
SERVICE MANUAL:

FUNCTIONS:**1.DAB Function:**

Support DAB Band III(5A 174.928 MHz----13F 239.200 MHz)

Support DAB L Band (LA 1452.960 MHz---- LW 1490.624 MHz)

2.FM Function:

Frequency:87.5MHz---108MHz /Support FM RDS.

3.CD/MP3 Function:

Support disc: CD ,CD-R,CD-RW;

Support files formats: CD,MP3,WMA.

4. USB Function:

Support playing USB storage card music files;

Support files formats: CD,MP3,WMA.

5.SD Function:

Support playing SD storage card music files;

Support files formats: CD,MP3,WMA.

6.iPod Function:

Support iPod Audio Output.

6.AUX1/MP3 Function:

AUX1/MP3 Audio Input.

7.AUX2 Function:

AUX2 Audio Input

8.OUTPUT Function:

SPEAKEROUT /LINE OUT /SUB OUT/

Cambridge Audio One _{DX1} CD Player

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SAFETY PRECAUTIONS&IMPORTANT NOTES

1. Check that the rear of the product indicates the correct supply voltage for your area.



2. The lighting flash with the arrowhead within an equilateral triangle is intended to alert the user or service agent to the presence of dangerous voltages within the product enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



3 . The exclamation point within an equilateral triangle is intended to alert the user or service agent to the presence of important operating and maintenance (Servicing) instructions in the literature accompanying the appliance.

4. This product complies with European Low Voltage (2006/95/EC) and Electromagnetic Compatibility (89/336/EEC) Directives when used and serviced in accordance with this manual. For continued compliance all components marked safety and EMC critical must only be replaced by Cambridge Audio approved parts.

5.Any unauthorized design alterations or additions will void the manufacturer's warranty;furthermore the manufacturer cannot accept responsibility for personal injury of property damage resulting therefrom.

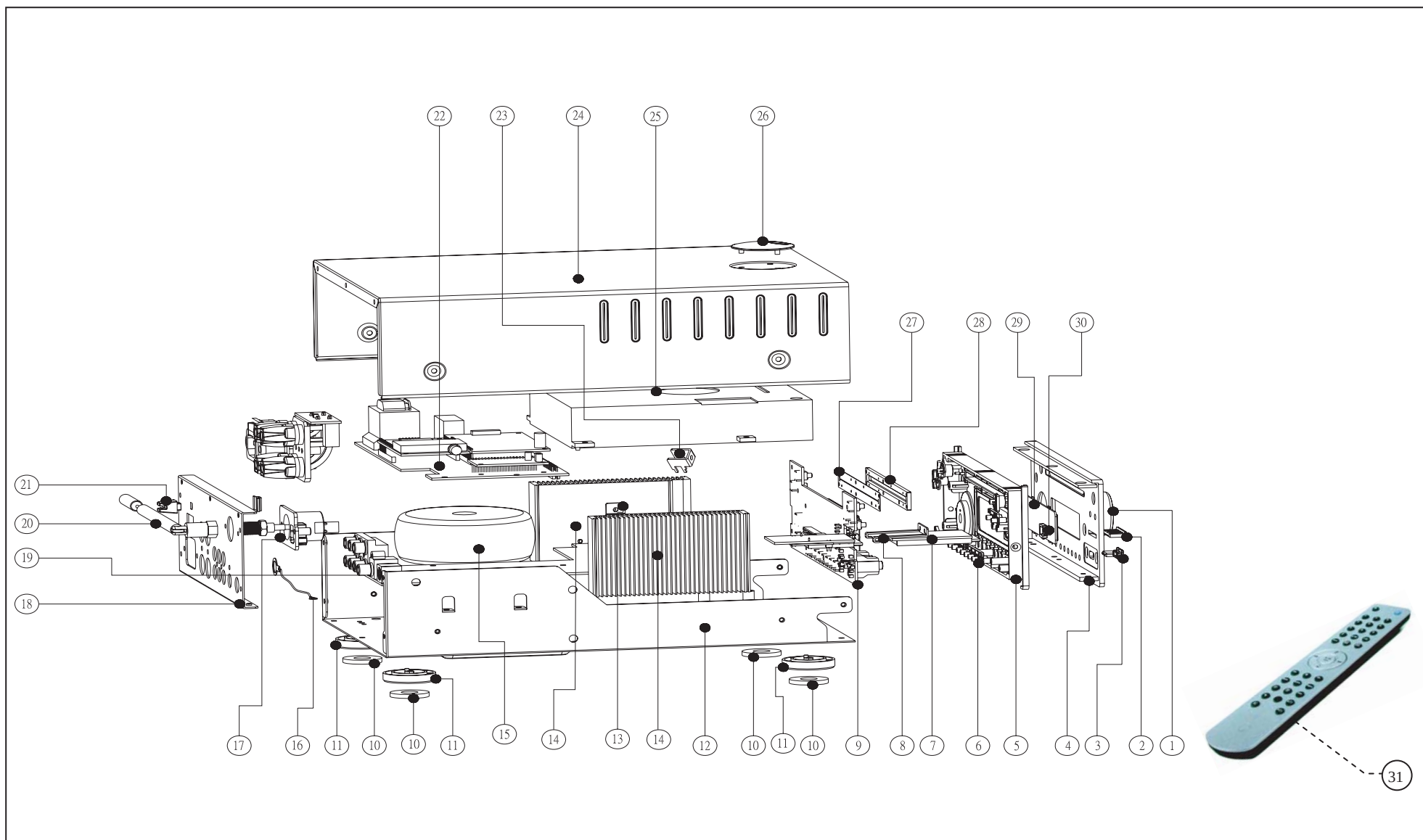
6.When servicing,care should be taken to observe the original routing and dressing of the leads and it should be confirmed that they have been returned to normal after re-assembly.

Notes on chip component replacement

Never reuse a component that has been removed from a PCB

Notice that the minus side of a tantalum capacitor may be damaged by heat

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Exploded Diagram

AP Spare part	Factory ref	Description	Page 5 Drawing ref:
PZ144	38115501005100	Front panel (silver) for One	4
PZ145	38115501006100	Front panel (black) for One	4
PZ155	AR30-34.5XN080605A1S	One volume Knob (Silver)	1
PZ156	AR30-34.5XN080605A1B	One volume knob (Black)	1
PZ186	40115501005100	FRONT PANEL BOARD INCLUDING LCD & BACKLIGHT	9
PZ124		One LCD module in DFSTN including the glass, PCB, back light & metal frame	mounted to item 9
PZ187	40115501007100	CD MODULE BOARD WITHOUT Tuner MODULE	22
PZ188	40115501018100	DC TO DC BOARD (3PIN) (on Module board)	see item 22
PZ125	tuner module	DAB MODULE + RF-cable 160mm with F connector for One EU version	mounted on item 22
PZ126		MD-100 BOARD : CD + USB+ SD (MP3/WMA)	mounted on item 22
PZ189	40115501009100	SD BOARD	7
PZ190	40115501011100	CD Loader Board	-
PZ191	40115501013100	MAIN AMP board	19
PZ192	40115501015100	DC TO DC BOARD (4PIN) (on amp board)	-
PZ193	40115502002100	IPOD BOARD	item 4, page 13
PZ194	7107296151100	TDA7296 amplifier IC (IC1, IC2 on main board)	-
PZ195	15100900741100	Main transformer	15
PZ196	5106000841100	Standby transformer	mounted on item 22
PZ197	40215501002100	CD slot loader mechanism	25
PZ198	19315404001100	Dab/FM aerial	20
PZ199	30515501018100	Accessory aerial key Black	not shown
PY1457	40215501001100	Remote control	31

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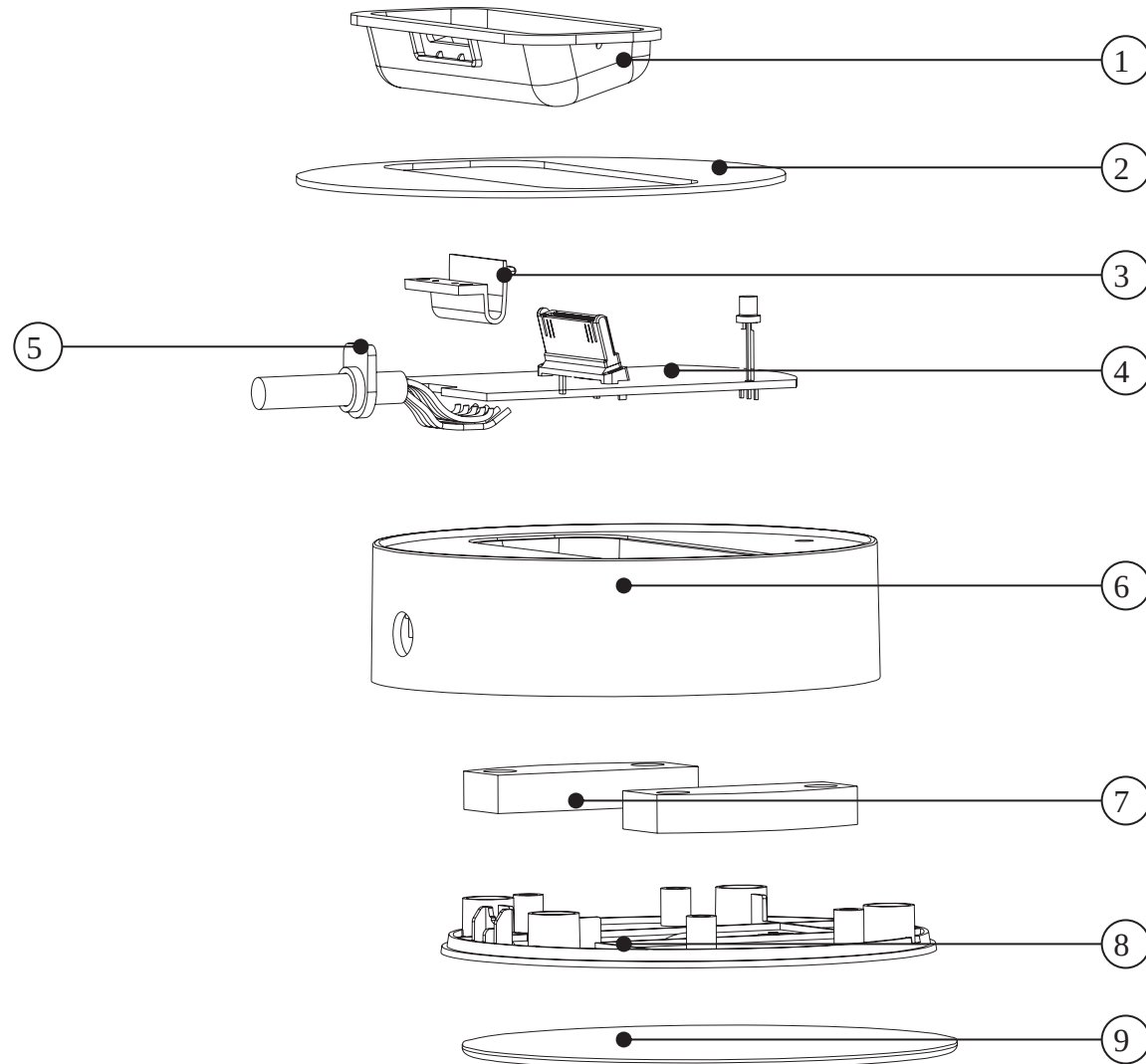
S/N	Part Number	Name	Specification	Qty	Notes
1	40215501004100	Volume Knob	Φ 35*15.6mm(Plastic+Knob)Black (RoHS)	1	For Black Units
	40215501003100		Φ 35*15.6mm (Plastic+Knob) Silver (RoHS)	1	For Silver Units
2	30115501006100	SD Rubber bungs	28.1*6.2*5.3mm silica gel with Black (RoHS)	1	For Black Units
	30115501005100		28.1*6.2*5.3mm silica gel with spray-paint 877c (RoHS)	1	For Silver Units
3	30115501008100	USB Rubber bungs	17.9*10.5*9.1mm silica gel black(RoHS)	1	For Black Units
	30115501007100		17.9*10.5*9.1mm silica gel painting 877c(RoHS)	1	For Silver Units
4	38115501006100	Front Panel	215*82*15mmT=3mm aluminium black with silkscreen in Pantone 428 c (RoHS)	1	For Black Units
	38115501005100		215*82*15mm T=3mm aluminium silver with silkscreen with black c(RoHS)	1	For Silver Units
5	30115501004100	Front Plastic	215*80*15mm ABS spray-paint black(RoHS)	1	For Black Units
	30115501003100		215*80*15mm ABS painting 877c(RoHS)	1	For Silver Units
6	30315501004100	Shift Press Key	46.2*8*13mm ABS painting black(RoHS)	1	For Black Units
	30315501003100		46.2*8*13mm ABS painting 877c(RoHS)	1	For Silver Units
7	40115501009100	SD-PCBA	FUSION SD BOARD DIP part(RoHS)	1	
8	38615501003100	Bracket for SD Card socket	28.1*11.0*34.8mm T=1mm SECC (RoHS)	1	
9	40115501005100	Press-Key PCBA	FUSION LCD KEY BOARD DIP (RoHS)	1	
10	31115501001100	Silica gel foot pad	OuterΦ 24.5*InnerΦ 10.5mm T=3mm silica gel with Black Single glue T95(RoHS)	4	
11	30515501002100	Foot seat	Φ 33*6.1mm ABS Painting Black (RoHS)	4	For Black Units
	30515501001100	Foot seat	Φ 33*6.1mm ABS Painting 877c (RoHS)	4	For Silver Units
12	38115501004100	Bottom cover	300*206*75mm T=1mm SECC Painting Black (RoHS)	1	For Black Units
	38115501003100	Bottom cover	300*206*75mm T=1mm SECC Painting 877c (RoHS)	1	For Silver Units
13	38228030001100	Sheet metal	26*12*1.6mm(RoHS)	2	
14	34215501004100	Heat sink	100.4*70*19mm aluminum with black (RoHS)	2	
15	15100900741100	Main transformer	Input:double 230VA Output:9.2V/0.75A 12.5V/0.2A 18V-0-18V/1.2A input cable L=150mm with female socket one blank pin in P=3.96mm3pin output 7PIN cable with female socket P=2.54mm L=180mm toroid(RoHS)	1	

Exploded Diagram Part List

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S/N	Factory P/N	Name	Specification	Qty	Notes
16	17302006001100	Grounded line	L=60mm 18#with yellow and green one side with pad (\$ 4.3)the other is peeled for 5mm (RoHS)	3	
17	30515501006100	Aerial card seat	48.9*27.9*25.5mm ABS paiting blacke(RoHS)	1	For Black Units
	30515501005100	bracket	48.9*27.9*25.5mm ABS spray-paint 877c (RoHS)	1	For Silver Units
18	38115501008100	Rear Panel	202*73.6*10mm T=1mm SECC spray-paint black with silkscreen in Panntone 428 c (RoHS)	1	For Black Units
	38115501007100		202*73.6*10mm T=1mm SECC spray-paint 877c with silscreen in black c(RoHS)	1	For Silver Units
19	40115501013100	AMP PCBA	FUSION MAIN AMP DIP part(RoHS)	1	
20	19315404001100	Aerial	Φ8mm 8 period after extend; Length 718mm gray plastic(RoHS)	1	
21	30515501008100	Aerial key	9*9*11mm ABS Black(RoHS)	1	For Black Units
	30515501007100		9*9*11mm ABS spray-paint 877c (RoHS)	1	For Silver Units
22	40115501018100	Power PCBA	FUSION DC TO DC BOARD (3PIN)DIP Part (RoHS)	1	
23	38610098001100	Bracket	11.5*13*8.5mm T=1mm iron plating nickel (RoHS)	4	
24	38115501002100	Top cover	300*212*77mm T=1mm SECC Painting Black (RoHS)	1	For Black Units
	38115501001100		300*212*77mm T=1mm SECC Painting 877c (RoHS)	1	For Silver Units
25	40215501002100	CD Loader	VSH-M33C-71022(RoHS)	1	
26	30515501004100	Plastic LOGO	Φ39.5*6.1mm ABS Painting Blacke(RoHS)	1	For Black Units
	30515501003100	Plastic LOGO	Φ39.5*6.1mm ABS Painting 877c(RoHS)	1	For Silver Units
27	32010104001100	Fiber brush	132*14mm mylar+double side glue+no weaving Black(RoHS)	1	
28	30110104027100	Fixed board	132*14*2.4mm ABS Black(RoHS)	1	
29	30515501011100	LCD Lens	95.5*25*1.5mm PMMA Transparent(RoHS)	1	
30	30515501009100	IR Acryl	10.5*9.5*5.8mmPMMA Transparent(RoHS)	1	
31	40215501001100	Remote control	Cambride Audio Remote control (RoHS)	1	

Cambridge Audio One _{DX1} iPod

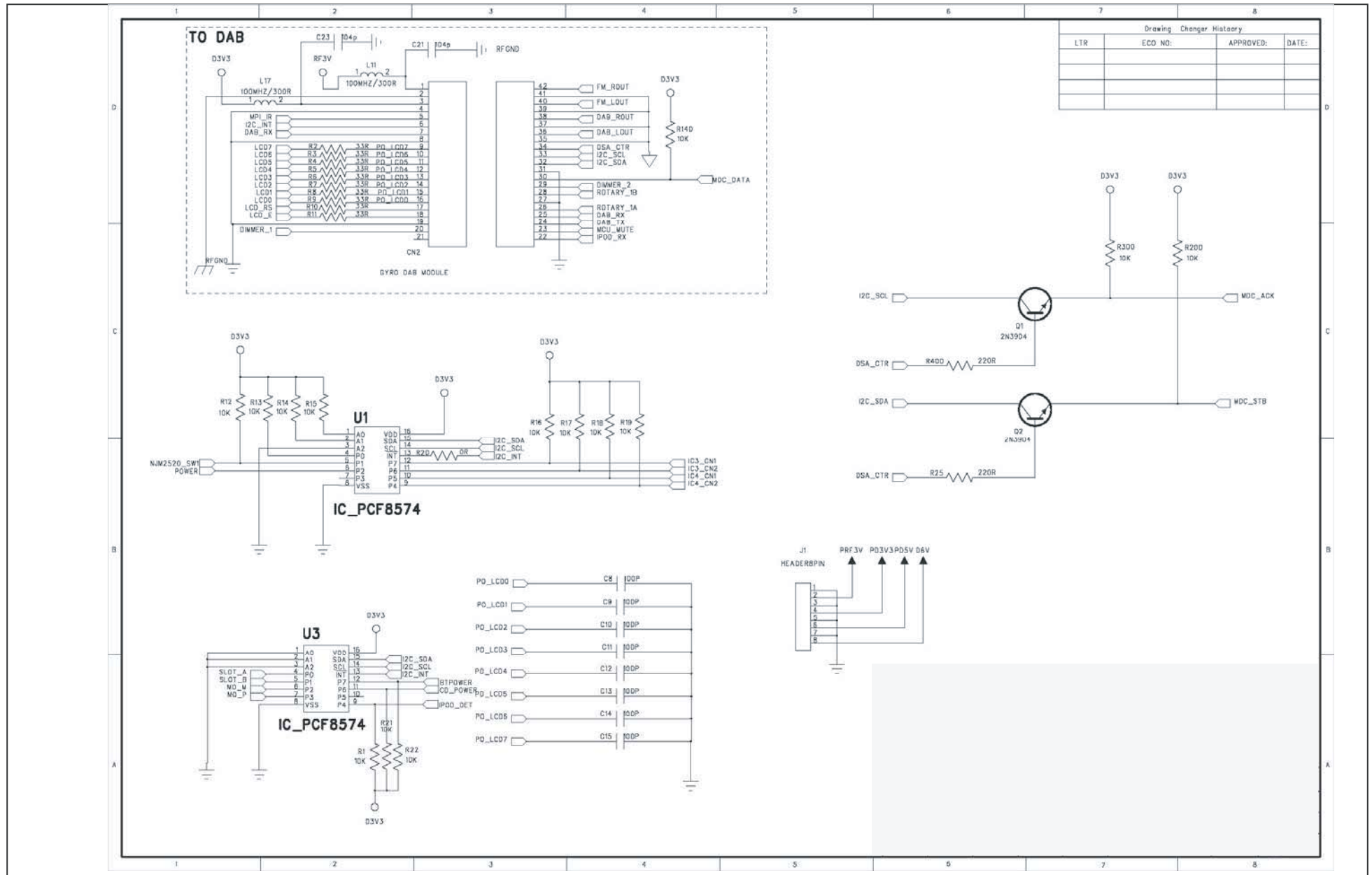


Exploded Diagram

Cambridge Audio One _{DX1} iPod

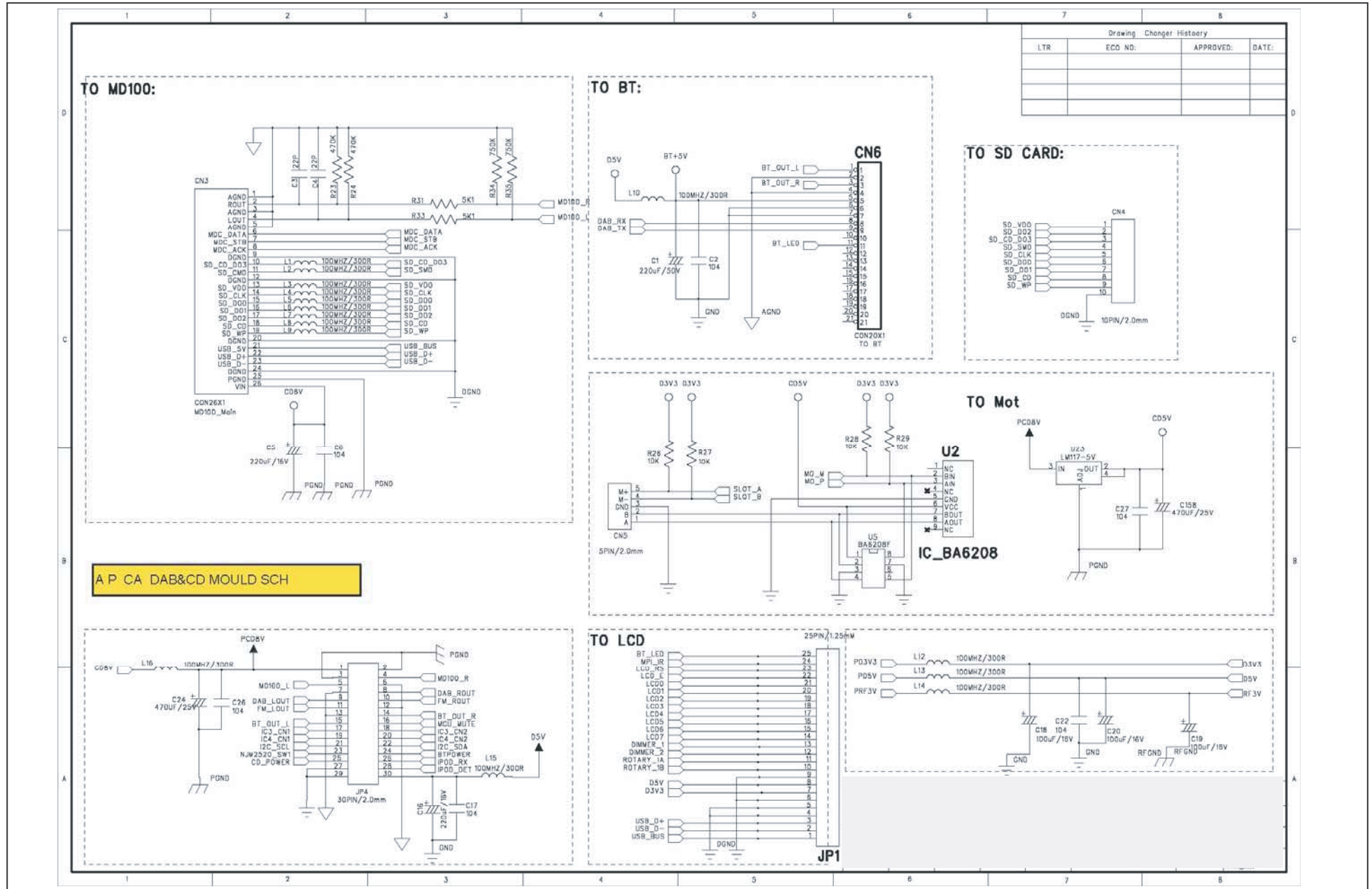
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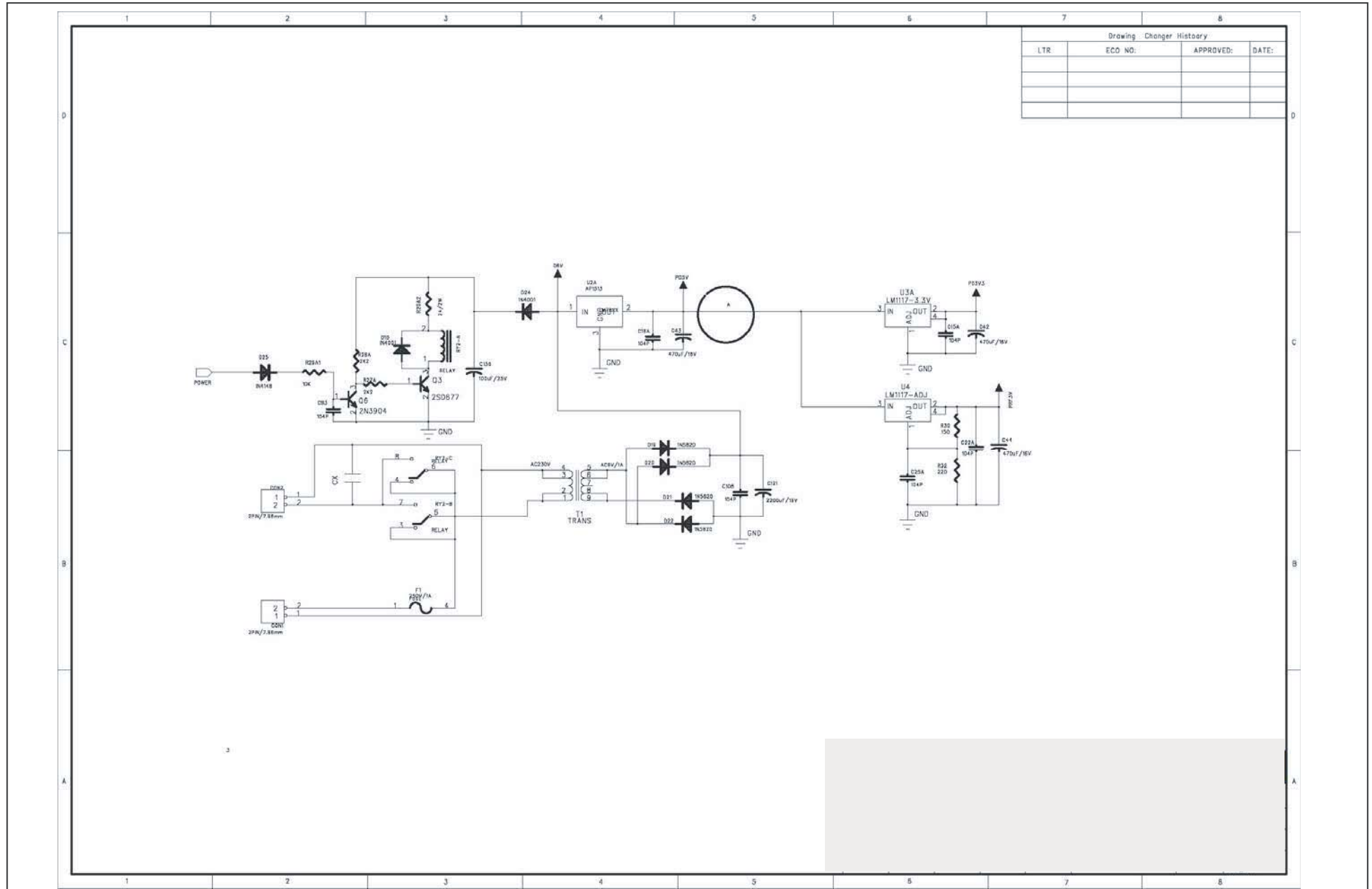
DAB&CD MODULE SCH

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DAB&CD MODULE SCH

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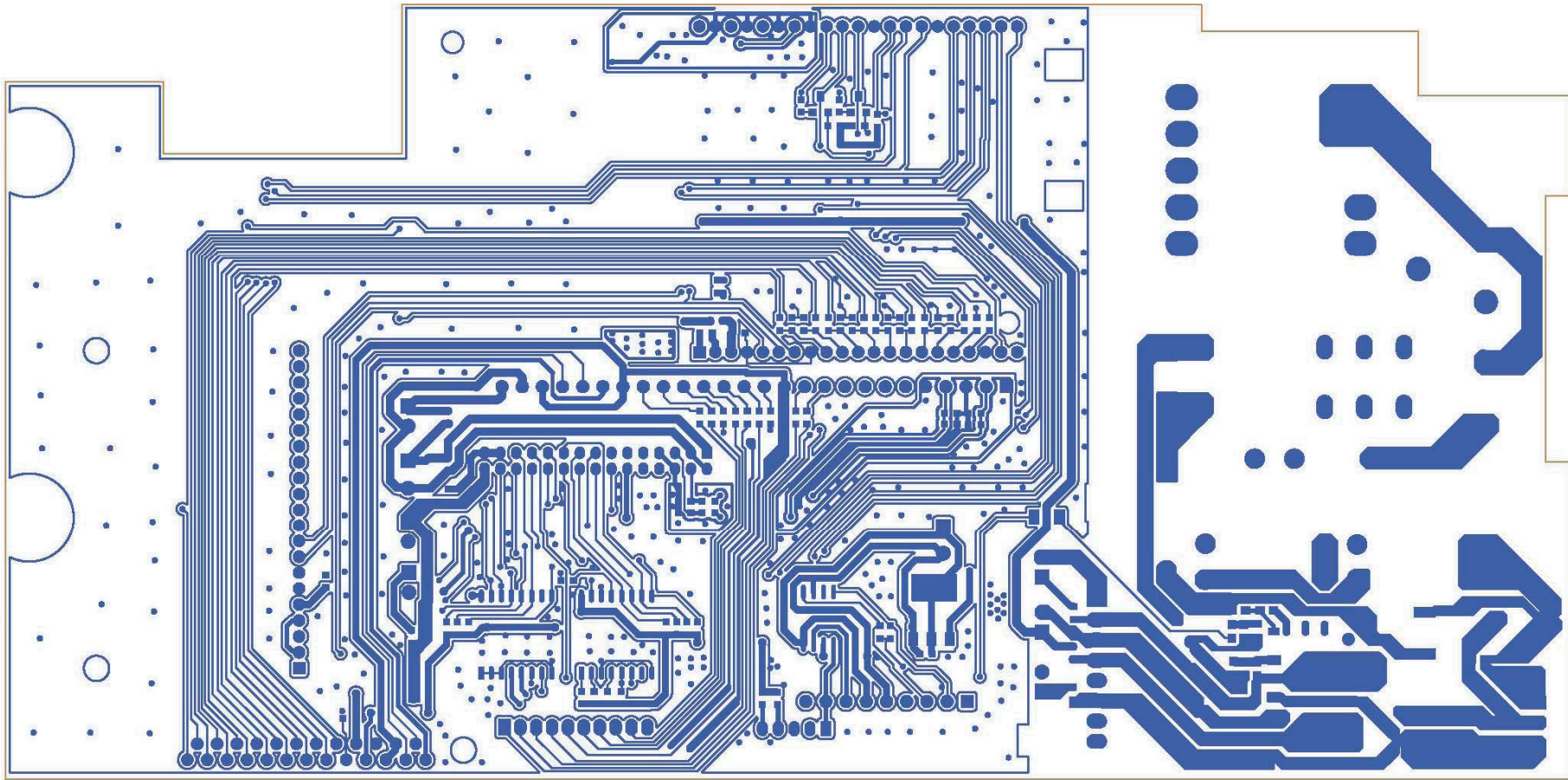


DAB&CD MODULE SCH

DAB&CD MODULE TOP SLK

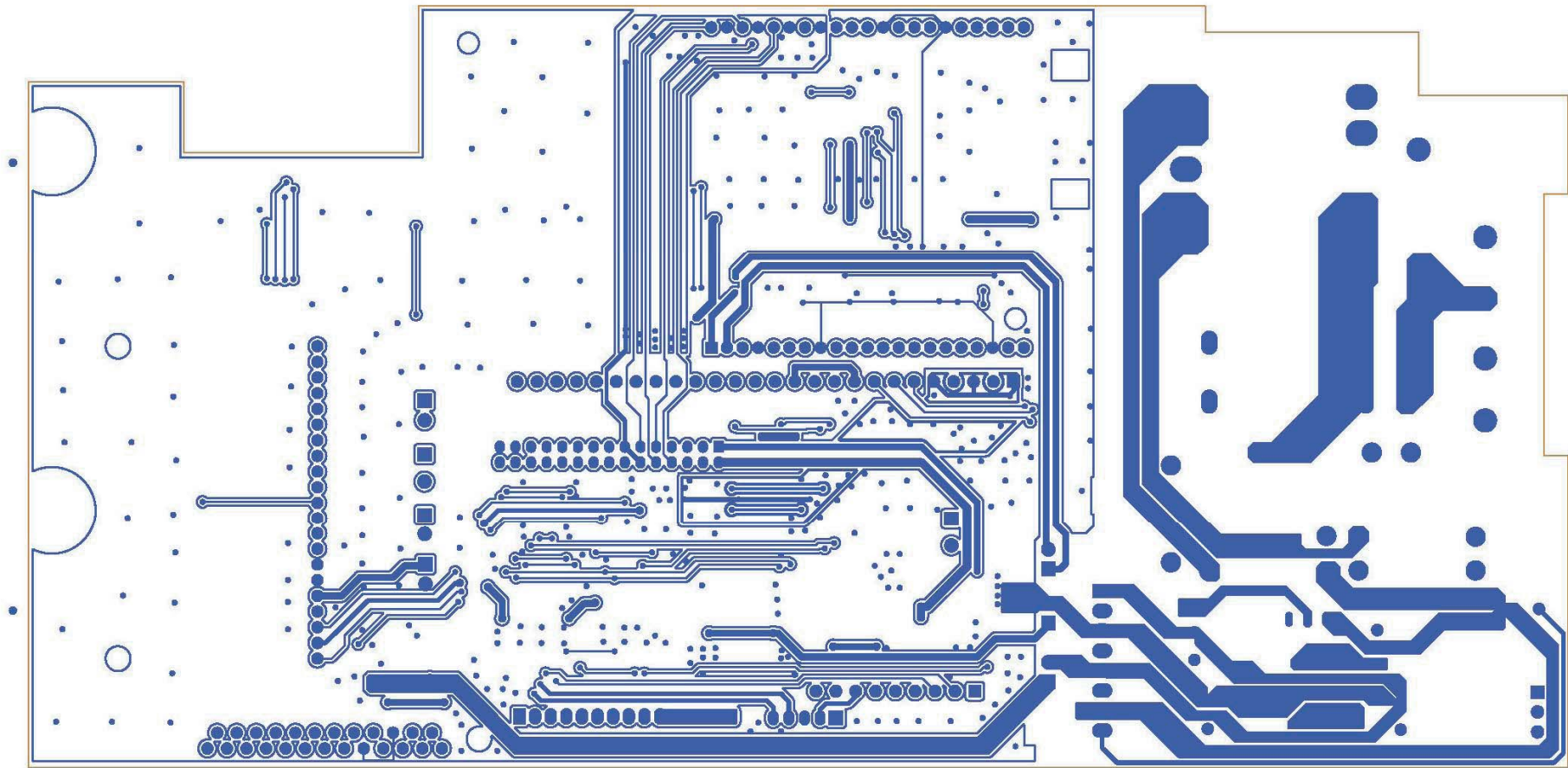


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DAB&CD MODULE TOP LAYOUT

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DAB&CD MODULE BOTTOM

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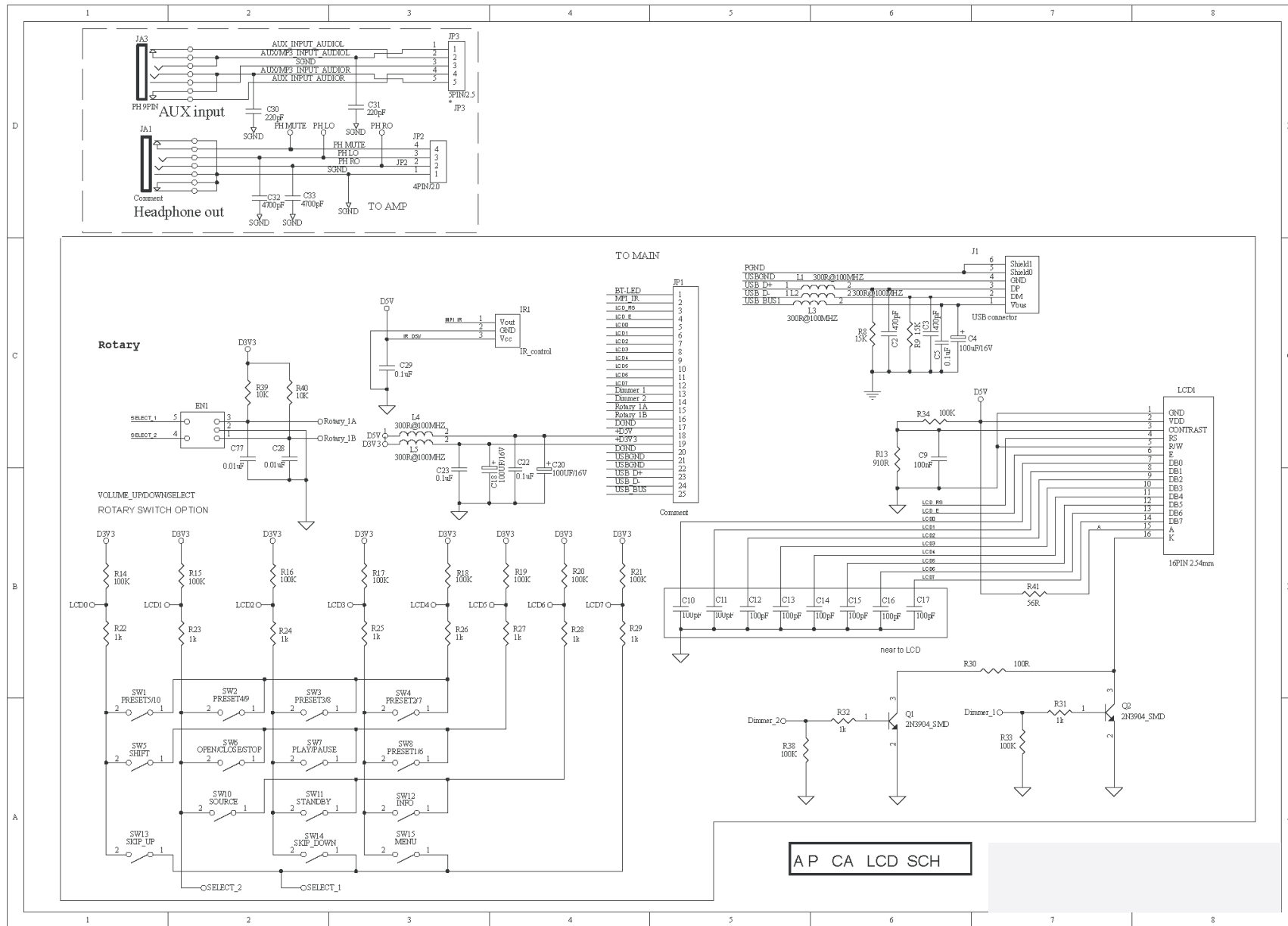
S/N	Name	Specification	Qty	Component Ident	Factory P/N
	PCBA	FUSION CA DAB&CD MODULE BOARD DIP part(RoHS)	1		40115501007100
1	Resistors	SMD 0Ω 1/10W 0603(RoHS)	2	R20.L13	03900003531100
2		SMD 33Ω 1/10W ±5% 0603(RoHS)	10	R2~R11	03933013331100
3		SMD 220Ω 1/10W ±5% 0603(RoHS)	2	R25,R400	03922023331100
4		SMD 150Ω 1/10W ±5% 0603(RoHS)	1	R30	03915023331100
5		SMD 220Ω 1/10W ±1% 0603(RoHS)	1	R32	03922023131100
6		SMD 2.2KΩ 1/10W ±5% 0603(RoHS)	2	R26A,R27A	03922033331100
7		SMD 10KΩ 1/10W ±5% 0603(RoHS)	19	R1,R12~19,R21~22,R26~29,R200, R300,R140,R26A1	03910043331100
8	Chip capacitors	SMD 0603 100pF/50V ±5%(RoHS)	8	C8~C15	04911016431100
9		SMD 0603 22pF/50V ±5%(RoHS)	2	C3,C4	04912206431100
10		SMD 0603 0.1uF/16V ±10% X7R(RoHS)	14	C2,C6,C17,C21,C22,C23,C26,C27,C15A,C16A,C22A,C25A,C83,C108	04911043331100
11	magnet	SMD 0603 300Ω @100MHz(RoHS)	14	L1~L9,L11.12.14.16. 17	10931080013100
12	Audion	SMD MMBT3904 NPN SOT-23 (RoHS)	2	Q1,Q2	06910390401100
13		SMD 2N3904 NPN SOT-23 (PMBT3904)(RoH S)	1	Q6	06910390402100
14	Diode	SMD 1N4148 1206 (RoHS)	1	D25	05940414804100
15		SMD 1N4001 1A 50V(RoHS)	2	D10.D24	05910400101100
16	IC	SMD LM1117-5.0V SOT-223(RoHS)	1	U23	07901117034100
17	IC	SMD PCF8574 (R-PDSO-G16)(RoHS)	2	U1,U3	07908574161100
18	IC	SMD LM1117MPX-3.3 N05A 3.3V/800mA SO T223(RoHS)	1	U3A	07901117031100
19	IC	SMD LM1117MPX-ADJ N03A 800mA SOT22 3(RoHS)	1	U4	07901117032100
20	IC	SMD BA6208F SOP8(RoHS)	1	U5	07906208081100
21	Resistors	SMD 470KΩ 1/10W ±5% 0603(RoHS)	2	R23~24	03947053331100
22		SMD 820KΩ 1/10W ±5% 0603 (RoHS)	2	R34,R35	03982053331100
23		SMD 5.1KΩ 1/10W ±5% 0603(RoHS)	2	R31.R33	03951033331100
24	E/C(Electronic capacitors)	220uF/16V ±20% P=2.5mm 6.3*7mm (RoHS)	1	C5	04122273313100
25		470uF/25V ±20% P=3.5mm 8*14mm (RoHS)	2	C158,C24	04124774272100
26		100uF/25V ±20% P=5mm 6.3*11mm(RoHS)	1	C156	04121074221100
27		470uF/16V ±20% P=3.5mm 8*11mm(RoHS)	3	C42,C43,C44	04124773272100
28		2200uF/16V ±20% P=5mm D=12mm(RoHS)	1	C121	04122283223100
29	Commutate diode	1N5820 M 型 P=15mm(RoHS)	4	D19, D20, D21, D22	05110582002100
30	Audion	HIT667-EQ NPN TO-92(RoHS)	1	Q3	06110066701100
31	FFC Socket	25PIN P=1.25MM (RoHS)	1	Connect to LCD board	18170250001100
32	Male socket	5PIN P=2mm RoHS)	1	CN5	18114050002100
33		10PIN P=2mm (RoHS)	1	CN4	18114100004100
34		IDC PH=2.0 2*15PIN (RoHS)	1	JP4	18110150003100
35		3PIN P=3.96mm (RoHS)	2	CON1,CON2	18116030003100
36	Female socket	26PIN P=2.54mm H=8.5mm(RoHS)	1	CN3	18125260001100
37		21PIN P=2.00mm single line plastic H=4.3mm(Ro HS)	2	CN2*2	18124210001100
38	Relay	voltage :6V DC 5A/230VAC (RoHS)	1	RY2	16100600001100
39	Fuse holders	WL-210A(RoHS)	2	F1-1,F1-2	14120000005100
40	Fuse tube	250V/1A 5.2*20mm CE certification (RoHS)	1	F1	14112500105100
41	Standby transformer	IN :230VAC/ 50Hz OUT: 6VAC/ 800mA DIP(R oHS)	1	T1	15106000841100
42	Safety Capacitor	0.1uF/275VAC X2 ±10% P=15mm (RoHS)	1	X1	04161040361100
43	E/C	100uF/16V ±20% P=2.5mm 6.3*7mm(RoHS)	3	C18,C19,C20	04121073212100
44	resistor	22Ω 1/2W ±1% M type P=12.5mm(RoHS)	1	R26A2	03122014151100
45	connector	L=100mm one with 2.54*8 male ;the other with 2.54*8 female 1,3,5,7 feet black 18#	1	J1	17304010008100
46	Chip capacitor	SMD 1206 0.1uF/50V +80/-20%(RoHS)	1		04911046151100
47	CD Module space pole	Φ3*11.2mm (LCF-11) (RoHS)	2		30515501014100
48	MD100 Module	MD100 VER.3(RoHS)	1		40115501003100
49	DAB Module	Gyro1122 E Customer v CA1.1 Software version :Vca 1.1(GS-0812051330)(R	1		40115501001100

DAB&CD MODULE BOM

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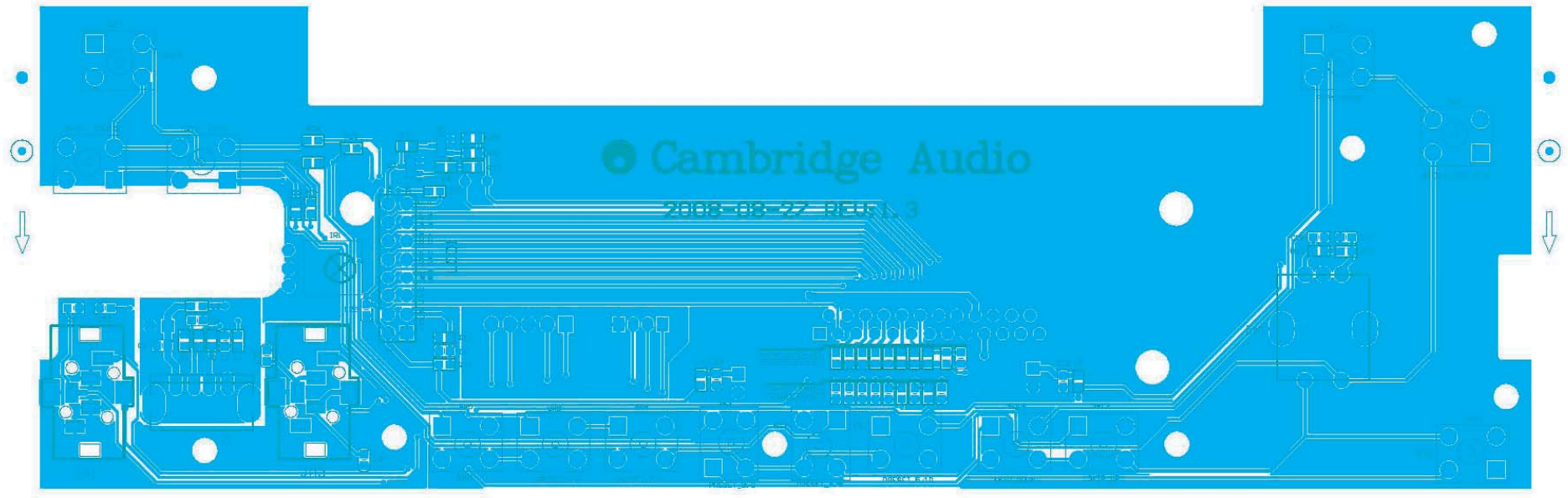
S/N	Name	Specification	Qty	Component Ident	Factory P/N
	PCBA	FUSION DC TO DC BOARD (3PIN)DIP part(RoHS)	1	U2A	40115501018100
1	IC	SMD AP1513 SOP8(RoHS)	1	U1	07901513081100
2	Diode	SMD MBRA340T3G 3A/40V(RoHS)	1	D1	05910034002100
3	Inductance	SMD 47uH 1A ferrite core 7.5*7.5*H4.5mm(RoHS)	1	L1	10914703001100
4	Chip Capacitor	SMD 0603 0.1uF/50V ±10%(RoHS)	5	C3~C7	04911046331100
5	Resistors	SMD 100KΩ 1/10W ±1% 0603(RoHS)	1	R2	03910053131100
6		SMD 3KΩ 1/10W ±5% 0603(RoHS)	1	R1	03930033331100
7		SMD 6.8KΩ 1/10W ±1% 0603(RoHS)	1	R4	03968033131100
8		SMD 1.2KΩ 1/10W ±1% 0603 (RoHS)	1	R3	03912033131100
9	E/C	220uF/16V ±20% P=2mm 6.3*7mm 105C(RoHS)	2	C1,C2	04122273271100
10	Header	3PIN 3*2.54 single line 90 degree Curve P=2.54mm A=3m m B=3.1mm H=5.24mm (R	1	J1	18135030002100

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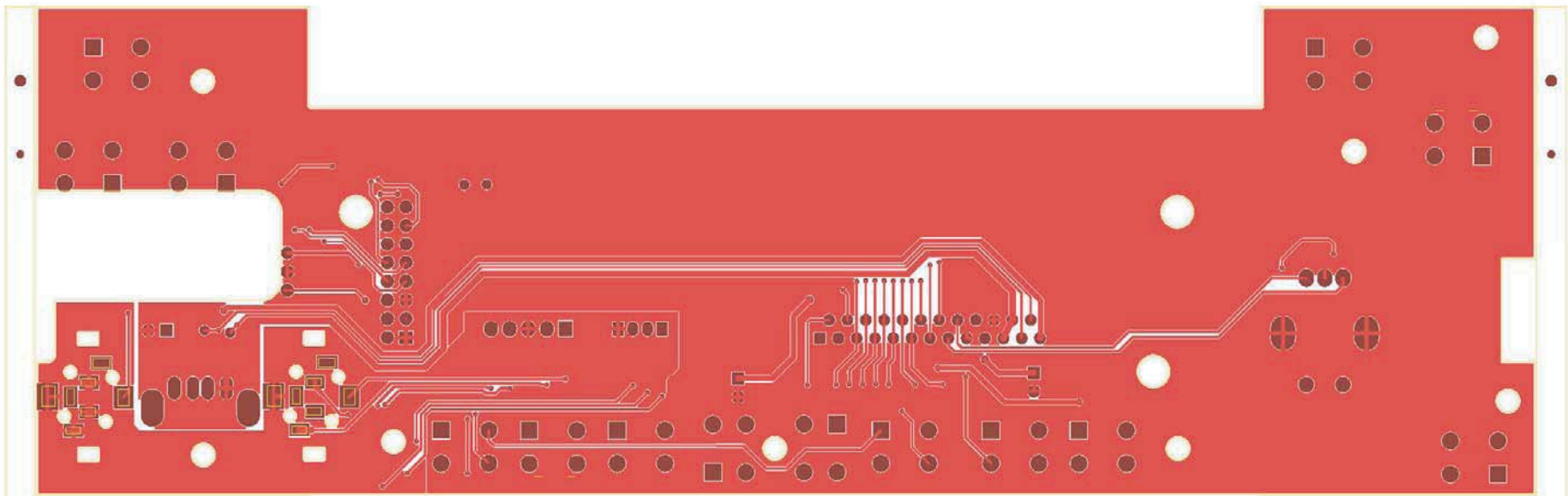
LCD SCH

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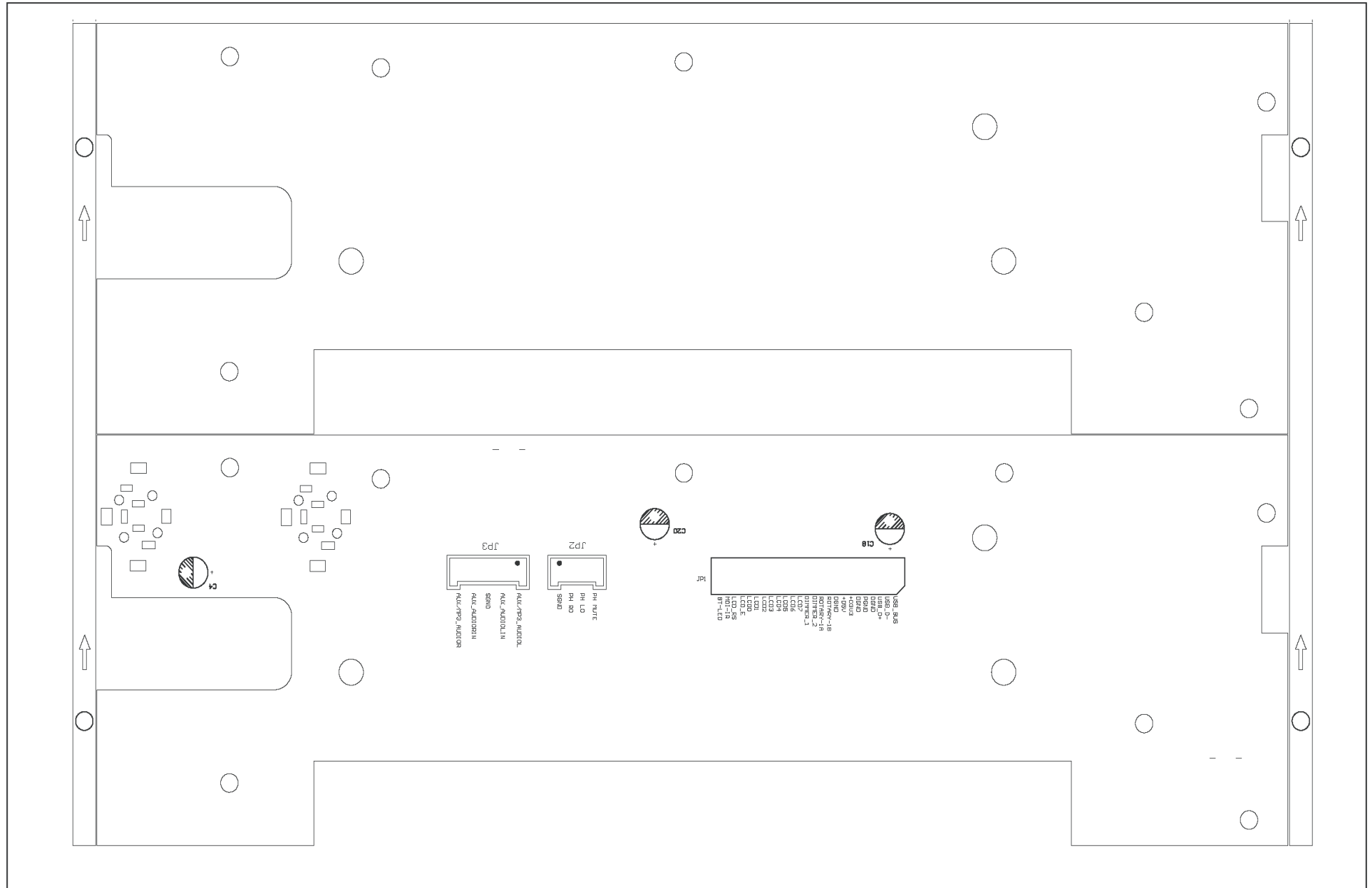
LCD TOP SLK&LAYOUT

Cambridge Audio One _{DX1} CD Player



LCD BOTTOM LAYOUT

Cambridge Audio One _{DX1} CD Player

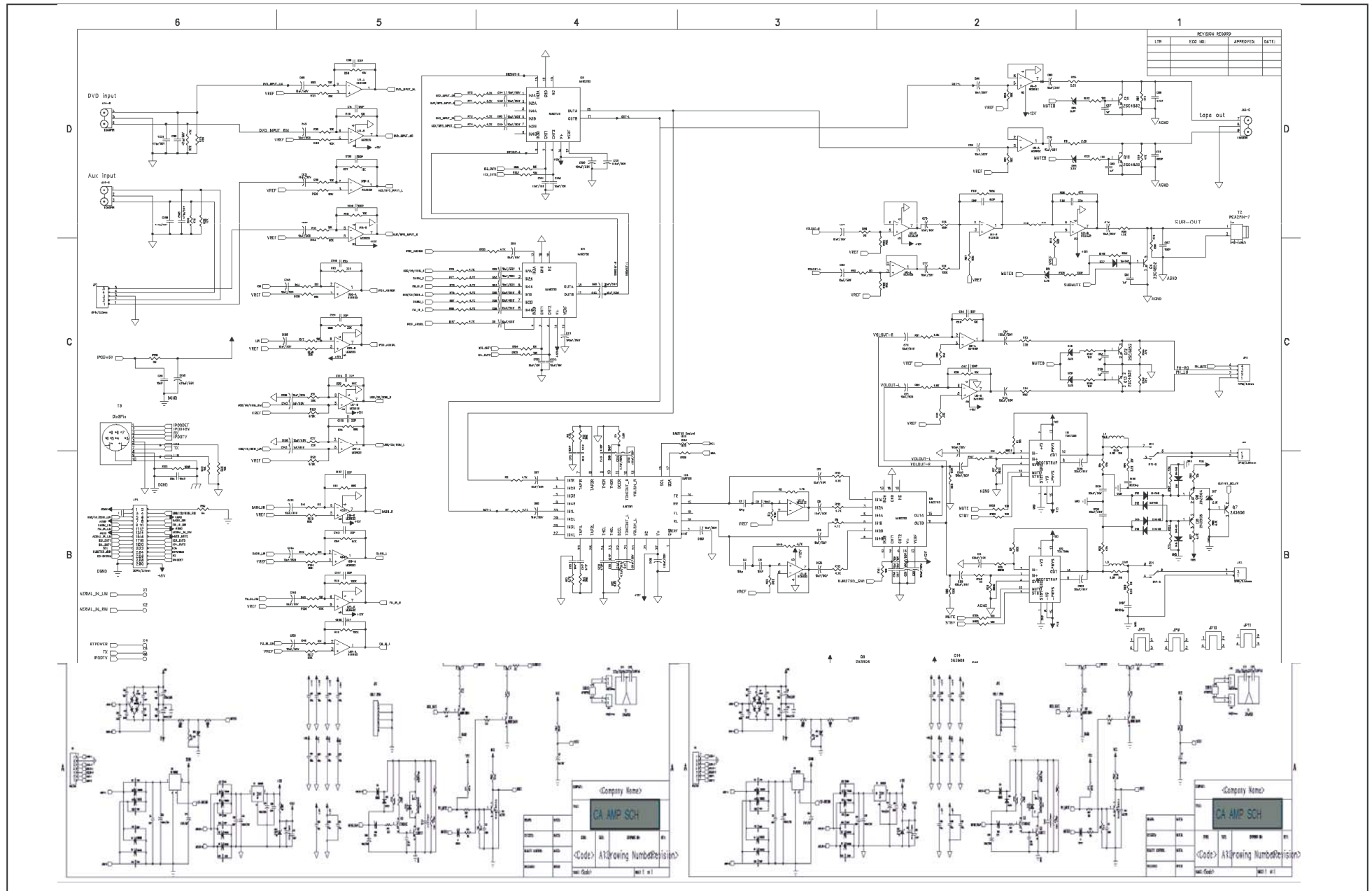


LCD BOTTOM L SLK

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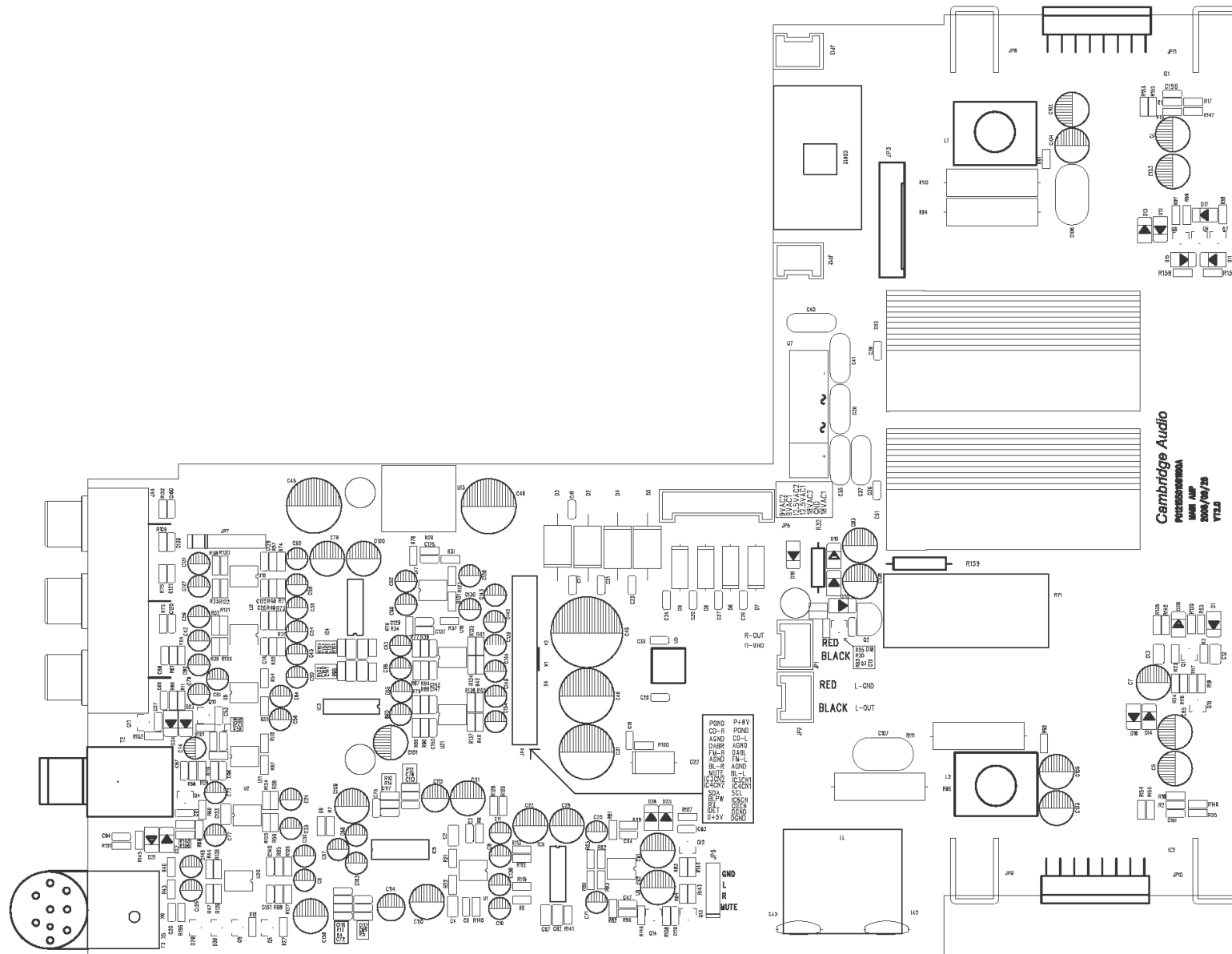
S/N	Name	Specification	Qty	Component Ident	Factory P/N
	PCBA	FUSION LCD KEY BOARD PCBA part(RoHS)	1		40115501005100
1	Resistors	SMD 75Ω 1/10W ±1% 0603(RoHS)	1	R41	03975013131100
2		SMD 100Ω 1/10W ±5% 0603(RoHS)	1	R30	03910023331100
3		SMD 1.5KΩ 1/10W ±1% 0603(RoHS)	1	R13	03915033131100
4		SMD 1KΩ 1/10W ±5% 0603(RoHS)	10	R22~29,R31,R32	03910033331100
5		SMD 10KΩ 1/10W ±5% 0603(RoHS)	2	R39,R40	03910043331100
6		SMD 100KΩ 1/10W ±5% 0603(RoHS)	11	R14~21,R33,R34,R38	03910053331100
7	Chip capacitors	SMD 0603 100pF/50V ±5%(RoHS)	9	C9~C17	04911016431100
8		SMD 0603 220pF/50V ±5% (RoHS)	2	C30,C31	04912216431100
9		SMD 0603 4700pF/50V ±10% X7R(RoHS)	2	C32,C33	04914726332100
10		SMD 0603 0.01uF/50V ±10%(RoHS)	2	C28,C77	04911036331100
11		SMD 0603 0.1uF/50V ±10%(RoHS)	4	C5,C22,C23,C29	04911046331100
12	Magnet	SMD 0603 300Ω @100MHz(RoHS)	5	L1,L2,L3,L4,L5	10931080013100
13	Audion	SMD MMBT3904 NPN SOT-23 (RoHS)	2	Q1,Q2	06910390401100
14	Resistor	SMD 15KΩ 1/10W ±5% 0603(RoHS)	2	R8,9	03915043331100
15	E/C	100uF/16V ±20% P=2.5mm 6.3*7mm(RoHS)	3	C4,C18,C20	04121073212100
16	Encoder switch	ED11305M-FB17A7.0-E20 with switch L=17mm F= 7mm(RoHS)	1	EN1	12160000041100
17	Remote control receiver	3638 F4(3V)(RoHS)	1	IR1	20130363801100
18	USB Seat	RD-USB-08(RoHS)	1	J1	18190000001100
19	LCD Module	GMPB016274Z00(RoHS)	1		40015501001100
20	Male Seat	4PIN P=2mm (RoHS)	1	JP2	18114040001100
21	Male Seat	5PIN P=2.54mm standard type(RoHS)	1	JP3	18115050001100
22	FFC Seat	25PIN P=1.25MM (RoHS)	1	JP1	18170250001100
23	Earphone Seat	7PIN EJ-3521(RoHS)	2	JA1,JA3	18140070003100
24	Touch press key	6*6*7(H)mm TS-00104-B 4PIN (RoHS)	14	SW1~SW8,SW10~ SW15	12130000005100
25	LCD Space pole	Φ3*3.5mm (LCH-3) (RoHS)	3	Locate LCD	30515501016100

Cambridge Audio One_{DX1} CD Player



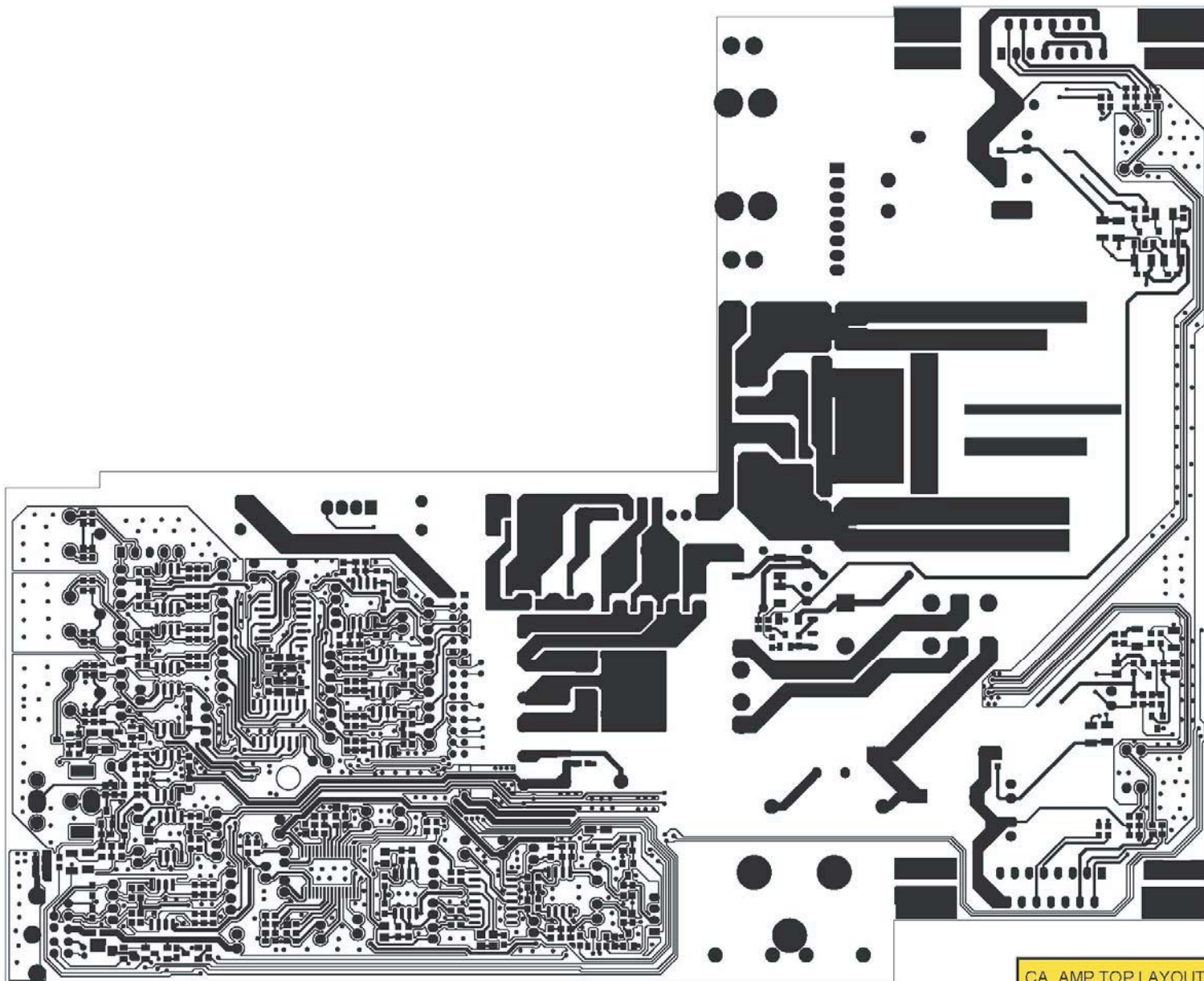
AMP SCH

Cambridge Audio One _{DX1} CD Player



AMP TOP SLK

Cambridge Audio One_{DX1} CD Player

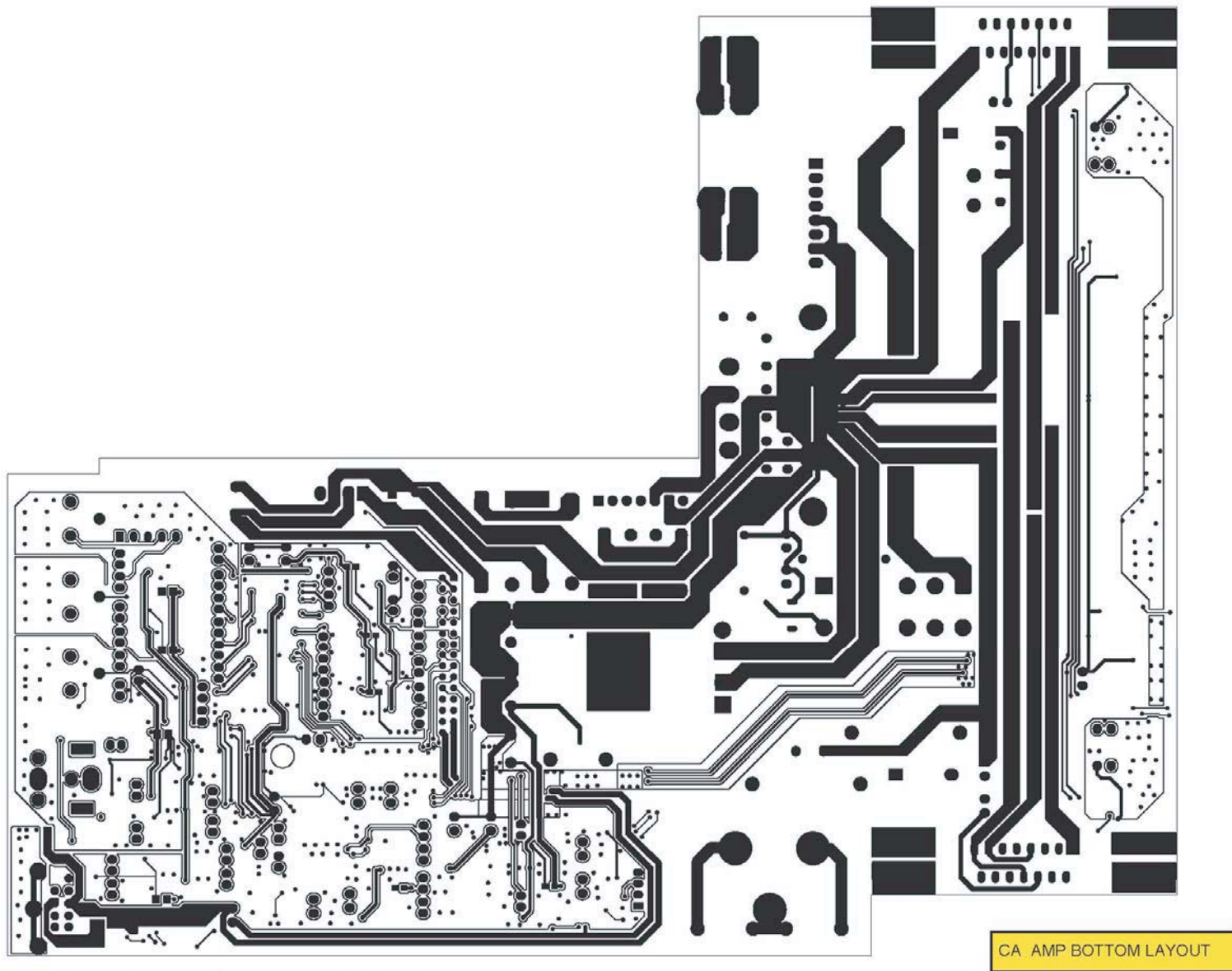


AMP TOP LAYOUT

Cambridge Audio One _{DX1} CD Player

AMP BOTTOM SLK

Cambridge Audio One_{DX1} CD Player



AMP BOTTOM LAYOUT

Cambridge Audio One_{DX1} CD Player

S/N	Name	Specification	Qty	Component Ident	Factory P/N
	PCBA	FUSION MAIN AMP DIP part (RoHS)	1		40115501013100
1	Resistors	SMD 0 Ω 1/10W 0603(RoHS)	5	R146,R147,R28,R50,R156	03900003531100
2		SMD 100 Ω 1/10W $\pm$ 5% 0603(RoHS)	10	R106,R107,R108,R128,R129,R151~155	03910023331100
3		SMD 680 Ω 1/10W $\pm$ 5% 0603(RoHS)	4	R15,R17,R18,R20	03968023331100
4		SMD 820 Ω 1/10W $\pm$ 5% 0603(RoHS)	1	R16	03982023331100
5		SMD 1.2K Ω 1/10W $\pm$ 5% 0603(RoHS)	3	R26,R145,R149	03912033331100
6		SMD 2.2K Ω 1/10W $\pm$ 5% 0603(RoHS)	8	R5,R11,R12,R19,R30,R93,R100,R114	03922033331100
7		SMD 4.7K Ω 1/10W $\pm$ 5% 0603(RoHS)	24	R4,R6~9,R10,R27,R70,R71,R73,R74,R76,R77,R78,79,R87,R88,R97,R112,R113,R115,R126,R127,R140	03947033331100
8		SMD 5.1K Ω 1/10W $\pm$ 5% 0603(RoHS)	1	R96	03951033331100
9		SMD 6.2K Ω 1/10W $\pm$ 5% 0603(RoHS)	2	R81,82	03962033331100
10		SMD 10K Ω 1/10W $\pm$ 5% 0603(RoHS)	24	R33,R35,R36,R38,R40,43~49,R52,R53,R57,R89,R99,R103~105,117,118,141,150	03910043331100
11		SMD 22K Ω 1/10W $\pm$ 5% 0603(RoHS)	9	R1~3,31,37,41,42,5 5,56	03922043331100
12		SMD 39K Ω 1/10W $\pm$ 5% 0603(RoHS)	2	R13,R14	03939043331100
13		SMD 33K Ω 1/10W $\pm$ 5% 0603(RoHS)	1	R142	03933043331100
14		SMD 47K Ω 1/10W $\pm$ 5% 0603(RoHS)	14	R58,60~61,R66,R72,R75,R91,R92,R109,R132,R143,R144,R157,158	03947043331100
15		SMD 56K Ω 1/10W $\pm$ 5% 0603(RoHS)	4	R51,R54,R62,R63	03956043331100
16		SMD 62K Ω 1/10W $\pm$ 5% 0603(RoHS)	16	R39,R64,R67,R116,R120~122,124,125,R130,R133~134,R1 36~139	03962043331100
17		SMD 68K Ω 1/10W $\pm$ 5% 0603(RoHS)	2	R34 R29	03968043331100
18		SMD 100K Ω 1/10W $\pm$ 5% 0603(RoHS)	15	R21~25,R59,R65,R68,R69,R80,R86,R90,R119,R135,R148	03910053331100
19	Chip Capacitors	SMD 0603 22pF/50V $\pm$ 5% NPO (RoHS)	9	C86,C125,C128,C137,C142,C146,C147,C150,C151	04912206432100
20		SMD 0603 100pF/50V $\pm$ 10%(RoHS)	4	C14,C26,C122,C129	04911016331100
21		SMD 0603 220pF/50V $\pm$ 10% X7R(RoHS)	2	C88,C89	04912216331100
22		SMD 0603 470pF/50V $\pm$ 5% NPO(RoHS)	6	C117,C116,C120,C1 21,C159,C160	04914716432100
23		SMD 0603 1000pF/25V $\pm$ 5% NPO (RoHS)	1	C97	04911024431100
24		SMD 0603 4700pF/50V $\pm$ 10% X7R(RoHS)	2	C113 C112	04914726332100
25		SMD 0603 0.01uF/50V $\pm$ 5% X7R(RoHS)	1	C96	04911036431100
26		SMD 0603 0.1uF/50V $\pm$ 10%(RoHS)	36	C2~4,C6,C12,C15~21,C23,C27~30,C32,C34,36,38,C69,C72,C75~76,C84,C94~95,C119,C123~124,C132,C134~135,C138,C157	04911046331100
27		SMD 0603 1uF/16V $\pm$ 10% X7R(MURATA)(RoHS)	3	C61,C93,C118	04911053331100
28		SMD 0805 1uF/50V $\pm$ 10% X7R(RoHS)	1	C13	04911056341100
29	Diode	SMD 1206 ZD3.3V 1/2W(RoHS)	3	D21,D25,D26	05920003301100
30		SMD 5.1V 1/2W 1206 (RoHS)	3	D17,D20,D28	05920005103100
31		SMD 1N4001 1A 50V(RoHS)	2	D18,D19	05910400101100
32		SMD 1N4148 1206 (RoHS)	9	D1,D10~16,D27	05940414804100
33	Audion	SMD 2SC4852 SOT-23(RoHS)	3	Q4,Q12,Q13	06910485201100
34		SMD MMBT3904 NPN SOT-23 (RoHS)	4	Q1,Q5,Q6,Q15	06910390401100
35		SMD ST8050C SOT-23(RoHS)	1	Q3	06910805002100
36		SMD MMBT3906 PNP SOT-23(RoHS)	4	Q7,Q8,Q9,Q14	06910390601100
37	IC	SMD SJ4580 8PIN(RoHS)	1	U9	07904580082100
38	IC	SMD NE5532 SOP8(RoHS)	10	U1~U3,U8,U11,U17 ~21	07905532081100
39	IC	SMD NJM2750M SO16(RoHS)	3	IC3,IC4,IC6	07902750161100
40	IC	SMD NJW1191 SSOP32(RoHS)	1	IC5	079011191321100
41	IC	SMD MC7812ABTG DPAK-3(RoHS)	1	U5	07907812031100
42	Resistors	SMD 22 Ω 1/10W $\pm$ 5% 0603(RoHS)	2	R83,R84	03922013331100
43		SMD 470K Ω 1/10W $\pm$ 5% 0603(RoHS)	2	R123,R131	03947053331100
44	Chip Capacitor	SMD 0805 10uF/16V $\pm$ 10% X7R(RoHS)	6	C82.87.140.141.152. 153	04911063342100
45	Resistors	SMD 30K Ω 1/10W $\pm$ 5% 0603(RoHS)	2	R85,R98	03930043331100
46		2.2 Ω 2W $\pm$ 5% M P=20mm(RoHS)	4	R94,R95,R110,R111	03122006391100
47		1.2K Ω 1/4W $\pm$ 5% M P=10mm(RoHS)	1	R32	03112033341100
48	M/C capacitor	0.1uF/100V $\pm$ 5% P=5mm green (RoHS)	2	C106,C107	04151048421100
49	E/C	4.7uF/25V $\pm$ 20% P=2.5mm 5*11mm(RoHS)	2	C114,C115	04124754211100

AMP BOM

Cambridge Audio One _{DX1} CD Player

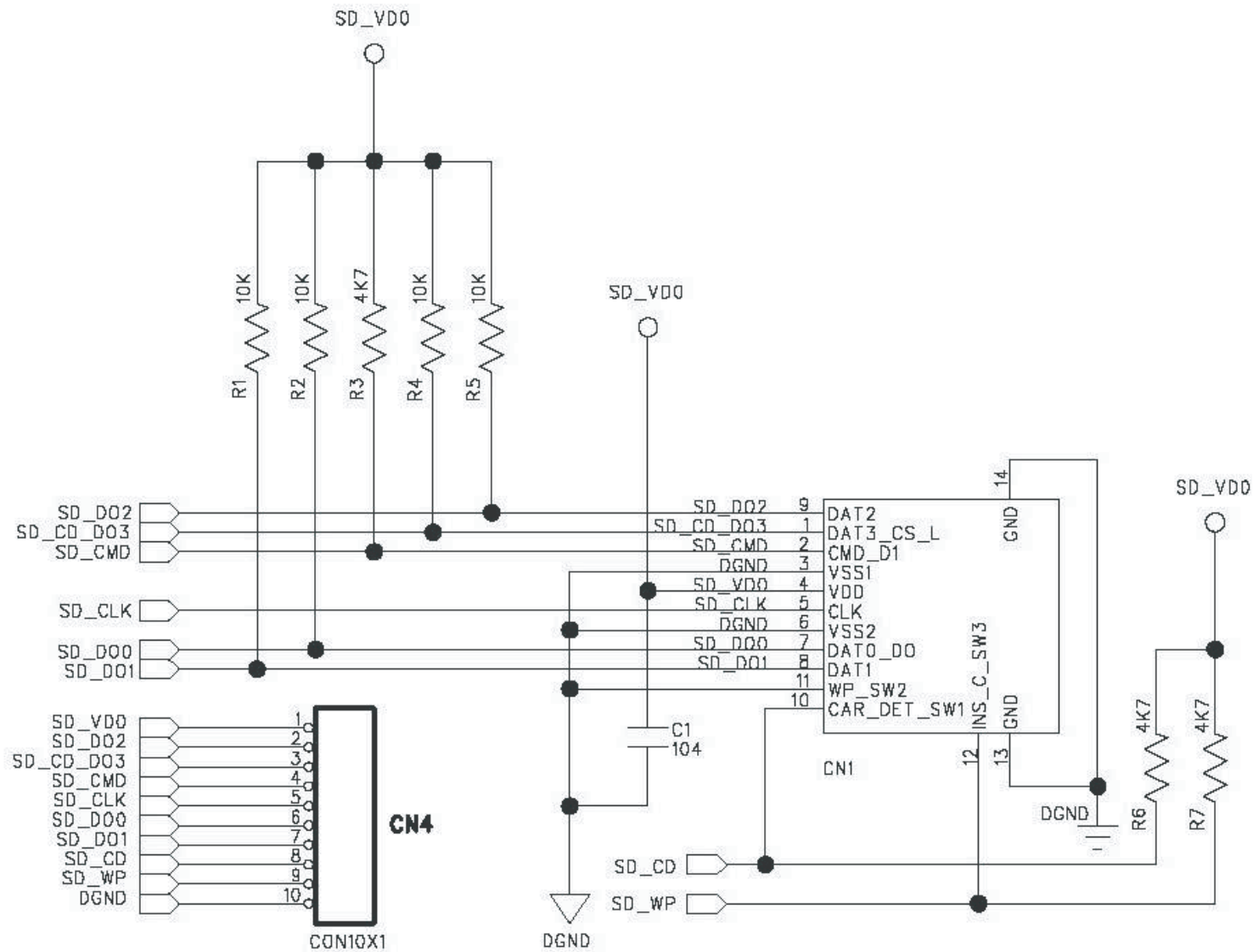
S/N	Name	Specification	Qty	Component Ident	Factory P/N
50	E/C	10uF/16V ±20% P=2mm 4*5mm(RoHS)	45	C8~11,C24,C33,C42~43,C50,C54~56,C58~C60,C62~68,C70~71,C73~74,C77,C79~81,C90,C98~99,C126~127,C130~131,C136,C139,C144,C148,C149,C154,C155,C163	04121063272100
51	E/C	10uF/50V ±20% P=2mm(RoHS)	1	C7	04121066271100
52	N/P capacitor	22uF/50V ±20% P=2.5mm 6.3*11mm(RoHS)	4	C102,C103,C104,C105	04172266271100
53	E/C	100uF/35V ±20% P=2.5mm 6.3*11mm(RoHS)	16	C1,C5,C22,C25,C78,C83,C85,C91~92,C100~101,C108~111,C133	04121075211100
54	E/C	470uF/35V ±20% P=5mm 10*20mm 105C LZ(RoHS)	3	C31,C45,C46	04124775222100
55	E/C	1000uF/16V ±20% P=5mm 10*12.5mm(RoHS)	1	C48	04121083223100
56	E/C	1000uF/35V ±20% P=5mm 13*20mm 105C(RoHS)	1	C49	04121085223100
57	E/C	8200uF/50V ±20% P=10mm D=25mm 105C(RoHS)	2	C51-52	04128286241100
58	Steady voltage diode	BZX55C 6.2V 1/2W P=10mm(RoHS)	1	D22	05120006201100
59	Rectifier diode	1N4934 M type P=10mm(RoHS)	4	D6,D7,D8,D9	05110493401100
60		1N5820 M type P=15mm(RoHS)	4	D2,D3,D4,D5	05110582002100
61	Bridge rectifier	RS604 6A/400V(RoHS)	1	U7	05160060401100
62	Audion	HIT667-EQ NPN TO-92(RoHS)	1	Q2	06110066701100
63	IC	TDA7296 ZIP15(RoHS)	2	IC1,IC2	07107296151100
64	RCA Seat	6PIN horizontal top white bottom red gilt(RoHS)	1	JA4	18180060003100
65	RCA Seat	1PIN horizontal purple gilt(RoHS)	1	T2	18180010004100
66	Male Seat	IDC PH=2.0 2*15PIN (RoHS)	1	JP4	18110150003100
67		2PIN pitch 3.96mm (RoHS)	2	JP12,13	18116020001100
68		7PIN P=2.54mm (RoHS)	1	JP5	18115070001100
69	Inductor	Empty core Φ1mm circle round with 18 <half diameter Φ15mm P=10mm(RoHS) >	2	L1,L2	10110000012100
70	Relay	12VDC/8A DPDT(EMI-SH-212D))(RoHS)	1	RY1	16101200002100
71	DINseat	9PIN 90。 C81012-09GHSB00(RoHS)	1	T3	18190090003100
72	Terminal	4PIN left red; right black RD-PT2-005(RoHS)	1	CON12	18160040003100
73	Heat sink	100.4*70*19mm aluminum anode black (RoHS)	2		34215501004100
74	metal sheet	26*12*1.6mm(RoHS)	2	Lock up on heat sink that press AMP IC(TRK-1)	38228030001100
75	AC Seat	SL-AC02-GP 10A-15A/250V/AC (RoHS)	1		18150000021100
76	Safety capacitor	2200pF/250~400V±20% P=10mm X1Y1(RoH S)	2	CY1.CY2	04162220241100
77	Shield cable	L=180mm 4PIN P=2.0mm 28AWG	1	JP6 TO earphone output	17404018001100
78	connection	L=160mm 2PIN (red and black)18AWG one end with female seat P= 3.96mm the other end with peel tin about 5mm(RoHS)	2	JP1.JP2 connect speaker output	17302016007100
79	shield cable	L=300mm 5PIN P=2.54mm	1	JP7 MP3 signal line	17405030002100
80	E/C	1uF/50V ±20% P=1.5mm 4*5mm(RoHS)	2	C143.C145	04121056201100
81	Resistor	100Ω 1W ±1% M type P=15mm(metal film)(RoHS)	1	R159	03110025361100
82	Male Seat	8PIN P=2.54mm (RoHS)	1	JP3	18115080002100
83	Mica sheet	Length 24*width 21*height 0.1mm(RoHS)	2	Back of heat sink	39402402101100
84	E/C	470uF/25V ±20% P=2.5mm 6.3*15 (RoHS)	1	C158	04124774211100
85	capacitor	0.1uF/100V ±10% P=5mm (RoHS)	5	C35,37,39~41	04111048321100
86	Bracket	11.5*13*8.5mm T=1mm iron plating nickel (RoHS)	4	On AMP board	38610098001100
87	Chip Capacitor	SMD 1206 0.1uF/50V +80/-20%(RoHS)	1	Welding out of DIN seat	04911046151100
88	PCBA	FUSION IPOD BOARD DIP part (RoHS)	1		40115502002100
89	Resistors	SMD 0Ω 1/10W 0603(RoHS)	4	R22,R23,R40,R39	03900003531100
90		SMD 27Ω 1/10W ±1% 0603(RoHS)	2	R16,R17	03927013131100
91		SMD 100Ω 1/10W ±5% 0603(RoHS)	3	R8,R29,R30	03910023331100
92		SMD 330Ω 1/10W ±5% 0603(RoHS)	2	R10,R13	03933023331100
93		SMD 1.8KΩ 1/10W ±5% 0603(RoHS)	1	R2	03918033331100
94		SMD 5.6KΩ 1/10W ±1% 0603(RoHS)	1	R27	03956033131100
95		SMD 10KΩ 1/10W ±5% 0603(RoHS)	2	R28,R31	03910043331100
96		SMD 47KΩ 1/10W ±1% 0603(RoHS)	2	R24,R38	03947043131100
97		SMD 49.9KΩ 1/10W ±1% 0603(RoHS)	2	R18,R21	03949943131100
98		SMD 75KΩ 1/10W ±1% 0603(RoHS)	2	R20,R19	03975043131100
99		SMD 100KΩ 1/10W ±5% 0603(RoHS)	4	R11,R12,R14,R15	03910053331100
100		SMD 549KΩ 1/10W ±1% 0603(RoHS)	1	R1	03954953131100

AMP BOM

Cambridge Audio One_{DX1} CD Player

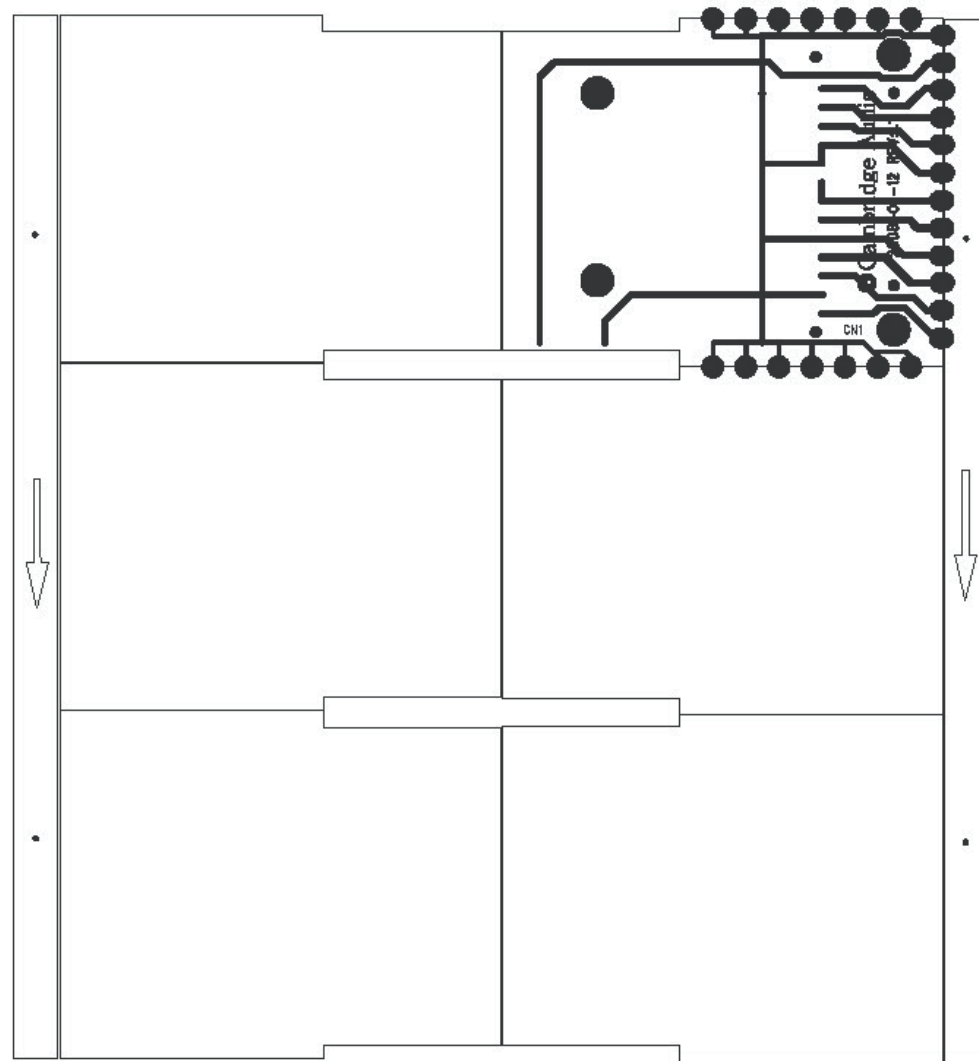
S/N	Name	Specification	Qty	Component Ident	Factory P/N
101	Inductances	SMD 0805 1.0uH ±10%(RoHS)	1	L3	10910100001100
102		SMD 0805 10uH ±10%(RoHS)	1	L2	10911000001100
103	Chip Capacitors	SMD 0603 47pF/50V ±5% NPO(RoHS)	9	C7,C8,C12-C15,C18 ,C24,C25	04914706432100
104		SMD 0603 0.1uF/50V ±10%(RoHS)	4	C10,C17,C21,C26	04911046331100
105		SMD 0603 100pF/50V ±10%(RoHS)	2	C5,C6	04911016331100
106	Audion	SMD BC817-25 SOT-23(RoHS)	1	Q1	06918172501100
107	IC	SMD TS922 SOP8(RoHS)	2	U1,U2	07900922081100
108	Female Seat	SMD 30PIN 514SO117 I/O PLUG(RoHS)	1	CN1	18920300001100
109	Magnetic bead	SMD 0805 220Ω @100MHz 2A ferrite (Murata)(RoHS)	1	L1	10931080019100
110	Resistor	SMD 22KΩ 1/10W ±1% 0603(RoHS)	14	R3~7,R9,25,26,32~3 7	03922043131100
111	E/C	10uF/16V±20% P=1.5mm 4*5mm 105。 (RoH S)	3	C1,C2,C9	04121063201100
112	E/C	10uF/16V ±20% P=2mm 4*5mm(RoHS)	4	C3,C4,C20,C22	04121063272100
113	E/C	220uF/16V ±20% P=2.5mm 6.3*7mm endure temperature 10 5C (RoHS)	2	C11,C16	04122273319100
114	LED	Φ3.0mm fog appearance with blue light 2PIN P=2.54mm(RoH S)	1	D1	05130003034100
	PCBA	FUSION DC TO DC BOARD (4PIN) DIP part (RoHS)	1		40115501015100
1	IC	SMD AP1513 SOP8(RoHS)	1	U1	07901513081100
2	Diode	SMD MBRA340T3G 3A/40V(RoHS)	1	D1	05910034002100
3	Inductance	SMD 47uH 1A 7.5*7.5*H4.5mm(RoHS)	1	L1	10914703001100
4	Chip Capacitor	SMD 0603 0.1uF/50V ±10%(RoHS)	4	C3,C4,C5,C6	04911046331100
5	Resistors	SMD 100KΩ 1/10W ±1% 0603(RoHS)	1	R2	03910053131100
6		SMD 3KΩ 1/10W ±5% 0603(RoHS)	1	R1	03930033331100
7		SMD 12KΩ 1/10W ±1% 0603(RoHS)	1	R4	03912043131100
8		SMD 1.3KΩ 1/10W ±5% 0603(RoHS)	1	R3	03913033331100
9	E/C	220uF/16V ±20% P=2mm 6.3*7mm 105C(Ro HS)	2	C1,C2	04122273271100
10	Header	4PIN P=2.54mm gilt L type header (RoHS)	1	J1	18135040001100

Cambridge Audio One_{DX1} CD Player



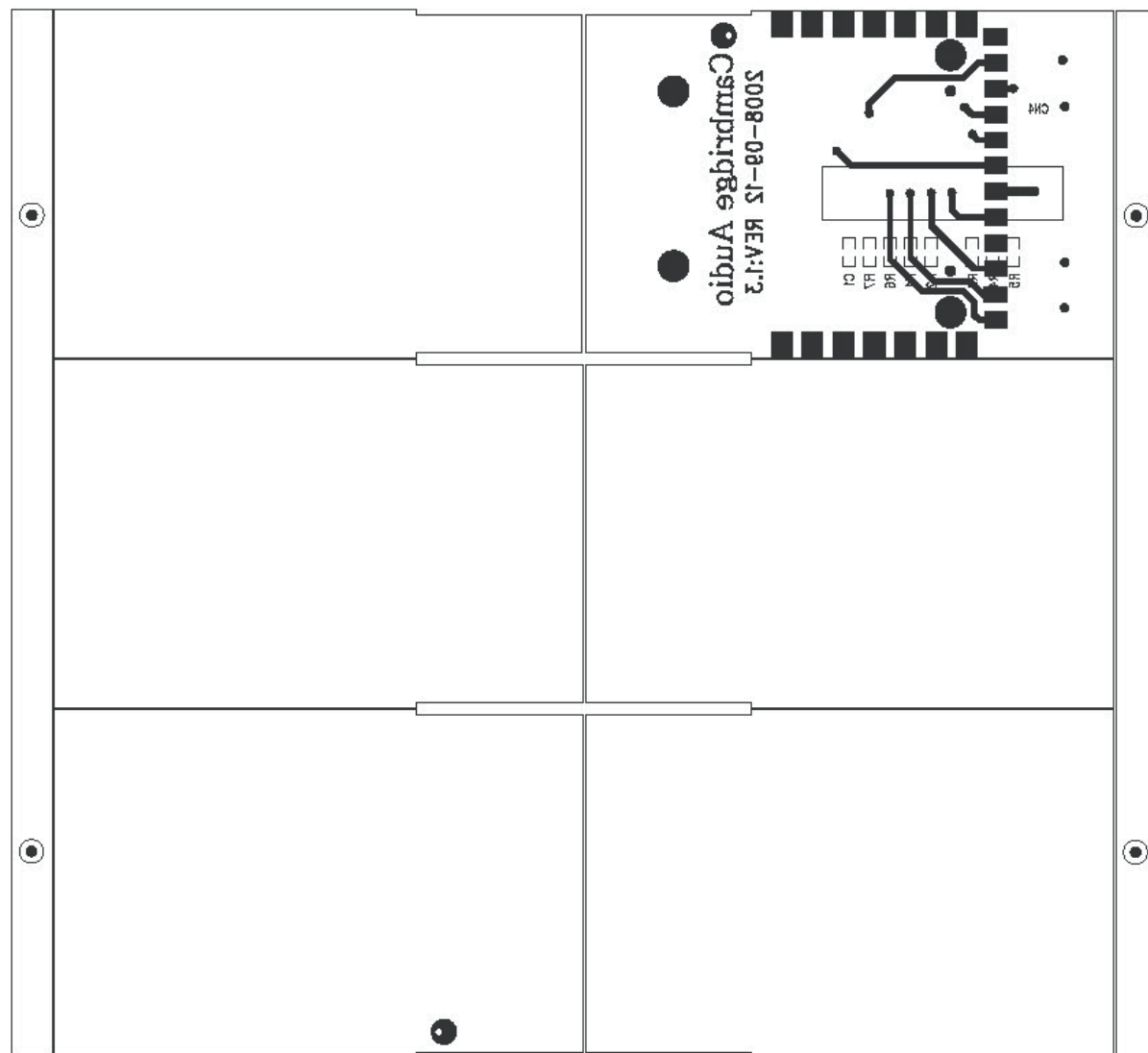
SD SCH

Cambridge Audio One_{DX1} CD Player



SD1 LAYOUT

Cambridge Audio One _{DX1} CD Player

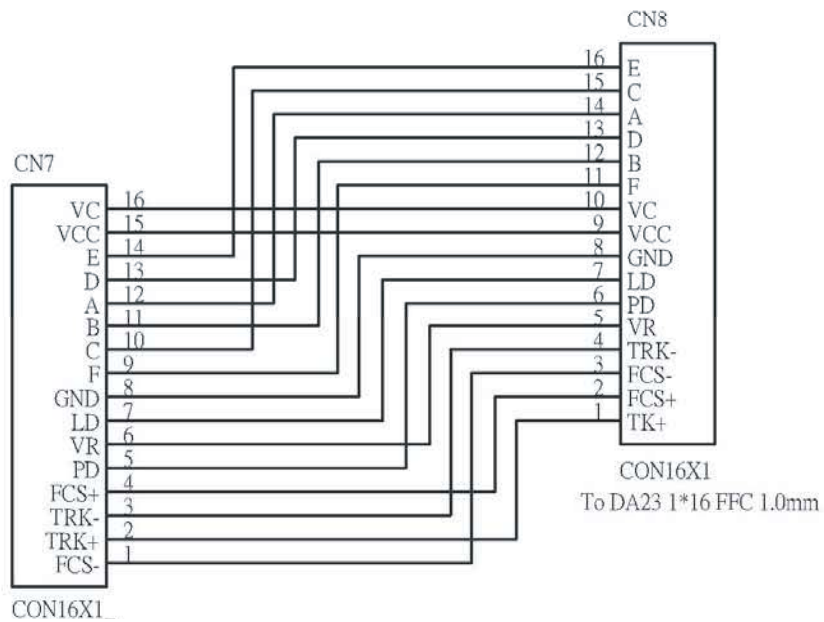
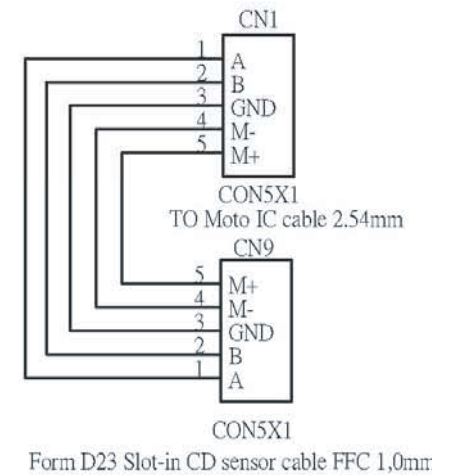
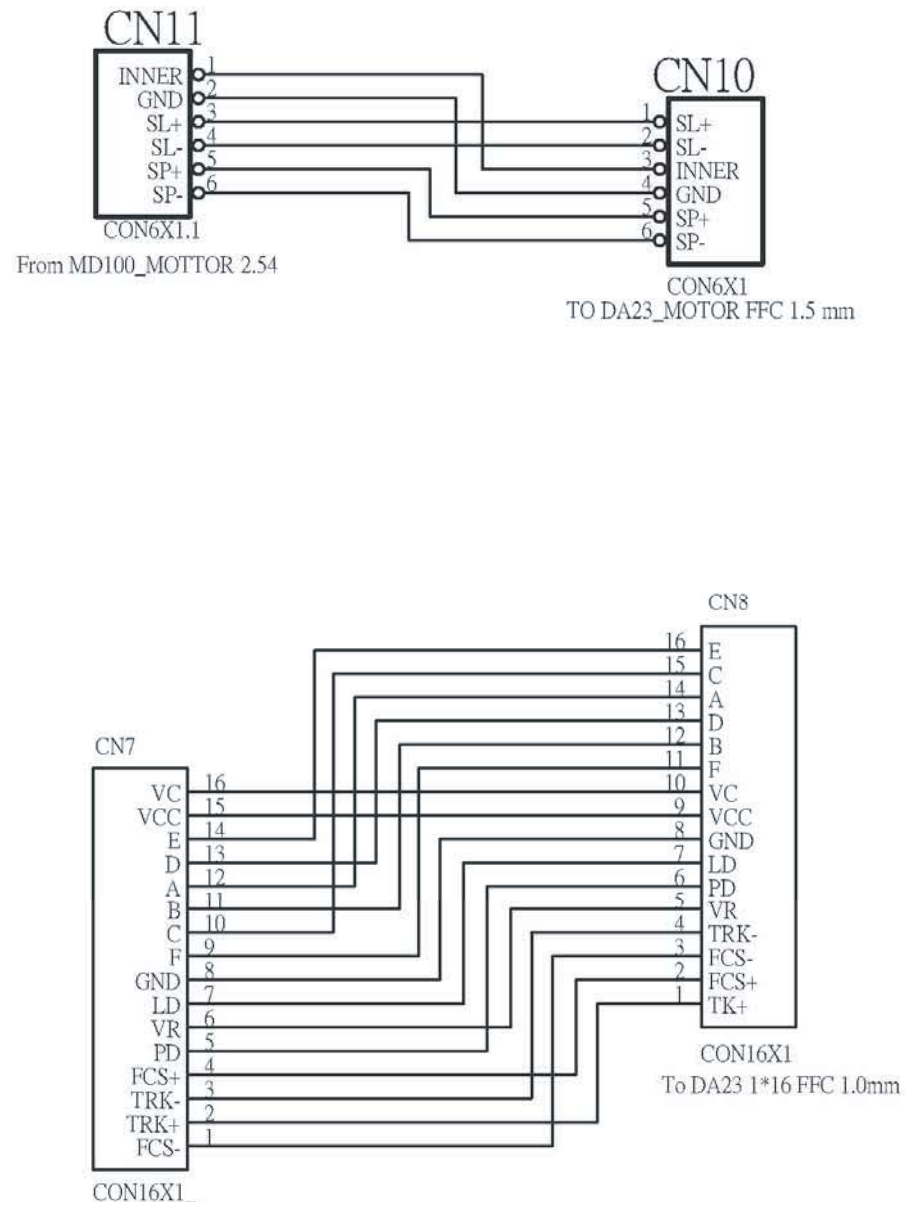


SD2 LAYOUT

Cambridge Audio One _{DX1} CD Player

S/N	Name	Specification	Qty	Component Ident	Factory P/N
	PCBA	FUSION SD BOARD DIP Part(RoHS)	1		40115501009100
1	Resistors	SMD 4.7K Ω 1/10W $\pm$ 5% 0603(RoHS)	3	R3,R6,R7	03947033331100
2		SMD 10K Ω 1/10W $\pm$ 5% 0603(RoHS)	4	R1,R2,R4,R5	03910043331100
3	Chip Capacitor	SMD 0603 0.1uF/16V $\pm$ 10% X7R(RoHS)	1	C1	04911043331100
4	Male Seat	SMD 10PIN P=2.0MM 90。 Vertical (RoHS)	1	CN4	18114100003100
5	SD Card Socket	SMD 16PIN P=0.95mm $\pm$ 0.05 (RoHS)	1	CN1	18102160001100

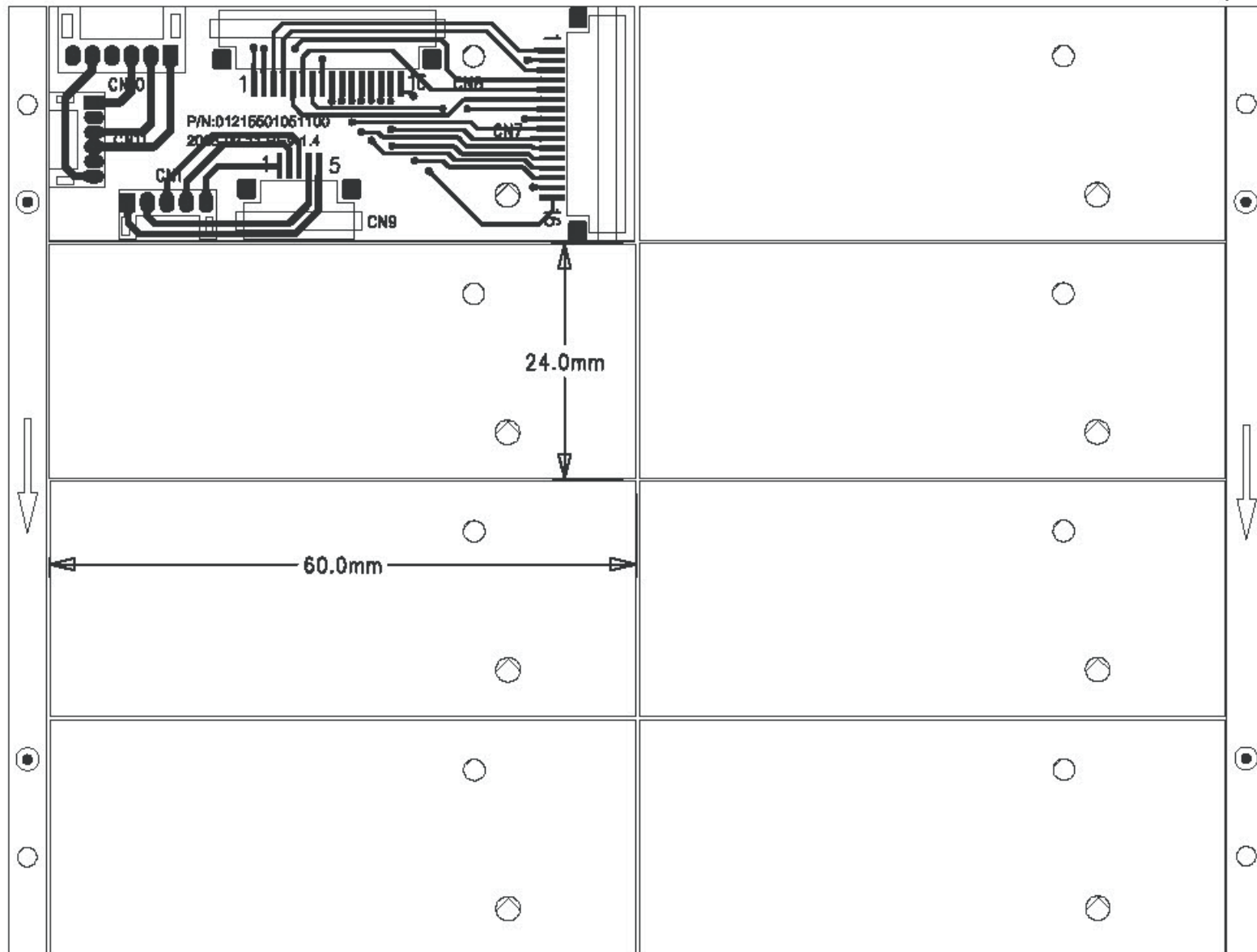
Cambridge Audio One _{DX1} CD Player



CA MOT SCH

MOT SCH

Cambridge Audio One_{DX1} CD Player

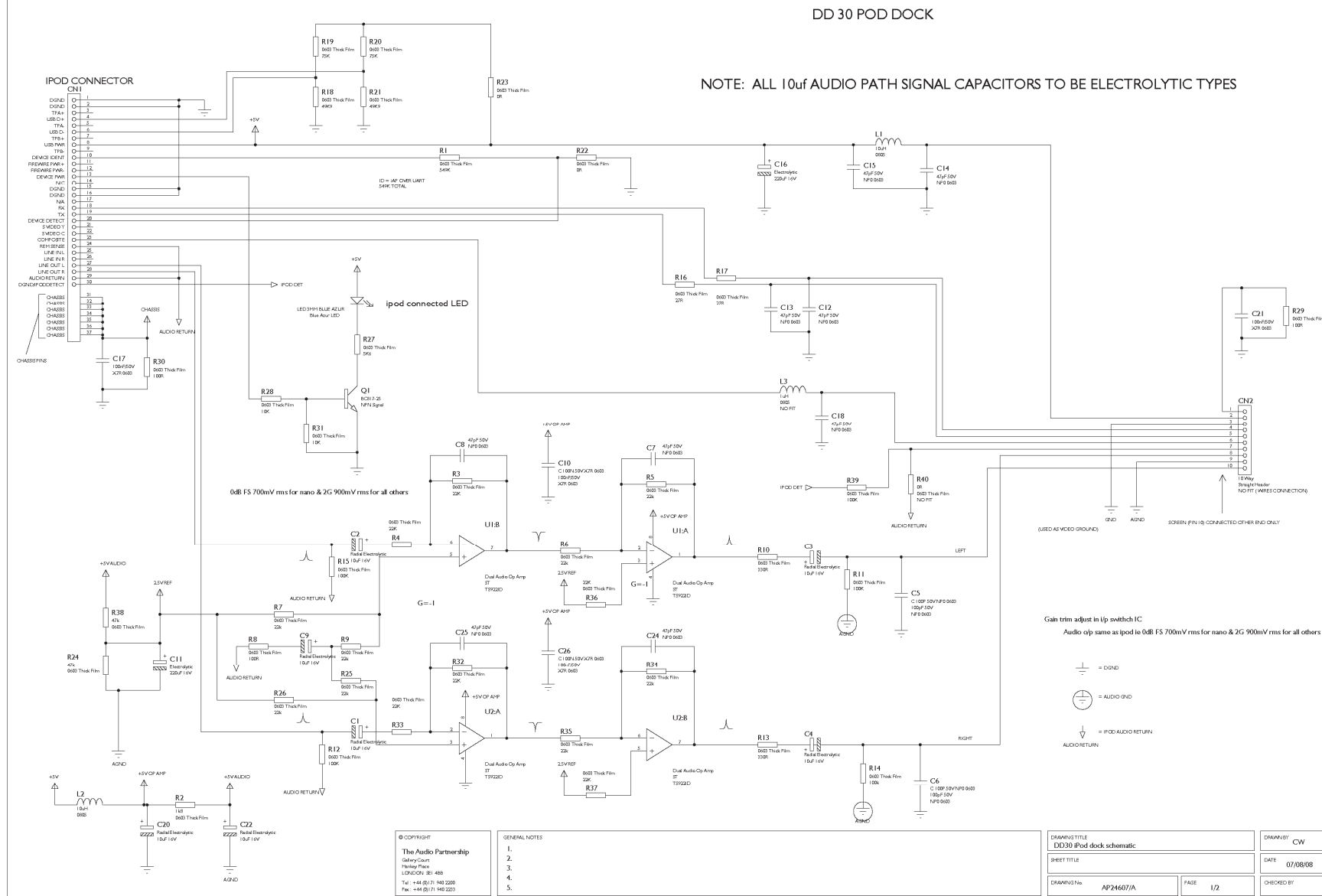


MOT LAYOUT

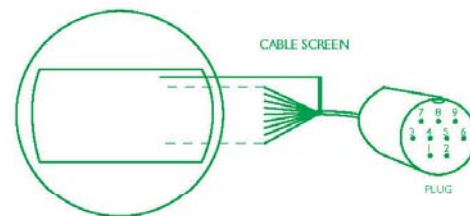
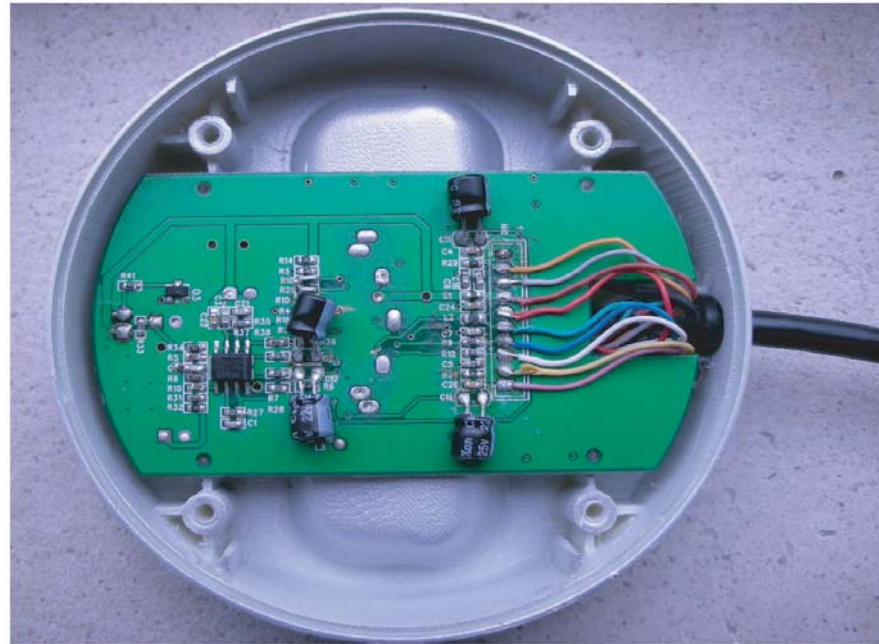
Cambridge Audio One _{DX1} CD Player

S/N	Name	Specification	Qty	Component Ident	Factory P/N
	PCBA	FUSION CD loader DIP part(RoHS)	1		40115501011100
1	FFC Seat	SMD 5PIN P=1.0mm (RoHS)	1	CN9	18972050003100
2	FFC Male Seat	SMD 16PIN P=1.0mm (RoHS)	2	CN7,CN8	18972160002100
3	Male Seat	6PIN P=1.5mm 90。 Vertical (RoHS)	1	CN11	18110060003100
4		6PIN P=2mm 90。 Vertical (RoHS)	1	CN10	18114060002100
5		5PIN P=2mm 90。 Vertical (RoHS)	1	CN1	18114050002100

Cambridge Audio One _{DX1} CD Player

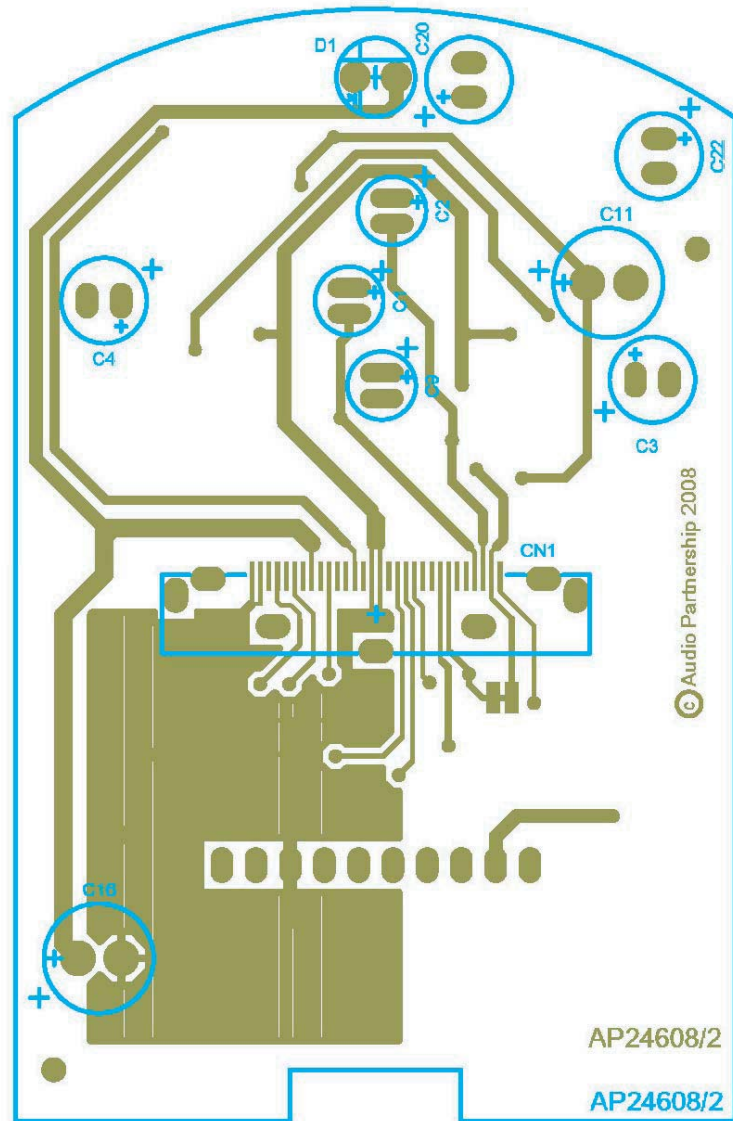


Cambridge Audio One_{DX1} iPod



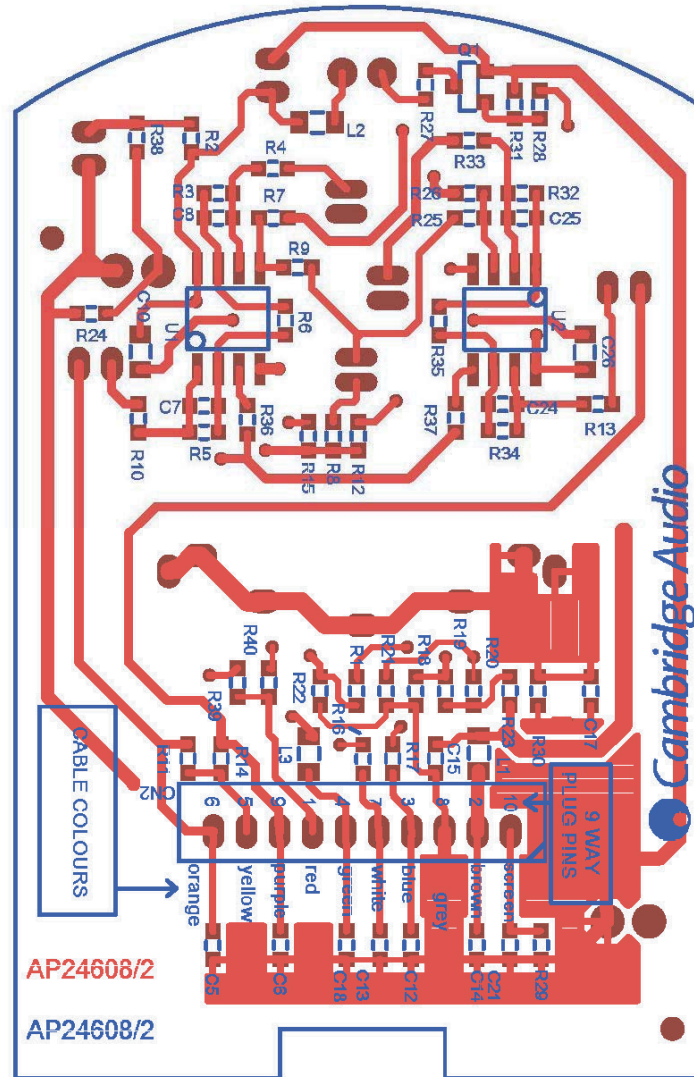
DOCK PCB CONNECTION	CABLE WIRING	9 PIN PLUG WIRING	9 PIN SOCKET WIRING	CABLE WIRING NOTES
(WAS IPOD DETECT) AUDIO RETURN/MDEO GROUND	RED	PIN 1	PIN 1	* THESE CABLES TO BE SCREENED TOGETHER IN ADDITIONAL SCREEN
+5V	BROWN	PIN 2/ STRAND 0.2MM WIRE	PIN 2	
IPOD RX	BLUE	PIN 3	PIN 3	
(WAS IPOD ENABLE) COMPOSITE VIDEO	GREEN	PIN 4	PIN 4	
ANALOGUE GROUND	YELLOW	PIN 5 *	PIN 5	
AUDIO RIGHT	ORANGE	PIN 6	PIN 6	
(WAS +12v) IPOD TX	WHITE	PIN 7	PIN 7	
DIGITAL GROUND	GREY	PIN 8/ STRAND 0.2MM WIRE	PIN 8	
AUDIO LEFT	PURPLE	PIN 9 *	PIN 9	
CHASSIS	CABLE SCREEN	METAL OUTER ON PLUG	METAL OUTER SCREEN (PIN 10)	

Cambridge Audio One_{DX1} iPod



iPod DUCK TOP LAYOUT

Cambridge Audio One_{DX1} iPod



iPod DUCK BOTTOM LAYOUT

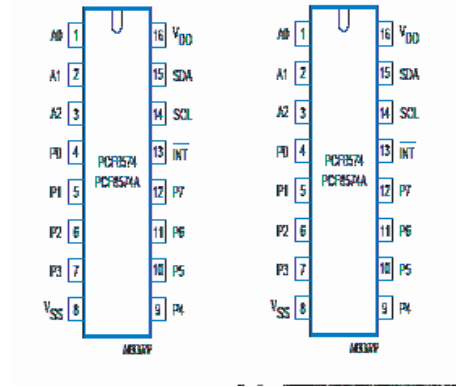
Cambridge Audio One _{DX1} CD Player -IC Details

2SC4852 AMP PCB (Q4,Q12,Q13)	[2SC4852] 1 : Base 2 : Emitter 3 : Collector SANYO : CP
MMBT3904 LCD PCB(Q1,Q2) DAB&CD MODULE PCB(Q1,Q2) AMP PCB(Q1,Q5,Q6,Q15)	MMBT3904 SOT-23 Mark: 1A
3638 F4(3V) LCD PCB (IR1)	1 : OUT 2 : GND 3 : Vcc
LM1117-5.0V DAB&CD MODULE PCB(U23)	SOT-223 Tab is V_{OUT} INPUT OUTPUT ADJ/GND DS100919-4 Top View

Cambridge Audio One_{DX1} CD Player IC Details

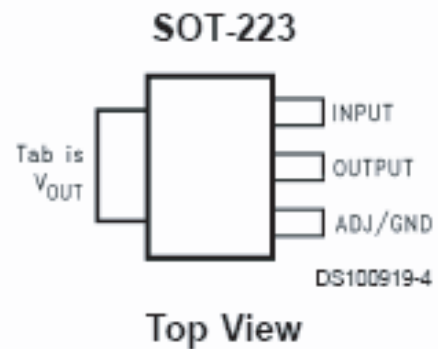
PCF8574T

DAB&CD MODULE PCB(U1,3)



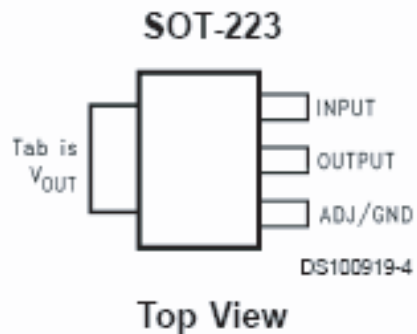
LM1117MPX-3.3

DAB&CD MODULE PCB(U3A)



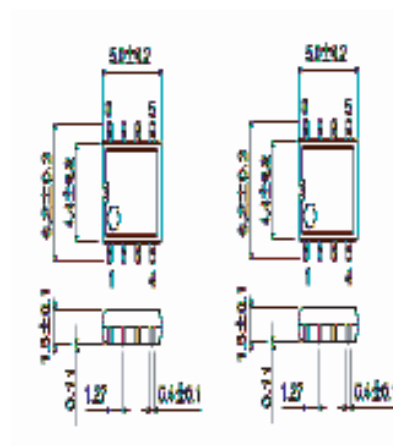
LM1117MPX-ADJ N03A

DAB&CD MODULE PCB(U4)



BA6208F

DAB&CD MODULE PCB(U5)



Cambridge Audio One _{DX1} CD Player IC Details

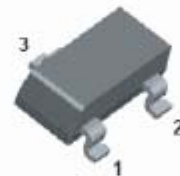
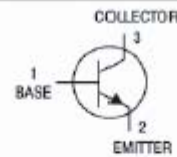
HIT667-EQ
DAB&CD MODULE PCB(Q3)



1. Emitter
2. Collector
3. Base

3
2
1

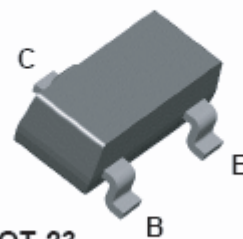
ST8050C SOT-23
AMP PCB (Q3)



SOT-23

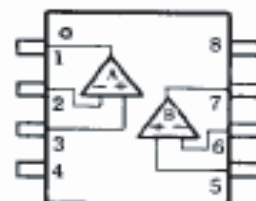
MMBT3906
AMP PCB (Q7,Q8,Q9,Q14)

MMBT3906



SOT-23
Mark: 2A

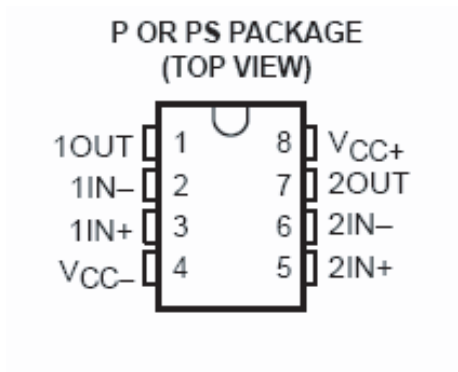
SJ4580



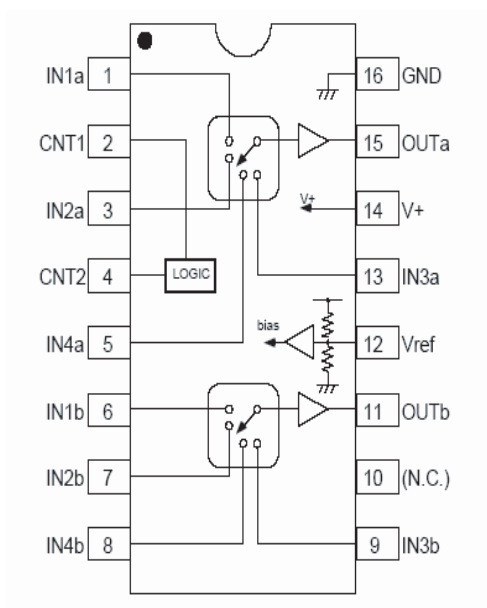
NJM4580D, NJM4580E
NJM4580M, NJM4580V

Cambridge Audio One_{DX1} CD Player IC Details

NE5532
AMP PCB (U1~U3,U8,U11,U17 ~21)



NJM2750M
AMP PCB (IC3,IC4,IC6)



NJW1191
AMP PCB (IC5)

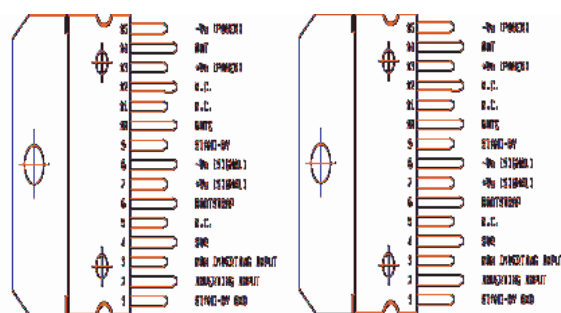


MC7812ABTG
AMP PCB (U5)

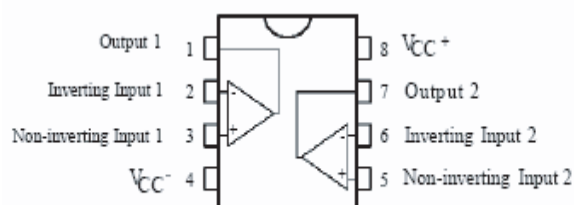


Cambridge Audio One _{DX1} CD Player IC Details

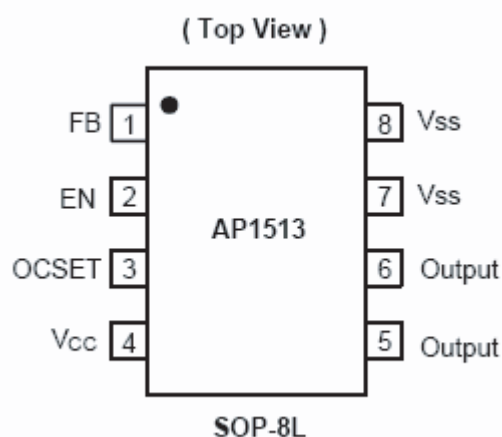
TDA7296
AMP PCB (IC1,IC2)



TS922
iPod PCB (U1,U2)



AP1513
DC-DC 3PIN small board(U2A)
DC-DC 4PIN small board(U1)



Cambridge Audio One _{DX1} CD Player

Failure Exclude

Phenomenon	Check points and Counter Measure
1.Function normal but display incompletely;	a.LCD defective,Changing the LCD PCBA;
2.Nothing response after turned on the units	a.DC-DC 5V Power board is defective; b. U3A LM1117 defect; c.CN2/DAB Module is defective,replacing DAB Module; d.The transformer is defective,replacing MCU board. e.MCU Board JP1 25PIN loose
3.CD can not load;	a.There is any disc in the loader; b.MCU Board CN5 connector loose, c.U5 BA6208 is defective d. CN3/MD100 module is defective; e.The toroid transformer is broken f.The loader is dead
4.Display formal but no output	a.MCU board F1(fuse tube)is burned; b.The toroid transformer broken; c.The circuit around Amp IC TDA7296is defective,change AMP board.
5.Can not read CD	a. CN3/MD100 module is defective; b.AMP Board U13(DC-DC 8V)is defective,no voltage output; c.The loader is defective.
6.Can not read USB	a. CN3/MD100 module is defective; b.AMP Board U13(DC-DC 8V) is defective,no voltage output; c. MCU board JP1 25PIN loose.
7.Can not read SD	a.CN3/MD100 module is defective; b.AMP board U13(DC-DC 8V)is defective,no voltage output; c. The connector (CN4/10PIN) on MCU board is cut; d.SD card seat is broken,replacing SD card seat board.
8.DAB/FM Can not receive the station	a.Connecting to the inner aerial is cut; b.CN2/DAB module is defective.
9.AUX1with single channel	a.JP7 connection is cut.