

AD-4532A

HIGH SPEED DIGITAL INDICATOR

TECHNICAL INFORMATION

Tech-AD-4532A-v.1.a 94/10/26 HYM

AD-4532A

Contents

Electronic Circuit Parts List

7PZ:2653	Main Board
7PZ:2654	Display Board
7PZ:2655	Power Supply & Interface
7PZ:2717	Analog Out
7PZ:2718	RS232C
7PZ:2780	BCD Out

Electronic Circuit Diagram

PZ:2653	Main Board (Not Incl.)
PZ:2654	Display Board
PZ:2655	Power Supply & Interface
PZ:2717	Analog Out
PZ:2718	RS232C
PZ:2780	BCD Out

Board Component Location

PZ:2653	Main Board
PZ:2654	Display Board
PZ:2655	Power Supply & Interface
PZ:2717	Analog Out
PZ:2718	RS232C
PZ:2780	BCD Out

Exploded View

VIEW for AD4532A

PARTS LIST

7 P Z : 2 6 5 3 (1/2)

CIRCUIT SYMBOL	PARTS NAME	DESCRIPTION	Q' TY
C48, 49 C2, 3, 17, 30, 46 C25, 27, 28 C4~8, 10~13, 29, 31, 34~45, 47	PC : 2 6 5 3 B CC : 0. 0 0 1 U CC : 0. 0 0 1 U - C CC : 0. 0 2 2 U - C CC : 0. 1 U 2 5 V - C	PRINTED CIRCUIT BOARD CAPACITOR 0.001 μ F CAPACITOR 0.001 μ F CAPACITOR 0.022 μ F CAPACITOR 0.1 μ F 25V	1 2 5 3 24
C15 C19~24, 26 C9, 18 C16 C14	CC : 1 0 P - C CC : 1 0 0 P - C CM : HU 1 C 1 0 4 J - C CM : HU 1 H 3 3 2 J - C CM : WU 1 C 2 2 4 J - C	CAPACITOR 10pF CAPACITOR 100pF CAPACITOR 0.1 μ F 16V CAPACITOR 0.0033 μ F 50V CAPACITOR 0.22 μ F 16V	1 7 2 1 1
C32, 33 C1 D1~5 J3 J4	CT : 1 C 1 0 0 - C CT : 1 C 4 R 7 - C DI : MA 1 5 3 A - C JI : 0 5 P - S 2 T 2 - E F JI : 1 1 P - S 2 T 2 - E F	CAPACITOR 10 μ F 16V CAPACITOR 4.7 μ F 20V DIODE CONNECTOR CONNECTOR	2 1 5 1 1
U4 J1, 2 NF1~11 L1 Q4	JS : 1 0 3 2 8 - 0 1 - 4 4 5 JT : 1 7 5 5 4 4 - 9 NF : EX CC ET 1 0 2 U NF : M - 6 2 0 T QT : A 1 2 0 1 Y - C	IC SOCKET CONNECTOR EMI FILTER NOISE FILTER TRANSISTOR 2SA1201Y	1 2 11 1 1
Q2 Q3 Q1 R23 R3~8, 21	QT : C 2 7 1 2 Y - C QT : C 2 8 8 1 Y - C QT : FA 1 L 4 M - C RC : 1 / 1 0 W 1 0 0 J RC : 1 / 1 0 W 1 0 3 J	TRANSISTOR 2SC2712Y TRANSISTOR 2SC2881Y TRANSISTOR FA1L4M RESISTOR 10 Ω 1/10W RESISTOR 10K Ω 1/10W	1 1 1 1 7
R20 R27 R1, 2, 24~26 R17, 22 R9, 10, 15, 16	RC : 1 / 1 0 W 1 5 2 J RC : 1 / 1 0 W 2 2 1 J RC : 1 / 1 0 W 2 2 2 J RC : 1 / 1 0 W 4 7 1 J RC : 1 / 1 0 W 4 7 2 J	RESISTOR 1.5K Ω 1/10W RESISTOR 220 Ω 1/10W RESISTOR 2.2K Ω 1/10W RESISTOR 470 Ω 1/10W RESISTOR 4.2K Ω 1/10W	1 1 5 2 4
R12 R14 R11 R18 R19	RC : 1 / 1 0 W 6 8 1 J RC : 1 / 1 0 W 6 8 3 J RF : RR 1 9 3 RF : 1 D 2 0 K Q F RF : 1 D 5. 6 K Q F	RESISTOR 680 Ω 1/10W RESISTOR 68K Ω 1/10W RESISTOR NETWORK RESISTOR 20K Ω F RESISTOR 5.6K Ω F	1 1 1 1 1
R29 R28 S1 TP1 U8	RF : 2 D 2 7 K R F RF : 2 D 2 7 0 R R F SS : SSS 0 2 2 TM : RCT 0 0 0 0 0 C UA : AD 7 0 6 J R	RESISTOR 27K Ω F RESISTOR 270 Ω F SLIDE SWITCH TEST POINT OPE AMP	1 1 1 1 1

PARTS LIST

7 P Z : 2 6 5 3 (2/2)

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CIRCUIT SYMBOL	PARTS NAME	DESCRIPTION	Q' TY
U10, 14 U11 U16 U9 U1	UA : C 4 0 7 2 G 2 UA : C 8 4 2 G 2 UA : MB 3 7 7 1 F P T UA : OP 0 7 C S 8 UC : D 7 8 C 1 0 G - 1 B	OPE AMP OPEAMP VOLTAGE COMPARATOR OPE AMP CPU	2 1 1 1 1
U5 U12 U13 U3 U2	UC : HC 0 0 F UC : HC 4 0 5 2 F UC : HC 4 0 5 3 F UC : HC 5 7 3 F UC : S - 2 9 1 4 A I F 1 0	HCMOS IC HCMOS IC HCMOS IC HCMOS IC EEPROM	1 1 1 1 1
U6 U7 U15 XT1	UC : 7 S 0 2 F UF : MB 8 7 0 2 0 UR : LT 1 0 0 9 S 8 XT : C 4 C B - 1 4 . 7 4 6 M	HCMOS IC A/D D/A VOLTAGE REGULATOR OSC	1 1 1 1

PARTS LIST

7 P Z : 2 6 5 4

CIRCUIT SYMBOL	PARTS NAME	DESCRIPTION	Q' TY
C2 C1 D1~4	PC : 2 6 5 4 B CC : FK16Y5V1H104 CT : 1D2R2 DA : LM-1 DI : 1S1588	PRINTED CIRCUIT BOARD CAPACITOR 0.1 μ F 50V CAPACITOR 2.2 μ F 20V LED SPACER DIODE	1 1 1 4 4
LED5~8 LED1~4 J1,2 R1~8 K1~4	DL : GL8HD22 DL : HDSP-5501 JT : 174074-9 RC : NAT560R SK : TM1-01	LED RED LED 7SEG CONNECTOR RESISTOR 560 Ω 1/4W KEY SWITCH	4 4 2 8 4
U2 U1	UA : TD62583AP UA : TD62783AP	TRANSISTOR ARRAY TRANSISTOR ARRAY	1 1

PARTS LIST

7 P Z : 2 6 5 5

CIRCUIT SYMBOL	PARTS NAME	DESCRIPTION	Q' TY
C6~9 C10 C1 C4.5	PC: 2 6 5 5 B CC: FK16Y5V1H104 CC: 0. 01U CC: 0. 01U500V CK: SME16VB47	PRINTED CIRCUIT BOARD CAPACITOR 0.1 μ F 50V CAPACITOR 0.01 μ F 50V CAPACITOR 0.01 μ F 500V CAPACITOR 47 μ F 16V	1 4 1 1 2
C2.3 D1.2 J2	CK: SME35VB47 DI: 1S1588 FH: 85PN0819 FS: EAK-2A JI: CL581-0146-1	CAPACITOR 47 μ F 35V DIODE FUSE HOLDER FUSE 2A CONNECTOR	2 2 2 1 1
J3 L1 MP1 L2 Q1.2	JI: 11P-S2T2-EF LL: SU9V-05020 MP: KWD5-1212 NF: ZJY51R5-2P QT: BA1L4M	CONNECTOR COMMON CHOKE COIL AC/DC CONVERTER 5W/12V NOISE FILTER TRANSISTOR BA1L4M	1 1 1 1 2
R1 RL1.2 TP1 U1 U2	RC: 1/21M SL: G6E-134P TM: LC-2-G-0 UR: 7805AHF UR: 79M05HF QA: AC256-1674	RESISTOR 1M Ω 1/2W RELAY TEST POINT VOLTAGE REGULATOR VOLTAGE REGULATOR COOL SHEET	1 2 1 1 1 2
	04: C41095A	PLATE	1

PARTS LIST

7 P Z : 2 7 1 7

CIRCUIT SYMBOL	PARTS NAME	DESCRIPTION	Q' TY
C4~9 C1~3 J1 Q1	PC : 2 7 1 7 CC : FK 1 6 Y 5 V 1 H 1 0 4 CK : SXE 2 5 V B 1 0 J I : CL 5 8 1 - 0 1 4 8 - 7 QF : K 3 0 A T M - Y	PRINTED CIRCUIT BOARD CAPACITOR 0.1 μ F 50V CAPACITOR 10 μ F 25V CONNECTOR FET 2SK30ATM-Y	1 6 3 1 1
Q2 R10 R9 R4 R8	QT : C 1 8 1 5 Y RC : NAT 1 K RC : NAT 1 8 K RF : 1 1 0 K R F RF : 1 5 R R F	TRANSISTOR 2SC1815Y RESISTOR 1K Ω 1/4W RESISTOR 18K Ω 1/4W RESISTOR 110K Ω F RESISTOR 15 Ω F	1 1 1 1 1
R5 R1 R2, 3 R6, 7 VR1	RF : 3 3 0 R R F RF : 3 9 K R F RF : 8 0 0 R R F RF : 9 1 1 6 RV : TM 7 S 1 K	RESISTOR 330 Ω F RESISTOR 39K Ω F RESISTOR 800 Ω F RESISTOR NETWOAK VARIABLE RESISTOR	1 1 2 2 1
VR2 TP1 U2, 3 U1	RV : V 2 0 1 TM : LC - 2 - G - 0 UA : OP 2 9 5 GP UR : TA 7 9 L 0 0 8 P	VARIABLE RESISTOR 200 Ω TEST POINT OPE AMP VOLTAGE REGULATOR	1 1 2 1

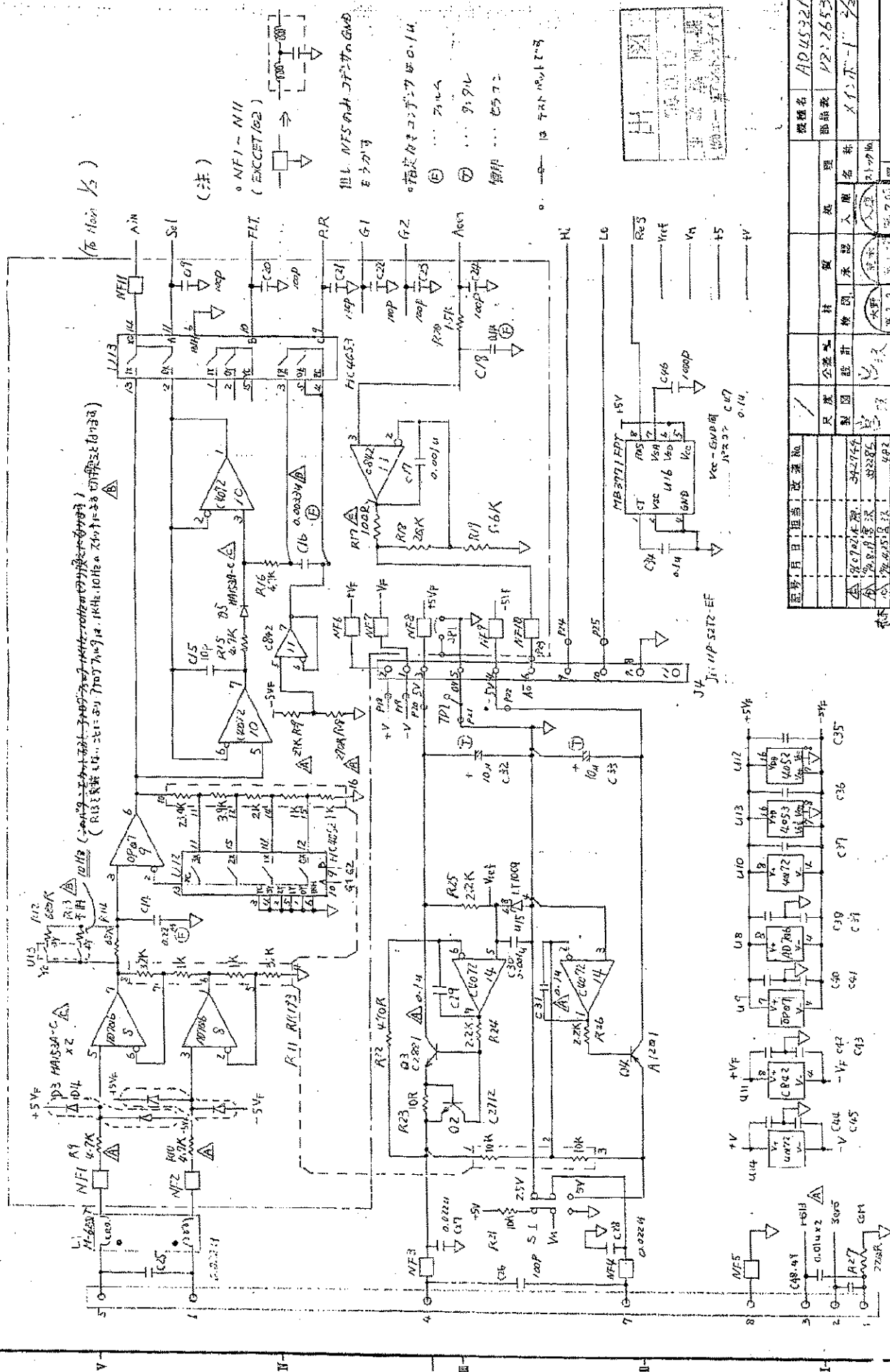
PARTS LIST

7 P Z : 2 7 1 8

7 P Z : 2 7 1 8			
CIRCUIT SYMBOL	PARTS NAME	DESCRIPTION	Q' TY
C2~5 C1 J2 J1	PC : 2 7 1 8 CK : SME 1 6 VB 1 0 CK : SME 1 6 VB 3 3 JA : 1 7 LE - 1 3 2 5 0 JI : 0 5 P - S 2 L 2 - E F	PRINTED CIRCUIT BOARD CAPACITOR 10 μ F 10V CAPACITOR 33 μ F 16V CONNECTOR CONNECTOR	1 4 1 1 1
L1 RI, 2 TP1 U1	NF : D - 4 2 C RC : NAT 1 K TM : LC - 2 - G - 0 UC : MAX 2 3 2 C P E 0 4 : C 4 1 1 0 3	NOISE FILTER RESISTOR 1K Ω 1/4W TEST POINT RS232C PANNEL	1 2 1 1 1

PARTS LIST

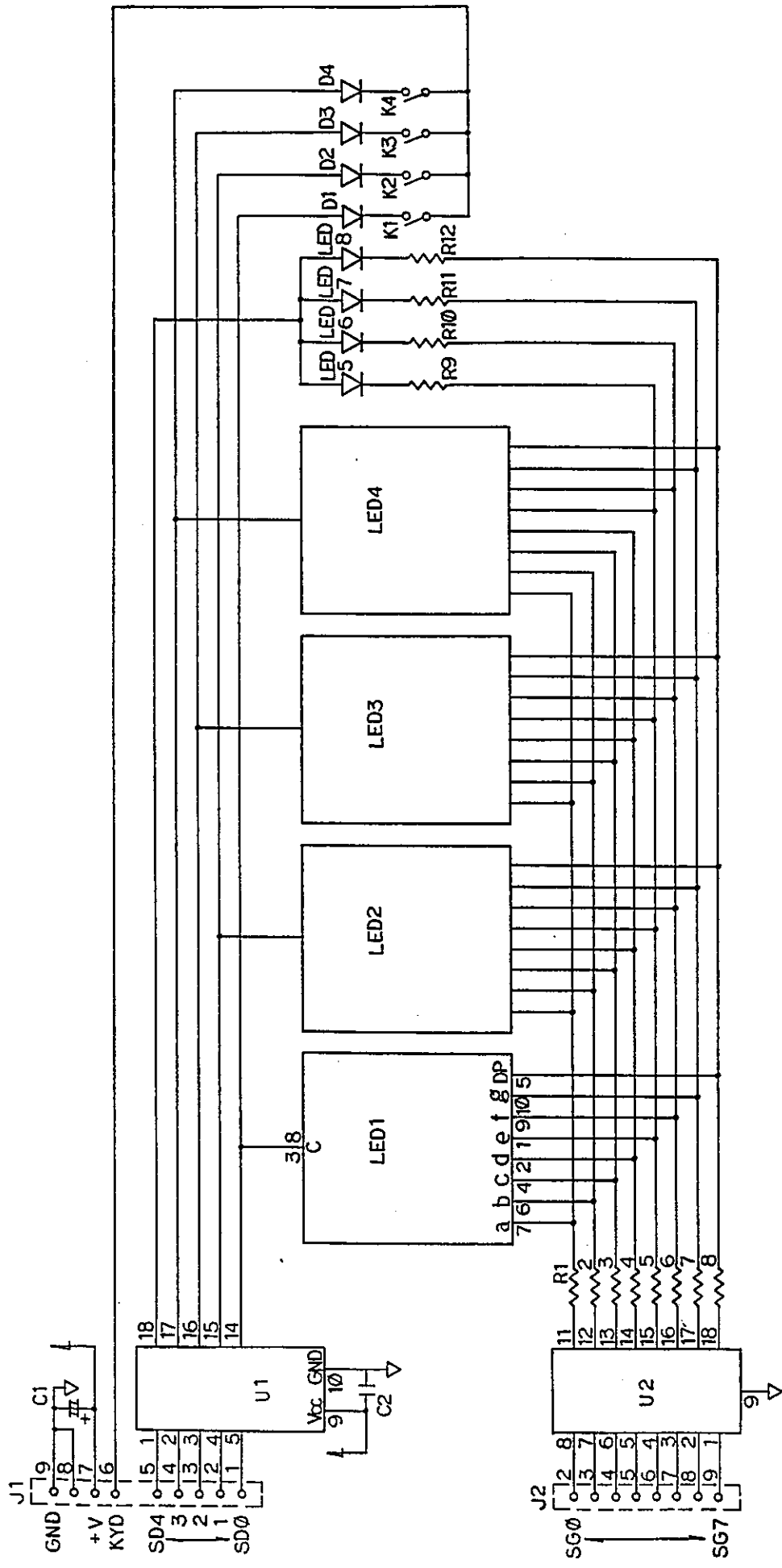
7 P Z : 2 7 8 0			
CIRCUIT SYMBOL	PARTS NAME	DESCRIPTION	Q' TY
C2~7 C10~12 C9 C1	PC : 2 7 8 0 CC : FK 1 6 Y 5 V 1 H 1 0 4 CC : 0 . 0 0 1 U CC : 0 . 0 0 1 U 2 K V CC : 0 . 0 2 2 U	PRINTED CIRCUIT BOARD CAPACITOR 0.1 μ F 50V CAPACITOR 0.001 μ F 50V CAPACITOR 0.001 μ F 2KV CAPACITOR 0.022 μ F 50V	1 6 3 1 1
C8 PHC1~5 J1 J2	CK : SME 1 6 V B 3 3 DF : TLP 6 2 7 - 4 J I : 0 5 P - S 2 L 2 - E F J I : 3 6 5 P 0 2 4 - A G J I : 3 6 0 A 2	CAPACITOR 33 μ F 16V PHOTO CUPPLER CONNECTOR CONNECTOR CONNECTOR ATTACHMENTS	1 5 1 1 2
Q1 R2, 3 R1 R4~6 TP1	QT : BA 1 L 3 M RC : NAT 4 . 7 K RC : NAT 5 6 0 R RN : I HR - 8 - 3 9 2 J A TM : LC - 2 - G - 0	TRANSISTOR BA1L3M RESISTOR 4.7K Ω 1/4W RESISTOR 560 Ω 1/4W RESISTOR NETWORK 3.9K Ω TEST POINT	1 2 1 3 1
U5 U4 U1~3	UC : HC 1 3 2 UC : HC 3 9 3 UC : HC 5 9 5 0 4 : C 4 3 2 9 5	HCMOS IC HCMOS IC HCMOS IC PANNEL	1 1 3 1



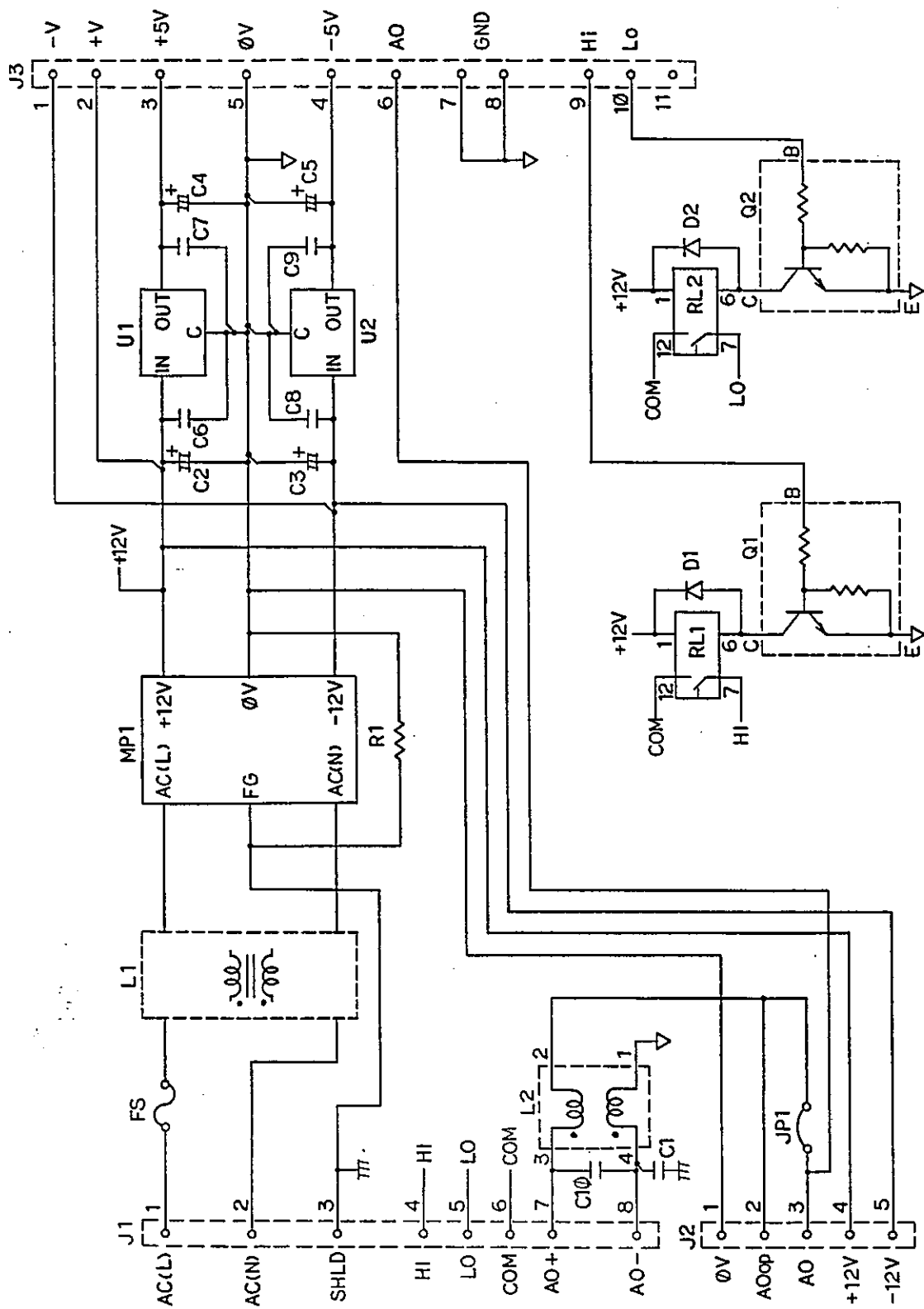
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機種名	AP453211
部品表	12:2653
図名	12:2653
図番	12:2653
規格	EC-01711E ^{2/2}
適用ロット	G1283430

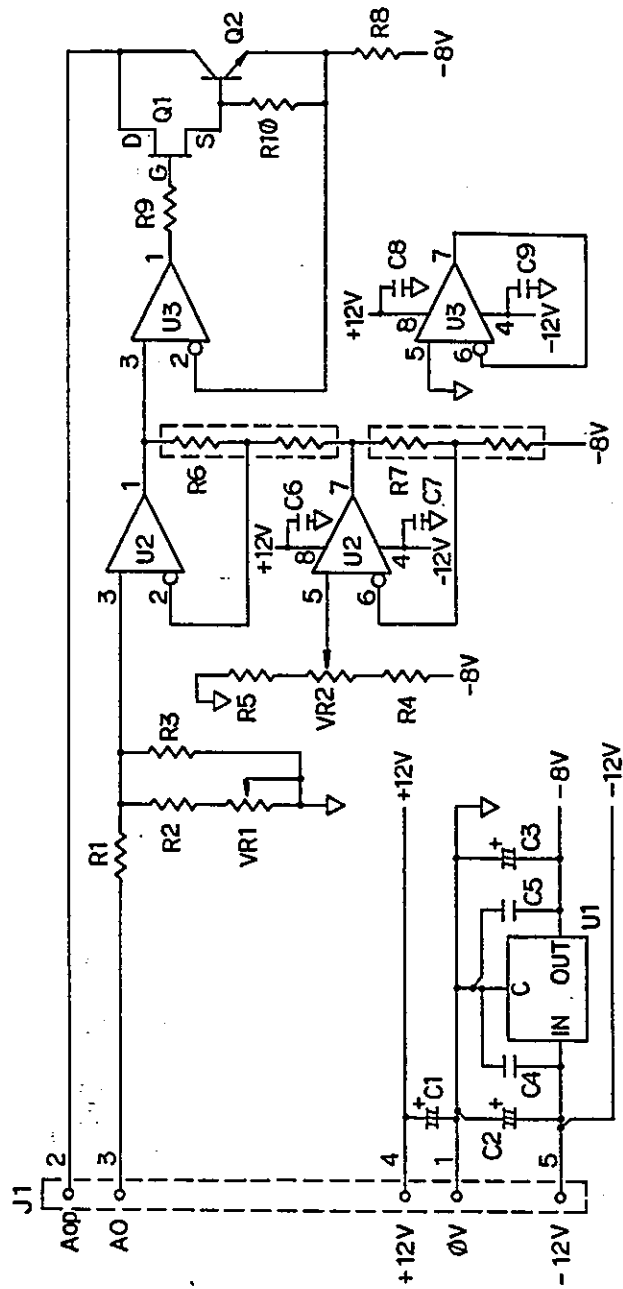
A&D CO., LTD.



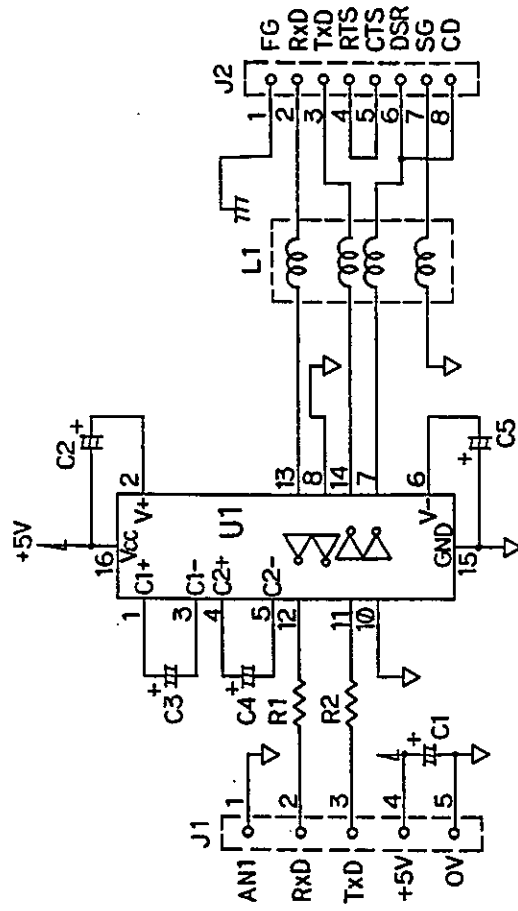
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Stock No.	PZ:2654
Drwg. No.	EC3-01712



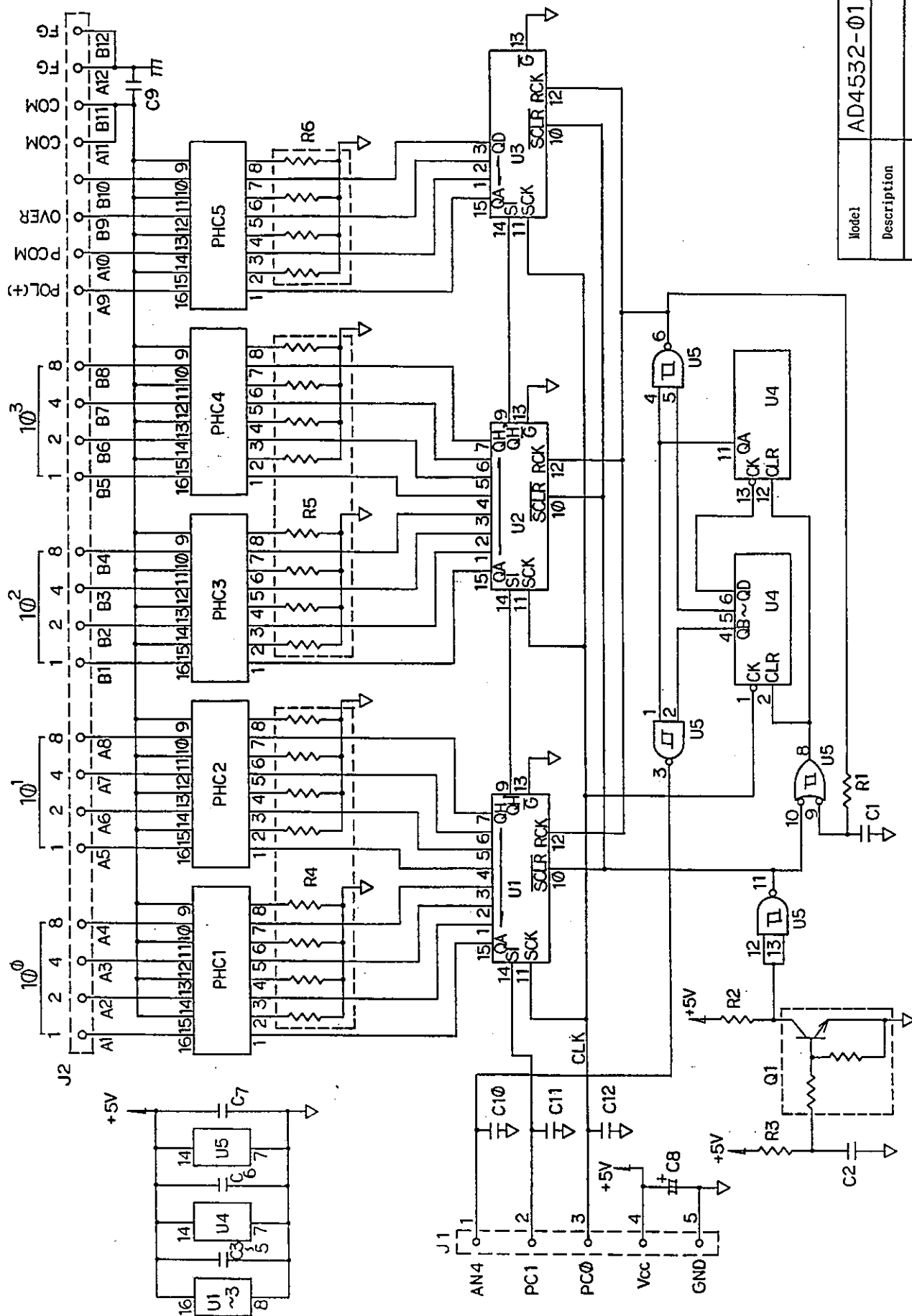
Model	AD4532A
Description	
Stock No.	PZ:2655
Drawg. No.	EC3-01713C



Model	AD4532-07
Description	
Stock No.	PZ:2717
Drwg. No.	EC4-00282A

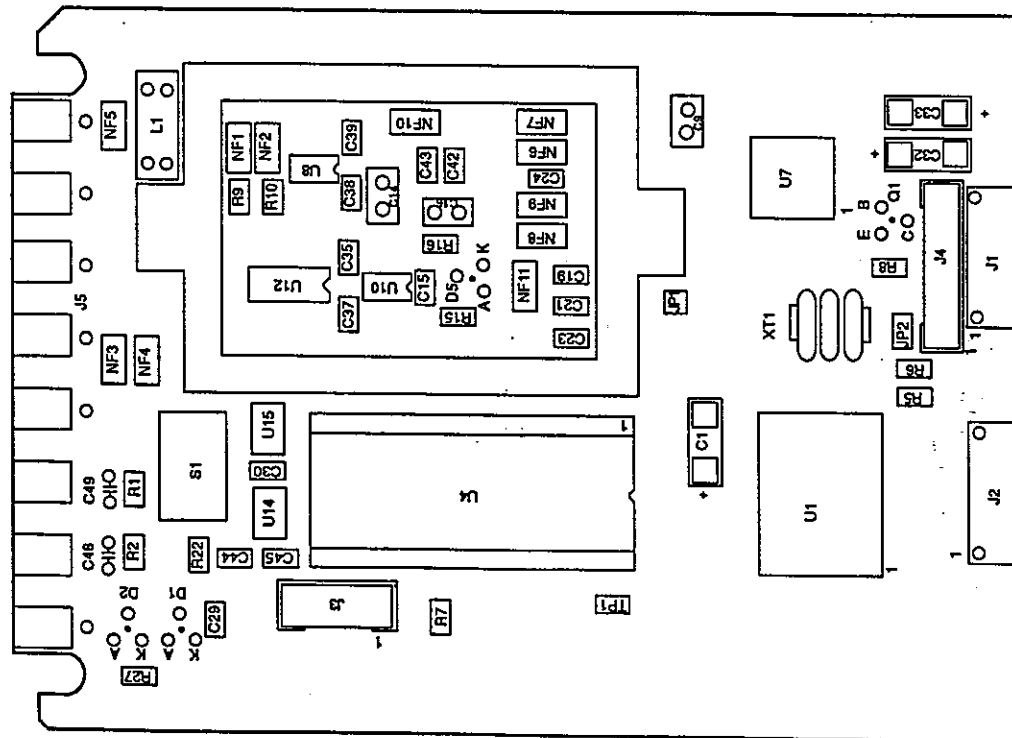


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Description	
Stock No	PZ:2718
Drwg. No	EC4-00283

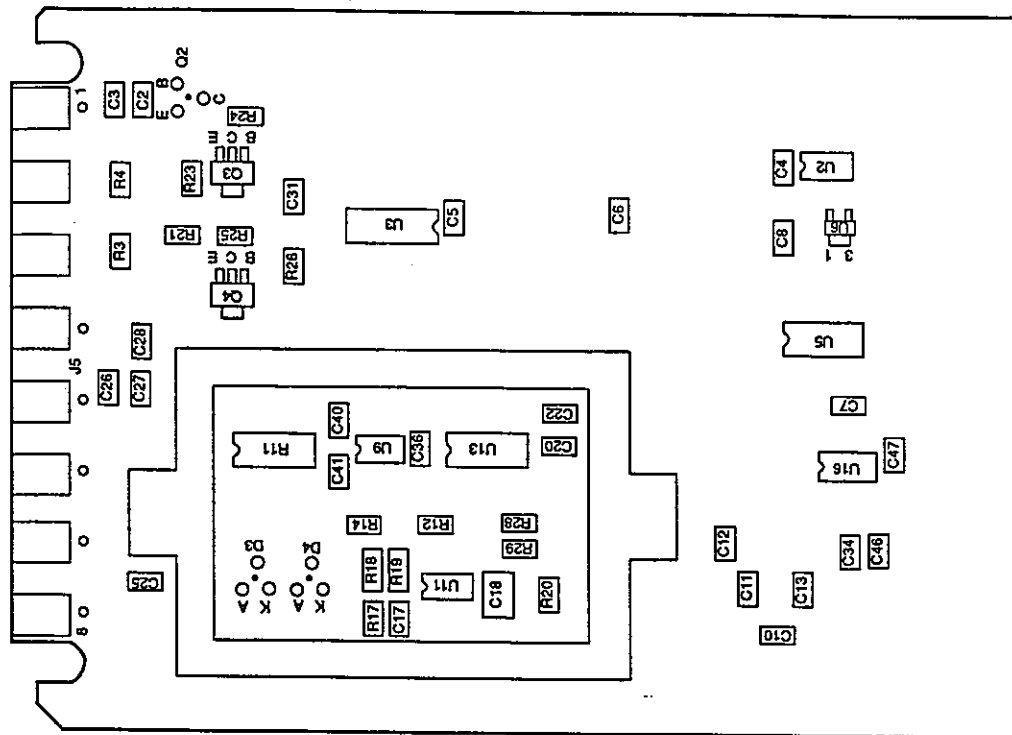


Model	AD4532-01
Description	
Stock No	PZ:2780
Drwg. No	QD-EC3-000005

A&D CO., LTD.

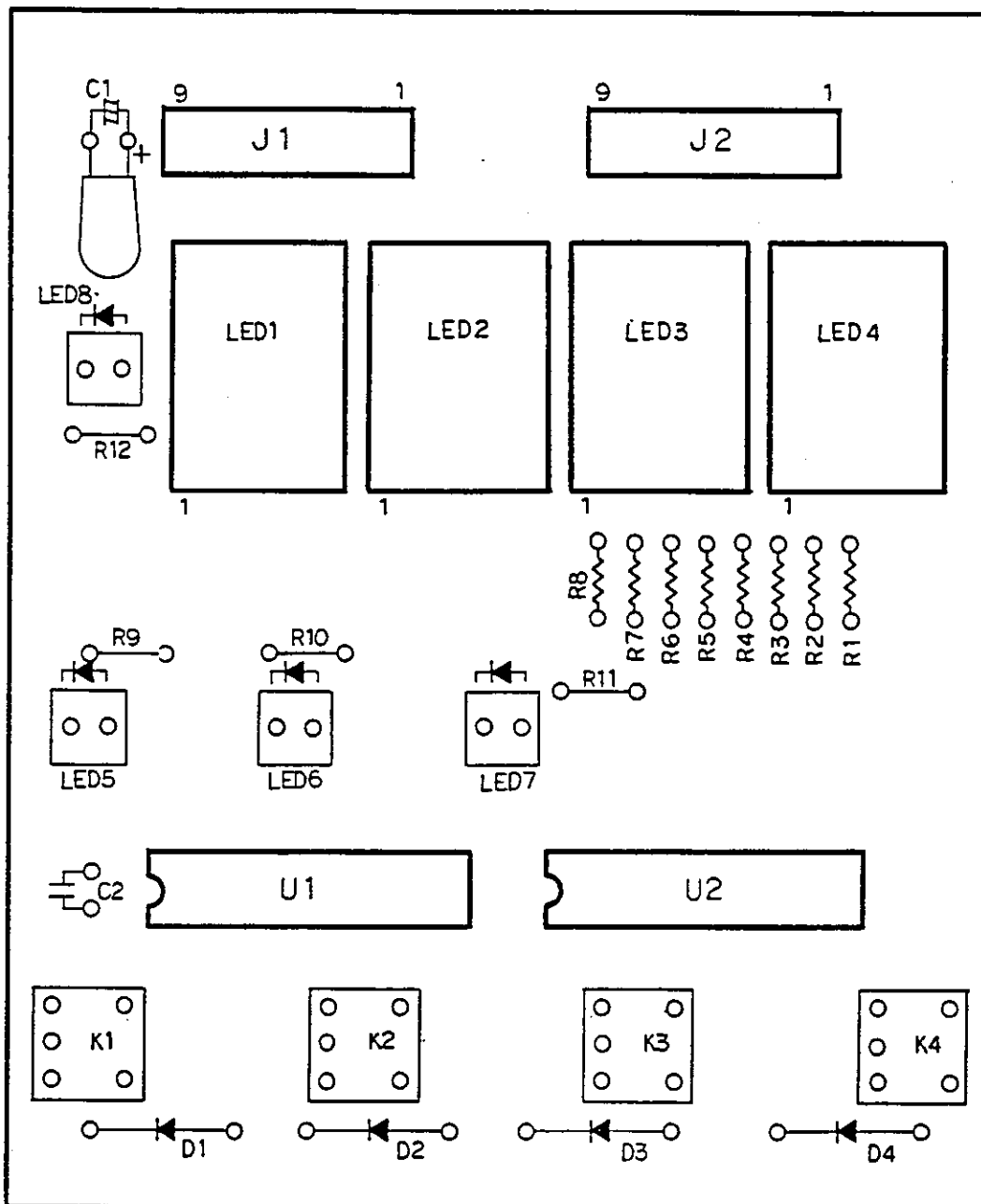


SIDE A



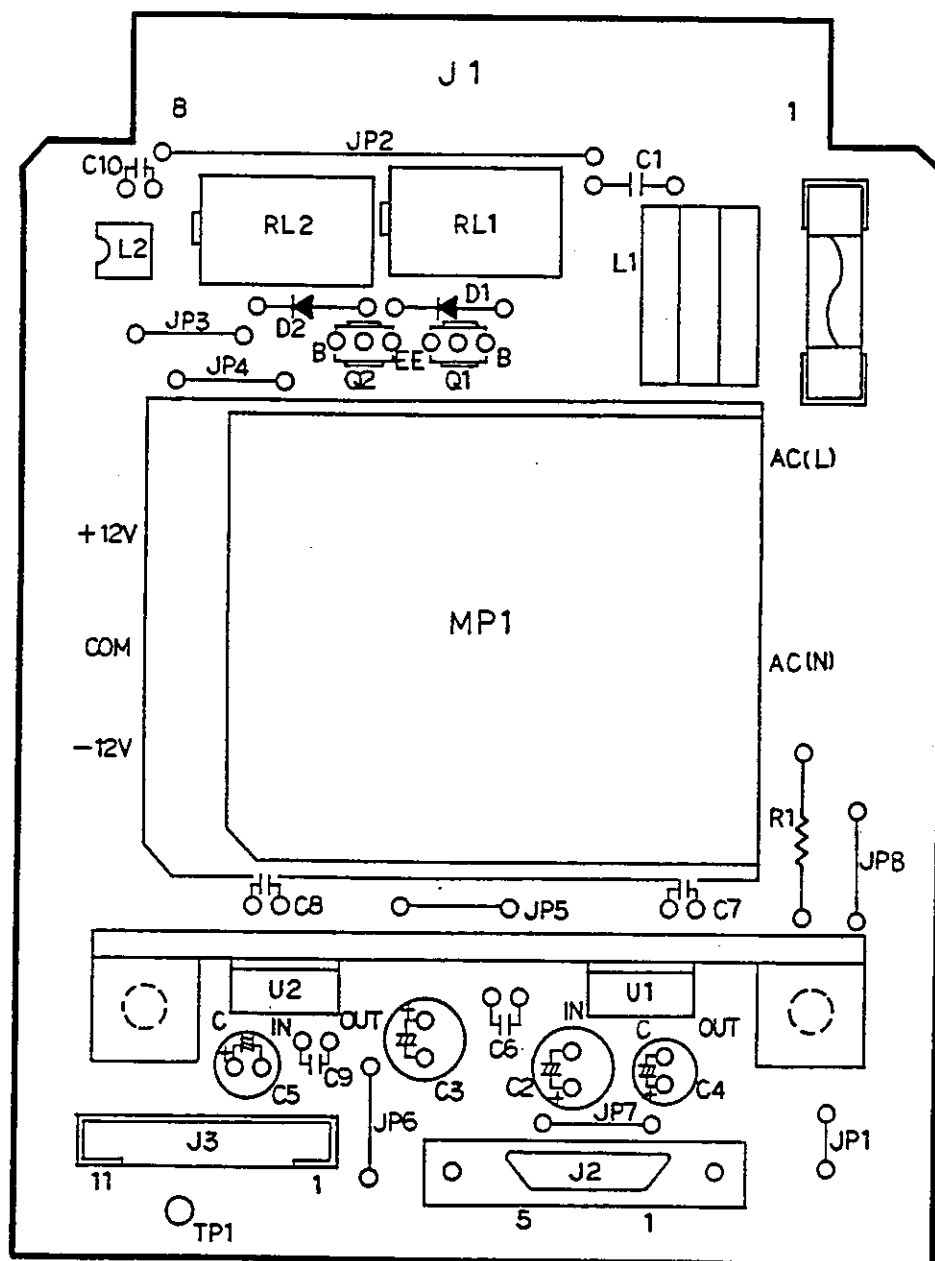
SIDE B

Model	AD4532A
Description	
Stock No.	PZ:2653
Drwg. No.	KZ2-00519D



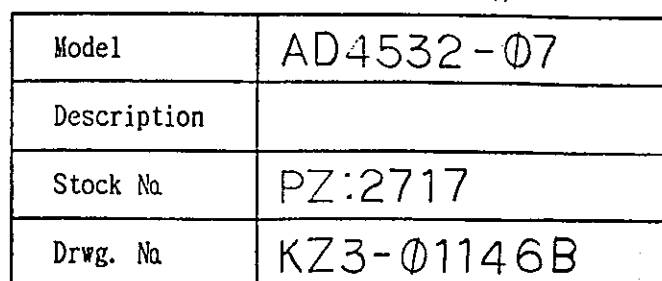
Model	AD4532A
Description	
Stock No	PZ:2654
Drwg. No	KZ3-01148D

A&D CO., LTD.

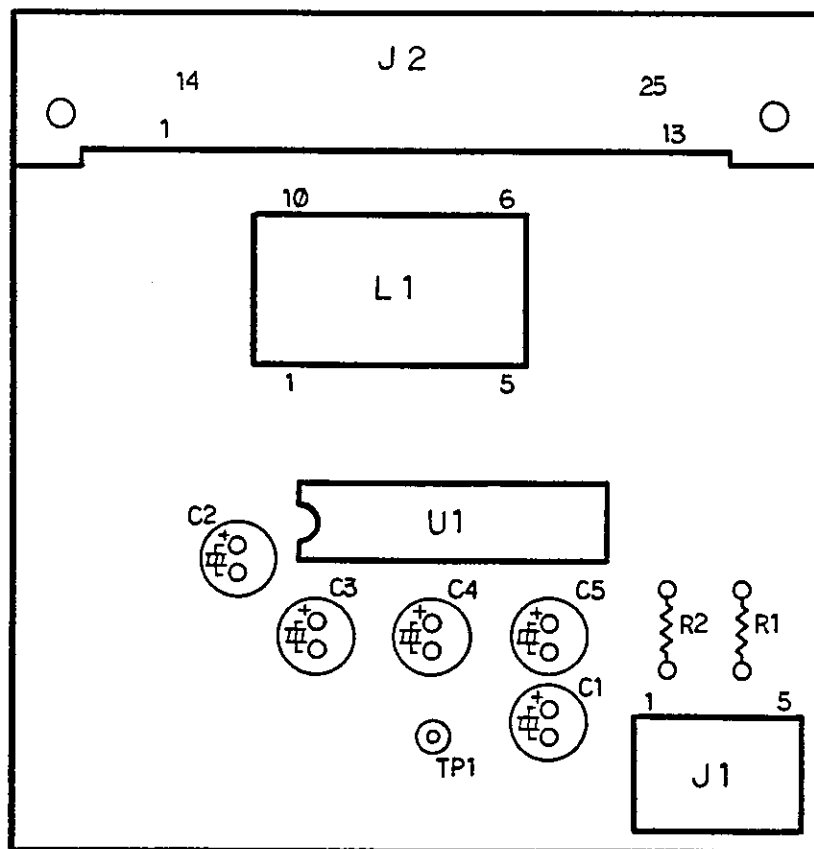


Model	AD4532A
Description	
Stock No	PZ:2655
Drwg. No	KZ3-01160B

A&D CO., LTD.

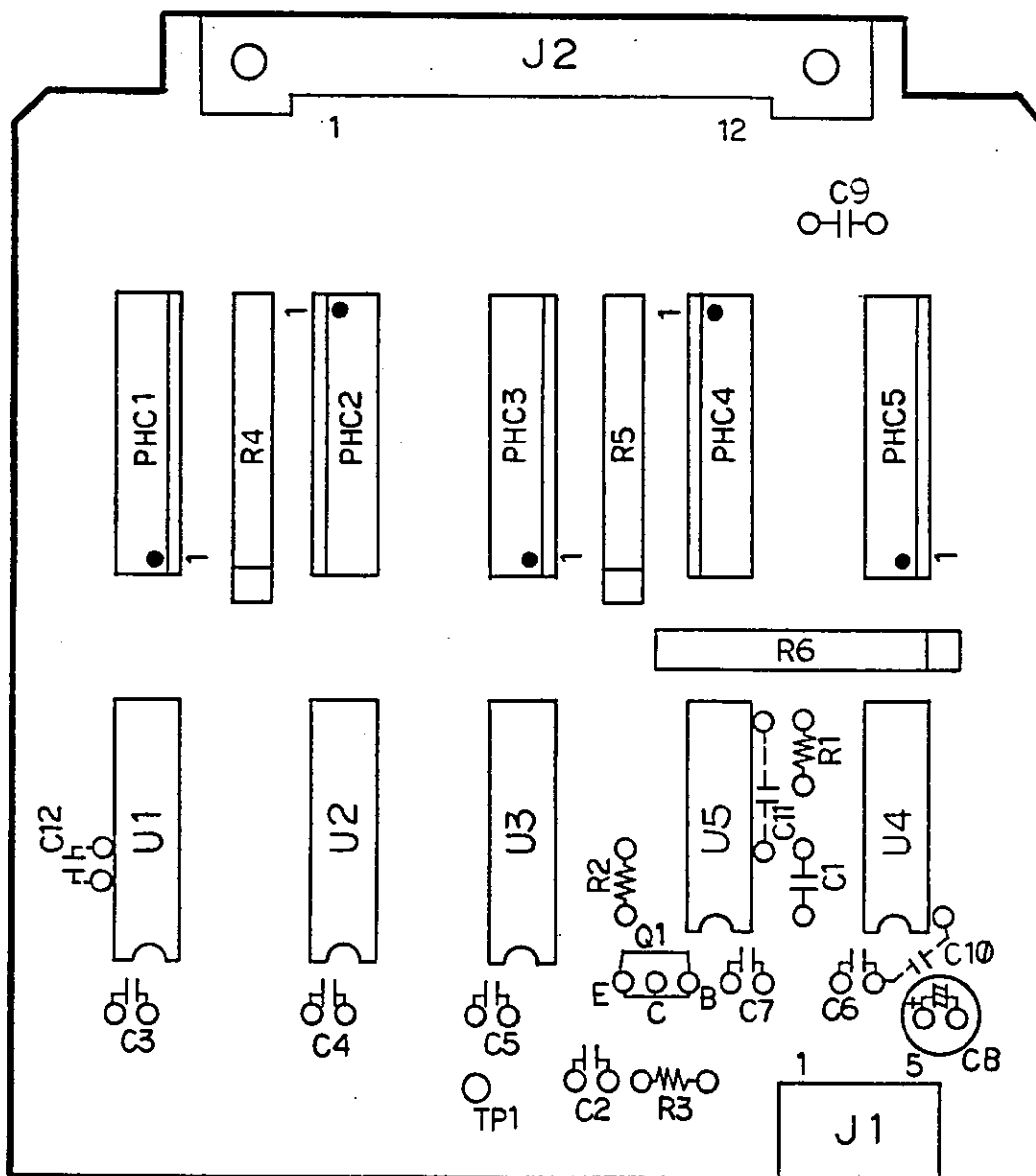


A&D CO., LTD.



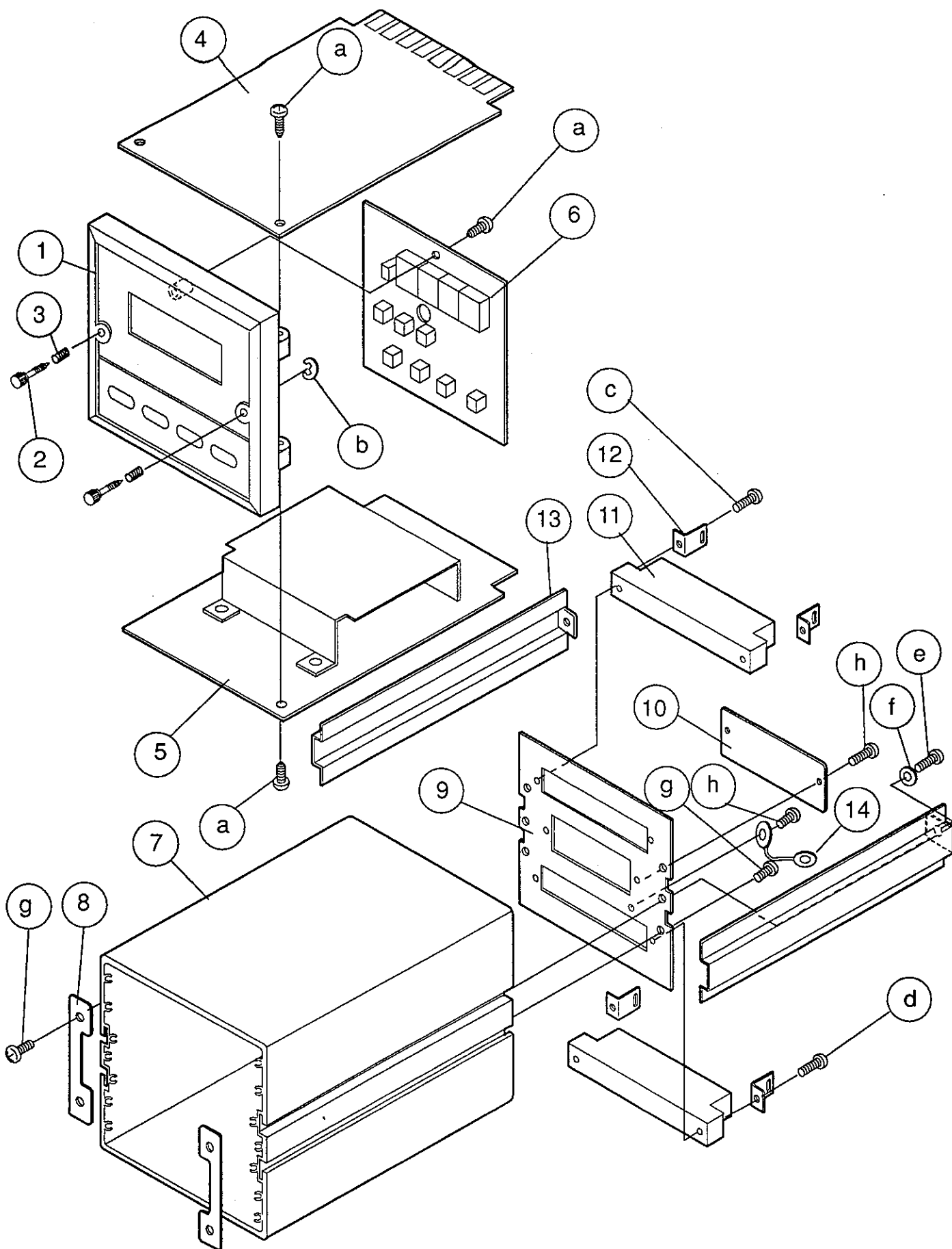
Model	AD4532-04
Description	
Stock No	PZ 2718
Drwg. No	KZ3-01145

A&D CO., LTD.



Model	AD4532-01
Description	
Stock No.	PZ:2780
Drwg. No.	KZ3-01179A

A&D CO., LTD.



**EXPLODED VIEW
AD-4532A**

A D - 4 5 3 2 A

NO.	PARTS NAME	DESCRIPTION
1	07:A21513A	FRONT PANEL
2	05:C41844	LOCK SCREW M4
3	00:C41845	LOCK SPRING
4	PZ:2653	MAIN BOARD
5	PZ:2655	BATTERY BOARD
6	PZ:2654	DISPLAY BOARD
7	05:C41090A	CASE
8	04:C41088	FRONT
9	04:C41091A	REAR PANEL
10	04:C41096A	BLANK PANEL
11	TM:F5009-8P	TERMINAL
12	04:C41098	TERMINAL PARTS
13	04:C41092A	SLIDE RAIL
14	KO:367W3Y/G3.50	GROUND CABLE
a		TAPPING SCREW M3×8
b		E RING
c		BINDING HEAD M3×12
d		BINDING HEAD M3×20
e		TRUSS HEAD M4×12
f		NYLON WASHER M4
g		S TYTE M4×6
h		PAN HEAD WITH WASHER AND SPRING WASHER M3×6

