

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Aeroflex / Tektronix / CDS 53A-353* at our website: *Click HERE*

SERVICE MANUAL

53A-353

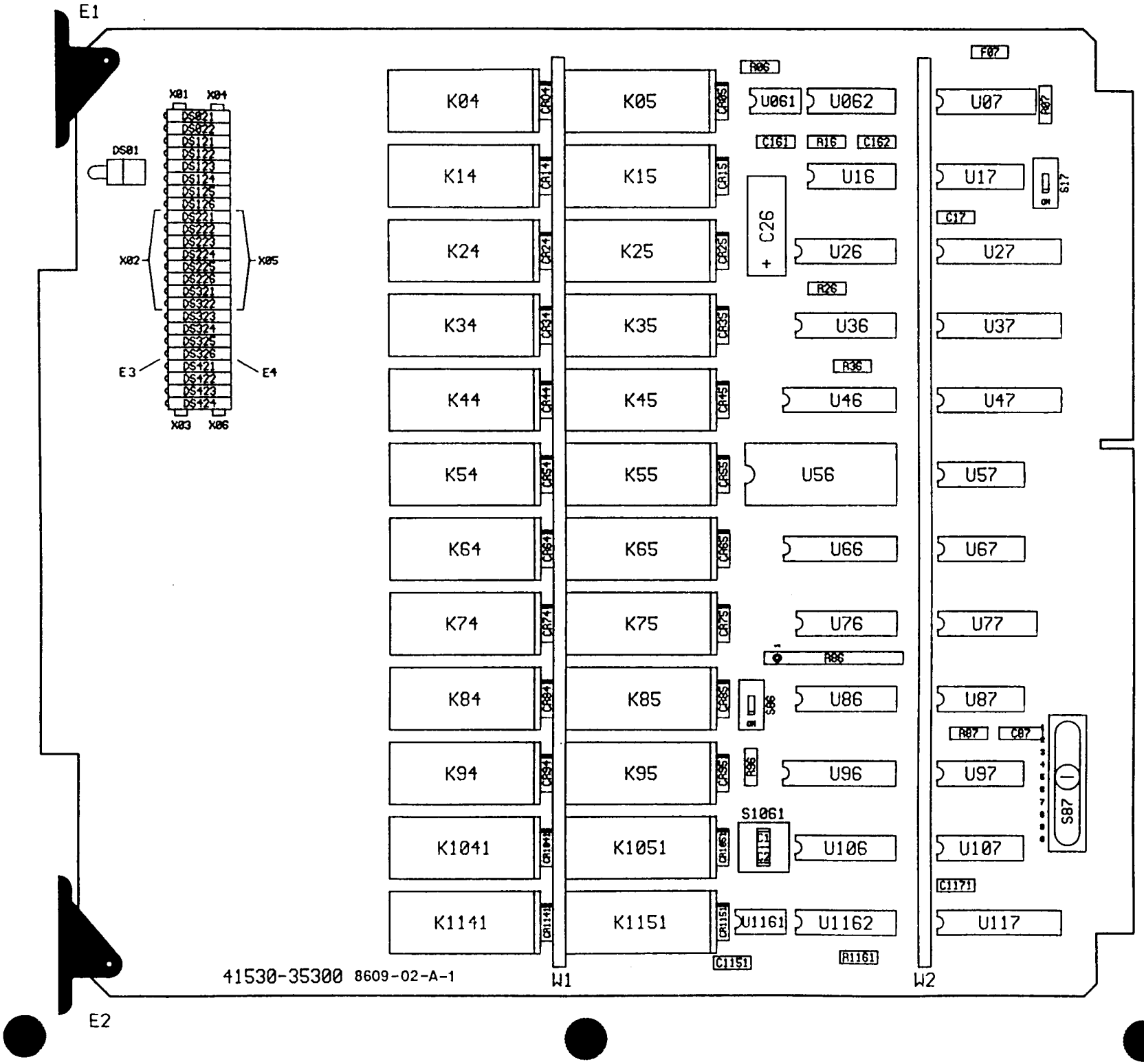
RELAY SWITCHING CARD

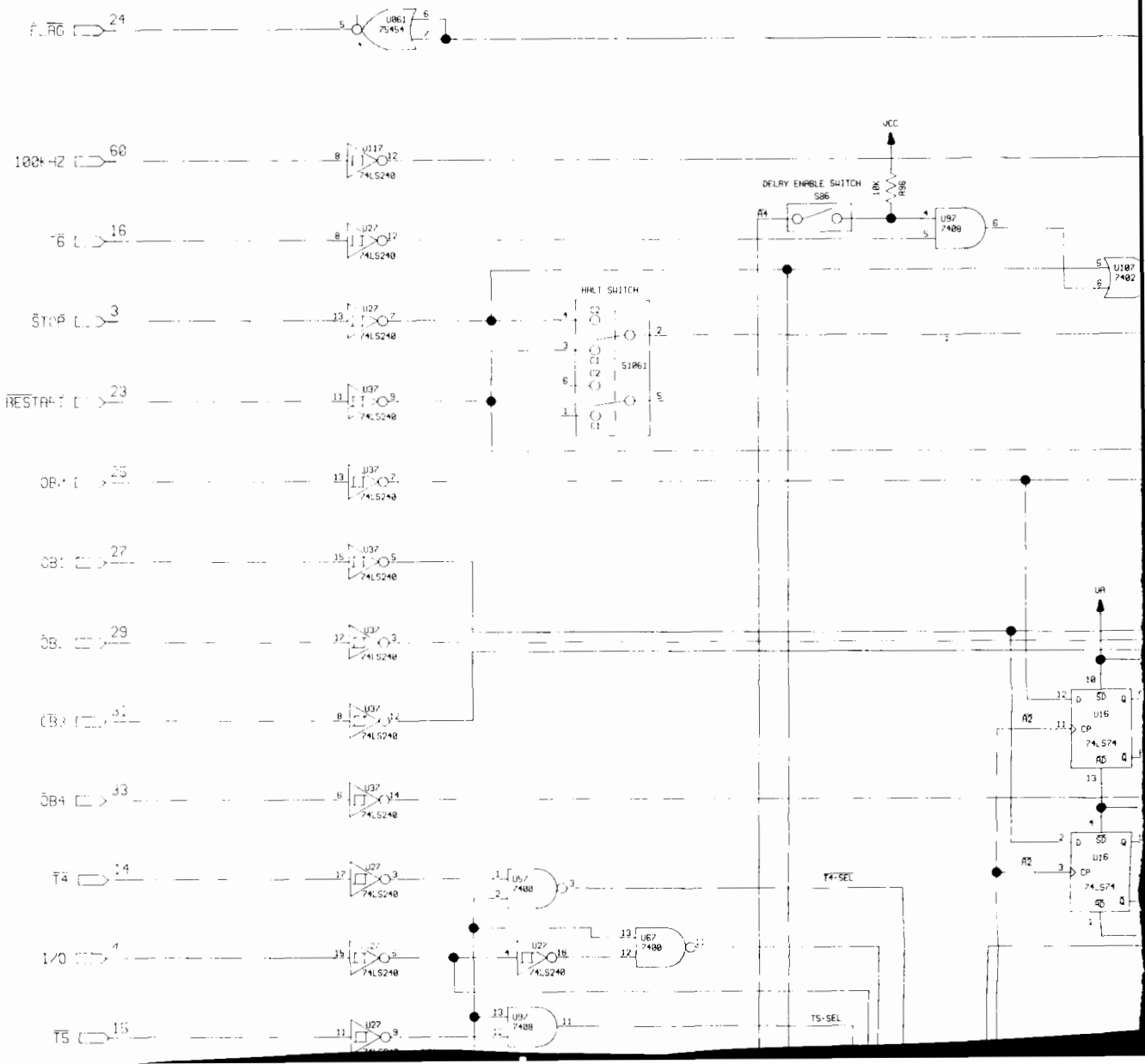
Copyright 1989 Colorado Data Systems, Inc. All rights reserved.
Contents of this publication may not be reproduced in any
form without the written permission of Colorado Data Systems, Inc.

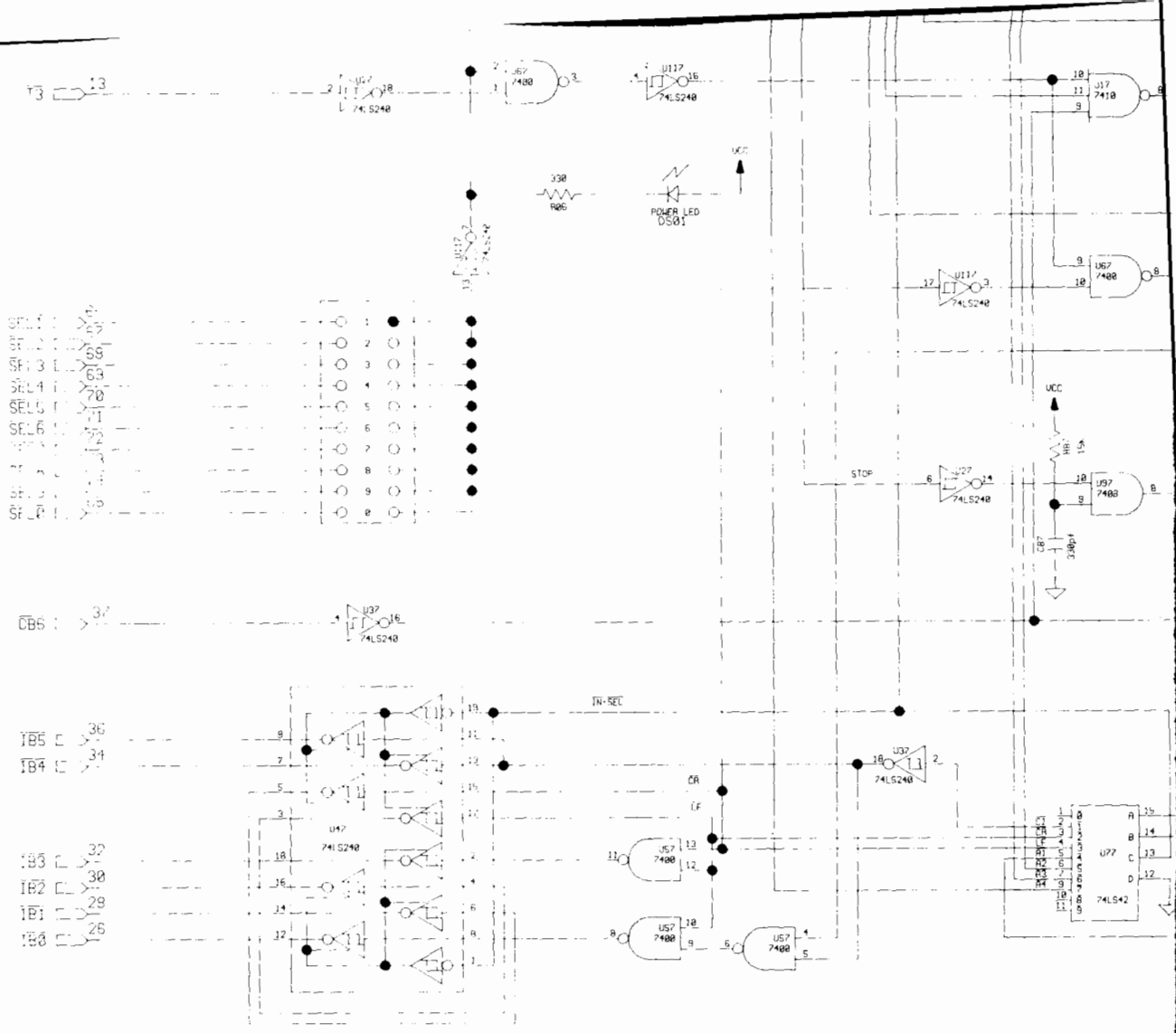
REFERENCE DESIGNATOR	CDS PART NUMBER	QTY.	PART DESCRIPTION	MFG. NUM.	MFG. PART NUMBER
C1151,1171,161,17	20128-10006	4	CAP FXD CER .1UF 80% -20% 50VDCW	0106	1C20Z5U104Z050B
C162	20128-47006	1	CAP FXD CER .47UF 20% 50VDCW	0075	RPE123Z5U474M50V
C26	21018-15009	1	CAP FXD ELECT 150UF 75% -10% 16VDCW	0025	NLW 150-16
C87	21528-33003	1	CAP FXD MICA 330PF 5% 500VDCW	0025	CD7CA331J03
CR04,05,1041,1051,1141,1151,14 15,24,25,34,35,44,45,54,55,64,65 74,75,84,85,94,95	32000-04148	24	DIODE SILICON 75V 1A 5%	0041	1N4148
DS01	32000-00103	1	DIODE LIGHT EMITTING RED 50MA	0039	550-0103
DS021,022,121,122,123,124,125 126,221,222,223,224,225,226,321 322,323,324,325,326,421,422,423 424	32000-02003	24	DIODE LIGHT EMITTING RED WITH RESISTOR 0	0039	547-2003
E1	40401-00353	1	EJECTOR STAMP 53A-353 STYLE B BLUE	0026	40401-00353
E2	40401-10010	1	EJECTOR STAMP RELAY STYLE D BLUE	0026	40401-10010
E3	45050-03287	1	DCL LED 24POS DRW 00000-00549	0026	45050-03287
E4	45050-03288	1	DCL LED 24POS BLK DRW 00000-00550	0026	45050-03288
F07	42202-52001	1	FUSE SUB-MIN 2AMP	0061	251002
K04,05,1041,1051,1141,1151,14,15 24,25,34,35,44,45,54,55,64,65,74 75,84,85,94,95	83500-20003	24	RELAY 2-A 2-B POLARIZED 130 OHM 5V	0013	S2EB5V
PCB	41530-35300	1	P.C. BOARD VERSION 8609	0026	41530-35300
R06	10117-33003	1	330 OHM RES COMP 1-4W 5%	0087	R25J-330-5%
R07,96	10117-10005	2	10K RES COMP 1-4W 5%	0087	R25J-10K-5%
R1161,26,36	10117-33004	3	3.3K RES COMP 1-4W 5%	0087	R25J-3.3K-5%
R16	10117-22003	1	220 OHM RES COMP 1-4W 5%	0087	R25J-220-5%
R86	12008-33004	1	3.3K RES NETWORK SIP 5% 1.5W 9-PKG	0027	750-101-R3.3K

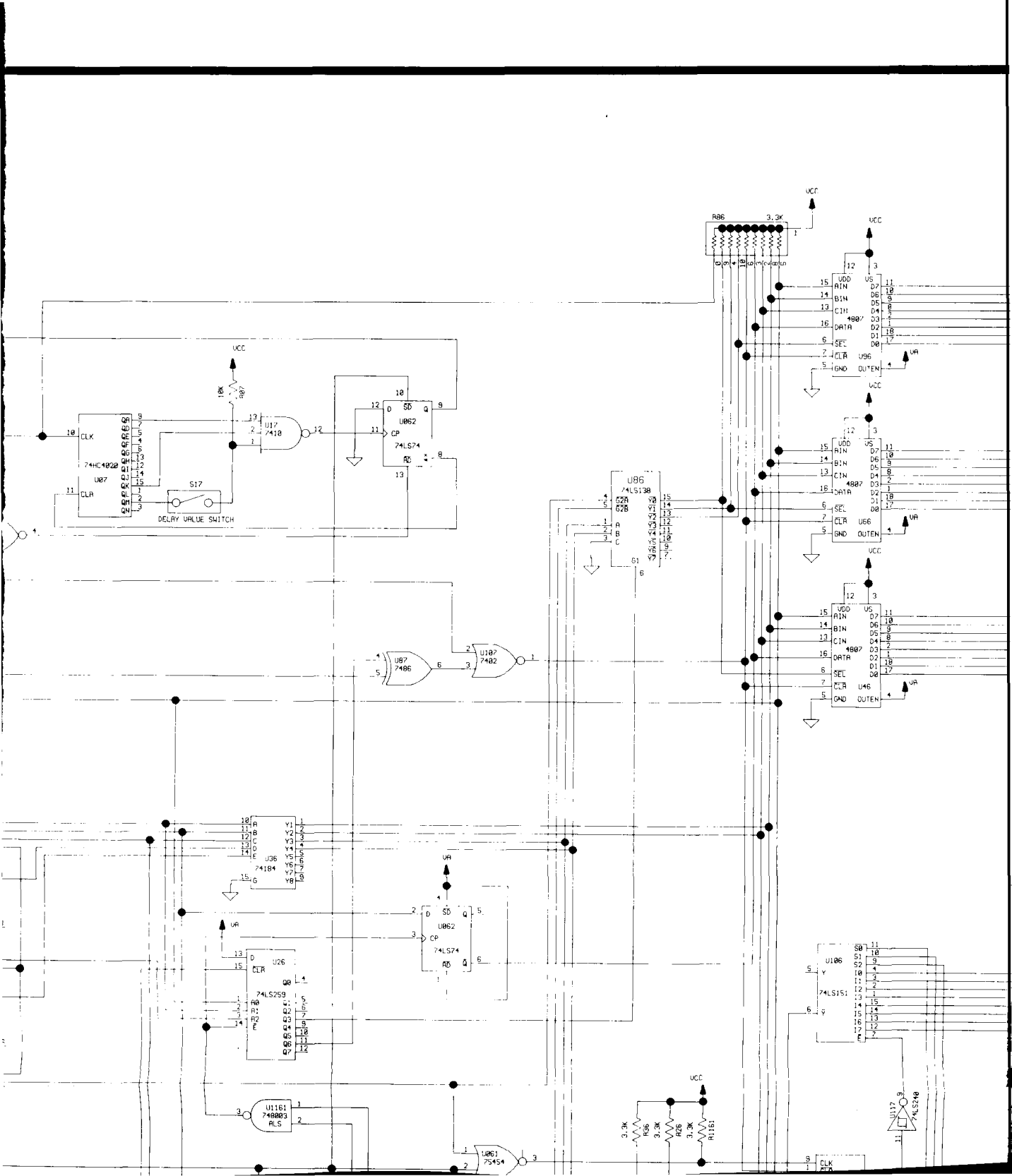
REFERENCE DESIGNATOR	CDS PART NUMBER	QTY.	PART DESCRIPTION	MFG. NUM.	MFG. PART NUMBER
R87	10117-15005	1	15K RES COMP 1-4W 5%	0087	R25J-15K-5%
S1061	42050-10121	1	SWITCH DIP 1POS DPDT	0048	76SD01S
S17,86	42050-10101	2	SWITCH DIP 1POS SPST	0093	JS-8794-01
S87	42050-10010	1	SWITCH 10POS.	0101	C42315-A61-A11
U061	73405-75454	1	IC 2-INPUT OR DRIVER	0107	75454B
U062,16	73001-07474	2	IC TTL LS DUAL D-TYPE EDGE TRIG FLIP-FLOP	0107	74LS74A
U07	73308-74020	1	IC HCMOS 14-STG BINARY COUNTER	0107	74HC4020
U106	79005-74151	1	IC TTL LS 1-OF-8 DIGITAL DATA SELECTOR	0107	74LS151
U107	76900-07402	1	IC TTL QUAD 2-INPUT NOR GATE	0107	7402
U1161	76510-74003	1	IC TTL ALS 2-INPUT NAND GATE	0107	74ALS8003AP
U1162	73001-74174	1	IC TTL LS HEX D-TYPE FLIP-FLOP	0107	74LS174
U117,27,37,47	73310-74240	4	IC TTL LS OCTAL BUFFER	0107	74LS240
U17	76600-07410	1	IC TTL TRIPLE 3-INPUT NAND GATE	0107	7410
U26	73601-74259	1	IC TTL LS QUAD BISTABLE LATCH	0041	74LS259
U36	71501-74184	1	IC TTL BCD TO BINARY CONVERTER	0078	74184
U46,66,96	73405-04807	3	IC TTL ADDRESSED LATCH DRIVER	0106	UCN-4807A
U56	79004-74150	1	IC TTL 1-OF-16 DATA SELECTOR-MUX	0107	74150
U57,67	76600-07400	2	IC TTL QUAD 2-INPUT NAND GATE	0107	7400
U76	71200-74161	1	IC TTL LS SYNCH 4-BIT COUNTER	0107	74LS161A
U77	79001-07442	1	IC TTL LS 4-LINE TO 10-LINE DECODER	0107	74LS42
U86	79006-74138	1	IC TTL LS 3-TO-8 LINE DECODER-MUX	0107	74LS138
U87	77800-07486	1	IC TTL QUAD 2-INPUT EXCLUSIVE OR GATE	0107	7486

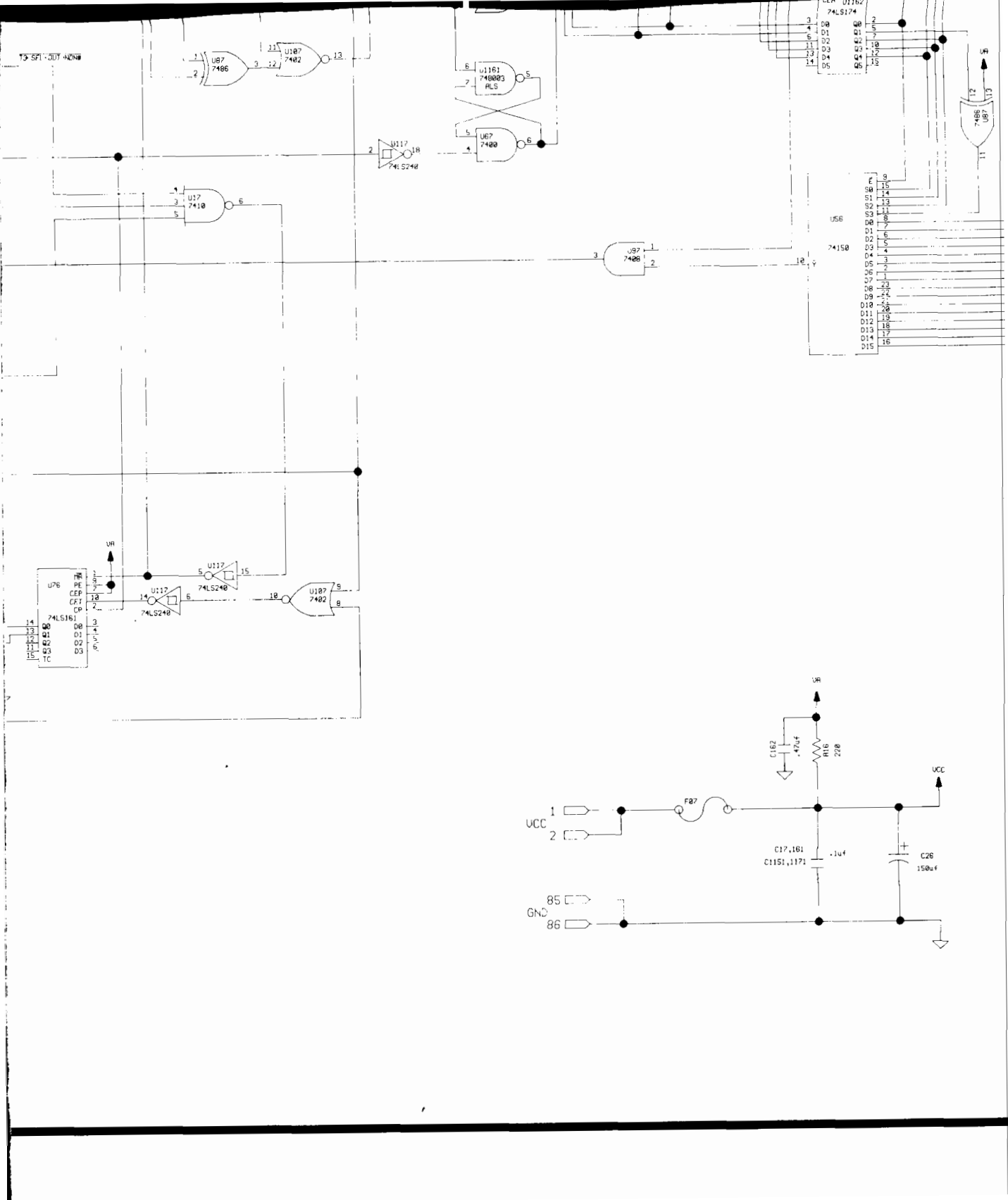
REFERENCE DESIGNATOR	CDS PART NUMBER	QTY.	PART DESCRIPTION	MFG. NUM.	MFG. PART NUMBER
U97	77200-07408	1	IC TTL QUAD 2-INPUT AND GATE	0107	7408
W1,2	93517-75398	2	BUS BAR P.6 F.3 X11 L7.05	0090	M-833 11.6.3
X01,02,03,04,05,06	45010-08100	6	SOCKET SIP 8 PIN	0032	CAS-08VSC-12B

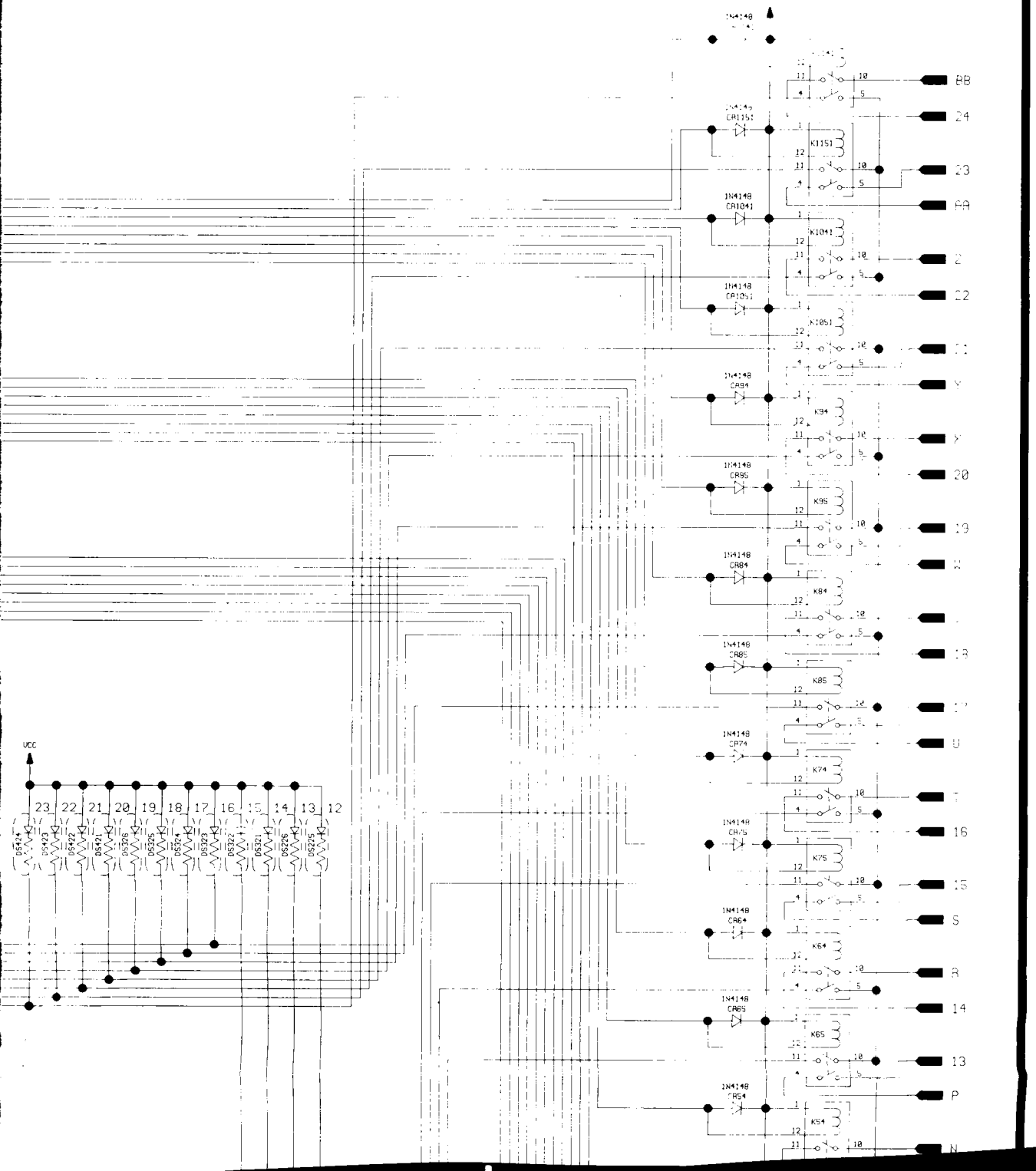

E1
E2
E3
E4
X01
X04
X02
X05
X03
X06
DS01
K04
K05
K14
K15
K24
K25
K34
K35
K44
K45
K54
K55
K64
K65
K74
K75
K84
K85
K94
K95
K1041
K1051
K1141
K1151
U061
U062
U16
U17
U26
U27
U36
U37
U46
U47
U56
U57
U66
U67
U76
U77
U86
U87
U96
U97
U106
U107
U1161
U1162
U117
U07
C26
S1061
S87
41530-35300 8609-02-A-1
W1
W2

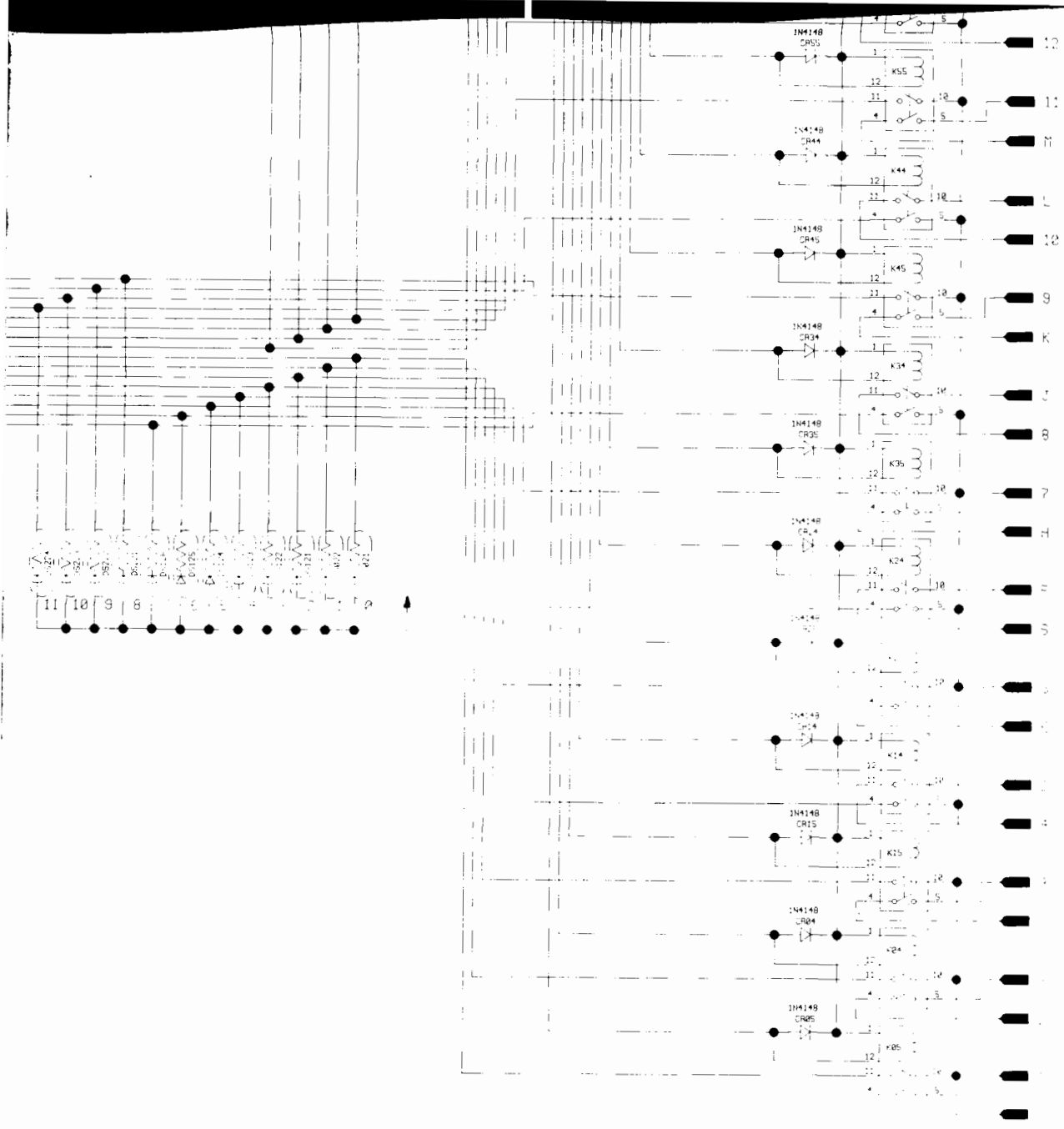

FLAG
24
100KHZ
60
16
STOP
3
23
25
27
29
33
14
I/O
4
15
U861
75454
U117
74LS240
U27
U37
VCC
DELAY ENABLE SWITCH
S86
10K
R98
U97
7408
U107
7402
HALT SWITCH
S1R61
T4-SEL
TS-SEL
U67
U9/
U16
74LS74


T3
U47
74LS240
U67
7400
U117
74LS240
U17
7410
330
R06
POWER LED
DS01
VCC
U117
74LS240
U67
7400
SEL1
SEL2
SEL3
SEL4
SEL5
SEL6
SEL7
SEL8
SEL9
SEL0
69
68
63
70
71
72
CBS
U37
74LS240
IB5
IB4
IB3
IB2
IB1
IB0
36
34
32
30
29
26
U47
74LS240
IN-SEC
CR
CF
U57
7400
U57
7400
U57
7400
U32
74LS240
STOP
U27
74LS240
VCC
1K
U27
7400
C87
330pf
U77
74LS42


VCC
R86
3.3K
U96
U66
U46
4807
U86
74LS138
U07
74HC102
S17
DELAY VALUE SWITCH
U17
7410
U062
74LS74
U87
7486
U107
7402
U36
74184
U26
74LS259
U106
74LS151
U161
74LS03
ALS
U061
75454
R36
R26
R161
U117
74LS240


U87 7486
U107 7402
U1161 74LS123 RLS
U67 7400
U117 74LS240
U17 7410
U97 7408
U56 74150
74LS174
U76 74LS161
VA
VB
VCC
GND
F87
C162 .47uf
R16 220
C17,161 C1151,1171 .1uf
C26 150uf


VCC
23 22 21 20 19 18 17 16 15 14 13 12
DS424
DS423
DS422
DS421
DS326
DS325
DS324
DS323
DS322
DS321
DS226
DS225
1N4148
CR1151
K1151
1N4148
CR1041
K1041
1N4148
CR1051
K1051
1N4148
CR94
K94
1N4148
CR95
K95
1N4148
CR84
K84
1N4148
CR85
K85
1N4148
CR74
K74
1N4148
CR75
K75
1N4148
CR64
K64
1N4148
CR65
K65
1N4148
CR54
K54
BB
24
23
AA
2
22
11
Y
X
20
19
W
J
18
17
U
T
16
15
S
R
14
13
P
N



REVISION LEVEL	ECO #
8507-01 A	[illegible]
8509-02 A	[illegible]
8529-22-A-1	644

COLORADO
DATA
SYSTEMS

COPYRIGHT© 1989 CDS
ALL RIGHTS RESERVED

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP