

SERVICE MANUAL



SPECIFICATIONS:

D/A Converter	Wolfson WM8740 24-Bit/192kHz Capable
Freq response (-0.5dB)	10Hz to 20kHz
THD	<-92dB
Dynamic Range	<105dB
Channel Separation	>75dB
Jitter (correlated)	<260pS
Digital Outputs	Opt and Coax
Dimension (mm) (H x W x D)	70 x 430 x 310
Weight (kg)	4.6

AP14839/2

640C SERVICE MANUAL

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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 lightning 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 EEC Low Voltage (73/23/EEC) 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 unauthorised design alterations or additions will void the manufacturer's warranty; furthermore the manufacturer cannot accept responsibility for personal injury or 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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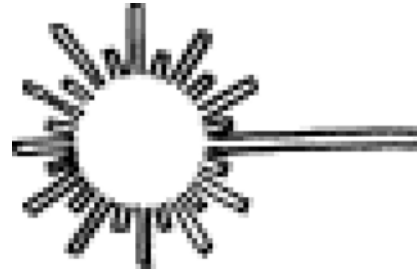
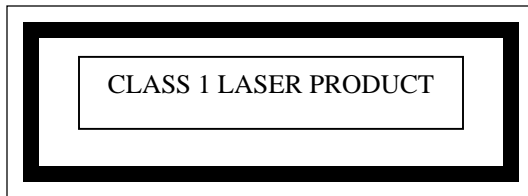
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LASER SAFETY PRECAUTIONS

Caution: These labels may be attached to the unit on the rear and inside to inform that it contains a laser component. Use of controls or adjustments, or performance of procedures other than those specified within the service or instruction manual may result in hazardous radiation exposure.



WARNING!

1. Service should only be performed by qualified personnel.
2. This equipment has been designed and manufactured to meet international safety standards; it is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Any repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety and EMC critical components are replaced with Cambridge Audio approved parts only.

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.

During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.

The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

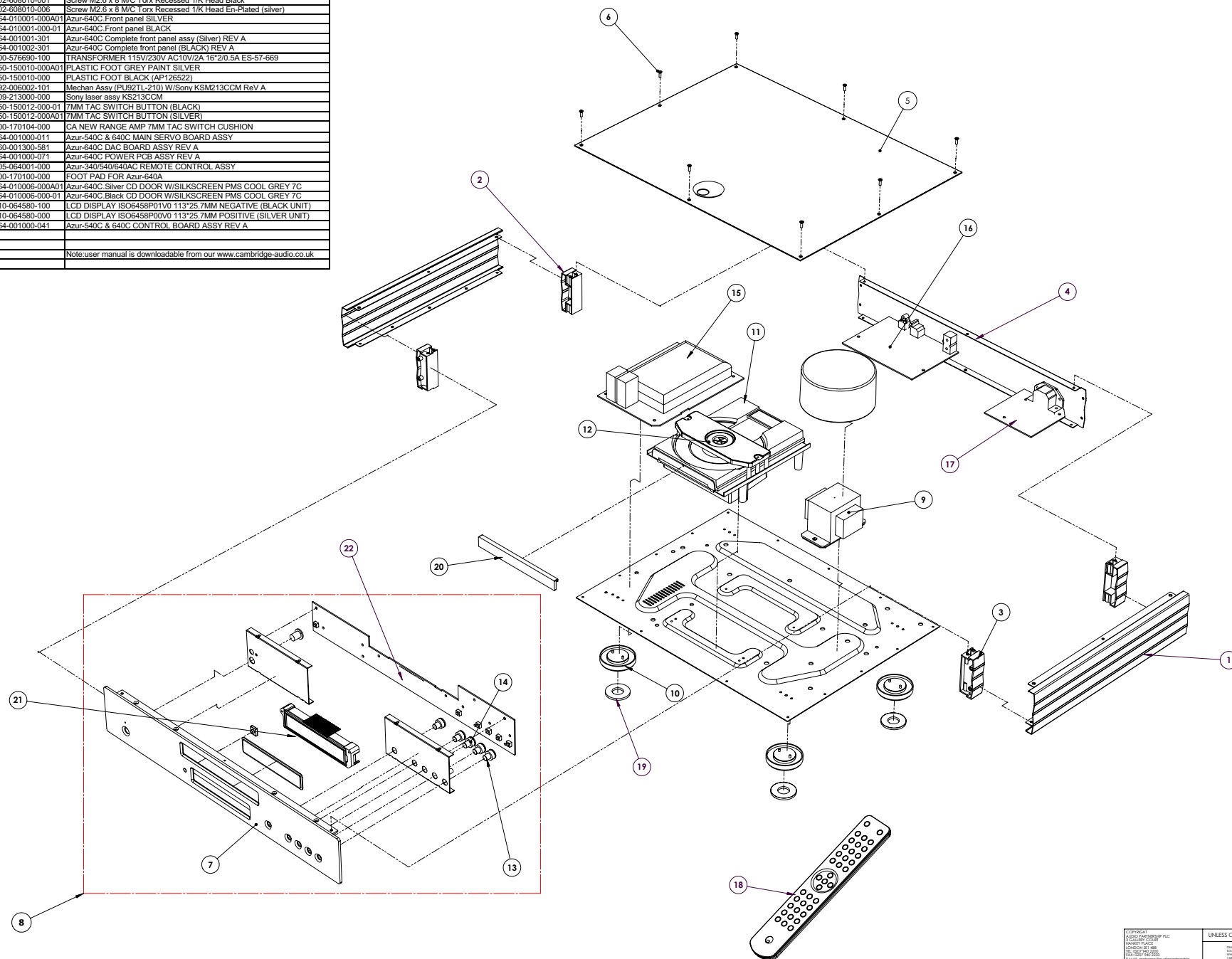
The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30cm away from the objective lens.

Drawing ref	AP part	Internal ref	Description
1			CA new side panel
2			CA new plastic insert rear
3			CA new plastic insert front
4			CA new back panel
5	PY507	6550-010204-000-01	Azur-640C Top Panel BLACK
6	PY508	6550-010204-000-02	Azur-640C Top Panel SILVER
7	PY515	6560-008010-000-01	Screw M2 x 8 MM Torx Recessed 1/K Head Black
8	PY516	6560-008010-000-02	Screw M2 x 8 MM Torx Recessed 1/K Head En-Plated (silver)
9	PY586	6564-010001-000A01	Azur-640C Front panel SILVER
7	PY582	6564-010001-000-01	Azur-640C Front panel BLACK
9	PY587	6564-001001-301	Azur-640C Complete front panel assy (Silver) REV A
9	PY583	6564-001002-301	Azur-640C Complete front panel (BLACK) REV A
10	PY583	6560-005010-000-10	TRANSFORMER 115V/230V AC10VA 16*20 SA ES-57-669
10	PY541	6050-150010-000A01	PLASTIC FOOT GREY PAINTEL SILVER
10	PY531	6050-150010-000-01	PLASTIC FOOT BLACK (AP126522)
11	PY340	9692-006002-101	Mechan Assy (PU92T1-210) W/Sony KSM213CCM Rev A
12	PY309	3099-213000-000-01	Sony laser assy KS213CCM
13	PY719	6050-150012-000-01	7MM TAC SWITCH BUTTON (BLACK)
13	PY720	6050-150012-000A01	7MM TAC SWITCH BUTTON (SILVER)
14	PY704	6000-170104-000-01	CA NEW RANGE AMP 7MM TAC SWITCH CUSHION
15	PY571	9464-001000-011	Azur-640C & 840C MAIN SERVO BOARD ASSY
16	PY588	9460-001300-581	Azur-640C DAC BOARD ASSY REV A
17	PY589	9464-001000-071	Azur-640C POWER PCB ASSY REV A
18	PY573	9805-064001-000-01	Azur-340/540/640AC REMOTE CONTROL ASSY
19	PY544	6000-170100-000-01	FOOT PAD FOR Azur-640A
20	PY548	6594-010006-000A01	Azur-640C Silver CD DOOR W/SILKSCREEN PMS COOL GREY 7C
20	PY554	6594-010006-000-01	Azur-640C Silver CD DOOR W/SILKSCREEN PMS COOL GREY 7C
21	PY552	3110-064850-100	LCD DISPLAY IS064850P010 113*25.7MM NEGATIVE (BLACK UNIT)
21	PY562	3110-064850-000	LCD DISPLAY IS064850P010 113*25.7MM POSITIVE (BLACK UNIT)
22	PY556	9464-001000-041	Azur-640C & 640C CONTROL BOARD ASSY REV A

Note: user manual is downloadable from our www.cambridge-audio.co.uk

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REVISIONS NOTES:-
1: ORIGINAL DRAWING 26/11/04.



DRAWING NOTES:-

PROPRIETARY AND CONFIDENTIAL

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TO:	5 AUDIO PARTNERSHIP PLC
TITLE:	640C EXPLODED ASSEMBLY DRAWING.

SIZE	DWG. NO.	
A0	AP16811/1	
SCALE 1:1	DO NOT SCALE FROM DRAWING	SHEET 1 OF 1

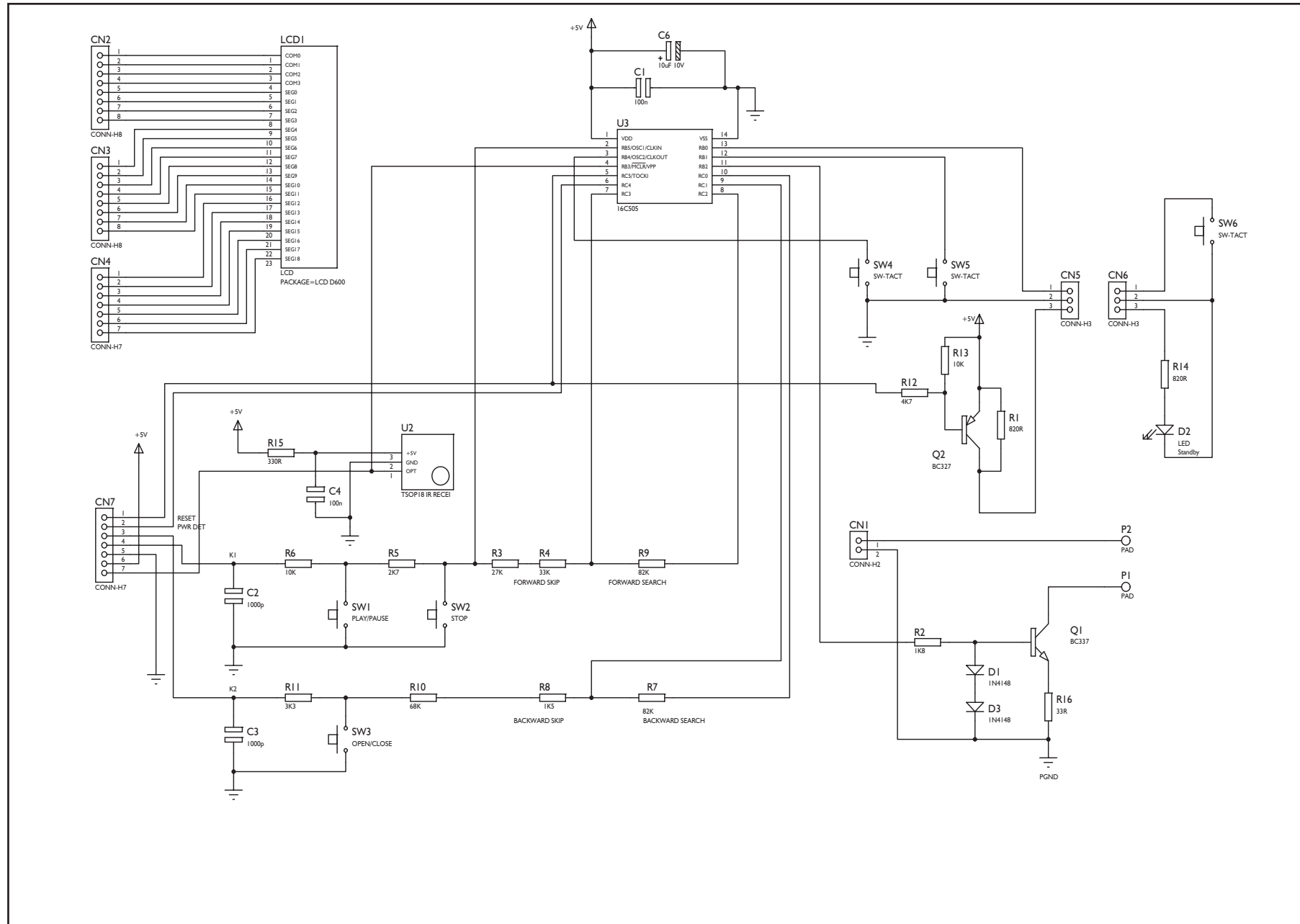
Cambridge Azur 640CCD Player (Main Assembly BOM Silver Unit)
API3752/3

AP Part No.	DRAWING NO	DESCRIPTION	QTY	COMMENTS
	API3504/I	POLY ENDCAP PACKAGING	2	
	API3505/I	CARTON PACKAGING W/HANDLE	1	PRINTED TO ARTWORK API3716/I
	API3613/I	CAMBRIDGE AUDIO AZUR WOVEN BAG FOR REMOTE CONTROL	1	PACK REMOTE CONTROL INSIDE,
		CAMBRIDGE AZUR REMOTE CONTROL COMPLETE. MODEL No RC-540AC/640AC	1	MOUNTED INTO POLY ENDCAP PACKING IN REBATE PROVIDED
		AAA ALKALINE BATTERIES	3	FOR REMOTE. PLACE IN INSTRUCTION MANUAL POLYBAG
PY566	API4004/I	640C CD PLAYER OWNERS' MANUAL	1	
	API3945/I	CARTON LABEL (MODEL NO.) UK SILVER	1	FOR BOX
		SERIAL NUMBER LABEL, BLANK (6.5X35.5mm)	3	1 X REAR PANEL, 1 X BOX, 1 X SHIPPING CARTON
		ISO 9002 LABEL	1	AFFIXED TO REAR PANEL ABOVE IEC SOCKET
	API0087/2	"MADE UNDER LICENCE IN PRC" STICKER	1	AFFIXED TO REAR PANEL BELOW IEC SOCKET
		POLYBAG 173X260X4C mm	1	FOR INSTRUCTION MANUALOWNERS CERTIFICATE AND REMOTE BATTERIES
	API3612/I	CAMBRIDGE AUDIO AZUR 2 RIDGE WOVEN BAG	1	PACK AMP UNIT INSIDE
		1830mm AC IEC POWER CORD SET BS STANDARD FUSED 3 AMP	1	MUST BE BS APPROVED
		BLUE TAPE SEAL FOR CAMBRIDGE CARTON	1	
		FRONT PANEL ASSEMBLY		
PY586	API2741/I	CAMBRIDGE NEW RANGE CD FRONT PANEL (PUNCHED AND PRINTED) (SILVER)	1	SCREENED WITH ARTWORK API3591/3 & API3593/I
	API2935/I	CAMBRIDGE NEW RANGE IR LENS	1	GLUED IN PLACE ON THE FRONT PANEL
	API3322/I	CAMBRIDGE NEW RANGE 105mm DISPLAY WINDOW	1	GLUED IN PLACE ON THE FRONT PANEL
	API3436/2	CAMBRIDGE NEW RANGE CD SUB PANEL LEFT (POWER)	1	FASTENEND IN PLACE INBETWEEN THE LEDGES ON THE FRONT PANEL, ALIGN UP THE POWER BUTTON HOLES
	API2931/I	CAMBRIDGE NEW RANGE AMP LIGHTGUIDE, CUT TO SINGLE PIPE	1	FASTEN TO SUBPLATE LEFT (POWER)
		M3 X 6 POZI PAN STP SCREW	1	AFFIXES SINGLE LIGHTGUIDE TO SUBPLATE
		M3 X 6 C/S POZI MACHINE SCREW	4	FASTEN THE SUB PLATE LEFT TO THE FRONT PANEL
	API3585/I	CAMBRIDGE NEW RANGE AMP 9mm TAC SWITCH CUSHION	1	POSITION ON THE CONTROL BOX BUTTON, DOWN THE MAIN SHAFT AFFIX USING ADHESIVE PROVIDED ON THE CUSHION.
PY145	API1782/I	OPUS CONTROL BOX BUTTON (SILVER)	1	POSITION IN PLACE ON THE FRONTPANEL
	API3437/2	CAMBRIDGE NEW RANGE CD SUB PANEL RIGHT (FUNCTION)	1	FASTENEND IN PLACE INBETWEEN THE LEDGES ON THE FRONT PANEL, ALIGN UP THE FUNCTION BUTTON HOLES
		M3 X 6 C/S POZI MACHINE SCREW	4	FASTEN THE SUB PLATE RIGHT TO THE FRONT PANEL
	API2934/I	CAMBRIDGE NEW RANGE AMP 7mm TAC SWITCH CUSHION	5	POSITION ON THE 7mm TACT SWITCH BUTTONS, DOWN THE MAIN SHAFT AFFIX USING ADHESIVE PROVIDED ON THE CUSHION.
	API2925/I	CAMBRIDGE NEW RANGE AMP 7mm TAC SWITCH BUTTON	5	POSITION IN PLACE ON THE FRONTPANEL

AP Part No.	DRAWING NO	DESCRIPTION	QTY	COMMENTS
		BOTTOM PANEL ASSEMBLY		
	API2735/5	CAMBRIDGE NEW RANGE CD BOTTOM PANEL	1	
		12.2mm BRASS THREADED STANDOFF	1	POSITION IN PLACE ON BOTTOM PANEL
		M3 X 8 POZI PAN MACHINE SCREW	1	TO AFFIX BRASS THREADED STANDOFF TO BOTTOM PANEL
PY541	API2652/2	CAMBRIDGE NEW RANGE FOOT MOULDING (SILVER)	4	POSITION IN PLACE ON BOTTOM PANEL
PY544	API2883/3	CAMBRIDGE NEW RANGE FOOT PAD	4	AFFIX ON FOOT USING ADHESIVE SURFACE
		M3 X 6 PLASTITE POZI PAN	4	AFFIX FEET TO BOTTOM PANEL
		12.7mm PLASTIC PCB STANDOFF	7	PUSH SNAP FIT ON BOTTOM PANEL
		8 mm PLASTIC PCB STANDOFF	1	PUSH SNAP FIT ON BOTTOM PANEL
		M4 X 12 POZI PAN MACHINE BOLT	2	FIX THROUGH EARTHING POINT HOLES ON BOTTOM PANEL
		M4 NUT STANDARD	2	USED TO FIX ABOVE BOLTS
		M4 LOCK WASHER	2	FOR EARTH BOLTS
		M4 X 12 POZI PAN MACHINE BOLT	2	TO FIX THROUGH TRANSFORMER HOLES IN BOTTOM PANEL
		M4 LOCK WASHER	2	PLACE ON TRANSFORMER FIXING BOLTS
		M4 NUT STANDARD	2	USED TO FIX TRANSFORMER IN PLACE
		FW-2S PIN GOOD STICK ON CABLE CLIP	3	USED TO CLIP DAC POWER CABLE API3894/ AND TRANSFORMER TO SERVO BOARD CABLE
	API3571/1	CAMBRIDGE AUDIO NEW RANGE CD TRANSFORMER PAD	1	POSITION IN PLACE ON BOTTOM PANEL WITH THE FIXING BOLTS THROUGH SUPPLIED HOLES
PY563	API3157/3	CAMBRIDGE AUDIO EI 115/230V 540C/640C TRANSFORMER	1	POSITION ON TRANSFORMER PAD WITH FIXING BOLTS THROUGH SUPPLIED HOLES
	API3545/1	CAMBRIDGE AUDIO NEW RANGE CD TRANSFORMER CAN WITH ADHESIVE PAD ADDED	1	SCREENED WITH ARTWORK API3721/1 POSITION ON TOP OF TRANSFORMER AND PRESS TO STICK IN PLACE
		CD Mechanism with Loader	1	POSITION IN THE CORRECT POSITION ON THE BOTTOM PANEL
PY057		CD mechanism (Sony)	1	
		M3 X 6 POZI PAN MACHINE SCREW	4	TO AFFIX THE CD MECH TO THE BOTTOM PANEL
	API3895/1	MAINS PCB INSULATING SHEET	1	TO BE POSITIONED OVER STANDOFFS UNDER POWER PCB
	API3544/2	CAMBRIDGE AUDIO NEW RANGE CD MECH TOP STICKER	1	SCREENED WITH ARTWORK API3763/1 THEN POSITION OVER LOCATING PIPS ON CD MECH TOP SURFACE AND PRESS TO STICK
PY568	API3495/1	CAMBRIDGE AUDIO NEW RANGE CD DRAW FRONT (SILVER)	1	SCREENED WITH ARTWORK API3601/1 POSITON ON DRAW FRONT AND GLUE IN PLACE
		M3x8 POSIPAN MACHINE SCREW	1	TO FIX SERVO BOARD TO BRASS THREADED STAND OFF
	API3617/1	16 WAY LASER CABLE, FLEXIBLE FLAT CABLE 250mm	1	CONNECTS SERVO PCB TO LASER BLOCK ON THE CD MECH

AP Part No.	DRAWING NO	DESCRIPTION	QTY	COMMENTS
	API3618/1	5 WAY TRAY MOTOR CABLE FLAT WIRE STYLE 350mm	1	CONNECTS THE SERVO PCB TO THE CD MECH, RUNS UNDER THE FRONT OF THE MECH AND UNDER THE SERVO PCB
	API3619/1	6 WAY SPINDLE MOTOR CABLE 200mm	1	CONNECTS THE SERVO PCB TO THE CD MECH, RUNS UNDER THE CD MECH
	API0616/6	SERVO PCB SHIELDING CAN	1	SCREENED WITH ARTWORK API3721/1 POSITION OVER SEVRO PCB AND SOLDER FIX
	API0001/2	CAMBRIDGE AUDIO SCREENING CAN	1	POSITION OVER DAC PCB AND SOLDER FIX
	API3625/1	2 WAY MUTE CABLE, FLAT WIRE STYLE CABLE 300mm	1	CONNECTS DAC PCB TO THE SERVO PCB
	API3626/1	3 WAY SHIELDED DIGITAL OUT CABLE 130mm	1	CONNECTS DAC PCB TO THE SERVO PCB
	API3627/1	5 WAY SHIELDED DIGITAL OUT CABLE 120mm		CONNECTS DAC PCB TO THE SERVO PCB
	API3628/1	2 WAY SHIELDED MASTER CLOCK CABLE 160mm	1	CONNECTS DAC PCB TO THE SERVO PCB
		M2.6 X 6 POZI PAN MACHINE SCREW	5	TO AFFIX BOTTOM PANEL TO SIDE, FRONT AND REAR PANELS
		M2.6 X 10 POZI PAN PLASTITE	4	FIX CORNERS OF BOTTOM PANEL TO PLASTIC INSERTS
		SIDE PANEL ASSEMBLY	2	
	API2725/1	CAMBRIDGE AUDIO NEW RANGE PRESSED SIDE PANEL (2 RIDGE) (SILVER)	2	POSITION IN PLACE ON PLASTIC FRONT INSERTS
	API2727/1	CAMBRIDGE AUDIO NEW RANGE FRONT PLASTIC SUPPORT (2 RIDGE WITH CAPTIVE M2.6 NUTS)	2	POSITION AT FRONT WITHIN SIDE PANELS
	API2728/1	CAMBRIDGE AUDIO NEW RANGE REAR PLASTIC SUPPORT (2 RIDGE WITH CAPTIVE M2.6 NUTS)	2	POSITON AT REAR WITHIN SIDE PANELS
		M2.6 X 10 C/S POZI PLASTITE	8	TO AFFIX SIDE PANELS TO PLASTIC INSERTS
		D640C REAR PANEL ASSEMBLY	1	
	API3435/2	CAMBRIDGE AUDIO NEW RANGE CD REAR PANEL PRINTED	1	SCREENED WITH ARTWORK API3669/1, THEN POSITION ON REAR PLASTIC SUPPORTS
		M3 X 10 POZI PAN PLASTITE	4	TO AFFIX REAR PANEL TO REAR PLASTIC INSERTS
		M3 X 8 POZI PAN PLASTITE	3	TO FIX DAC PCB ELECTRONIC PARTS TO REAR PANEL
		M3 X 10 POZI PAN MACHINE SCREW	2	FIXES THE IEC SOCKET MOUNTED ON THE POWER BOARD TO THE REAR PANEL
		M3 NUT STANDARD	2	USED TO FIX ABOVE BOLTS
		M3 LOCK WASHER	2	USED TO FIX ABOVE BOLTS
	API3340/1	A600 LIDDING TAPE FOR FRONT AND REAR PANELS	2	FIX TO THE CORRECT SURFACES FOR LID
	API3342/1	A600 LIDDING TAPE FOR SIDE PANELS	2	FIX TO THE CORRECT SURFACES FOR LID
PY574	API2733/2	CAMBRIDGE AUDIO NEW RANGE TOP PANEL WITHOUT VENTS (SILVER)	1	POSITIONON TOP OF THE PRODUCT
PY516		M2.6 X 6 C/S TORX MACHINE SCREW (SILVER)	8	TO AFFIX TOP PANEL TO PLASTIC INSERTS, SIDE, REAR AND FRONT PANEL

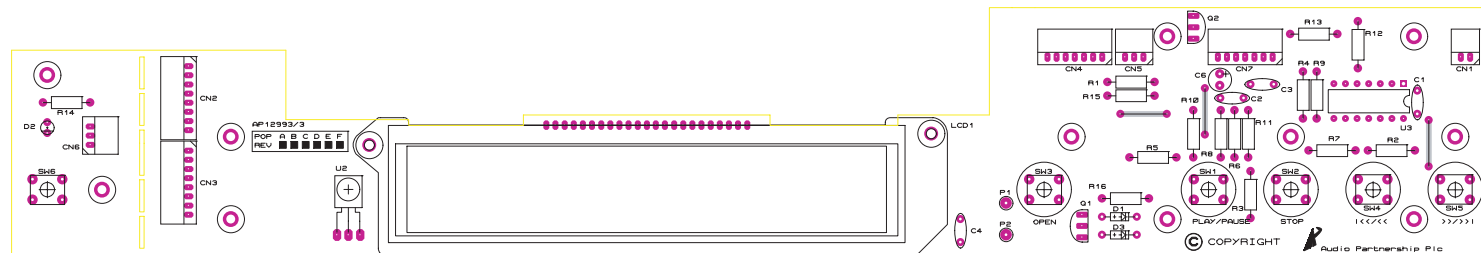
Cambridge Audio Azur 640C CD Player



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API2992/3 Front Panel PCB Schematic

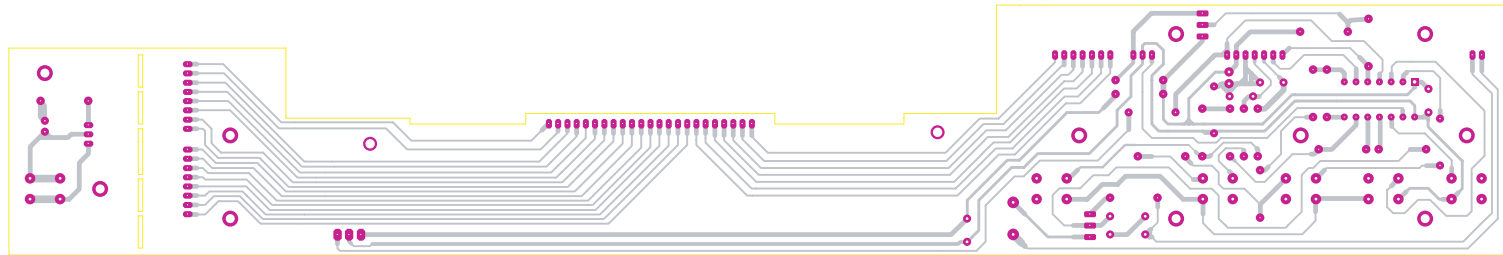
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API2992/3 Front Panel PCB Layout (Top Side)

Cambridge Audio Azur 640C CD Player

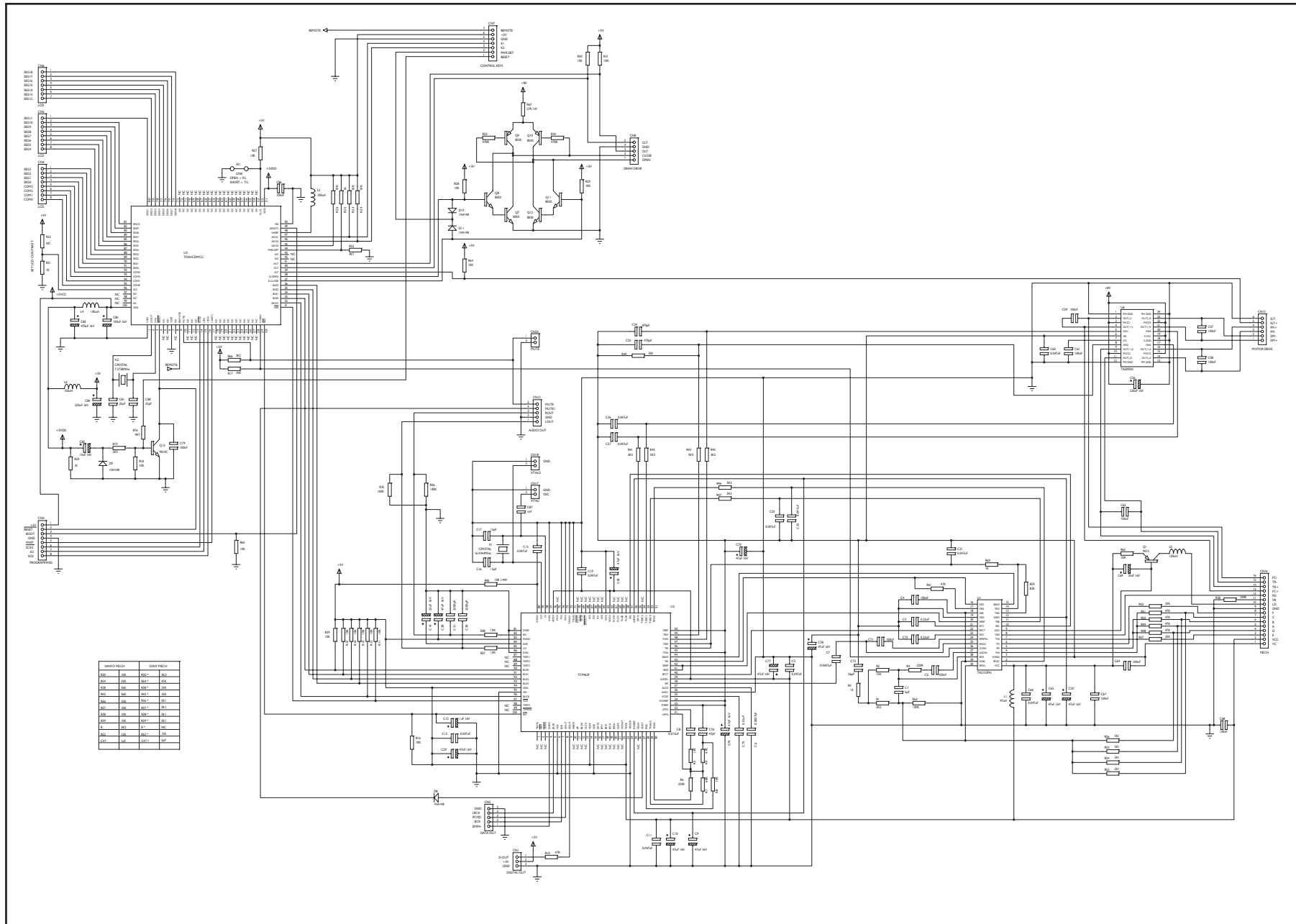


Cambridge Azur 640C CD Player (Front Panel BOM Silver Unit)
API3752/3

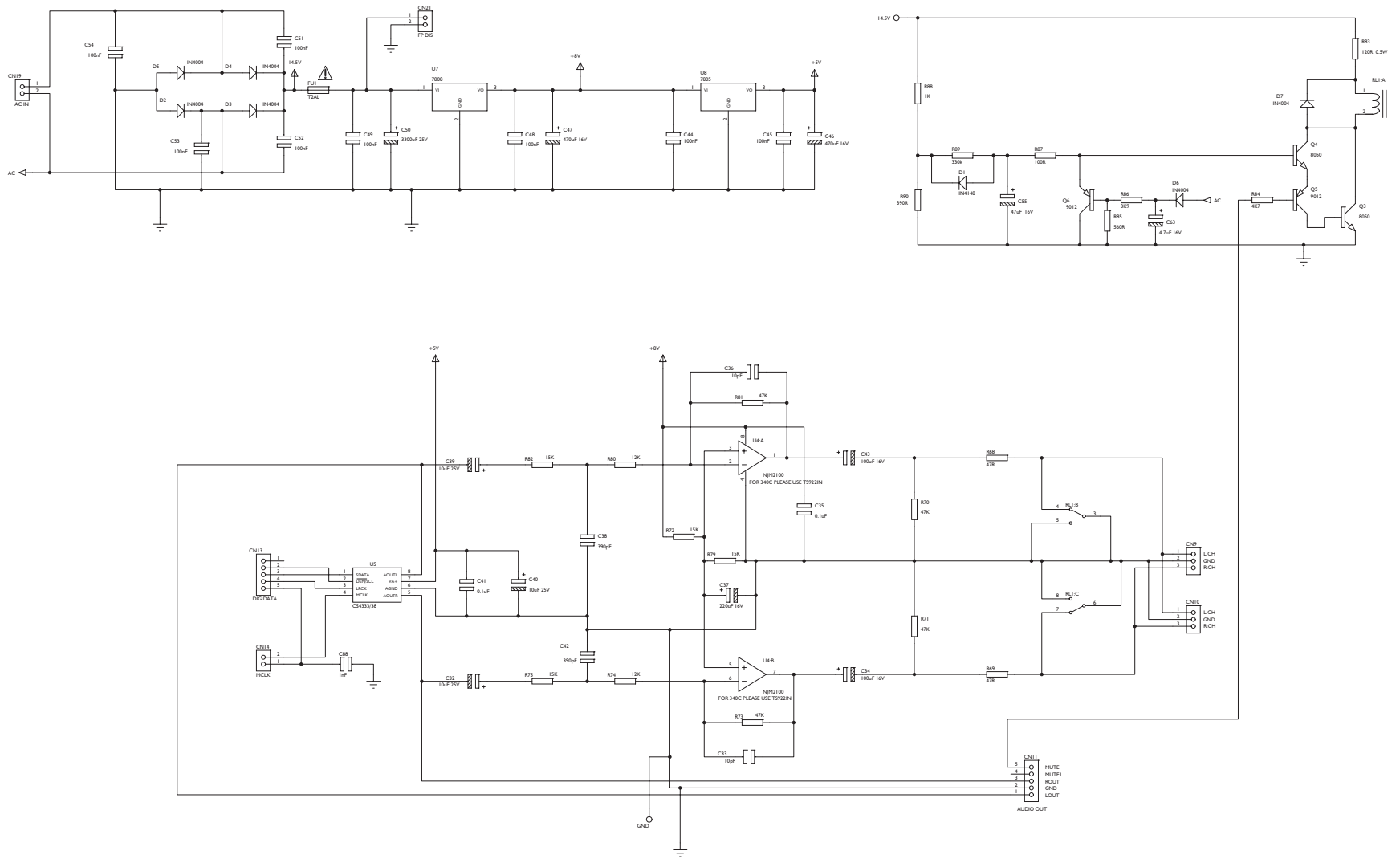
AP Part No.	DRAWING NO	DESCRIPTION	QTY	DESIGNATOR	COMMENTS
	API2993/3	CONTROL/FRONT PANEL PCB ASSEMBLY (FRONT PANEL SWITCH PCB) SNAP OFF	1		BLUE WITH WHITE IDENT
		33R 0.25W 1% METAL FILM RESISTOR	1	R16	
		330R 0.25W 1% METAL FILM RESISTOR	1	R15	
		820R 0.25W 1% METAL FILM RESISTOR	1	R1	
		1K5 0.25W 1% METAL FILM RESISTOR	1	R8	
		1K8 0.25W 1% METAL FILM RESISTOR	1	R2	
		2K7 0.25W 1% METAL FILM RESISTOR	1	R5	
		3K3 0.25W 1% METAL FILM RESISTOR	1	R11	
		10K 0.25W 1% METAL FILM RESISTOR	2	R6,R13	
		4K7 0.25W 1% METAL FILM RESISTOR	1	R12	
		27K 0.25W 1% METAL FILM RESISTOR	1	R3	
		33K 0.25W 1% METAL FILM RESISTOR	1	R4	
		68K 0.25W 1% METAL FILM RESISTOR	1	R10	
		82K 0.25W 1% METAL FILM RESISTOR	2	R7,R9	
		1000p CERAMIC 50/100V 5mm PITCH CAPACITOR	2	C2,C3	
		100n CERAMIC 50/100V 5mm PITCH CAPACITOR	1	C1,C4	
		10uF 10V ELECTROLYTIC CAPACITOR 2.5mm PITCH	1	C6	
PY054		TSOP18 IR RECEIVER	1	U2	
PY605		16C505 (MICROCHIP)	1	U3	PROGRAMED WITH API3762/1
PY214		BC337	1	Q1	
PY219		BC327	1	Q2	
		1N4148	2	D1,D3	
		TACTILE SWITCH	5	SW1,SW2, SW3, SW4,SW5	AS PER D500SE
		2way JST type connector 90deg 2mm	1	CN1	
		8way JST type connector 90deg 2mm	2	CN2,CN3	
		7way JST type connector 90deg 2mm	2	CN4,CN7	
		3way JST type connector 90deg 2mm	1	CN5	
	API3344/1	CAMBRIDGE AUDIO NEW RANGE BACKLIGHT AND LCD PLASTIC HOLDER	1	LCD1	
		CONTROL PCB ASSEMBLY (FRONT PANEL SWITCH PCB)			FIXES ONTO THE L/H SUB PANEL WITH M3 M/C SCREWS
	API2993/3	CONTROL/FRONT PANEL PCB ASSEMBLY (POWER SWITCH) SNAP OFF			BLUE WITH WHITE IDENT
		820R 0.25W 1% METAL FILM RESISTOR	1	R14	
PY064		FLAT TOP BLUE LED	1	D2	
		TACTILE SWITCH	1	SW6	AS PER D500SE
		3way JST type connector 90deg 2mm	1	CN6	
		DISPLAY ASSEMBLY			
	API3344/1	CAMBRIDGE AUDIO NEW RANGE BACKLIGHT AND LCD PLASTIC HOLDER	1		USE AS DISPLAY ASSEMBLY REFERENCE
		YANION BACKLIGHT PCB WITH TWO WHITE LEDS (JAPANESE)	1		POSITION WITHIN THE BACKLIGHT
	API3343/2	CAMBRIDGE AUDIO NEW RANGE BACKLIGHT WITH SILVER STRIPS	1		POSITION IN PLACE WITHIN THE UNDERSIDE OF THE PLASTIC HOLDER
	API4277/1	Backlight Correction Sheet Mechanical Details	1		Artwork API4278/1

AP Part No.	DRAWING NO	DESCRIPTION	QTY	DESIGNATOR	COMMENTS
	API3438/1	CAMBRIDGE AUDIO NEW RANGE CD DISPLAY SPACER PAD	1		POSITION UNDER THE BACKLIGHT WITHIN THE PLASTIC HOLDER
PY562	API3337/2	CAMBRIDGE AUDIO NEW RANGE CD LCD POSITIVE	1		POSITION ON THE TOP LEDGE WITHIN THE PLASTIC HOLDER AND FEED PINS THROUGH RELEVANT HOLES ON THE FRONT PANEL PCB
		M3 X 8 POZI PAN PLASTITE	2		TO FIX DISPLAY ASSEMBLY TO THE FRONT PANEL PCB
		CONTROL/FRONT PANEL PCB ASSEMBLY (FRONT PANEL SWITCH PCB)	1		FIXES ONTO THE R/H SUB PANEL WITH M3 M/C SCREWS
		M3 X 6 POZI PAN MACHINE SCREW	11		USED FOR FIXING THE FRONT PANEL PCB'S TO THE SUBPLATE STANDOFF'S
	API3620/1	8 WAY LCD CABLE, FLAT WIRE STYLE 280mm	2		CONNECTS THE FRONT PANEL PCB TO THE SERVO PCB, RUNS AROUND THE SIDE OF THE CASEWORK
	API3621/1	7 WAY LCD CABLE, FLAT WIRE STYLE 500mm	1		CONNECTS THE FRONT PANEL PCB TO THE SERVO PCB, RUNS AROUND THE SIDE OF THE CASEWORK
	API3622/1	7 WAY CRONTROL CABLE 520mm	1		CONNECTS THE FRONT PANEL PCB TO THE SERVO PCB, RUNS UNDER THE CD MECH THEN AROUND THE OUTSIDE OF THE CASEWORK
	API3623/1	3 WAY STANDBY CABLE 380mm	1		CONNECTS THE FRONT PANEL PCB TO THE STAND BY PCB, RUNS UNDERNEATH THE CD MECH
	API3624/1	2 WAY BACKLIGHT POWER CABLE 440mm	1		CONNECTS THE FRONT PANEL PCB TO THE SERVO PCB, RUNS UNDER THE CD MECH THEN AROUND THE OUTSIDE OF THE CASEWORK
	API3894/1	3 WAYDAC AC POWER CABLE 420mm	1		FROM POWER PCB UNDER DAC PCB TO DAC PCB

Cambridge Audio Azur 640C CD Player

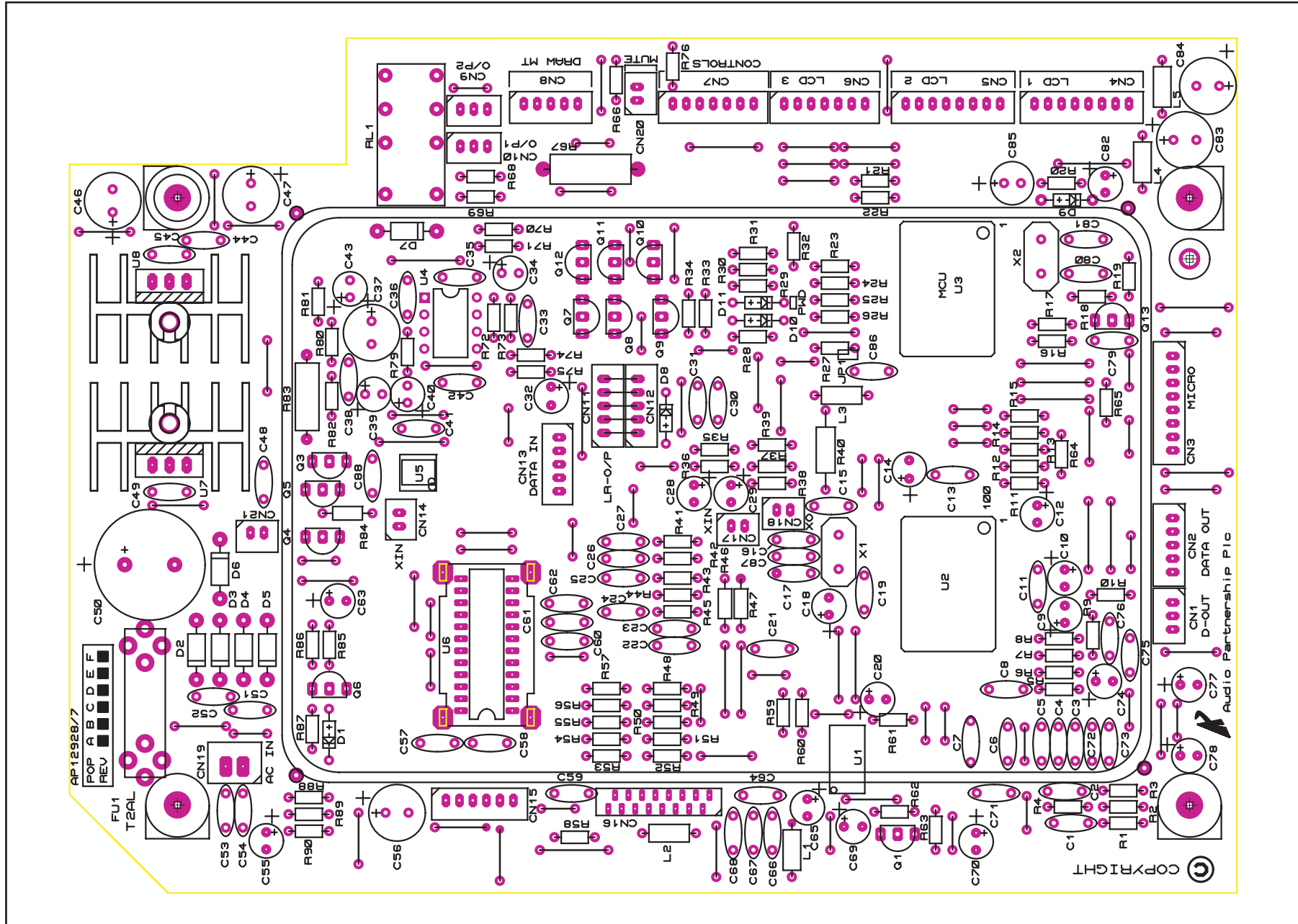


Cambridge Audio Azur 640C CD Player



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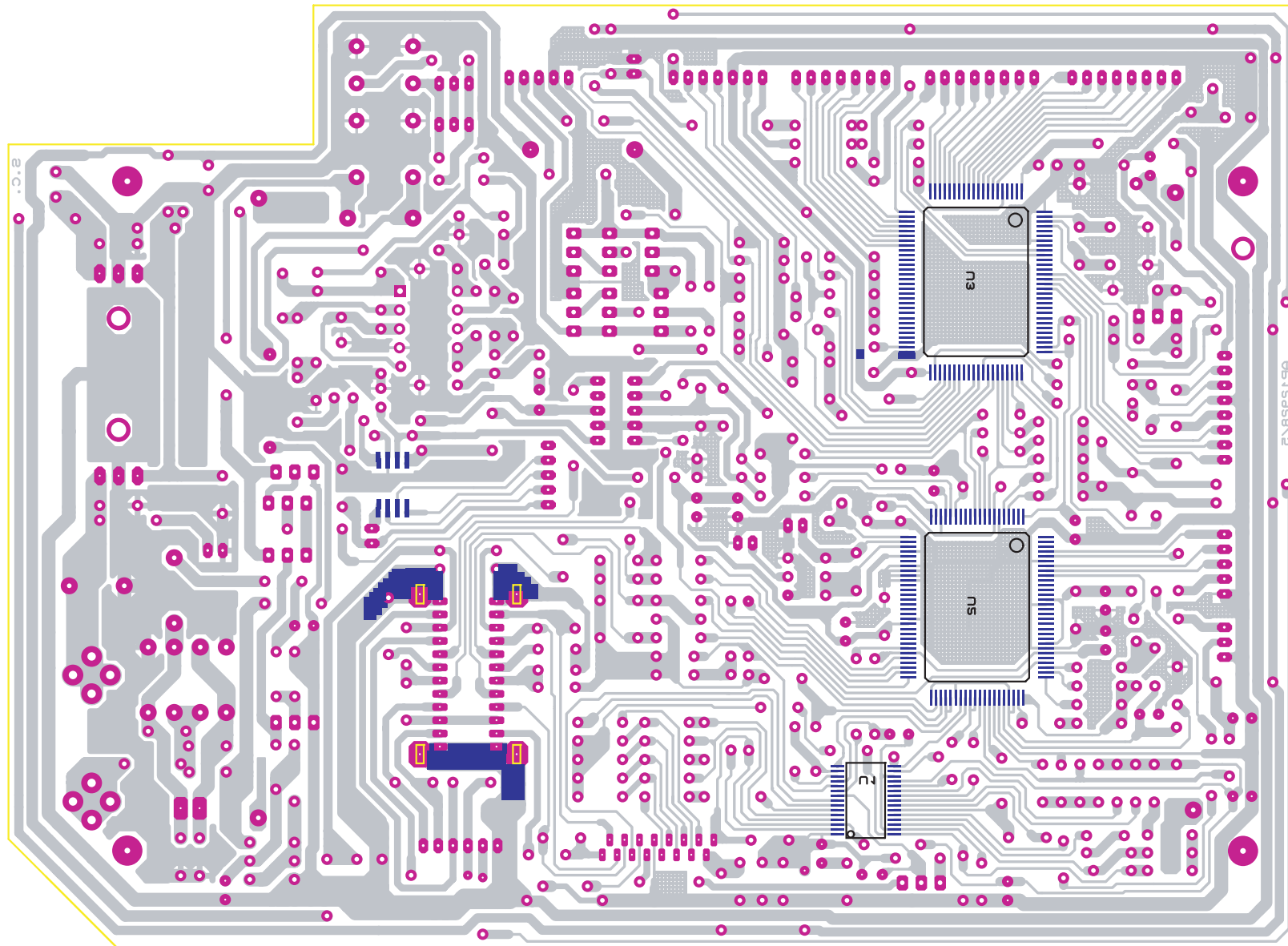
Cambridge Audio Azur 640C CD Player



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API2927/7 Servo PCB Layout (Top Side)

Cambridge Audio Azur 640C CD Player



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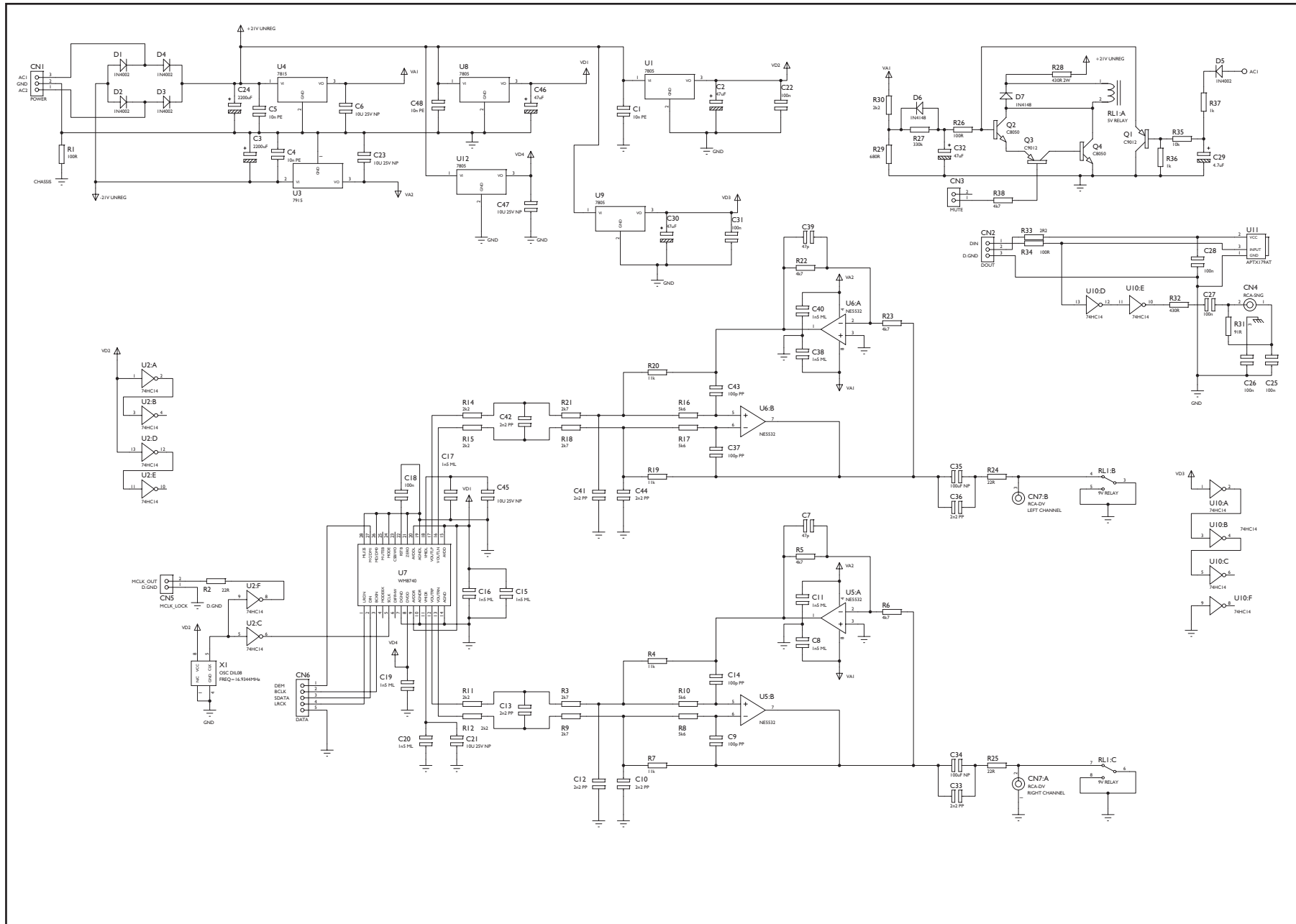
API2927/7 Servo PCB Layout (Bottom Side)

Cambridge Azur 640C CD Player (Servo BOM)
API3752/3

AP Part No.	DRAWING NO	DESCRIPTION	QTY	DESIGNATOR	COMMENTS
	API2928/6	SERVO PCB ASSEMBLY	1		Blue with white ident
		10R 0.125W METAL FILM RESISTOR	1	R62	
		10R 0.25W METAL FILM RESISTOR	1	R40	
		27R 1W CARBON RESISTOR	1	R67	
		47R 0.125W METAL FILM RESISTOR	1	R10	
		100R 0.125W METAL FILM RESISTOR	1	R58	
		220R 0.125W METAL FILM RESISTOR	1	R4	
		470R 0.125W METAL FILM RESISTOR	2	R33, R34	
		1K 0.125W METAL FILM RESISTOR	5	R3, R20, R21, R25, R60	
		2K2 0.125W METAL FILM RESISTOR	2	R1, R66	
		3k3 0.125W METAL FILM RESISTOR	7	R19, R41, R42, R43, R45, R46, R47	
		4K7 0.125W METAL FILM RESISTOR	1	R32, R76	
		5K1 0.125W METAL FILM RESISTOR	4	R53, R54, R55, R56	
		10K 0.125W METAL FILM RESISTOR	21	R8, R11, R12, R13, R14, R15, R16, R17, R18, R23, R24, R26, R27, R28, R29, R30, R31, R39, R44, R64, R65	
		15K 0.125W METAL FILM RESISTOR	2	R2, R5	
		33K 0.125W METAL FILM RESISTOR	2	R52, R57	
		47K 0.125W METAL FILM RESISTOR	6	R9, R48, R49, R50, R51, R61	
		68K 0.125W METAL FILM RESISTOR	1	R7	
		82K 0.125W METAL FILM RESISTOR	1	R59	
		100K 0.125W METAL FILM RESISTOR	1	R63	
		220K 0.125W METAL FILM RESISTOR	1	R6	
		5p CERAMIC COG 50/100V 5mm PITCH CAPACITOR	1	C1	
		15p CERAMIC COG 50/100V 5mm PITCH CAPACITOR	2	C16, C17	
		25p CERAMIC COG 50/100V 5mm PITCH CAPACITOR	2	C80, C81	
		47p CERAMIC COG 50/100V 5mm PITCH CAPACITOR	1	C76	
		56p CERAMIC COG 50/100V 5mm PITCH CAPACITOR	1	C73	
		470p CERAMIC 50/100V 5mm PITCH CAPACITOR	2	C24, C25	
		1n0 CERAMIC 50/100V 5mm PITCH CAPACITOR	1	C87	
		2n7 MYLAR 5mm PITCH CAPACITOR	1	C6	
		4n7 MYLAR 5mm PITCH CAPACITOR	2	C7, C21	
		10n CERAMIC 50/100V 5mm PITCH CAPACITOR	1	C75	
		15n CERAMIC 50/100V 5mm PITCH CAPACITOR	1	C8	
		47n CERAMIC 50/100V 5mm PITCH CAPACITOR	11	C5, C11, C13, C15, C19, C22, C23, C26, C27, C60, C66	
		100n CERAMIC 50/100V 5mm PITCH CAPACITOR	21	C2, C4, C44, C45, C48, C49, C51, C52, C53, C54, C57, C58, C59, C61, C62, C64, C67, C68, C71, C79, C86	
		220n CERAMIC 50/100V 5mm PITCH CAPACITOR	2	C3, C72	
		1u 16V ELECTROLYTIC CAPACITOR	1	C12	

AP Part No.	DRAWING NO	DESCRIPTION	QTY	DESIGNATOR	COMMENTS
		10u 16V ELECTROLYTIC CAPACITOR	2	C69, C82	
		22u 16V ELECTROLYTIC CAPACITOR	1	C14	
		47u 16V ELECTROLYTIC CAPACITOR	11	C9, C10, C18, C20, C28, C29, C65, C70, C74, C77, C78	
		100u 16V ELECTROLYTIC CAPACITOR	1	C85	
		220u 16V ELECTROLYTIC CAPACITOR	2	C56, C84	
		470u 16V ELECTROLYTIC CAPACITOR	3	C46, C47, C83	
		3300u 25V ELECTROLYTIC CAPACITOR	1	C50	
		CRYSTAL 16.9344MHz 2 PIN 5mm PITCH	1	X1	
PY561		CRYSTAL 7.3728MHz 2 PIN 5mm PITCH	1	X2	
PY474		TA2153FN (TOSHIBA RF Amplifier)	1	U1	
PY475		TC9462F (TOSHIBA Digital Servo-chip Processor)	1	U2	
PY565		I.C. MCU TMP87EP26F-1J15 SOP TOSHIBA	1	U3	
PY473		TA2092N (TOSHIBA Power driver IC)	1	U6	
		7808 (TO-220 +8V Regulator)	1	U7	
		7805 (TO-220 +5V Regulator)	1	U8	
PY560		9015	1	Q1	
PY014		8050 (TRANSISTOR NPN C8050)	4	Q7, Q8, Q11, Q12	
PY559		8550 (TRANSISTOR PNP C8550)	2	Q9, Q10	
PY558		9014C (TRANSISTOR NPN 9014C)	1	Q13	
		DIODE 1N4148	2	D8, D9, D10, D11	
		DIODE 1N4004	3	D2, D3, D4, D5	
		2 Way, 2mm Pitch JST Type connector (XIN X1, UNREG OUT X1, MUTE X1)	3	CN17, CN20, CN21	
		3 Way, 2mm Pitch JST Type connector (DIGITAL OUT X1)	1	CN1	
		5 Way, 2mm Pitch JST Type connector (DATA OUT X1, Draw drive X1) .	2	CN2, CN8	
		6 Way, 2mm Pitch JST Type connector (MOTOR DRIVE)	1	CN15	
		7 Way, 2mm Pitch JST Type connector (LCD X1, F/P CONTROLS)	2	CN6, CN7	
		8 Way, 2mm Pitch JST Type connector (PROGRAMMING X1, LCD X2)	3	CN3, CN4, CN5	
		2 Way, 2.5mm 2mm Pitch JST Type connector (AC IN)	1	CN19	
		CONNECTOR FFC 16-WAY 1.0mm PITCH (MECH)	1	CN16	
		FUSE HOLDER 20mm	1	FU1	
		2A	1	FU1	
		47uH (8mm pitch)	1	L1	
		100uH (8mm pitch)	4	L2, L3, L4, L5	
		HEATSINK FOR U7 & U8	2	(U7, U8)	
		M3 X 6 TAPTITE POZI PAN MACHINE SCREW	4	TO FIT HEATSINK TO PCB (X2) TO FIT U7 & U8 TO HEATSINK (X2)	

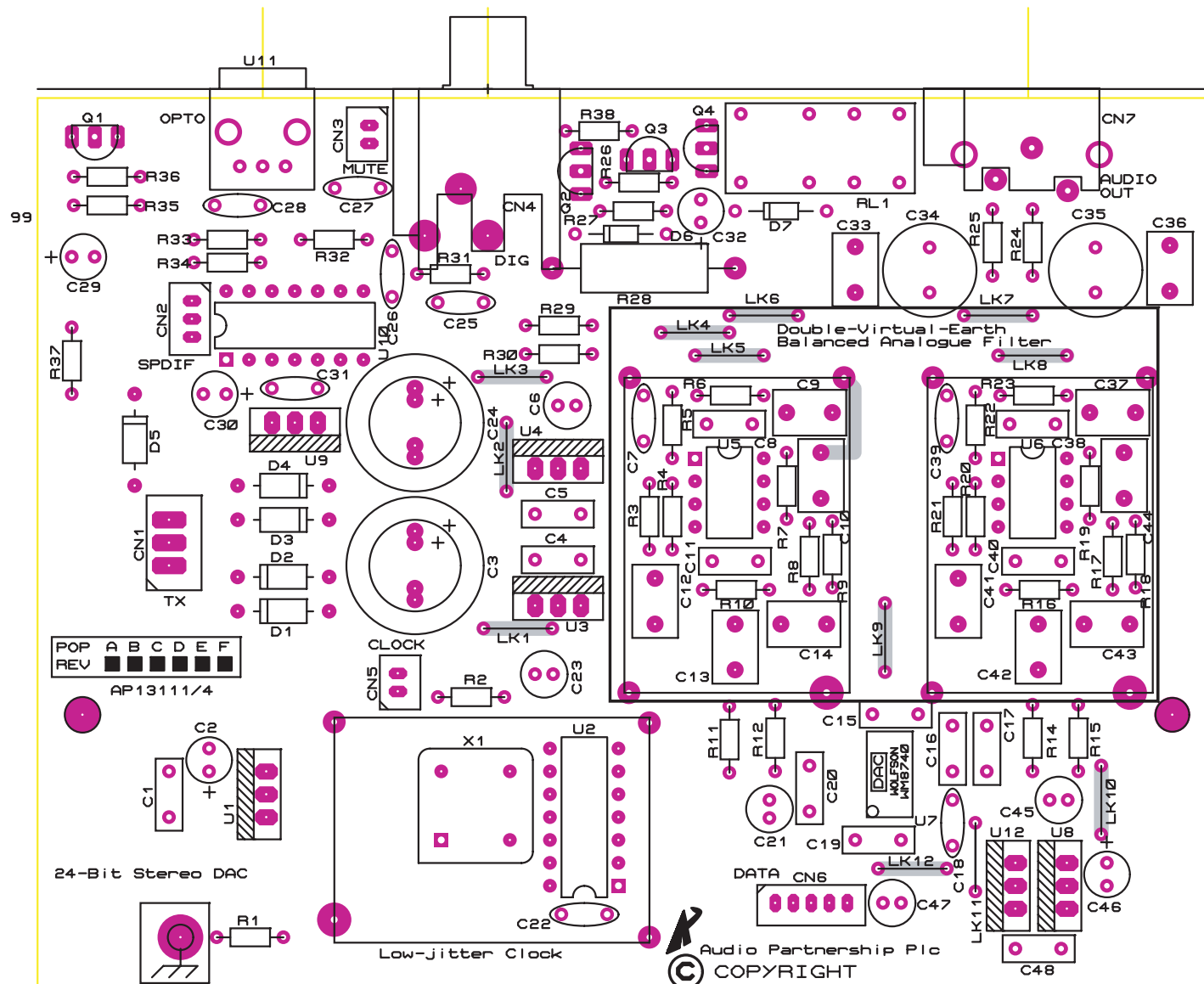
Cambridge Azur 540C CD Player



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API3111/5 DAC PCB Schematic

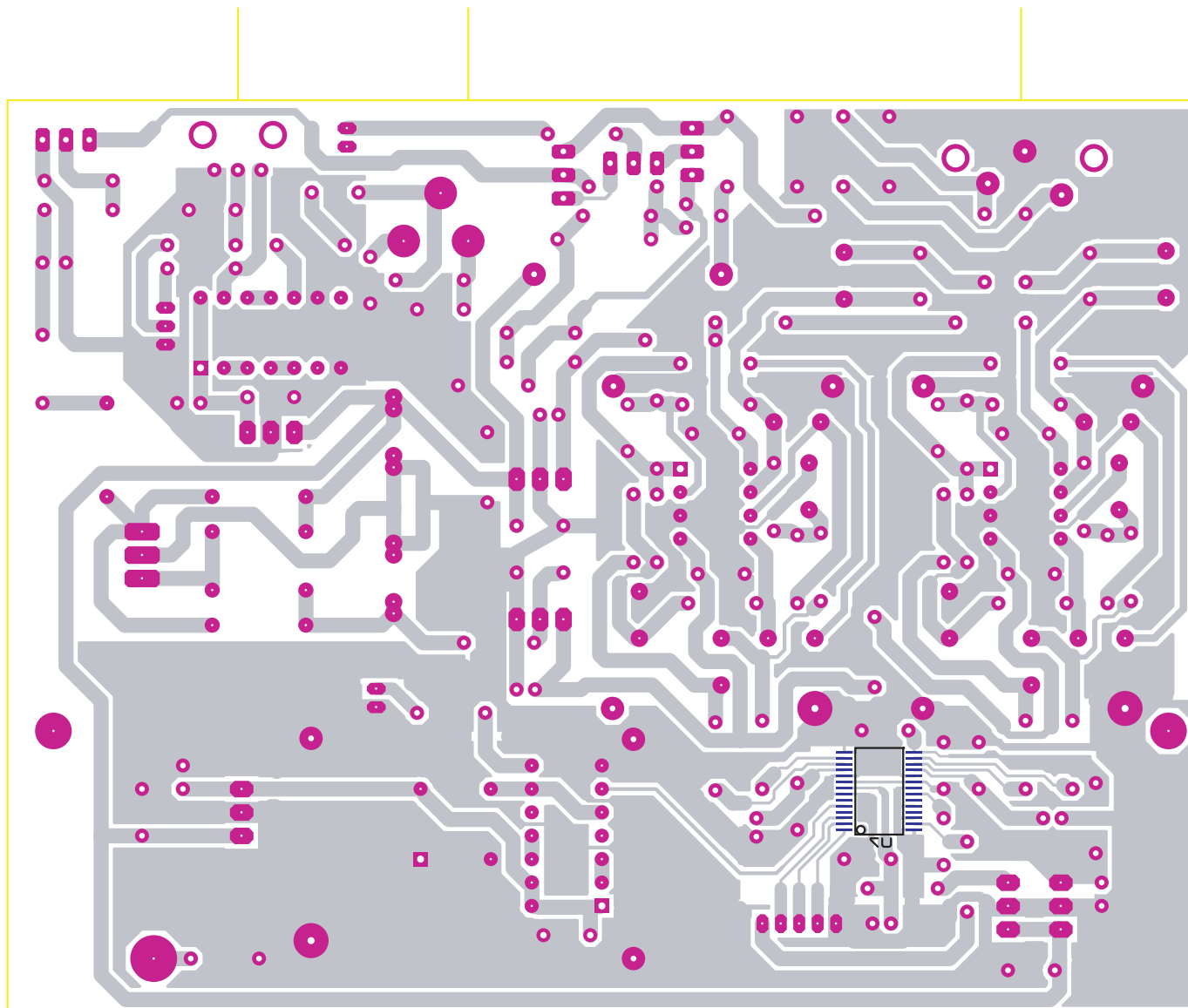
Cambridge Audio Azur 640C CD Player



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API3111/4 DAC PCB Layout (Top Side)

Cambridge Audio Azur 640C CD Player



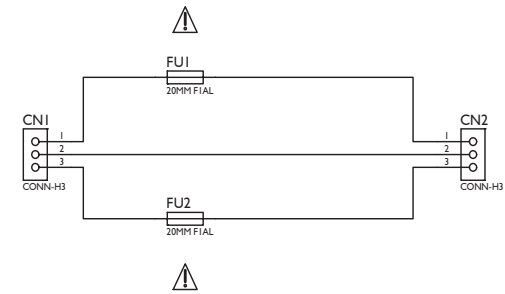
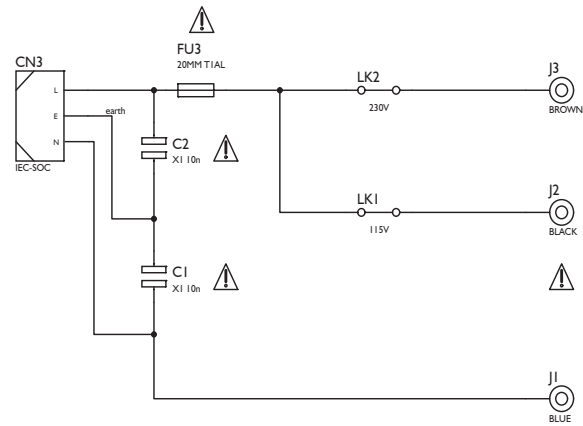
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API3111/4 DAC PCB Layout (Bottom Side)

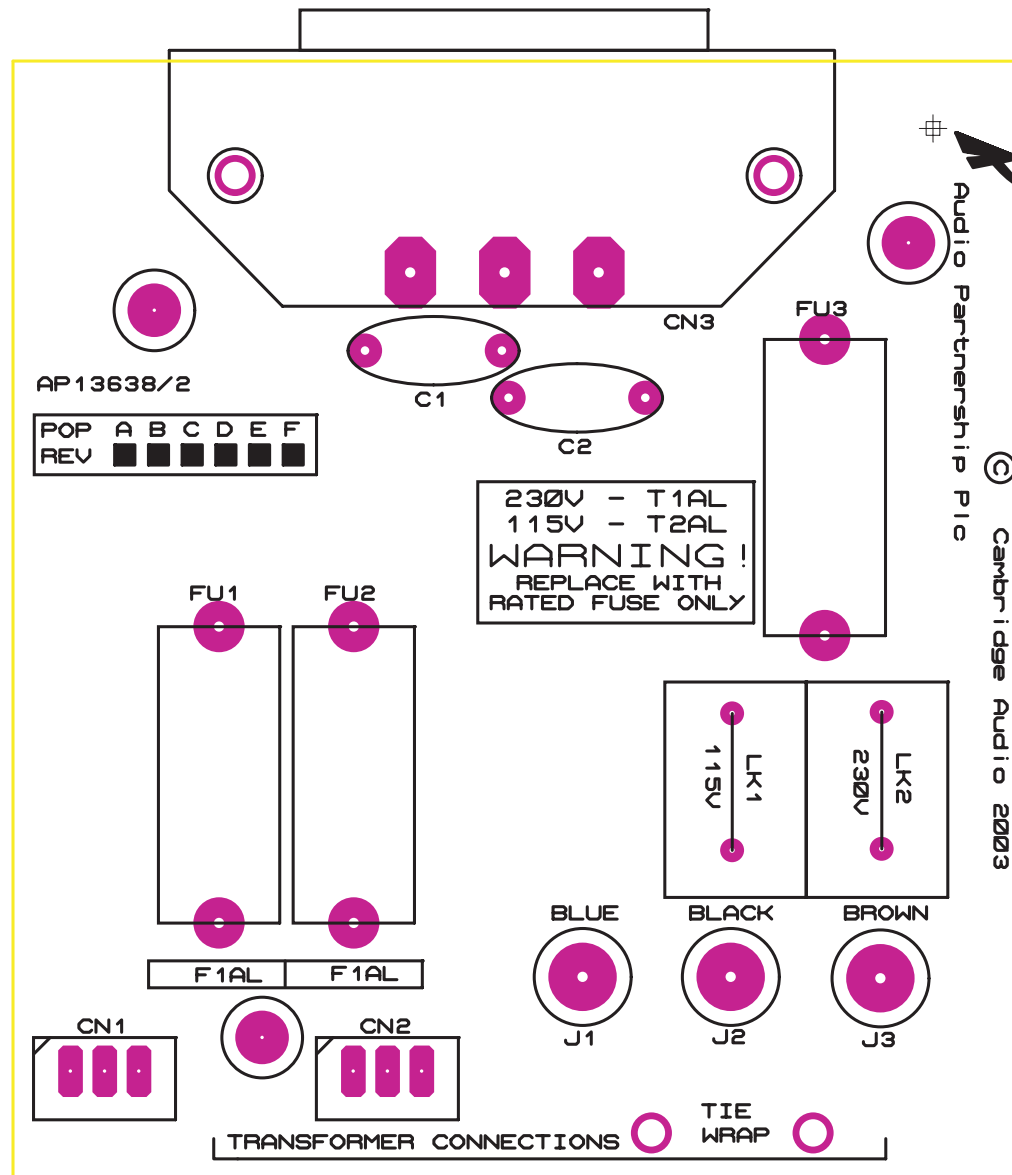
Cambridge Azur 640C CD Player (DAC BOM)
API3752/3

AP Part No.	DRAWING NO	DESCRIPTION	QTY	DESIGNATOR	COMMENTS
	API3112/4	WM8740 DAC PCB	1		Blue PCB with white ident
		2R2 Resistor 0.125W 1% metal film	1	R33	
		22R Resistor 0.125W 1% metal film	3	R2, 24, 25	
		91R Resistor 0.125W 1% metal film	1	R31	
		100R Resistor 0.125W 1% metal film	3	R1, 26, 34	
		430R Resistor 0.125W 1% metal film	1	R32	
		680R Resistor 0.125W 1% metal film	1	R29	
		1K0 Resistor 0.125W 1% metal film	2	R36, 37	
		2K2 Resistor 0.125W 1% metal film	5	R11, R12, R14, R15, R30	
		2K7 Resistor 0.125W 1% metal film	4	R3, 9, 18, 21	
		4K7 Resistor 0.125W 1% metal film	5	R5, 6, 22, 23, 38	
		5k6 Resistor 0.125W 1% metal film	4	R8, 10, 16, 17	
		10K Resistor 0.125W 1% metal film	1	R35	
		11K Resistor 0.125W 1% metal film	4	R4, 7, 19, 20	
		330K Resistor 0.125W 1% metal film	1	R27	
		430R Resistor 2W 5% carbon film	1	R28	
		47pF NPO/COG radial ceramic	2	C7, 39	
		100pF Polypropylene box 100V 5.08mm pitch	4	C9, 14, 37, 43	
		1n5 Maylar film 50V radial	9	C8, 11, 15, 16, 17, 19, 20, 38, 40	
		2n2 Polypropylene box 100V 5.08mm pitch	8	C10, 12, 13, 33, 36, 41, 42, 44	
		10n Polyester 100V 5.08mm pitch	4	C1, 4, 5, 48	
		100n 100n Radial COG	7	C18, 22, 25, 26, 27, 28, 31	
		4.7uF 50V Radial Electrolytic Capacitor	1	C29	
		47uF 25V Radial Electrolytic Capacitor	4	C2, 30, 32, 46	
		10uF NP 25V Radial Non-polar Electrolytic	5	C6, 21, 23, 45, 47	
		100uF NP 16V Radial Non-polar Electrolytic	2	C34, 35	
		2200uF 35V Radial Electrolytic Capacitor	2	C3, 24	
		1N4004 Standard rectifier diode	5	D1, 2, 3, 4, 5	
		1N4148 Standard signal diode	2	D6, 7	
PY014		C8050 Small signal transistor NPN, TO92	2	Q2, 4	
PY020		C9012 Small signal transistor PNP, TO92	2	Q1, 3	
		7805 5V, 1A regulator, TO220	4	U1, 8, 9, 12	
		7815 15V, 1A regulator, TO220	1	U4	
		7915 15V, 1A regulator, TO220	1	U3	
PY585		WM8740 24-bit Stereo DAC	1	U7	
PY108		NE5532 Audio Op-amp	1	U5, 6	
PY343		74HC14 HCMOS DIL	2	U2, U10	
PY363		APT-X179A Opto TX	1	U11	as used in DAB300
		16.934MHz XTAL Oscillator module, 4 pin	1	X1	
		Copper painted screening can	1	Fit over clock circuit (over X1)	Copper plated
PY584		Relay 5V SS-DPDT	1	RL1	
		Single RCA connector, gold plated	1	CN4	
		B 3B-XH-A 3 way 2.54mm pitch JST type connector	1	CN1	
		Dual RCA connector, gold plated	1	CN7	
		2 way 2.0mm pitch JST type connector	1	CN3, 5	
		3 way 2.0mm pitch JST type connector	1	CN2	
		5 way 2.0mm pitch JST type connector	1	CN6	
	API3903/1	160mm GREEN/YELLOW GROUNDING WIRE WITH 1 RING M4 AWG#18	1		CHASSIS CONNECTION ON PCB TO GROUND ON CHASSIS

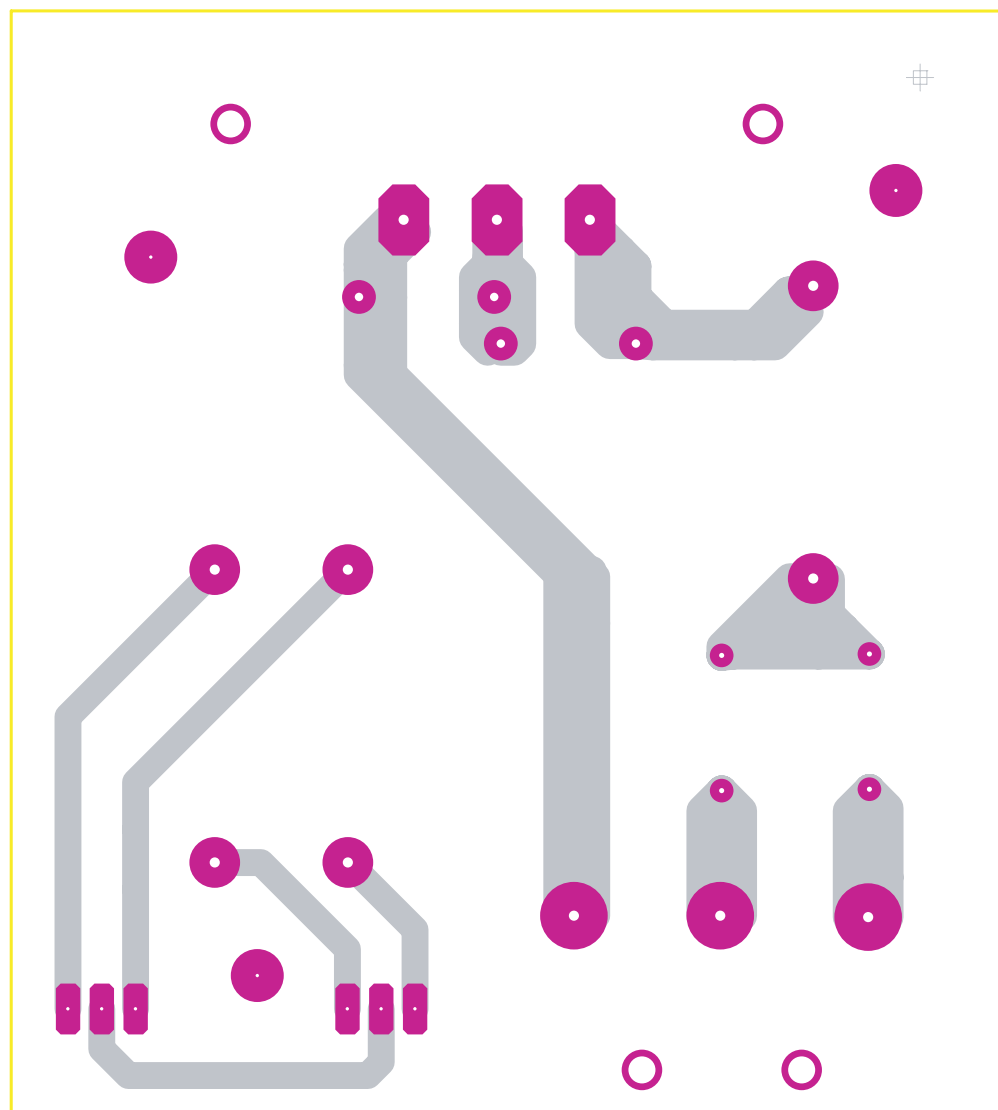
Cambridge Audio Azur 640C CD Player



Cambridge Audio Azur 640C CD Player



Cambridge Audio Azur 640C CD Player



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API3637/2 Mains Input PCB Layout (Bottom Side)

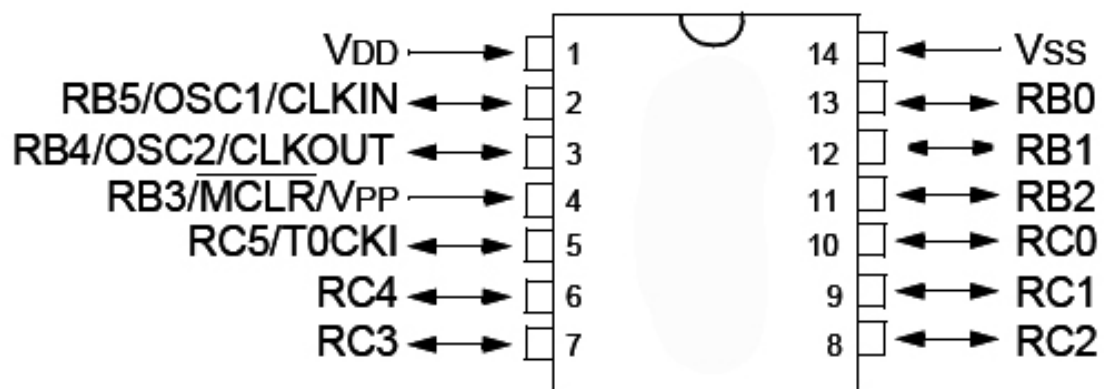
Cambridge Azur 640C CD Player (Mains Input BOM)
API3752/3

AP Part No.	DRAWING NO	DESCRIPTION	QTY	DESIGNATOR	COMMENTS
	API3638/2	MAINS PCB ASSEMBLY	1		BLUE WITH WHITE SILK SCREEN
		10n CERAMIC X1 Y2 MAINS RATED CAPACITOR	2	C1,C2	
		FUSE TIAL	1	FU3	
		FUSE FIAL	2	FU1,FU2	
PY091		Fuse holder	3	FU1,FU2,FU3	
PY092		Fuse cover	3	FU1,FU2,FU3	
		EYELET 2.3x4mm	3	J1,J2,J3	
		LINK WIRE 24SWG 10mm LONG	2	LK1, LK2	FITTED TO LK1 OR LK2
	API3903/1	160mm GREEN/YELLOW GROUNDING WIRE WITH 1 RING M4 AWG#18	1		IEC CONNECTOR EARTH TAG TO GROUND ON CHASSIS
		3 way 2.5mm pitch JST type connector	2	CN1, CN2	
		IEC MAINS SOCKET PC1287	1	CN3	FIRST TECH AS PER D500 SE CD PLAYER
		2 BOLT M3x10 BLACK	1		IEC CONNECTOR TO PCB
		2 LOCK WASHER M3	1		IEC CONNECTOR TO PCB
		2 NUT M3 HEX M3X5.5X2.4mm	1		IEC CONNECTOR TO PCB

Cambridge Audio Azur 640C CD Player IC Pin Layout Details

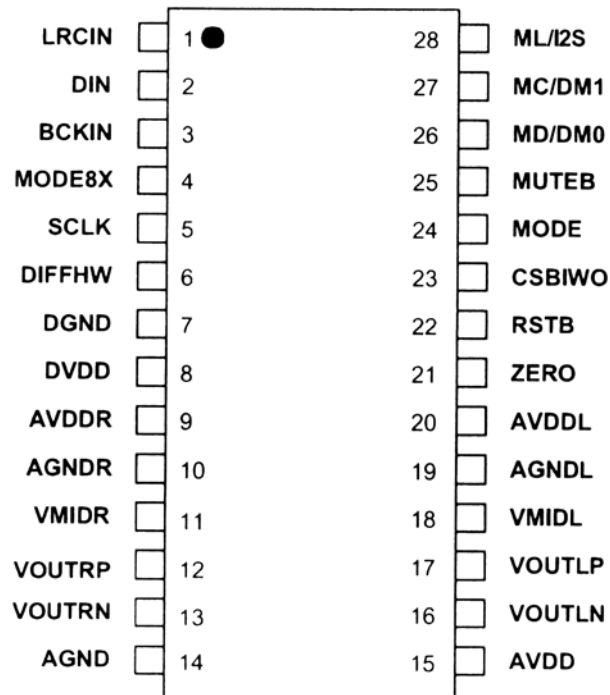
Front Panel PCB

PIC16C505 (U3)

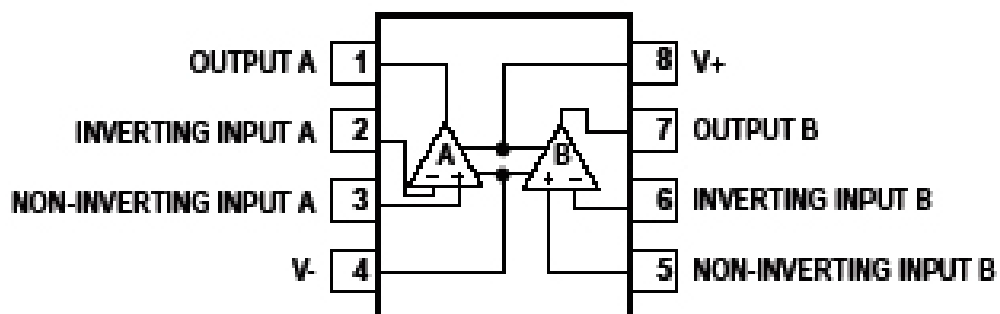


DAC PCB

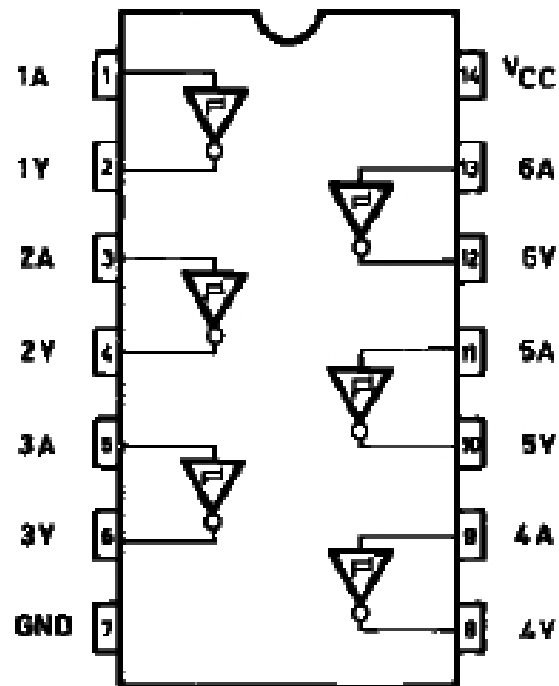
WM8740 (U7)



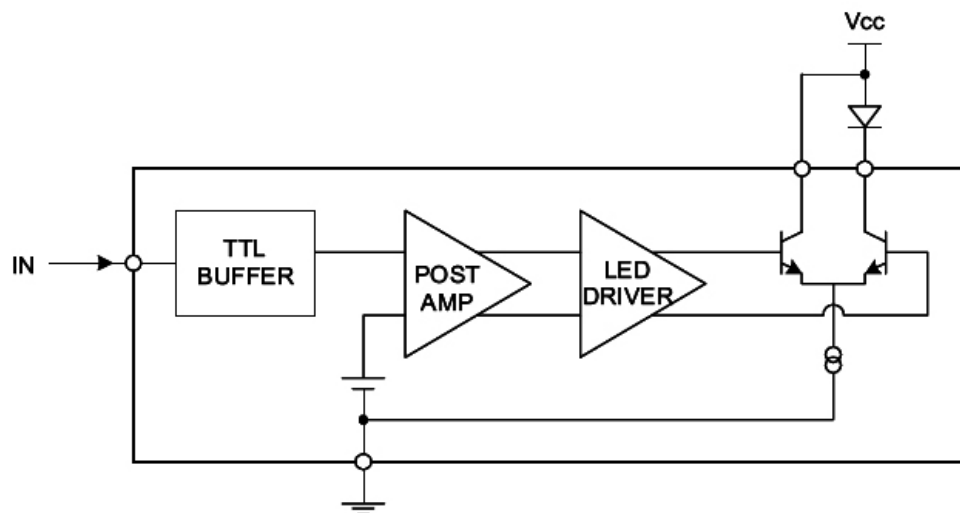
NE5532 (U5 & U6)



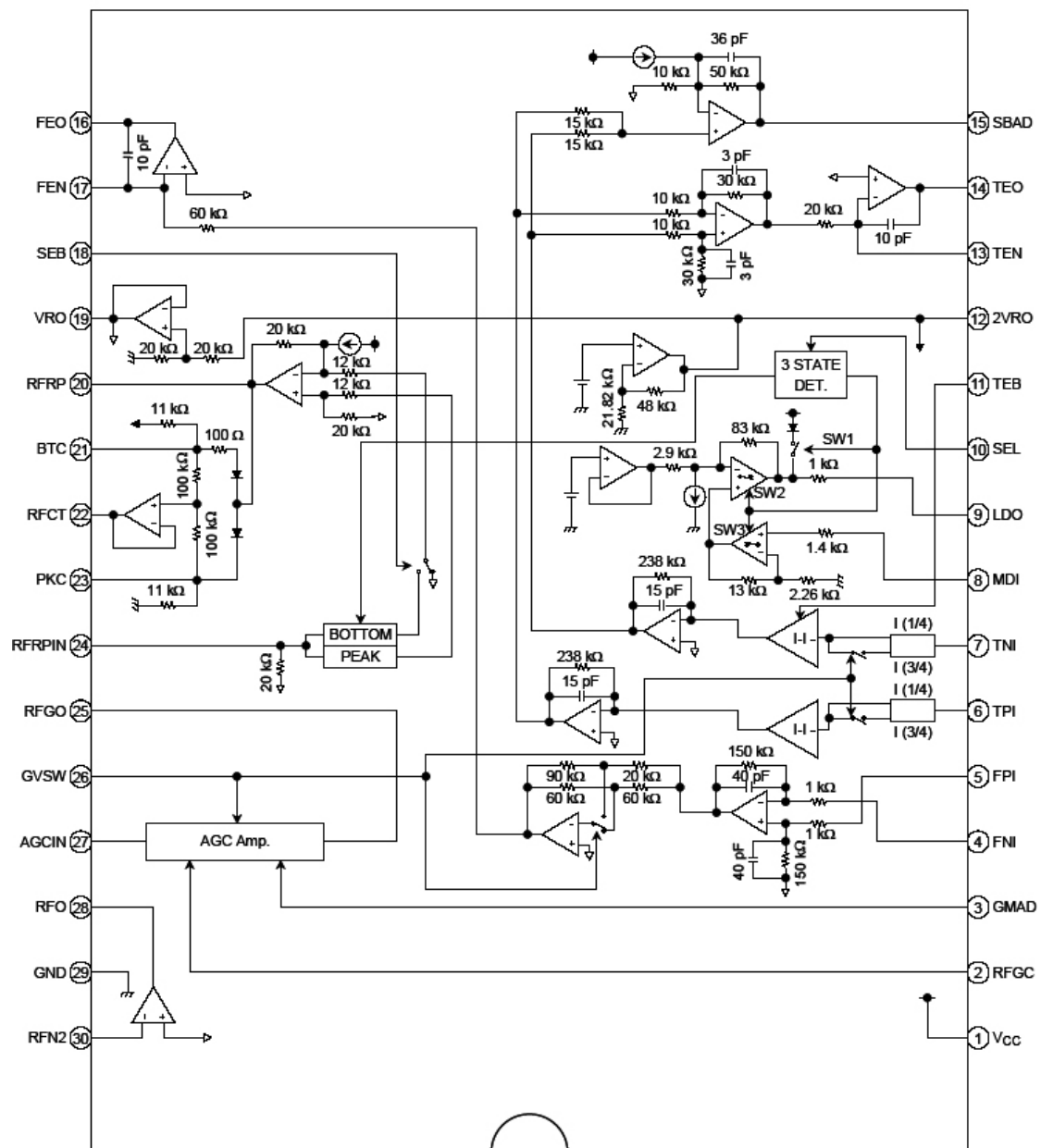
74HC14 (U2 & U10)



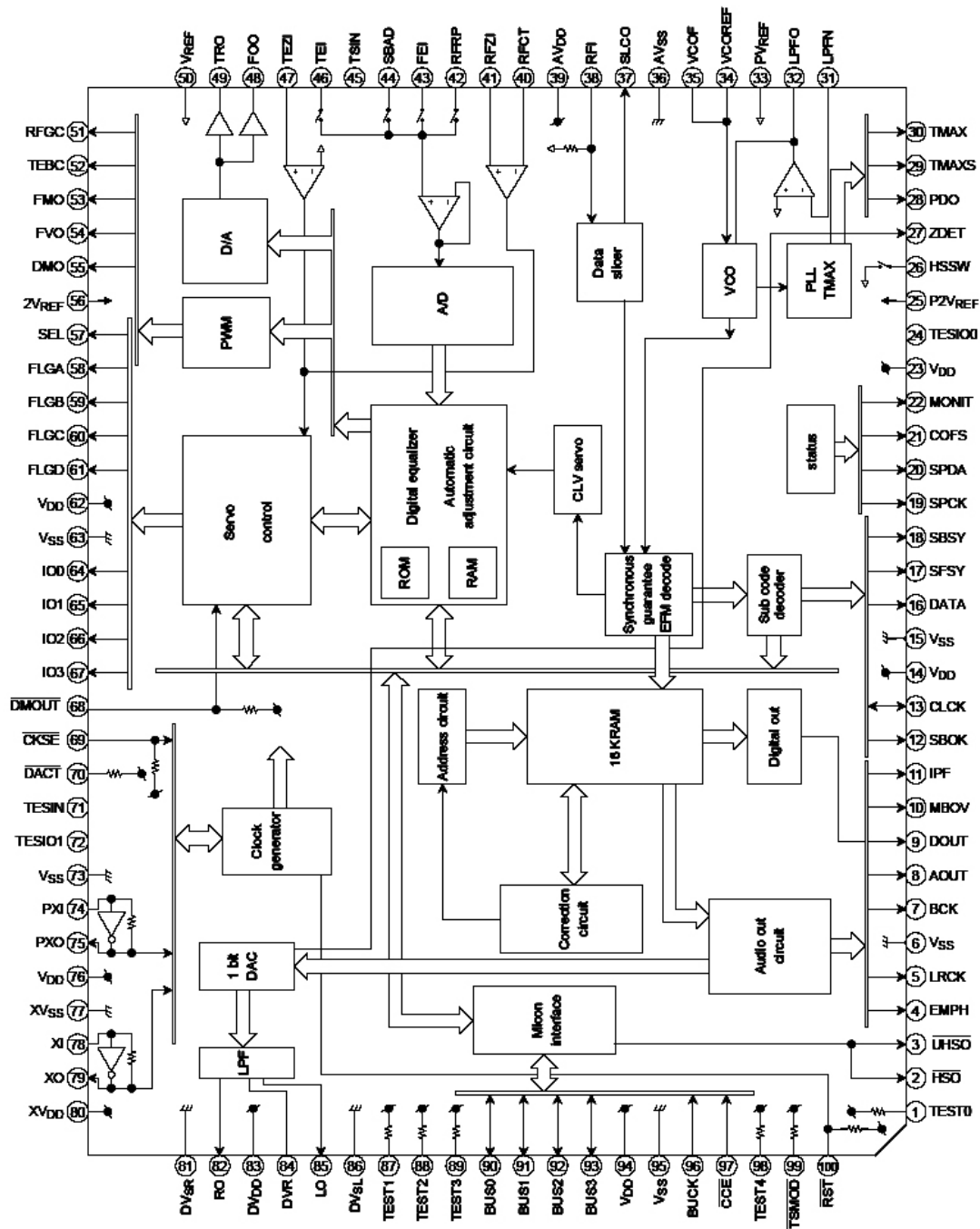
APT179A (U11)



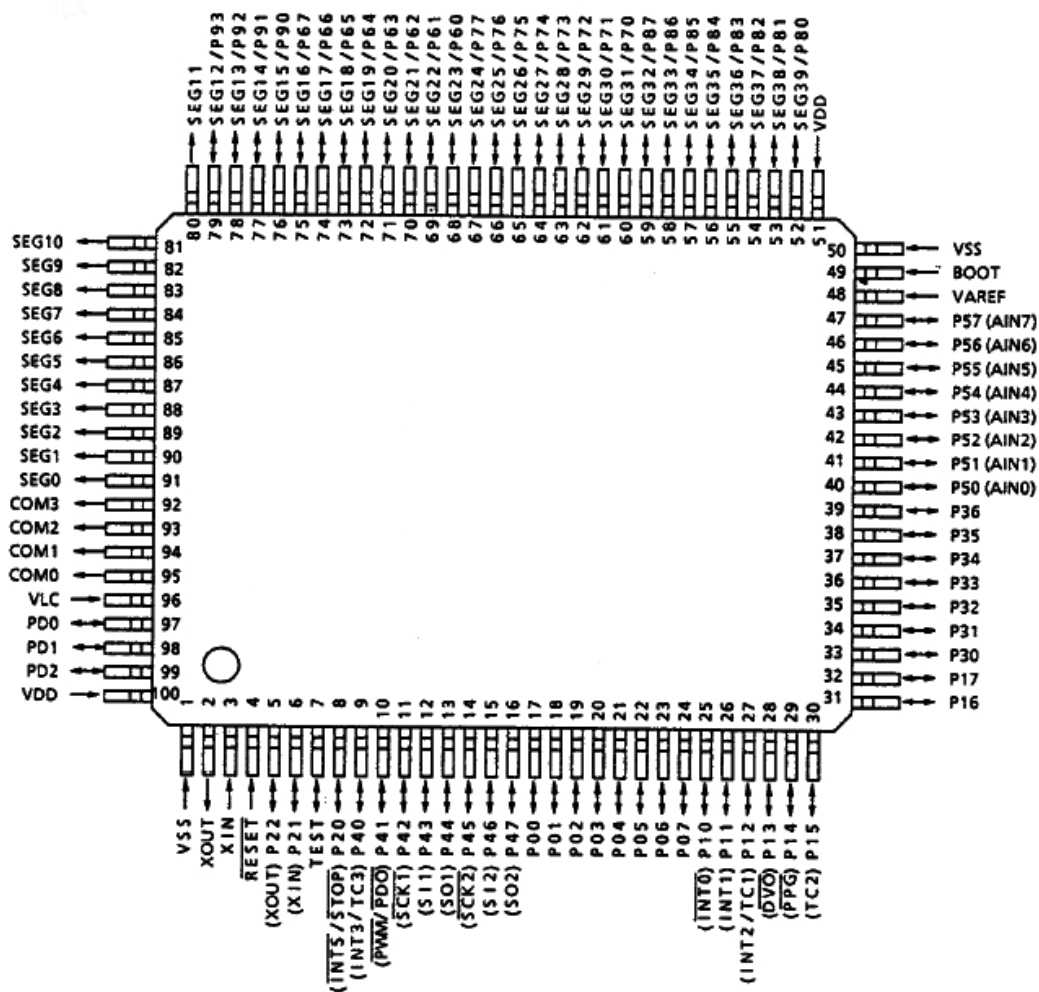
TA2153FN (U1)



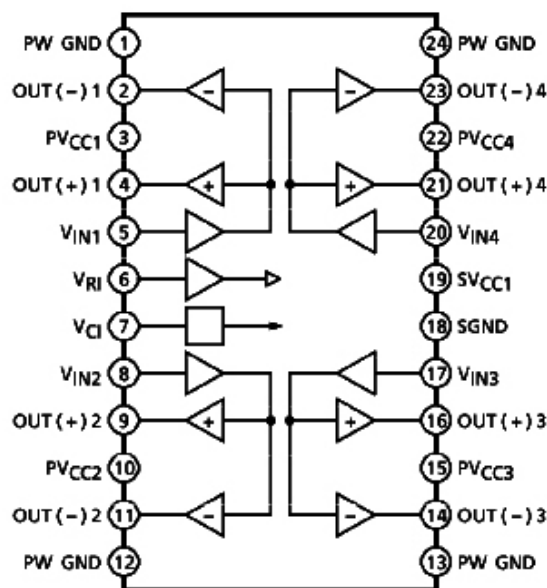
TC9462F (U2)



TLCS-870 MCU (U3)



TA2092 (U6)



Cambridge Azur 640C CD Player (Silver - Black Differences BOM)**API3752/3**

AP PART No.	DRAWING NO	DESCRIPTION	QTY	COMMENTS
PY557		CAMBRIDGE AUDIO NEW RANGE TOP PANEL (BLACK)	1	POSITIONON TOP OF THE PRODUCT
		SIDE PANELS		
PY582	API2741/1	CAMBRIDGE NEW RANGE CD FRONT PANEL (PUNCHED AND PRINTED) (BLACK)	1	SCREENED WITH ARTWORK API3591/3 & API3593/1
PY554	API3495/1	CAMBRIDGE AUDIO NEW RANGE CD DRAWER FRONT (BLACK)	1	
PY552		DISPLAY		
	API3945/1	CARTON LABEL (MODEL NO.) UK BLACK	1	FOR BOX
PY515		M2.6 x 8 MC Torx Recessed Screw BLACK	8	TOP PANEL SCREWS
PY146	API1782/1	OPUS CONTROL BOX BUTTON (BLACK)	1	POSITION IN PLACE ON THE FRONTPANEL
PY531		CAMBRIDGE NEW RANGE FOOT MOULDING (BLACK)	4	POSITION IN PLACE ON BOTTOM PANEL
		CAMBRIDGE NEW RANGE AMP 7mm TAC SWITCH BUTTON (BLACK)	5	POSITION IN PLACE ON THE FRONT PANEL