150 IN
155	J115-5 602199-001	J200-01D	ORN	407408 CABLE 2	40"	0151 IN
156	J115-6 602199-001	J200-01A	BLK	407408 CABLE 2	40"	GROUND
157	J115-7 602199-001	J200-01C	RED	407408 CABLE 2	40"	GROUND
158	J115-8 602199-001	J200-01E	YEL	407408 CABLE 2	40"	GROUND
159	J115-9 602199-001	NO CONNECT				
160	J115-10 602199-001	NO CONNECT				

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ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART	WIRE LEN	REFERENCE
161	J116-1 602199-001	J201-32A	WHT/BLK YEL/GRY	407408 CABLE 1	40”	GROUND
162	J116-2 602199-001	J201-32C	WHT/BLK GRN/VIO	407408 CABLE 1	40”	GROUND
163	J116-3 602199-001	J201-32E	WHT/BLK BLU/VIO	407408 CABLE 1	40”	GROUND
164	J116-4 602199-001	J201-32B	WHT/BLK GRN/BLU	407408 CABLE 1	40”	0150 OUT
165	J116-5 602199-001	J201-32D	WHT/BLK GRN/GRY	407408 CABLE 1	40”	0151 OUT
166	J116-6 602199-001	J201-31A	WHT/BLK ORN/VIO	407408 CABLE 1	40”	0070 OUT
167	J116-7 602199-001	J201-30A	WHT/BLK RED/VIO	407408 CABLE 1	40”	0071 OUT
168	J116-8 602199-001	J201-31B	WHT/BLK ORN/GRY	407408 CABLE 1	40”	0072 OUT
169	J116-9 602199-001	J201-30B	WHT/BLK RED/GRY	407408 CABLE 1	40”	0073 OUT
170	J116-10 602199-001	J201-31C	WHT/BLK YEL/GRN	407408 CABLE 1	40”	0074 OUT
171	J117-1 602199-001	J201-30C	WHT/BLK ORN/YEL	407408 CABLE 1	40”	0075 OUT
172	J117-2 602199-001	J201-31D	WHT/BLK YEL/BLU	407408 CABLE 1	40”	0076 OUT
173	J117-3 602199-001	J201-30D	WHT/BLK ORN/GRN	407408 CABLE 1	40”	0077 OUT
174	J1174 602199-001	J201-31E	WHT/BLK YEL/VIO	407408 CABLE 1	40”	0078 OUT
175	J117-5 602199-001	J201-30E	WHT/BLK ORN/BLU	407408 CABLE 1	40”	0079 OUT
176	J117-6 602199-001	J201-29A	WHT/BLK BRN/VIO	407408 CABLE 1	40”	0080 IN
177	J117-7 602199-001	J201-27A	WHT/GRN VIO	407408 CABLE 1	40”	0080 OUT
f78	J117-8 602199-001	J201-28A	WHT/BLK BRN/RED	407408 CABLE 1	40”	0081 IN
179	J117-9 602199-001	J201-26A	WHT/YEL GRN	407408 CABLE 1	40”	0081 OUT
180	J117-10 602199-001	J201-29B	WHT/BLK BRN/GRY	407408 CABLE 1	40”	0082 IN
181	J118-1 602199-001	J201-27B	WHT/GRN GRY	407408 CABLE 1	40”	0082 OUT
182	J118-2 602199-001	J201-28B	WHT/BLK BRN/ORN	407408 CABLE 1	40”	0083 IN

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WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
183	J118-3 602199-001	J201-26B	WHT/YEL BLU	407408 CABLE 1	40"	0083 OUT
184	J118-4 602199-001	J201-29C	WHT/BLK RED/YEL	407408 CABLE 1	40"	0084 IN
185	J118-5 602199-001	J201-27C	WHT/BLU VIO	407408 CABLE 1	40"	0084 OUT
186	J118-6 602199-001	J201-28C	WHT/BLK BRN/YEL	407408 CABLE 1	40"	0085 IN
187	J118-7 602199-001	J201-26C	WHT/YEL VIO	407408 CABLE 1	40"	0085 OUT
188	J118-8 602199-001	J201-29D	WHT/BLK RED/GRN	407408 CABLE 1	40"	0086 IN
189	J118-9 602199-001	J201-27D	WHT/BLU GRY	407408 CABLE 1	40"	0086 OUT
190	J118-10 602199-001	J201-28D	WHT/BLK BRN/GRN	407408 CABLE 1	40"	0087 IN
191	J119-1 602199-001	J201-26D	WHT/YEL GRY	407408 CABLE 1	40"	0087 OUT
192	J119-2 602199-001	J201-29E	WHT/BLK RED/BLU	407408 CABLE 1	40"	0088 IN
193	J119-3 602199-001	J201-27E	WHT/VIO GRY	407408 CABLE 1	40"	0088 OUT
194	J119-4 602199-001	J201-28E	WHT/BLK BRN/BLU	407408 CABLE 1	40"	0089 IN
195	J119-5 602199-001	J201-26E	WHT/GRN BLU	407408 CABLE 1	40"	0089 OUT
196	J119-6 602199-001	J201-25A	WHT/ORN YEL	407408 CABLE 1	40"	0090 IN
197	J119-7 602199-001	J201-23A	WHT/BRN GRN	407408 CABLE 1	40"	0090 OUT
198	J119-8 602199-001	J201-24A	WHT/RED YEL	407408 CABLE 1	40"	0091 IN
199	J119-9 602199-001	J201-22A	WHT/BLK VIO	407408 CABLE 1	40"	0091 OUT
200	J119-10 602199-001	J201-25B	WHT/ORN GRN	407408 CABLE 1	40"	0092 IN
201	J120-1 602199-001	J201-23B	WHT/BRN BLU	407408 CABLE 1	40"	0092 OUT
202	J120-2 602199-001	J201-24B	WHT/RED GRN	407408 CABLE 1	40"	0093 IN
203	J120-3 602199-001	J201-22B	WHT/BLK GRY	407408 CABLE 1	40"	0093 OUT
204	J120-4 602199-001	J201-25C	WHT/ORN BLU	407408 CABLE 1	40"	0094 IN
205	J120-5 602199-001	J201-23C	WHT/BRN VIO	407408 CABLE 1	40"	0094 OUT

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ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
206	J120-6	J201-24C	WHT/RED	407408	40'	0095 IN
	602199-001		BLU	CABLE 1		
207	J120-7	J201-22C	WHT/BRN	407408	40"	0095 OUT
	602199-001		RED	CABLE 1		
208	J120-8	J201-25D	WHT/ORN	407408	40"	0096 IN
	602199-001		VIO	CABLE 1		
209	J120-9	J201-23D	WHT/BRN	407408	40"	0096 OUT
	602199-001		GRY	CABLE 1		
210	J120-10	J201-24D	WHT/RED	407408	40"	0097 IN
	602199-001		VIO	CABLE 1		
211	J121-1	J201-22D	WHT/BRN	407408	40"	0097 OUT
	602199-001		ORN	CABLE 1		
212	J121-2	J201-25E	WHT/ORN	407408	40"	0098 IN
	602199-001		GRY	CABLE 1		
213	J121-3	J201-23E	WHT/RED	407408	40"	0098 OUT
	602199-001		ORN	CABLE 1		
214	J121-4	J201-24E	WHT/RED	407408	40"	0099 IN
	602199-001		GRY	CABLE 1		
215	J121-5	J201-22E	WHT/BRN	407408	40"	0099 OUT
	602199-001		YEL	CABLE 1		
216	J121-6	J201-21A	WHT/BLK	407408	40"	0100 IN
	602199-001		RED	CABLE 1		
217	J121-7	J201-19A	WHT/BLK	407408	40"	0100 OUT
	602199-001			CABLE 1		
218	J121-8	J201-20A	WHT/GRN	407408	40"	0101 IN
	602199-001			CABLE 1		
219	J121-9	J201-18A	ORN	407408	40"	0101 OUT
	602199-001			CABLE 1		
220	J121-10	J201-21B	WHT/BLK	407408	40"	0102 IN
	602199-001		ORN	CABLE 1		
221	J122-1	J201-19B	WHT/BRN	407408	40"	0102 OUT
	602199-001			CABLE 1		
222	J122-2	J201-20B	WHT/BLU	407408	40"	0103 IN
	602199-001			CABLE 1		
223	J122-3	J201-18B	BLU	407408	40"	0103 OUT
	602199~oo1			CABLE 1		
224	J122-4	J201-21C	WHT/BLK	407408	40"	0104 IN
	602199-001		YEL	CABLE 1		
225	J122-5	J201-19C	WHT/RED	407408	40"	0104 OUT
	602199-001			CABLE 1		
226	J122-6	J201-2OC	WHT/VIO	407408	40"	0105 IN
	602199-001			CABLE 1		
227	J122-7	J201-18C	VIO	407408	40"	0105 OUT
	602199-001			CABLE 1		
228	J122-8	J201-21D	WHT/BLK	407408	40"	0106 IN
	602199-001		GRN	CABLE 1		

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WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
229	J122-9 602199-001	J201-19D	WHT/ORN	407408 CABLE 1	40"	0106 OUT
230	J122-10 602199-001	J201-20D	WHT/GRY	407408 CABLE 1	40"	0107 IN
231	J123-1 602199-001	J201-18D	GRY	407408 CABLE 1	40"	0107OUT
232	J123-2 602199-001	J201-21E	WHT/BLK BLU	407408 CABLE 1	40"	0108 IN
233	J123-3 602199-001	J201-19E	WHT/YEL	407408 CABLE 1	40"	0108 OUT
234	J123-4 602199-001	J201-20E	WHT/BLK BRN	407408 CABLE 1	40"	0109 IN
235	J123-5 602199-001	J201-18E	WHT	407408 CABLE 1	40"	0109 OUT
236	J123-6 602199-001	J201-17A	BLK	407408 CABLE 1	40"	0110 IN
237	J123-7 602199-001	J201-15A	WHT/BLK ORN/V1O	407408 CABLE 2	40"	0110 OUT
238	J123-8 602199-001	J201-16A	WHT/BLK YEL/ORY	407408 CABLE 2	40"	0111 IN
239	J123-9 602199-001	J201-14A	WHT/BLK RED/VIO	407408 CABLE 2	40"	0111 OUT
240	J123-10 602199-001	J201-17B	BRN	407408 CABLE 1	40"	0112 IN
241	J124-1 602199-001	J201-15B	WHT/BLK ORN/GRY	407408 CABLE 2	40"	0112 OUT
242	J124-2 602199-001	J201-16B	WHT/BLK GRN/BLU	407408 CABLE 2	40"	0113 IN
243	J124-3 602199-001	J201-14B	WHT/BLK RED/GRY	407408 CABLE 2	40"	0113 OUT
244	J124-4 602199-001	J201-17C	RED	407408 CABLE 1	40"	0114 IN
245	J124-5 602199-001	J201-15C	WHT/BLK YEL/GRN	407408 CABLE 2	40"	0114 OUT
246	J124-6 602199-001	J201-16C	WHT/BLK GRN/VIO	407408 CABLE 2	40"	0115 IN
247	J124-7 602199-001	J201-14C	WHT/BLK ORN/YEL	407408 CABLE 2	40"	0115 OUT
248	J124-8 602199-001	J201-17D	ORN	407408 CABLE 1	40"	0116 IN
249	J124-9 602199-001	J201-15D	WHT/BLK YEL/BLU	407408 CABLE 2	40"	0116 OUT
250	J124-10 602199-001	J201-16D	WHT/BLK GRN/GRY	407408 CABLE 2	40"	0117 IN

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WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
251	J125-1 602199-001	J201-14D	WHT/BLK ORN/GRN	407408 CABLE 2	40"	0117 OUT
252	J125-2 602199-001	J201-17E	YEL	407408 CABLE 1	40"	0118 IN
253	J125-3 602199-001	J201-15E	WHT/BLK YEL/VIO	407408 CABLE 2	40"	0118 OUT
254	J125-4 602199-001	J201-16E	WHT/BLK BLU/VIO	407408 CABLE 2	40"	0119 IN
255	J125-5 602199-001	J201-14E	WHT/BLK ORN/BLU	407408 CABLE 2	40"	0119 OUT
256	J125-6 602199-001	J201-13A	WHT/BLK BRN/VIO	407408 CABLE 2	40"	0120 IN
257	J125-7 602199-001	J201-11A	WHT/GRN VIO	407408 CABLE 2	40"	0120 OUT
258	J125-8 602199-001	J201-12A	WHT/BLK BRN/RED	407408 CABLE 2	40"	0121 IN
259	J125-9 602199-001	J201-10A	WHT/YEL ORN	407408 CABLE 2	40"	0121 OUT
260	J125-10 602199-001	J201-13B	WHT/BLK BRN/GRY	407408 CABLE 2	40"	0122 IN
261	J126-1 602199-001	J201-11B	WHT/GRN GRY	407408 CABLE 2	40"	0122 OUT
262	J126-2 602199-001	J201-12B	WHTI/LK BRN/ORN	407408 CABLE 2	40"	0123 IN
263	J126-3 602199-001	J201-10B	WHT/YEL BLU	407408 CABLE 2	40"	0123 OUT
264	J126-4 602199-001	J201-13C	WHT/BLK RED/YEL	407408 CABLE 2	40"	0124 IN
265	J126-5 602199-001	J201-11C	WHT/BLU VIO	407408 CABLE 2	40"	0124 OUT
266	J126-6 602199-001	J201-12C	WHT/BLK BRN/YEL	407408 CABLE 2	40"	0125 IN
267	J126-7 602199-001	J201-10C	WHT/YEL VIO	407408 CABLE 2	40"	0125 OUT
268	J126-8 602199-001	J201-13D	WHT/BLK RED/ORN	407408 CABLE 2	40"	0126 IN
269	J126-9 602199-001	J201-11D	WHT/BLU GRY	407408 CABLE 2	40"	0126 OUT
270	J126-10 602199-001	J201-12D	WHT/BLK BRN/GRN	407408 CABLE 2	40"	0127 IN
271	J127-1 602199-001	J201-10D	WHT/YEL GRY	407408 CABLE 2	40"	0127 OUT
272	J127-2 602199-001	J201-13E	WHT/BLK RED/BLU	407408 CABLE 2	40"	0128 IN
273	J127-3 602199-001	J201-11E	WHT/VIO GRY	407408 CABLE 2	40"	0128 OUT

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WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
274	J127-4 602199-001	J201-12E	WHT/BLK BRN/BLU	407408 CABLE 2	40"	0129 IN
275	J127-5 602199-001	J201-10E	WHT/GRN BLU	407408 CABLE 2	40"	0129 OUT
276	J127-6 602199-001	J201-09A	WHT/ORN YEL	407408 CABLE 2	40"	0130 IN
277	J127-7 602199-001	J201-07A	WHT/BRN GRN	407408 CABLE 2	40"	0130 OUT
278	J127-8 602199-001	J201-08A	WHT/RED YEL	407408 CABLE 2	40"	0131 IN
279	J127-9 602199-001	J201-06A	WHT/BLK VIO	407408 CABLE 2	40"	0131 OUT
280	J127-10 602199-001	J201-09B	WHT/ORN GRN	407408 CABLE 2	40"	0132 IN
281	J128-1 602199-001	J201-07B	WHT/BRN BLU	407408 CABLE 2	40"	0132 OUT
282	J128-2 602199-001	J201-08B	WHT/RED GRN	407408 CABLE 2	40"	0133 IN
283	J128-3 602199-001	J201-06B	WHT/BLK GRY	407408 CABLE 2	40"	0133 OUT
284	J128-4 602199-001	J201-09C	WHT/ORN BLU	407408 CABLE 2	40"	0134 IN
285	J128-5 602199-001	J201-07C	WHT/BRN VIO	407408 CABLE 2	40"	0134 OUT
286	J128-6 602199-001	J201-08C	WHT/RED BLU	407408 CABLE 2	40"	0135 IN
287	J128-7 602199-001	J201-06C	WHT/BRN RED	407408 CABLE 2	40"	0135 OUT
288	J128-8 602199-001	J201-09D	WHT/ORN VIO	407408 CABLE 2	40"	0136 IN
289	J128-9 602199-001	J201-07D	WHT/BRN GRY	407408 CABLE 2	40"	0136 OUT
290	J128-10 602199-001	J201-08D	WHT/RED VIO	407408 CABLE 2	40"	0137 IN
291	J129-1 602199-001	J201-06D	WHT/BRN ORN	407408 CABLE 2	40"	0137 OUT
292	J129-2 602199-001	J201-09E	WHT/ORN GRY	407408 CABLE 2	40"	0138 IN
293	J129-3 602199-001	J201-07E	WHT/RED ORN	407408 CABLE 2	40"	0138 OUT
294	J129-4 602199-001	J201-08E	WHT/RED GRY	407408 CABLE 2	40"	0139 IN
295	J129-5 602199-001	J201-06E	WHT/BRN YEL	407408 CABLE 2	40"	0139 OUT
296	J129-6 602199-001	J201-05A	WHT/BLK RED	407408 CABLE 2	40"	0140 IN

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ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART #	WIRE LEN	REFERENCE
297	J129-7 602199-001	J201-03A	WHT/BLK	407408 CABLE 2	40"	0140 OUT
298	J129-8 602199-001	J201-04A	WHT/GRN	407408 CABLE 2	40"	0141 IN
299	J129-9 602199-001	J201-02A	GRN	407408 CABLE 2	40"	0141 OUT
300	J129-10 602199-001	J201-05B	WHT/BLK ORN	407408 CABLE 2	40"	0142 IN
301	J130-1 602199-001	J201-03B	WHT/BRN	407408 CABLE 2	40"	0142 OUT
302	J130-2 602199-001	J201-04B	WHT/BLU	407408 CABLE 2	40"	0143 IN
303	J130-3 602199-001	J201-02B	BLU	407408 CABLE 2	40"	0143 OUT
304	J130-4 602199-001	J201-05C	WHT/BLK YEL	407408 CABLE 2	40"	0144 IN
305	J130-5 602199-001	J201-03C	WHT/RED	407408 CABLE 2	40"	0144 OUT
306	J130-6 602199-001	J201-04C	WHT/VIO	407408 CABLE 2	40"	0145 IN
307	J130-7 602199-001	J201-02C	VIO	407408 CABLE 2	40"	0145 OUT
308	J130-8 602199-001	J201-05D	WHT/BLK GIRN	407408 CABLE 2	40"	0146 IN
309	J130-9 602199-001	J201-03D	WHT/ORN	407408 CABLE 2	40"	0146 OUT
310	J130-10 602199-001	J201-04D	WHT/GRY	407408 CABLE 2	40"	0147 IN
311	J131-1 602199-001	J201-02D	GRY	407408 CABLE 2	40"	0147 OUT
312	J131-2 602199-001	J201-05E	WHT/BLK BLU	407408 CABLE 2	40"	0148 IN
313	J131-3 602199-001	J201-03E	WHT/YEL	407408 CABLE 2	40"	0148 OUT
314	J131-4 602199-001	J201-04E	WHT/BLK BRN	407408 CABLE 2	40"	0149 IN
315	J131-5 602199-001	J201-02E	WHT	407408 CABLE 2	40"	0149 OUT
316	J131-6 602199-001	J201-01A	BLK	407408 CABLE 2	40"	GROUND
317	J131-7 602199-001	J201-01C	RED	407408 CABLE 2	40"	GROUND
318	J131-8 602199-001	J201-01E	YEL	407408 CABLE 2	40"	GROUND
319	J131-9 602199-001	NO CONNECT				

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WIRE	FROM	TO	TYPE	PART	WIRE LEN	REFERENCE
320	J131-10 602199-001	NO CONNECT				

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Chapter 7
PRODUCT SUPPORT

Product Support

Racal Instruments has a complete Service and Parts Department. If you need technical assistance or should it be necessary to return your product for repair or calibration, call 1-800-722-3262. If parts are required to repair the product at your facility, call 1-949-859-8999 and ask for the Parts Department.

When sending your instrument in for repair, complete the form in the back of this manual.

For worldwide support and the office closes to your facility, refer to the Support Offices section on the following page.

Reshipment Instructions

Use the original packing material when returning the 1260-18 to Racal Instruments for calibration or servicing. The original shipping crate and associated packaging material will provide the necessary protection for safe reshipment.

If the original packing material is unavailable, contact Racal Instruments Customer Service for information.

Support Offices

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