

tangent

Service manual

EXEO CDP

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SPECIFICATIONS

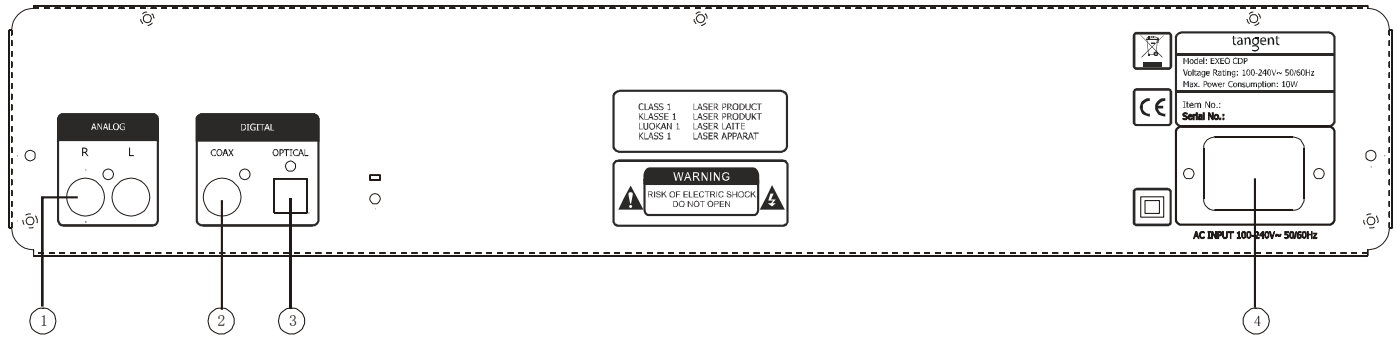
Compatible disc types	CD-DA/CD-R/CD-RW
Output voltage	2V +/-0.2V
Frequency response	20 Hz~20 KHz
Channel balance	<2.0 dB
Separation channel	>60 dB
Harmonious ratio (THD +noise)	<0.05%
Signal/noise ratio	>90 dB
Voltage and power consumption	100-240V ~ 50/60Hz
Dimensions (WxDxH)	430 x 240 x 80 mm

***Design and specifications are subject to change without notice.**

[PL 2010-04-28] Pending

Fortex 2010-04-29: Will wait for further information.

REAR PANEL INFORMATION



1. ANALOG

For connection to an amplifier e.g. EXEO AMP

2. COAX

Coaxial (75Ω) SPDIF output.

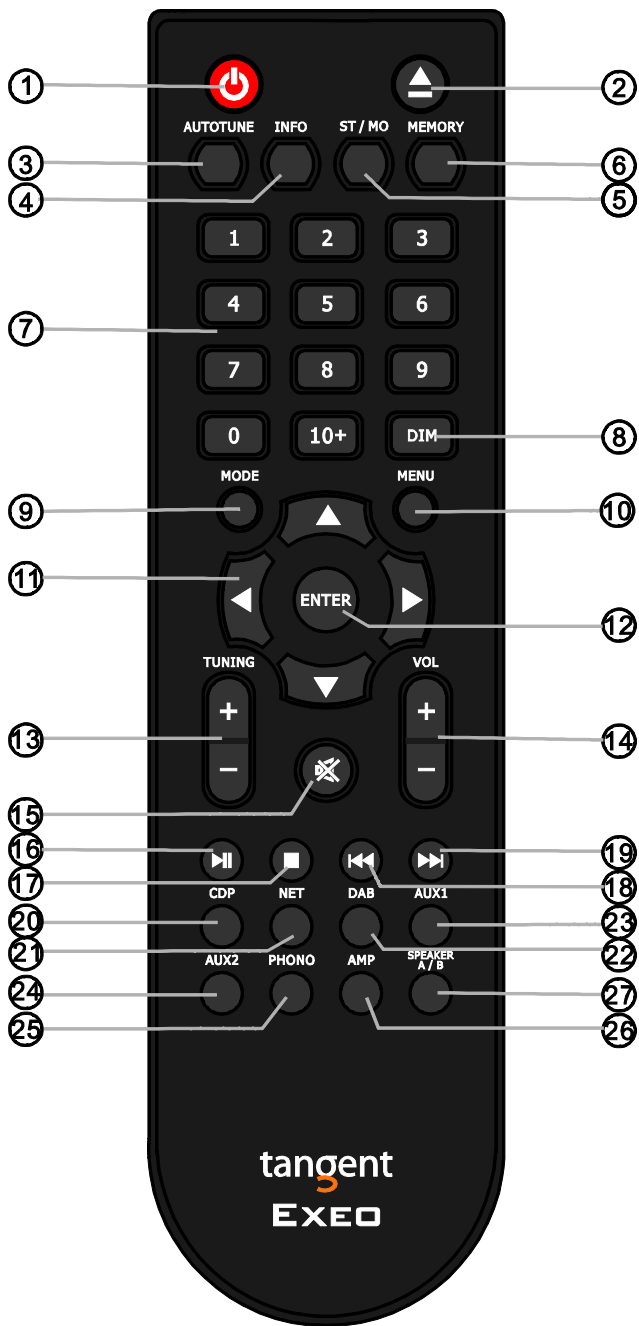
3. OPTICAL

Optical (Toslink) SPDIF output

4. AC MAINS INPUT

For connection of mains voltage. Make sure that the plug is correctly inserted, and that the voltage corresponds to the text printed on the rear panel of the cabinet.

REMOTE CONTROL INFORMATION



- 1. System Off**
Press this key to turn off the EXEO AMP and any other EXEO product.
- 2. ▲** Open and close the disc tray on the EXEO CDP.
- 3. Autotune**
Does not apply.
- 4. Info**
Press CDP and the MENU button to display the current playing time, remaining time of the track or the total remaining of the disc.
- 5. ST/Mono**

Does not apply.

6. Memory
Under stop mode, press memory and “MEM01 = 01” appears on the display, use the numerical keys to select your tracks, e.g. press 2, then “MEM01 = 02” appears on the display, press enter to select. Nextly “MEM02” will be displayed and same procedure applies. Press ►/|| key to start to play your custom list according to your programming.

7. Number Keys
Select numbers by pressing these buttons.

8. DIM
Press this button to toggle the brightness between: 25%, 50%, 75% & 100%.

9. MODE
Does not apply.

10. Menu
Press the CDP button and then press the Menu button to enter the menu.

11. Cursor keys ◀▶▲▼

12. Enter
To confirm selection.

13. Tuning +/-
Does not apply.

14. Volume +/-
Does not apply.

15. Mute
Does not apply.

16. ►/|| Play/Pause

17. ■ Stop

18. ◀◀ Press to select the previous track. Press and hold to fast rewind and return to normal playback after release.

19. ▶▶ Press to select the next track or chapter (MP3). Press and hold to fast forward and return to normal playback after release.

20. CDP
Press this button to activate the EXEO CDP from Standby or to select MENU or INFO.

21. NET
Does not apply.

22. DAB
Does not apply.

23. AUX1
Does not apply.

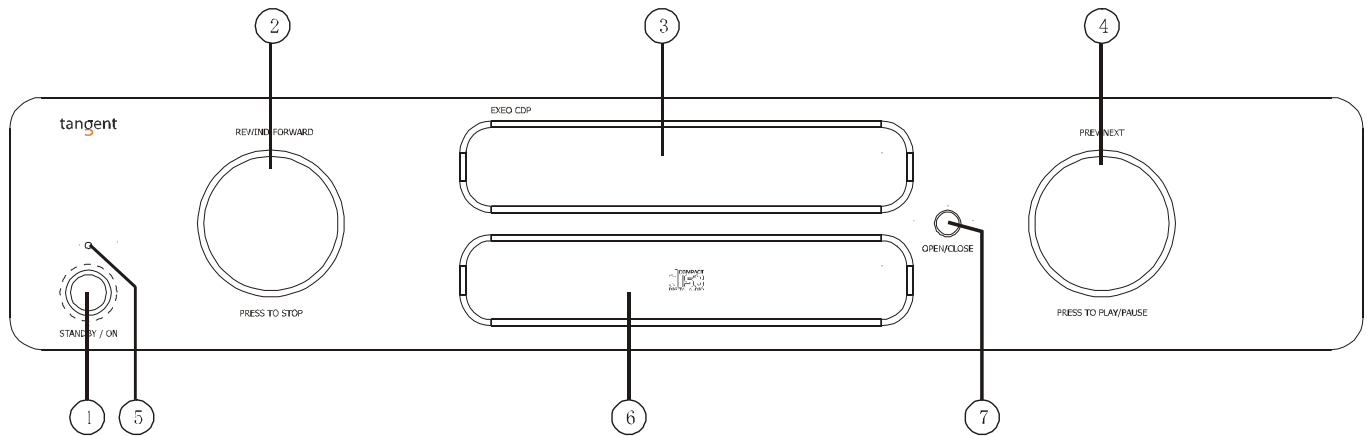
24. AUX2
Does not apply.

25. Phono
Does not apply.

26. AMP
Does not apply.

27. Speaker A/B
Does not apply.

FRONT PANEL INFORMATION



1. Power On

Press it to turn on the unit, press it again to turn off.

2. REWIND-FORWARD

- Rotate the knob clockwise or counterclockwise to scan the tracks forward or backwards. Press it once to stop the playback.
(Note: when the unit is scanning fast forward, press the PREV-NEXT button once to resume normal playback.
- Press this button for 2 seconds to enter the MENU. Rotate to select Repeat, Random, Display and Firmware.

3. Disc Tray

The tray for loading a disc

4. PREV-NEXT

Rotate the knob clockwise or counterclockwise to skip to the previous or the next track while playing. Press it to switch between Play/Pause.

5. LED indicator

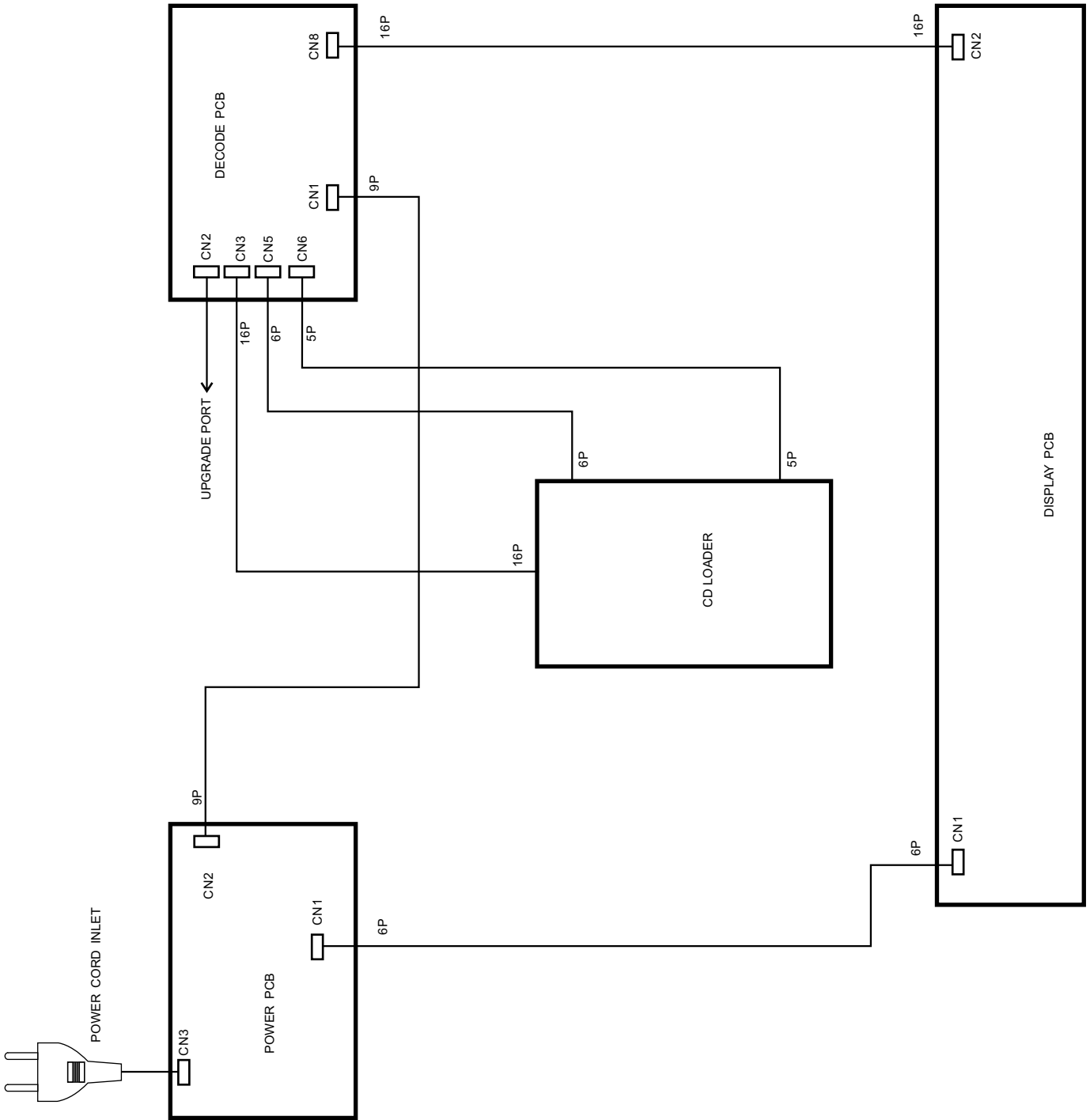
Is OFF when the unit is turned on. Is red when the unit is in standby mode.

6. Display

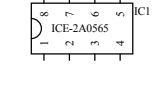
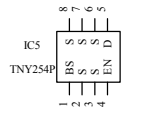
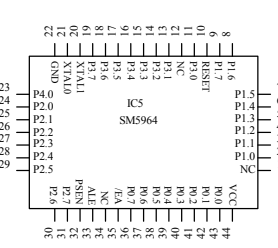
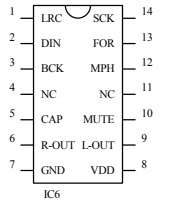
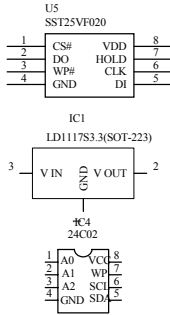
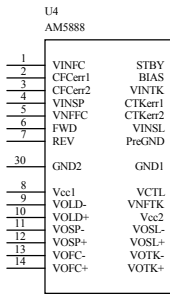
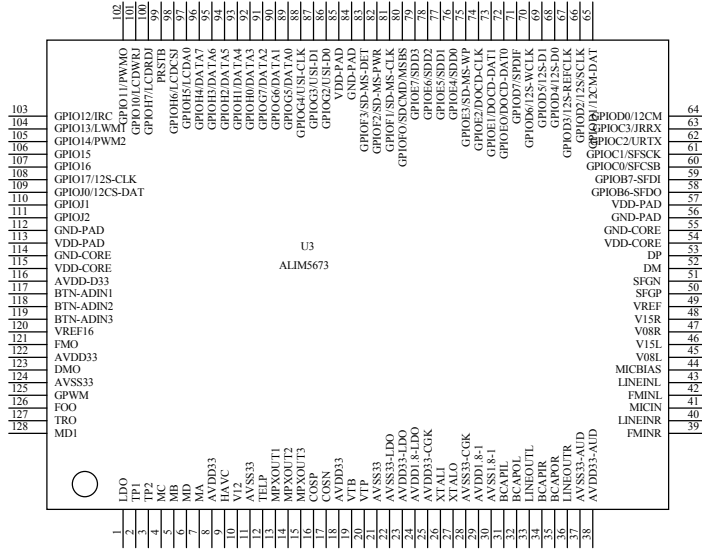
7. OPEN/CLOSE

Press this button to open/close the disc tray.

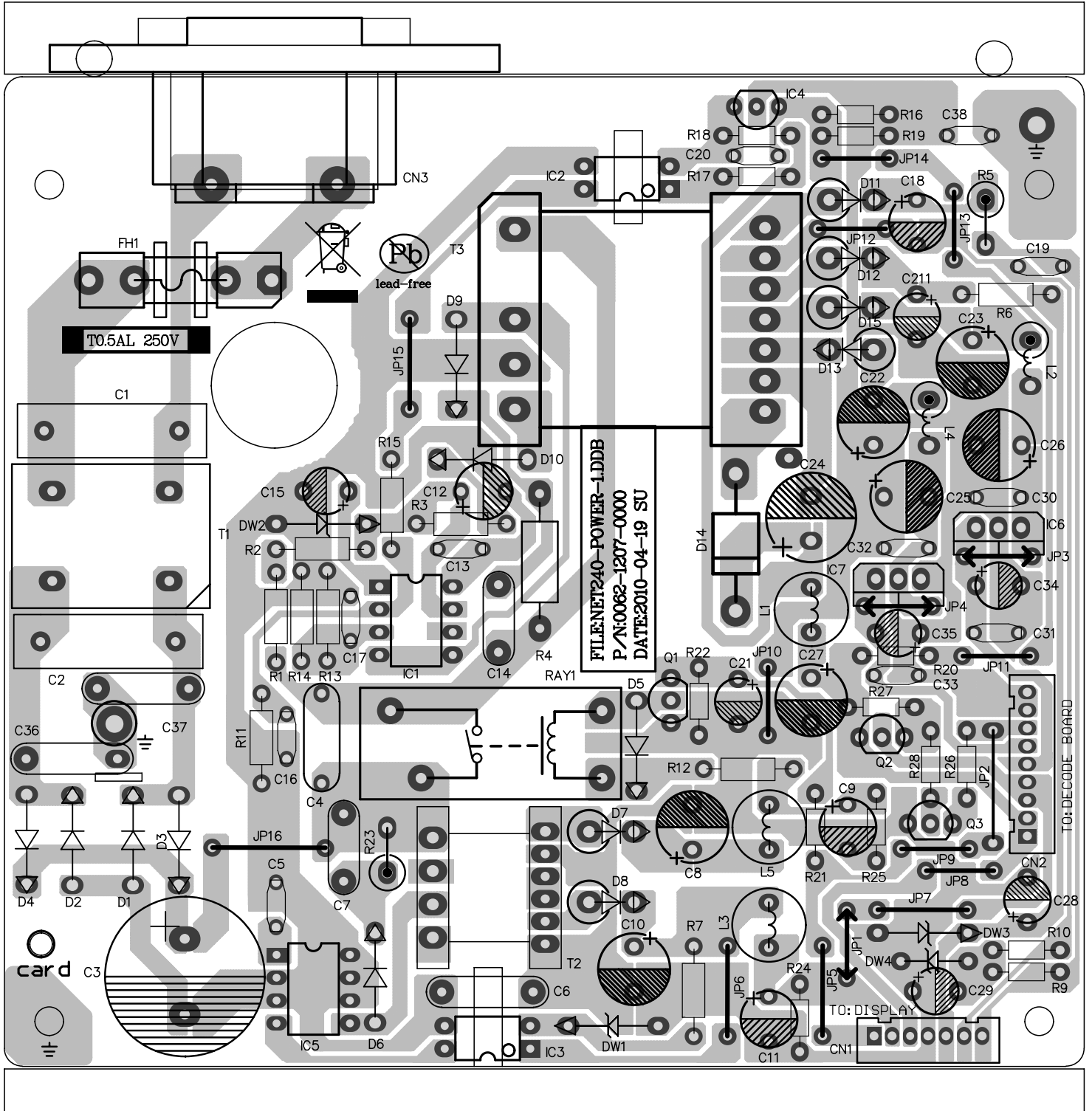
WIRING DIAGRAM



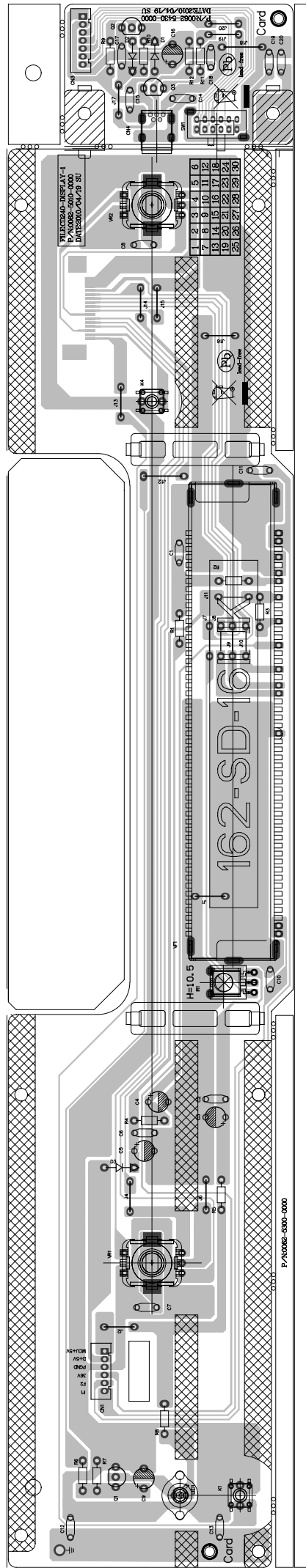
SEMICONDUCTOR INSTRUCTION

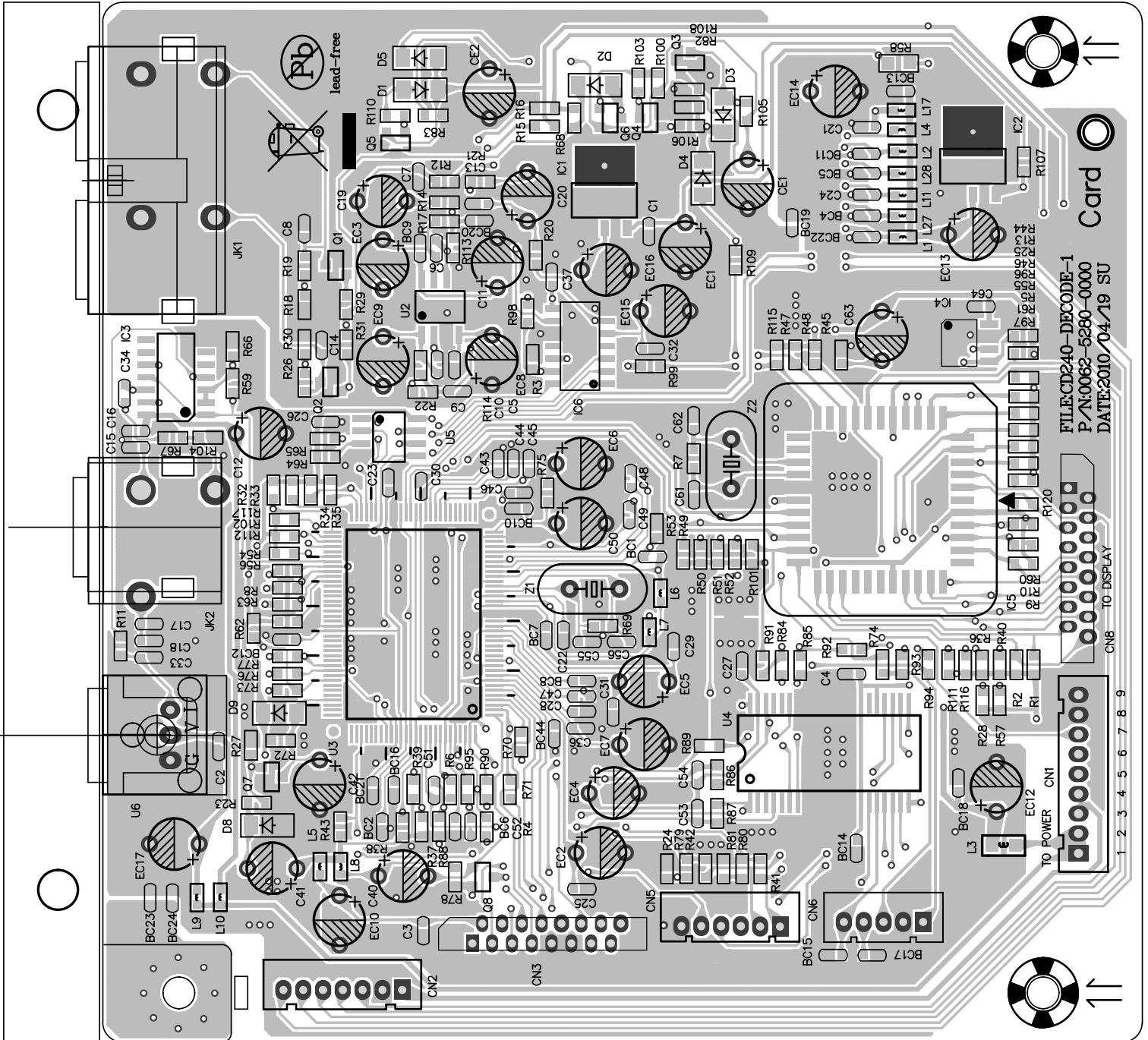


POWER PCB



DISPLAY PCB

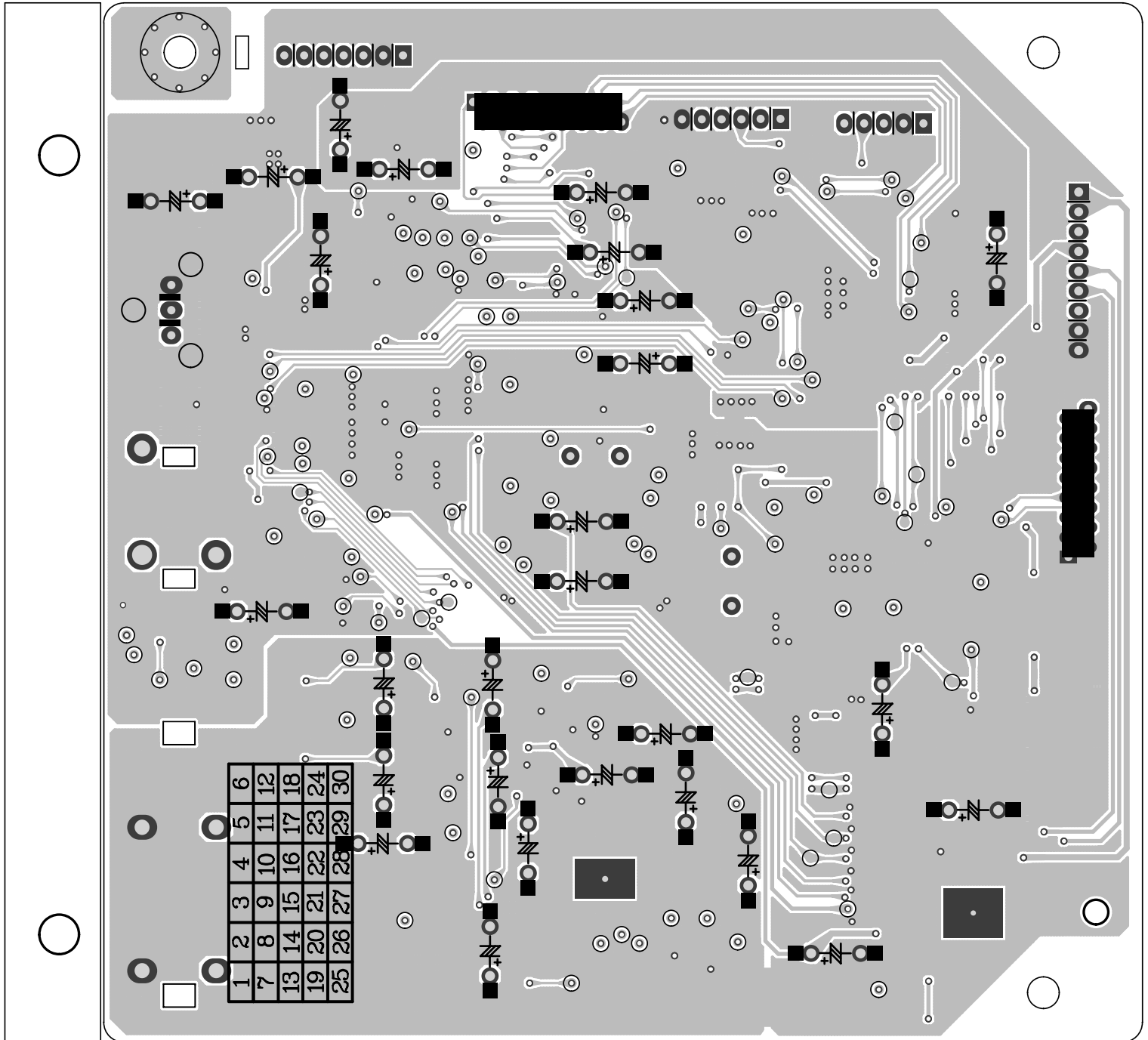




FILE:CD240-DECODE-1
P/N:0062-6280-0000
DATE:2010/04/19 SU

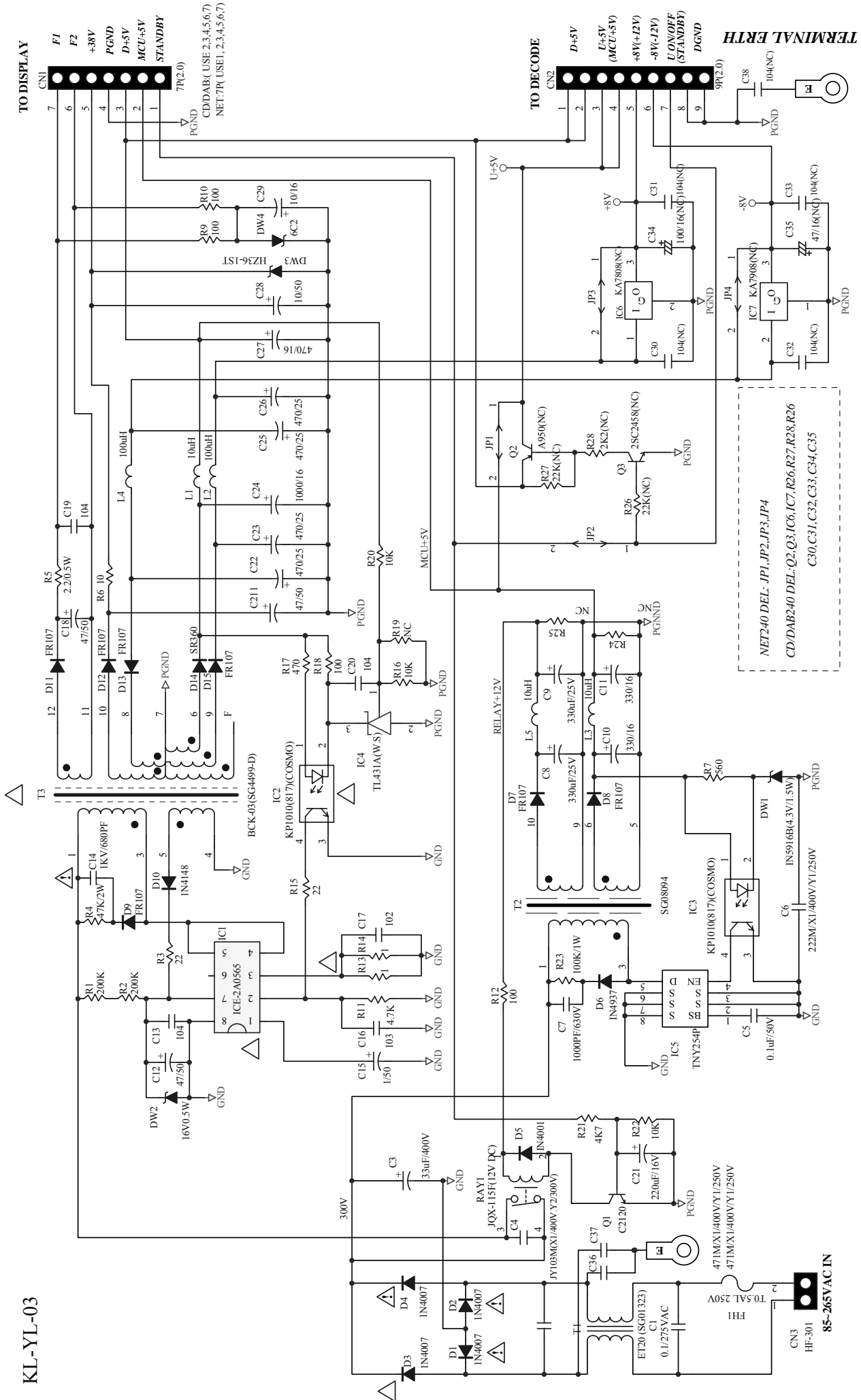
TO DISPLAY
CN8

TO POWER CN1
1 2 3 4 5 6 7 8 9



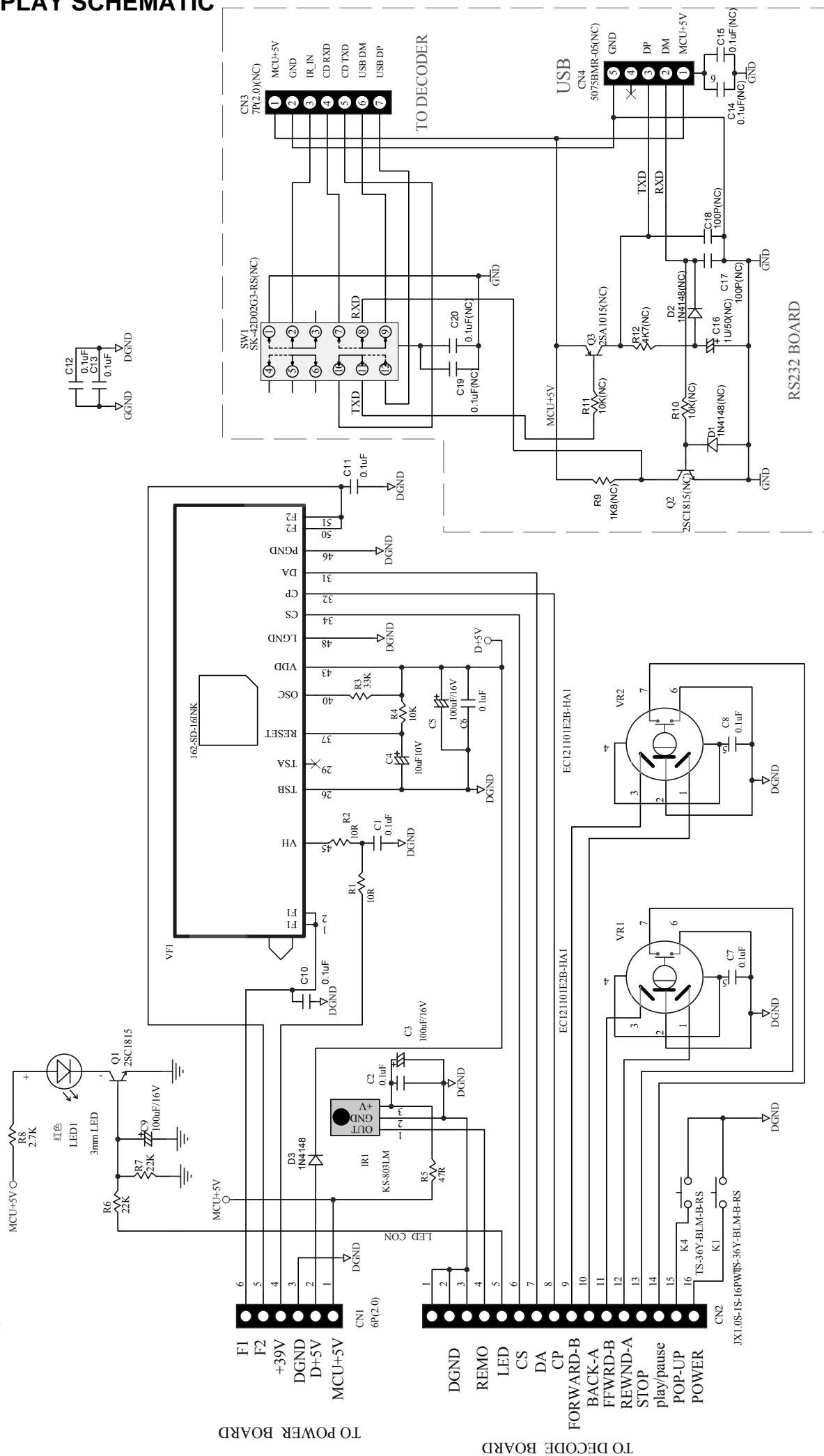
POWER SCHEMATIC

KL-YL-03



DISPLAY SCHEMATIC

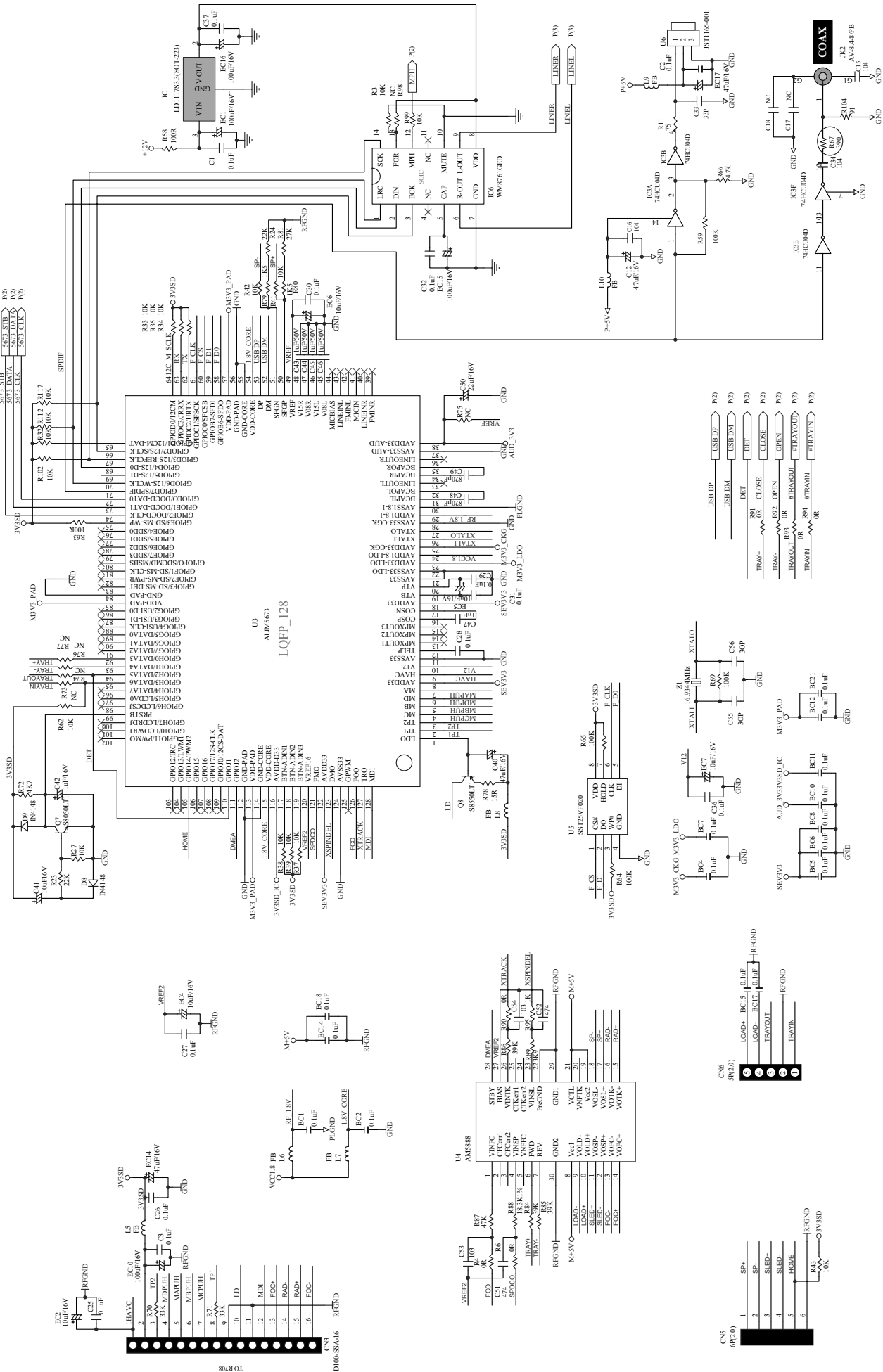
KF-YL-03



TO DECODE BOARD

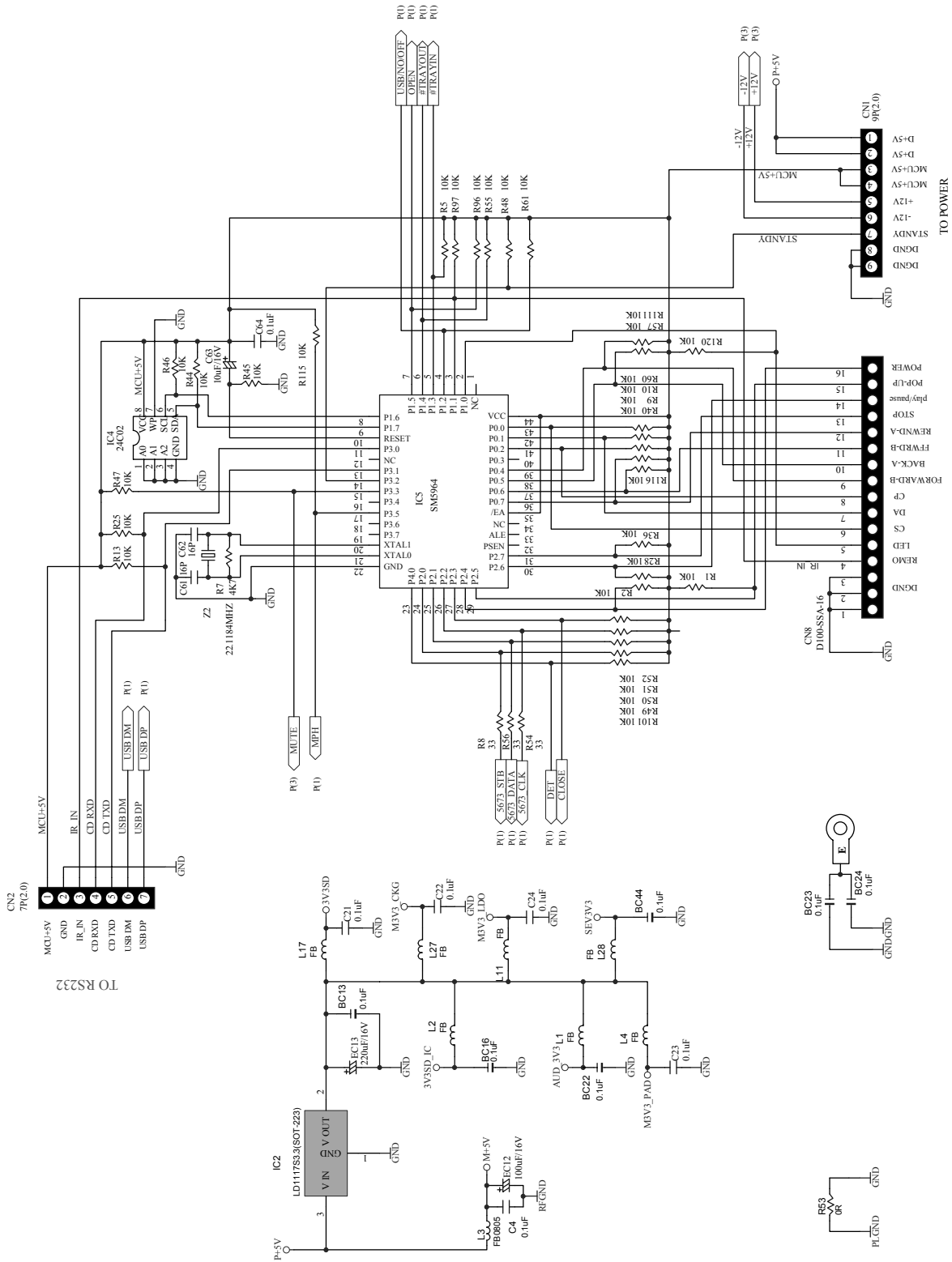
TO POWER BOARD

DECODER SCHEMATIC 1/3



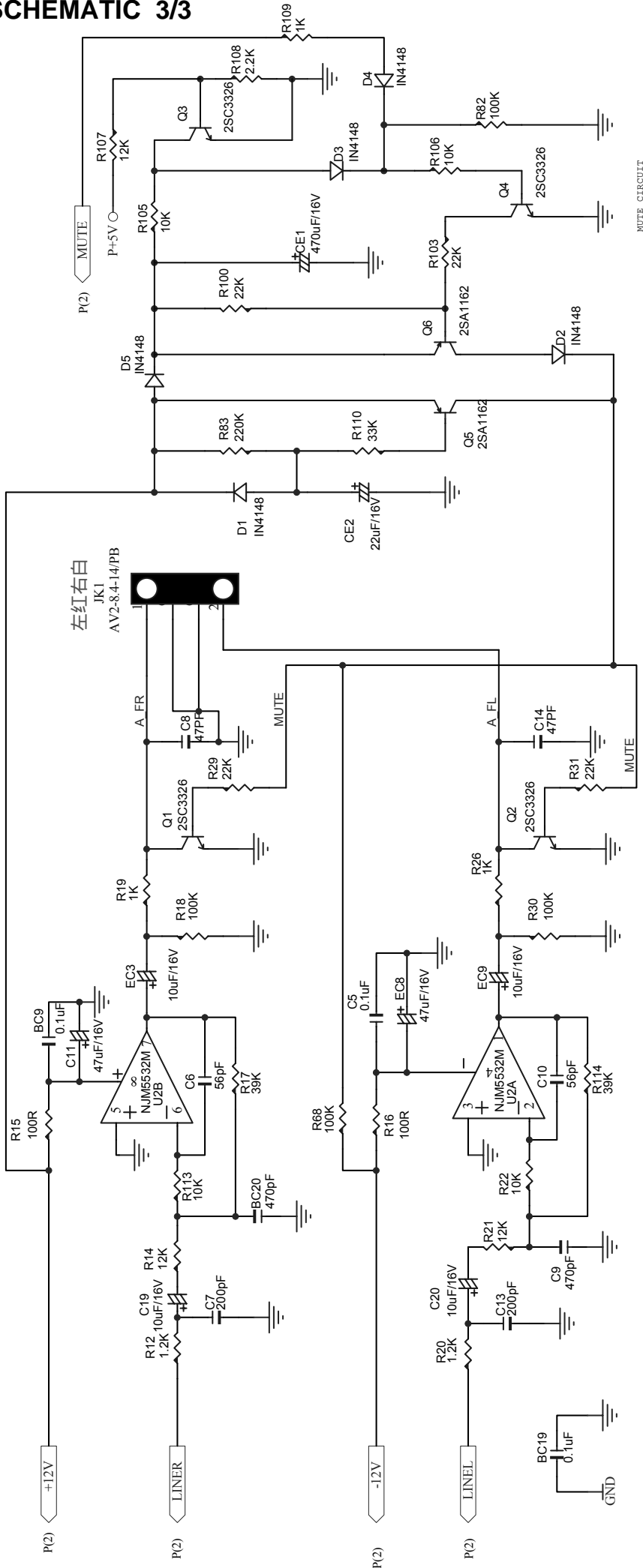
10 R 708

DECODER SCHEMATIC 2/3

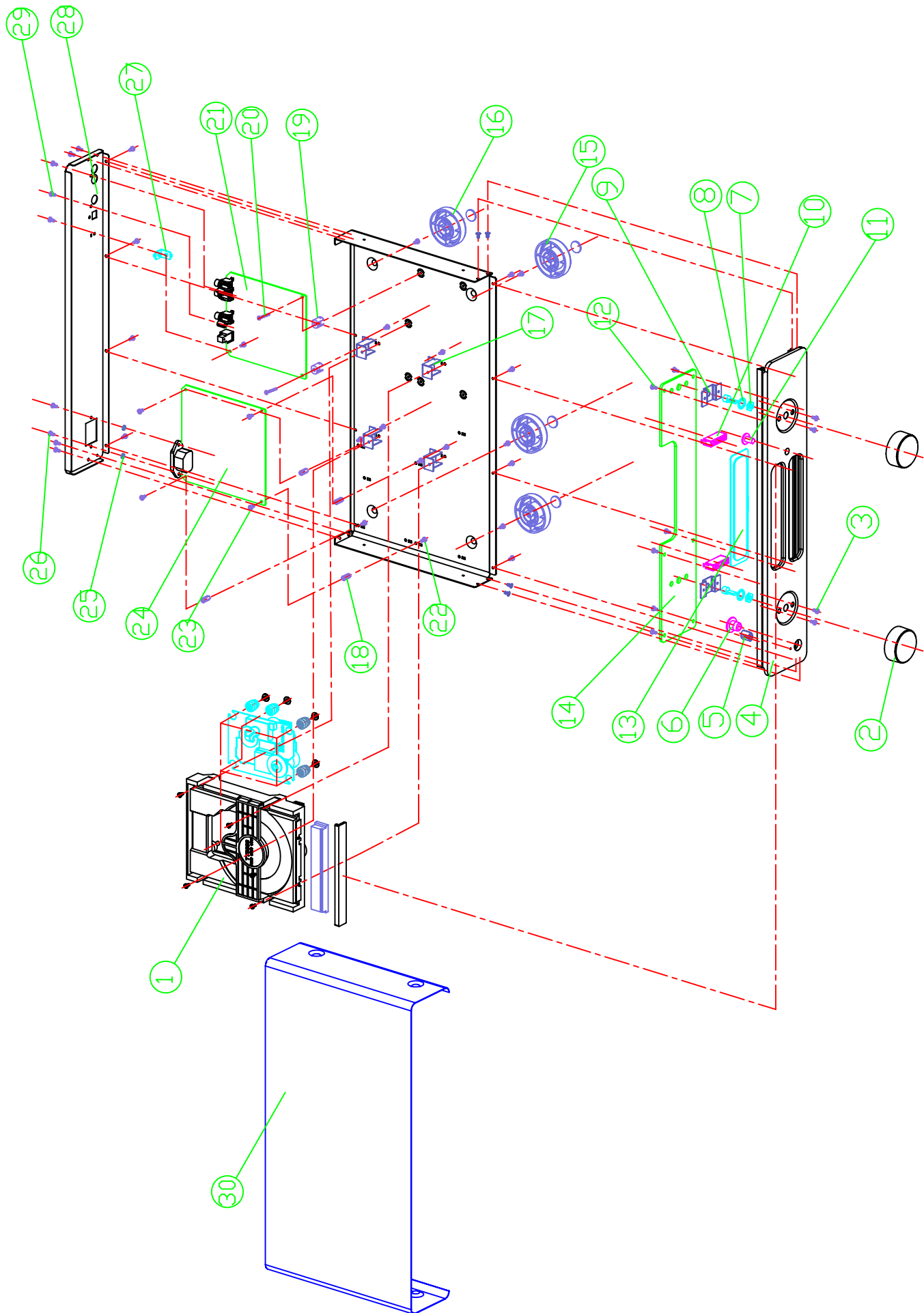


TO DISPLAY BOARD

DECODER SCHEMATIC 3/3



EXPLODED VIEW



CDP PART LIST					
NO	PART NO.	PART NAME	MATERIAL	QTY.	REMARK
1	7500 0060 0000	DECK: TY3988		1	
2	6545 1010 0021	Pull on Switch/Volume	ALUMIMUM	2	
3	5011-3006-0030	SCREW BTF3.0×6	STEEL	4	
4	6053 501A 0000	AL PANEL	AL	1	
5	7453 1020 0000	SDANDBY LENS	PMMA	1	
6	7353 1010 0000	POWER KNOB	ABS	1	
7	5020 9012 0201	nut M9	STEEL	2	
8	5030 9010 0601	Washer F9xF14x0.6	STEEL	2	
9	5305 5020 0000	DISPLAY BRCKET	0.8 Stl. Plt.	2	
10	7553 1010 0000	DISPLAY LENS BRACKET	PMMA	2	
11	7353 5010 0000	FUNCTION KNOB	ABS	1	
12	5011 3006 0010	SCREW BTB 3.0x6	STEEL	28	
13	6653 5010 0000	CD AL.DOOR	AL	1	
14	0062 5010 0000	DISPLAY PCB		1	
15	7932 6010 0000	FRONT FOOT	ABS	2	
16	7932 6020 0000	REAR FOOT	ABS	2	
17	5338 5020 0000	CD BRACKET		4	
18	5350 1010 0000	Copper pillar	Cu	4	
19	8770 0800 0000	PCB gel column	ABS	4	
20	5011 3014 0010	SCREW BTB 3.0x14	STEEL	2	
21	0062 5280 0000	DECODE PCB		1	
22	5012 3006 0010	SCREW BM3.0x6	STEEL	4	
23	5012-3004-001	SCREW BM3.0×4	STEEL	4	
24	0062 1207 0000	POWER PCB		1	
25	5020 3006 0260	nut M3	STEEL	2	
26	5012 3008 0010	SCREW BM3.0x8	STEEL	2	
27	5300 0010 0000	L BRACKET (C)		1	
28	6353 502A 0000	BACK COVER	0.8 Stl. Plt.	1	
29	5013 3010 0010	SCREW PA 3.0X10	STEEL	2	
30	6153 1010 0000	TOP COVER	0.8 Stl. Plt.	1	

DECODER-BOM

Used	Part Type	Designator	part number
1	74HCU04D--(SOP14) IC3		1049 1004 1200
1	AT24C02--(SOP8) IC4		1006 2402 2000
1	ALIM5673--(QFP128-0.5-6500)		1005 6732 2034
1	AM5888--(DIP28-SSOP) U1		1005 8880 9753
1	JST1165-001 U6		1341 1651 0100
1	NJM5532M--DMP8(JRC) U2		1005 5320 3113
2	LD1117S3.3--(SOT-223) IC2		1000 1117 3300
1	SM5964--PLCC44 IC5		1005 9640 8132
1	SST25VF020--SOIC8 U5		1025 0200 7387
1	WM8761GED--SOIC14 IC6		1008 7610 6714
2	2SA1162--SC-59 Q5 Q6		1111 1620 7100
4	2SC3326--SC-59 Q1 Q2 Q3 Q4		1133 3260 1000
1	S8050LT1--SC-59 Q7		1108 0502 1828
1	S8550LT1--SC-59 Q8		1108 5502 1828
7	IN4148--SMD D1 D2 D3 D4 D5 D8 D9		1311 4414 8000
1	FB0805--L-0805 L3		1852 0120 9100
13	FB--L-0603 L1 L2 L4 L5 L6 L7 L8 L9 L10 L11 L17 L27 L28		1852 0120 9200
1	16.9344MHZ Z1		2705 1693 4010
1	22.1184MHZ Z2		2705 2211 8429
1	5P(2.0)--JACK CN6		3100 4050 0200
1	6P(2.0)--JACK CN5		3100 4060 0200
1	7P(2.0)--JACK CN2		3100 4070 0200
1	9P(2.0)--JACK CN1		3100 4090 0200
1	AV-8.4-8/PB--JACK JK2		2910 1321 3081
1	AV2-8.4-14/PB--JACK JK1		2910 2061 3135
2	D100-SSA-16--JACK CN3 CN8		3104 0116 0050
1	18.3K1%--R-0603 R88		2403 1218 3303
8	0R--R-0603 R4 R6 R53 R90 R91 R92 R93 R94		2401 1220 0003
1	15R--R-0603 R78		2401 1221 5003
3	33R--R-0603 R8 R54 R56		2401 1223 3003
1	75R--R-0603 R11		2401 1227 5003
1	91R--R-0603 R104		2401 1229 1003
2	100R--R-0603 R15 R16		2401 1221 0103
1	390R--R-0603 R67		2401 1223 9403
4	1K--R-0603 R19 R26 R95 R109		2401 1221 0203
2	1K2--R-0603 R12 R20		2401 1221 2203
2	1K5--R-0603 R79 R80		2401 1221 5203
1	2K2--R-0603 R108		2401 1222 2203
1	3K9--R-0603 R89		2401 1223 9203
3	4K7--R-0603 R7 R72 R66		2401 1224 7203
51	10K--R-0603 R1 R2 R3 R5 R9 R10 R13 R22 R25 R27 R28 R32 R33 R34 R35 R36 R37 R38 R39 R40 R41 R42 R43 R44 R45		2401 1221 0303

	R46 R47 R48 R49 R50 R51 R52 R55	
	R57 R60 R61 R62 R96 R97 R99	
	R101 R102 R105 R106 R111 R112	
	R113 R115 R116 R117 R120	
3	12K--R-0603 R14 R21 R107	2401 1221 2303
6	22K--R-0603 R23 R24 R29 R31 R100 R103	2401 1222 2303
1	27K--R-0603 R81	2401 1222 7303
3	33K--R-0603 R70 R71 R110	2401 1223 3303
5	39K--R-0603 R17 R84 R85 R86 R114	2401 1223 9303
1	47K--R-0603 R87	2401 1224 7303
9	100K--R-0603 R18 R30 R59 R63 R64 R65 R68 R69 R82	2401 1221 0403
1	220K--R-0603 R83	2401 1222 2103
1	100R--R-0805 R58	2401 8210 1400
2	16pF/50V--C-0603 C61 C62	2103 5160 0130
2	30pF/50V--C-0603 C55 C56	2103 5300 0130
1	33pF/50V--C-0603 C33	2103 5330 0130
2	47pF/50V--C-0603 C8 C14	2103 5470 0130
2	56pF/50V--C-0603 C6 C10	2103 5560 0130
2	200pF/50V--C-0603 C7 C13	2103 5201 0130
2	470pF/50V--C-0603 BC20 C9	2103 5471 0130
2	820pF/50V--C-0603 C48 C49	2103 5821 0130
2	0.01uF/50V--C-0603 C53 C54	2115 5103 0135
2	0.47uF/50V--C-0603 C51 C52	2115 6474 0130
46	0.1uF/50V--C-0603 BC1 BC2 BC4 BC5 BC6 BC7 BC8 BC9 BC10 BC11 BC12 BC13 BC14 BC15 BC16 BC17 BC18 BC19 BC21 BC22 BC23 BC24 BC44 C1 C2 C3 C4 C5 C21 C22 C23 C24 C25 C26 C27 C28 C29 C30 C31 C32 C36 C37 C64 C15 C16 C34	2115 1040 0130
5	1uF/50V--C-0603 C43 C44 C45 C46 C47	2115 6105 0130
1	1uF/16V C42	2319 0310 1015
11	10uF/16V C19 C20 C41 C63 EC2 EC3 EC4 EC5 EC6 EC7 EC9	2310 0310 1015
2	22uF/16V C50 CE2	2320 0310 1015
6	47uF/16V C11 C12 C40 EC8 EC14 EC17	2340 0310 1015
5	100uF/16V EC1 EC10 EC12 EC15 EC16	2311 0310 2015
1	220uF/16V EC13	2321 0210 2015
1	470uF/16V CE1	2341 0310 4025

CD240-Display BOM

Used	Part Type	Designator	part number
1	2SC1815--TO_92	Q1	1131 8150 0172
1	1N4148	D3	1310 1414 8000
1	3mm LED	LED1	1401 1403 0008

1	162-SD-16INK	VF1	1521 6216 0101
2	EC121101E2B-HA1	VR1 VR2	4401 1211 0121
1	JX1.0S-1S-16PWT--JACK		3109 0116 3103
1	KS-803LM	IR1	1304 0008 0300
2	TS-36Y-BLM-B-RS	K1 K4	4502 1003 6100
2	10R--1/8W	R1 R2	2401 0221 0011
1	47R--1/8W	R5	2401 0224 7011
1	2.7K--1/8W	R8	2401 0222 7211
1	10K--1/8W	R4	2401 0221 0311
2	22K--1/8W	R6 R7	2401 0222 2311
1	33K--1/8W	R3	2401 0223 3311
9	0.1uF/50V	C1 C2 C6 C7 C8 C10 C11 C12 C13	2115 5104 0123
1	10uF/10V	C4	2310 0210 1105
3	100uF/16V	C3 C5 C9	2311 0310 2015

CD240-POWER BOM

Used Part Type	Designator	part number	
1	ICE-2A0565	IC1	1020 5650 8227
2	KP1010(817)(COSMO) IC DIP3		1022 8170 7012
1	TL431A(W.S)--TO-92	IC4	1043 1002 1688
1	TNY254P--DIP8	IC5	1000 2542 2701
1	2SC2120--TO-92	Q1	1132 1200 0162
1	IN4001	D5	1360 1400 1000
4	1N4007	D1 D2 D3 D4	1360 7400 7000
1	1N4148	D10	1310 1414 8000
1	IN4937	D6	1310 1493 7002
6	FR107	D7 D8 D11 D12 D13 D15	1360 7000 1075
1	FR107	D9	1360 7000 1072
1	IN5916B(4.3V/1.5W)	DW1	1300 4304 0200
1	16V0.5W	DW2	1301 6002 0200
1	HZ36-1ST	DW3	1303 6000 0000
1	6C2	DW4	1302 0632 1200
1	SR360	D14	1360 7000 3602
1	BCK-03(SG4499-D)	T3	1709 0449 9000
1	ET20 (SG01323)	T1	1702 0132 3000
1	SG08094	T2	4014 5163 0000
3	10uH	L1 L3 L5	1821 0010 7050
2	100uH	L2 L4	1841 0011 0501
1	JQX-115F(12V DC)	RAY1	4712 1211 5006
1	T0.5AL 250V--FUSE	FH1	1610 5050 2200
1	7P(2.0)--JACK	CN1	3100 4070 0200
1	9P(2.0)--JACK	CN2	3100 4090 0200
4	100R--1/8W	R9 R10 R18 R12	2401 0221 0111
1	220R--1/8W	R24	2401 1222 1000
1	470R--1/8W	R17	2401 0224 7111
2	4K7--1/8W	R21 R11	2401 0224 7211

3	10K--1/8W	R16 R20 R22	2401 0221 0311
1	22K--1/8W	R27	2401 0222 2311
1	NC	R19	
2	1R--1/4W	R13 R14	2401 0321 0911
2	560R--1/4W	R6 R7	2401 0325 6111
2	200K--1/4W	R1 R2	2401 0322 0411
1	2.2R--1/2W	R5	2401 0422 2215
1	100K/1W	R23	2401 0521 0415
1	47K--2W	R4	2401 0624 7311
1	JY103M(X1/400V.Y2/300V)		2210 3103 0600
2	0.1/275VAC	C1 C2	2210 3104 6000
8	0.1uF/50V	C5 C13 C19 C20 C30 C31 C32 C33	2115 5104 0123
1	1KV/680pF	C14	2221 3681 1344
1	1000pF/50V	C17	2115 6102 0123
1	0.01uF/50V	C16	2115 6103 0123
1	222M/X1/400V/Y1/250V	C6	2100 6222 7600
2	471M/X1/400V/Y1/250V	C36 C37	2221 3470 0000
1	1000pF/630V	C7	2221 3102 0700
1	47uF/16V	C35	2340 0310 1015
1	100/16	C34	2311 0310 2015
1	220uF/16V	C21	2321 0210 2015
2	330uF/16V	C10 C11	2331 0310 1015
1	470uF/16V	C27	2341 0310 4025
1	1000uF/16V	C24	2312 3104 4000
2	330uF/25V	C8 C9	2331 0410 1015
4	470uF/25V	C22 C23 C25 C26	2341 0410 4035
1	1uF/50V	C15	2319 0610 1015
2	10uF/50V	C29 C28	2319 0610 1015
3	47uF/50V	C211 C12 C18	2340 0610 2015
1	33uF/400V	C3	2330 0910 7000