

SERVICE MANUAL



SPECIFICATIONS:

D/A converters	Dual Wolfson WM8740 24 bit DACs
Digital filter	Analog Devices Black Fin ADSP-BF532 32 bit DSP Performing ATF™ Upsampling to 24 bit 384kHz
Analog filter	2 Pole Dual Differential Bessel Double Virtual Earth Balanced
Frequency Response	20Hz to 20 kHz (+/-0.1dB)
THD @ 1kHz 0dBfs	< 0.0008%
THD @ 1kHz -10dBfs	< 0.0005%
THD @ 20kHz)dBfs	< 0.001%
IMD (19/20kHz) 0dBfs	< 0.0006%
Linearity @ -90dBfs	> 113dB
Total correlated jitter	< 130pS
Crosstalk @ 1kHz	< -130dB
Crosstalk @ 20kHz	< -110dB
Output impedance	< 50 ohms
Digital input word widths supported	16 – 24 bit
Digital input word widths supported	16, 20, 24 bit
Digital input sampling frequencies supported	32kHz, 44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz, 192kHz
Digital output sampling frequencies supported	32kHz – 192kHz pass through (including 44.1kHz for CD) 48kHz, 96kHz, 192kHz upsampled
Audio output upsampling	Fixed 24 bit, 384kHz
Dimensions – H x W x D	115 x 430 x 315mm (4.5 x 16.9 x 12.4")
Weight	6.4Kg (14.1Lbs)

AP22735/1

740C 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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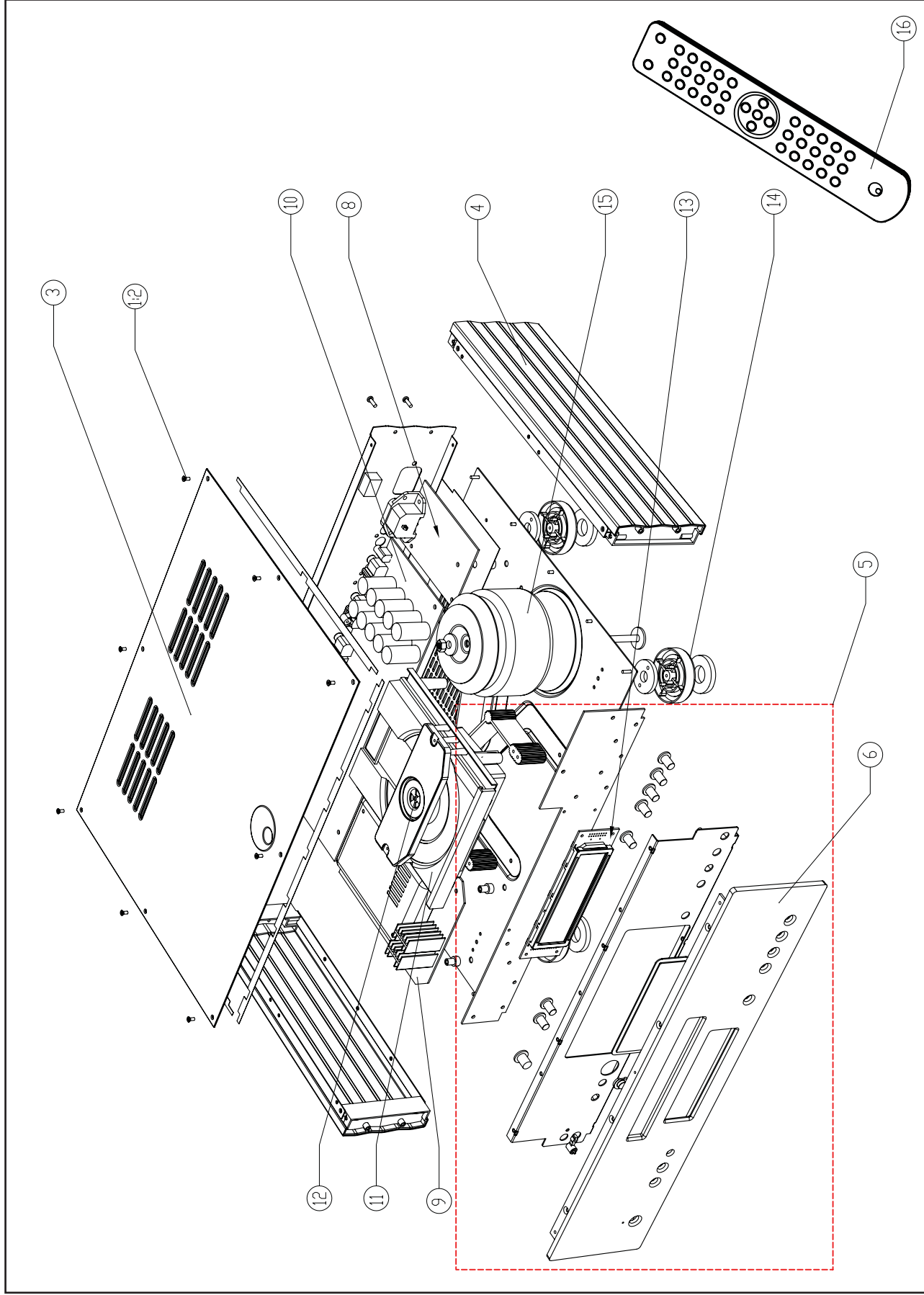
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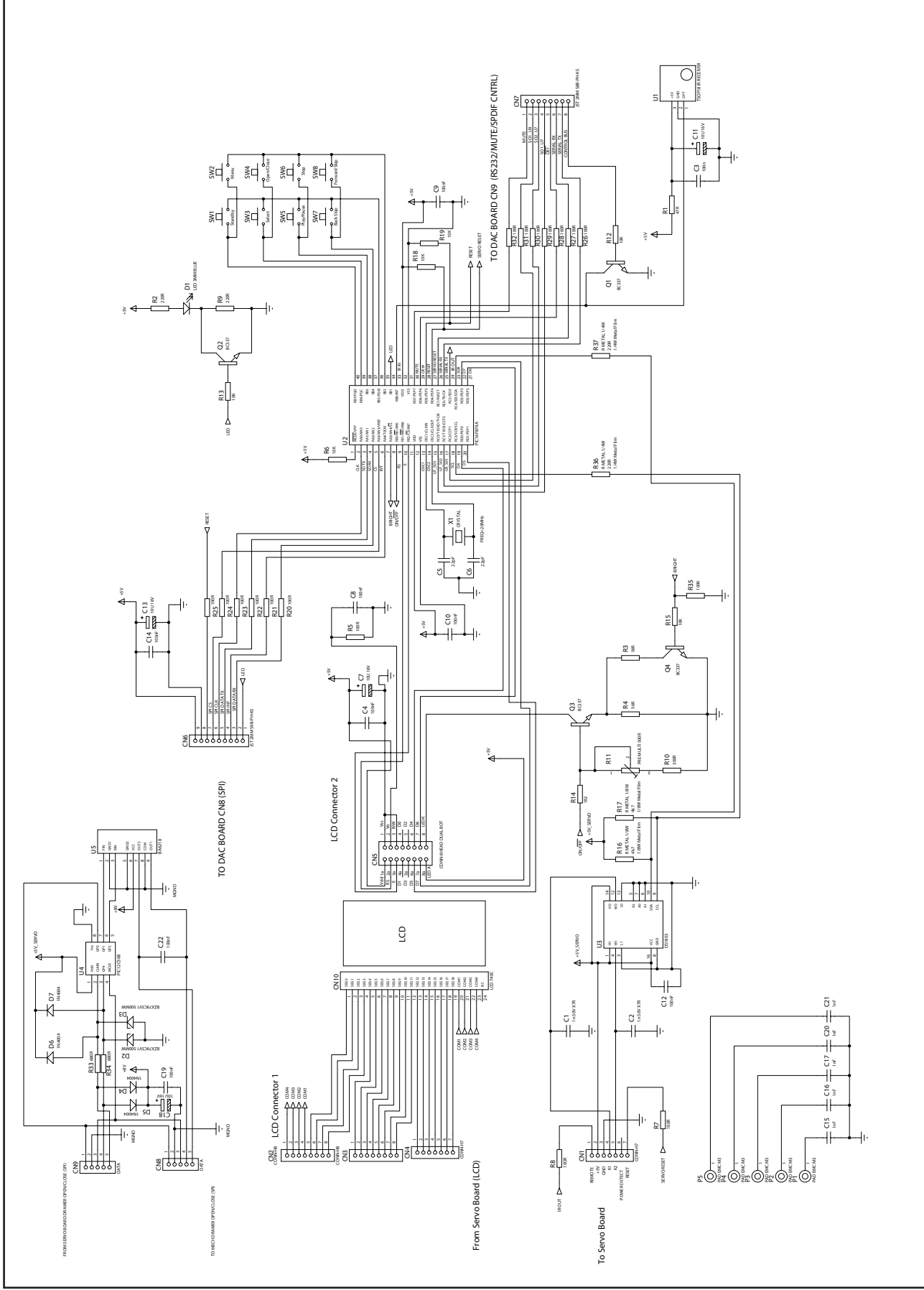
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Drawing Ref	AP Part Number	Factory Part Number	Description
1	PY1228	7003-008010E006	Screw M3*8 M/C torx recess ZN-PT (Silver)
2	PY1229	7003-008010E001	Screw M3*8 M/C torx recess BLK-PT (Black)
3	PY1270	6574-010009E000-02	Azur 740C Top Panel-S (With Painted)
3	PY1271	6574-010009E000-01	Azur 740C Top Panel-B (With Painted)
4	PY1032	6550-150017E001-02	Larger Side Panel Silver Painted
4	PY1033	6550-150017E001-01	Larger Side Panel Black Painted
5	PY1272	8574-001000E301	Azur-740C Silver Front Panel Assy Rev A
5	PY1273	8574-001010E301	Azur-740C Black Front Panel Assy Rev A
6	PY1274	6574-010012E002A01	Azur 740C Front Panel-S Artwork AP20101*& AP20102*
6	PY1275	6574-010012E002-01	Azur 740C Front Panel-B Artwork AP20101*& AP20102*
7	PY1276	9474-001000E041	Azur-740C Control PCB Assy Rev A
8	PY1277	9474-001000E071	Azur-740C Main Power Input PCBA Rev A
9	PY1278	9474-001000E181	Azur-740C Servo PCBA <T-Type> Rev A
10	PY1175	4006-740058E001	740C DAC Module
11	PY940	9692-006002-201	Azur V2 CD Mechanism Assy with Sanyo DA11V Rev A
12	PY941	3009-110000-002	V2 CD Sanyo Laser DA11V
13	PY1222	4006-840001E000	Azur 840C Display Module MBCF00003B00V0
14	PY1122	6074-150004E000	Azur 840A Plastic Foot (Black)
14	PY1124	6074-150004E000A01	Azur 840A Plastic Foot (Silver)
15	PY1356	3200-082661E000	Transformer AC230 (EU) TO8266A for 740C
15	PY1357	3200-082591E000	Transformer AC115/60Hz TO8259A for 740C (CU Version)
16	PY1165	9805-084000E001	Azur 840A/C 740A/C Remote Control Assy Rev A

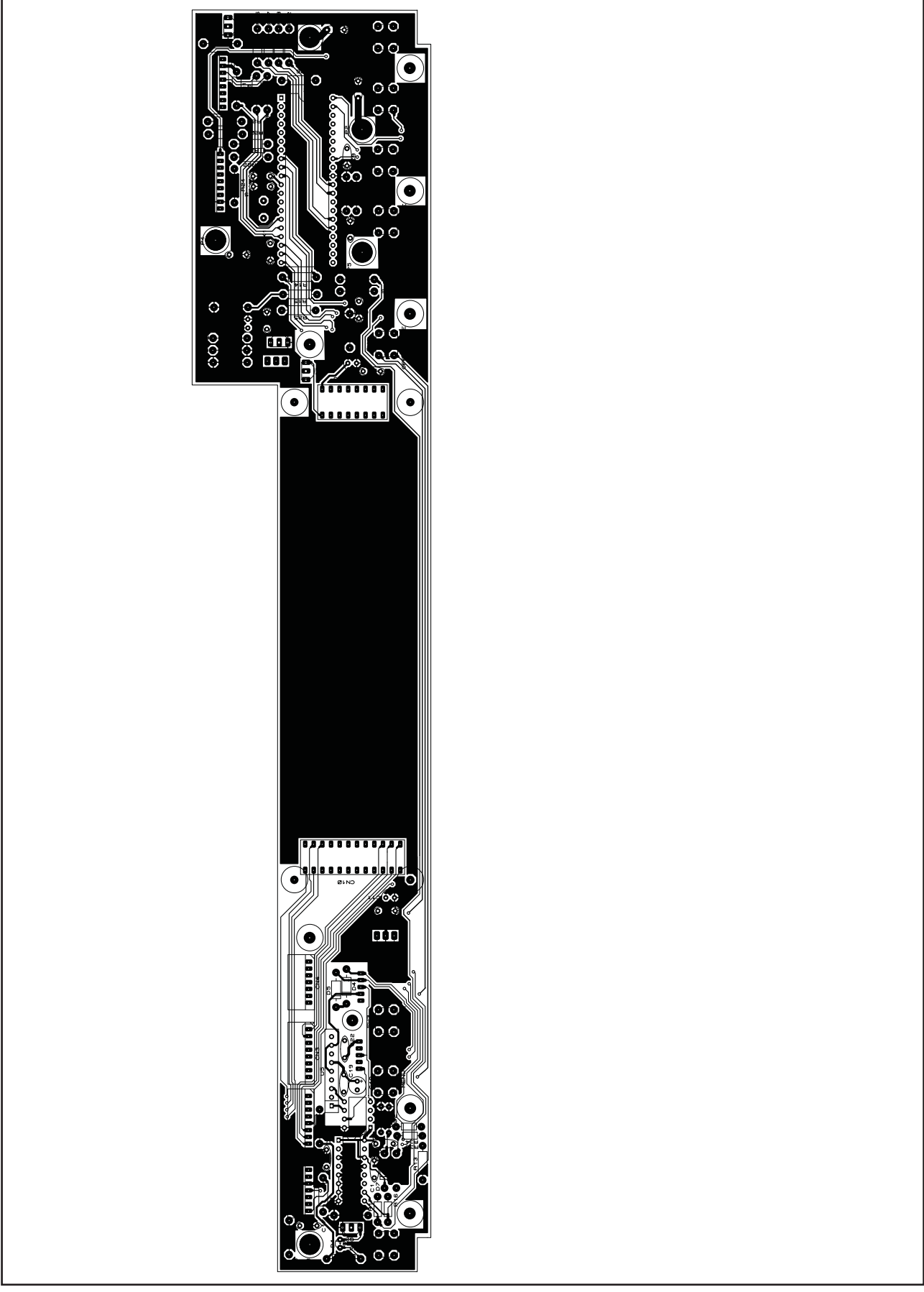
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API9135/4 Front Panel Circuit Diagram

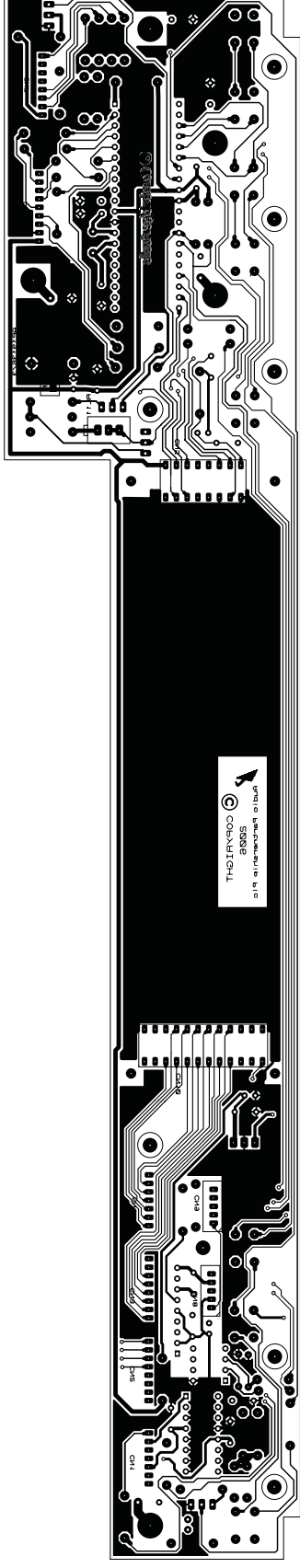
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API9135/3 Front Panel Board Layout (Top Side)

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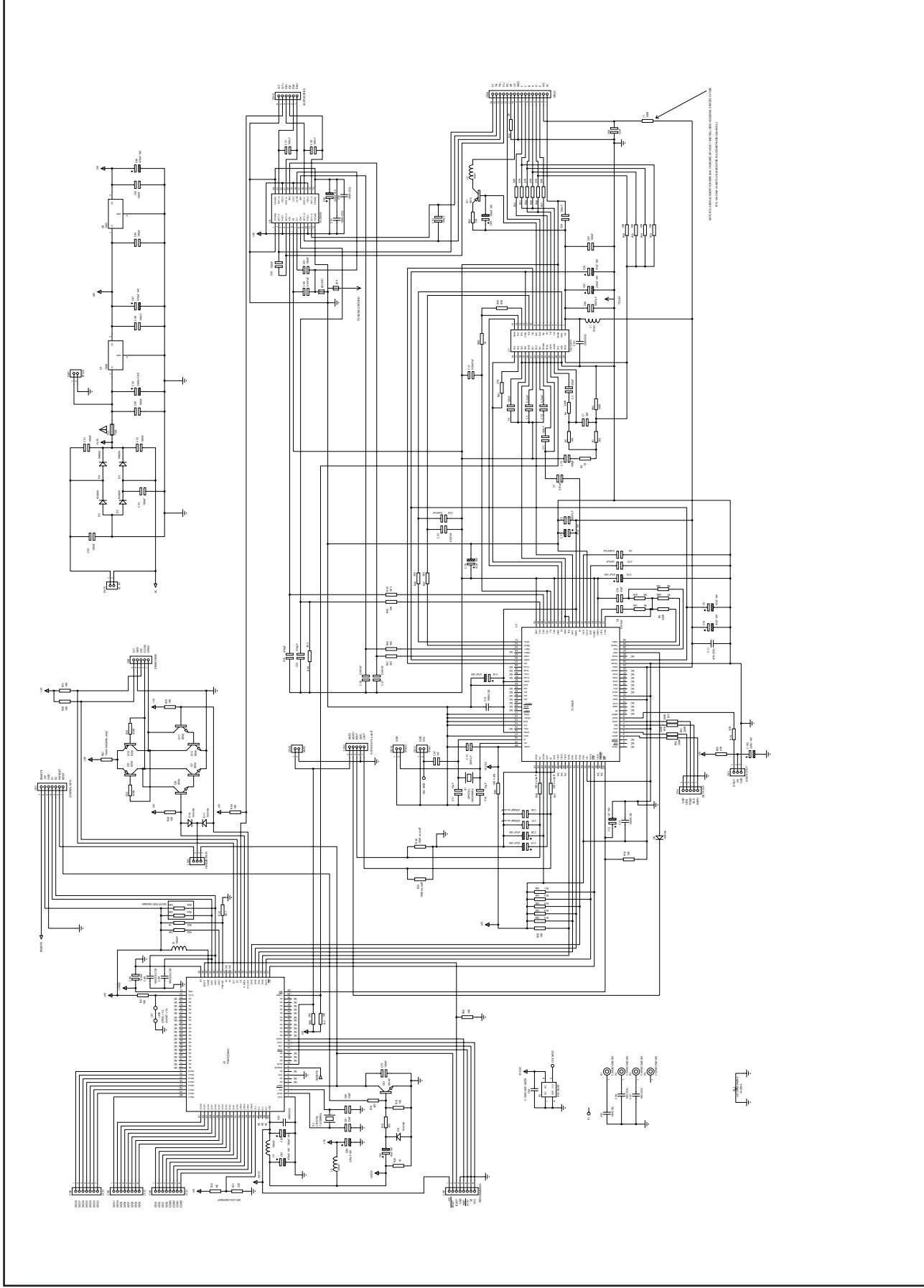
Cambridge Azur 740C Front Panel BOM

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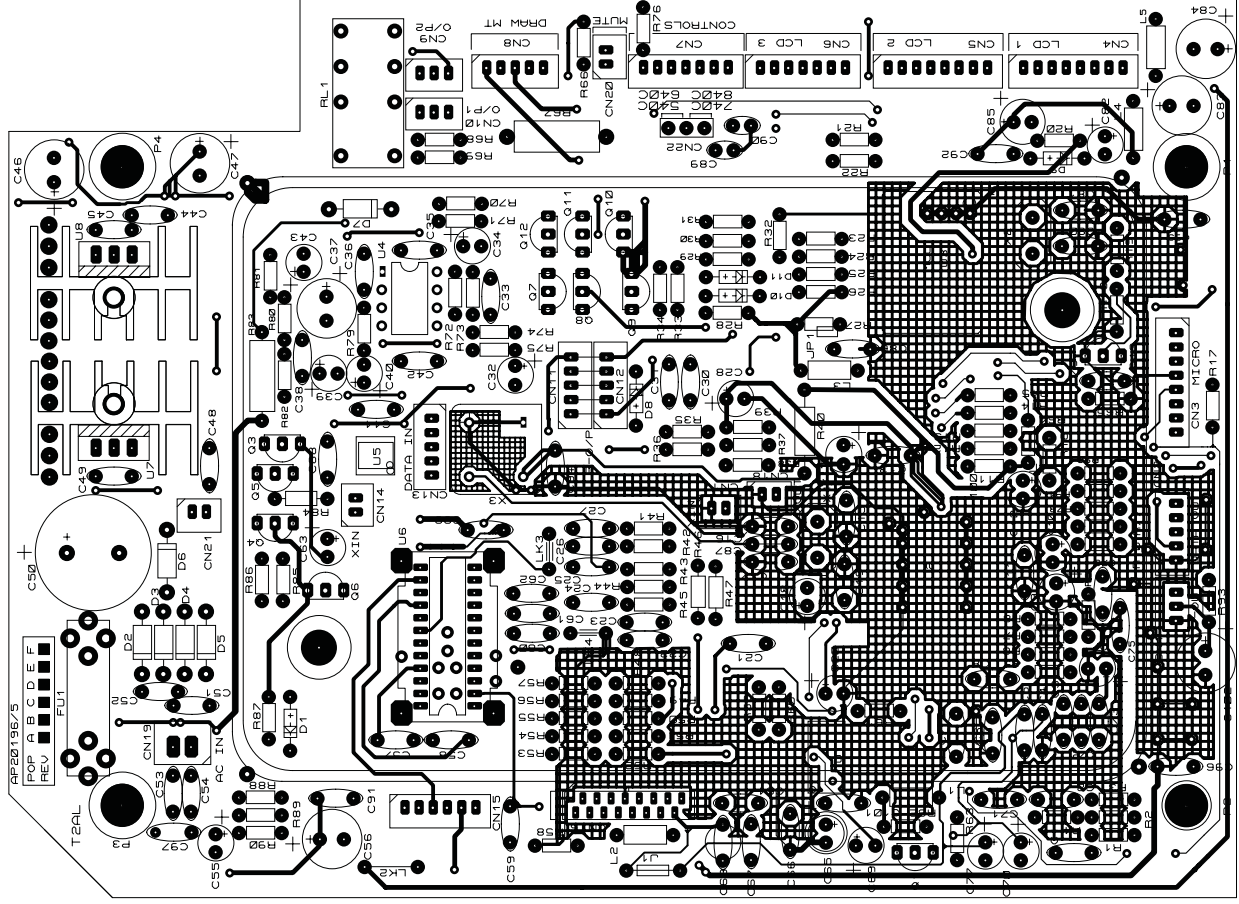
AP Part no.	Value	Description/Type	Factory PN	Qty	Component Ident	NOTES
RESISTORS						
	47R	0.25 W 1% Metal Film		1	R1	
	56R	0.25 W 1% Metal Film		2	R3, R4	
	100R	0.25 W 1% Metal Film		16	R5, R7, R8, R20-R32	
	220R	0.25 W 1% Metal Film	1012-201014E000	4	R2, R9, R36, R37	
	300R	0.25 W 1% Metal Film		1	R10	
	680R	0.125 W 1% Metal Film	1016-801016E020	2	R33, R34	
	1K2	0.25 W 1% Metal Film		1	R14	
	4K7	0.25 W 1% Metal Film		2	R16, R17	
	10k	0.25 W 1% Metal Film		6	R6, R12, R13, R15, R18, R19	
	100K	0.25 W 1% Metal Film		1	R35	
	PRE MULTI 500R	Side adjust Footprint 9.5 x 4.5 mm	VR B500 OHM +-10% WI 3296NOXOX-XA1-013	1	R11	Mount on bottom side of PCB with screw adjust facing upwards
CAPACITORS						
	22pF	Ceramic NPO, Pitch = 5.0mm		2	C5, C6	
	1nF	Ceramic 50V Pitch = 5.0mm		7	C1, C2, C15-C17, C20, C21	
	100nF	Ceramic 50V Pitch = 5.0mm		9	C3, C4, C8-C10, C12, C14, C19, C22	
	10uF	Miniature 16V Pitch 2.5mm Height 5.2mm		4	C7, C11, C13, C18	
SEMICONDUCTORS						
	TSOP1836SS3V	TSOP IR RECEIVER		1	U1	
	PIC16F877A-I/P	PIC		1	U2	Programme with AP20728/4, Please add version label
PY983	DS18030-050	DIGITAL POT	4118-030051E200	1	U3	
	PIC12C508A-I/P	PIC		1	U4	Programme with AP20231/1, Please add version label
PY260	BA6218	CD DRIVER IC		1	U5	
TRANSISTORS						
PY214	BC337	NPN SMALL SIGNAL		4	Q1-Q4	
DIODES						
	LED BLUE			1	D1	HFB963M-130
	5V1 ZENER	BZX79C5V1	1402-511201E200	2	D2, D3	
	1N4004	GENERAL PURPOSE RECTIFIER		4	D4, D5, D6, D7	
MISCELLANEOUS						
PY043	TACT SWITCH	TACT SW 2P2T KPT-1105A (5MM)		8	SW1-SW8	
	20MHz CRYSTAL	20MHz, HEIGHT ABOUT 3.5MM	CL20PF HC-49US	1	X1	+ - 30PPM

Note: resistors, capacitors and other 'generic' electronic components are not usually stocked by the manufacturer. Please obtain these locally.

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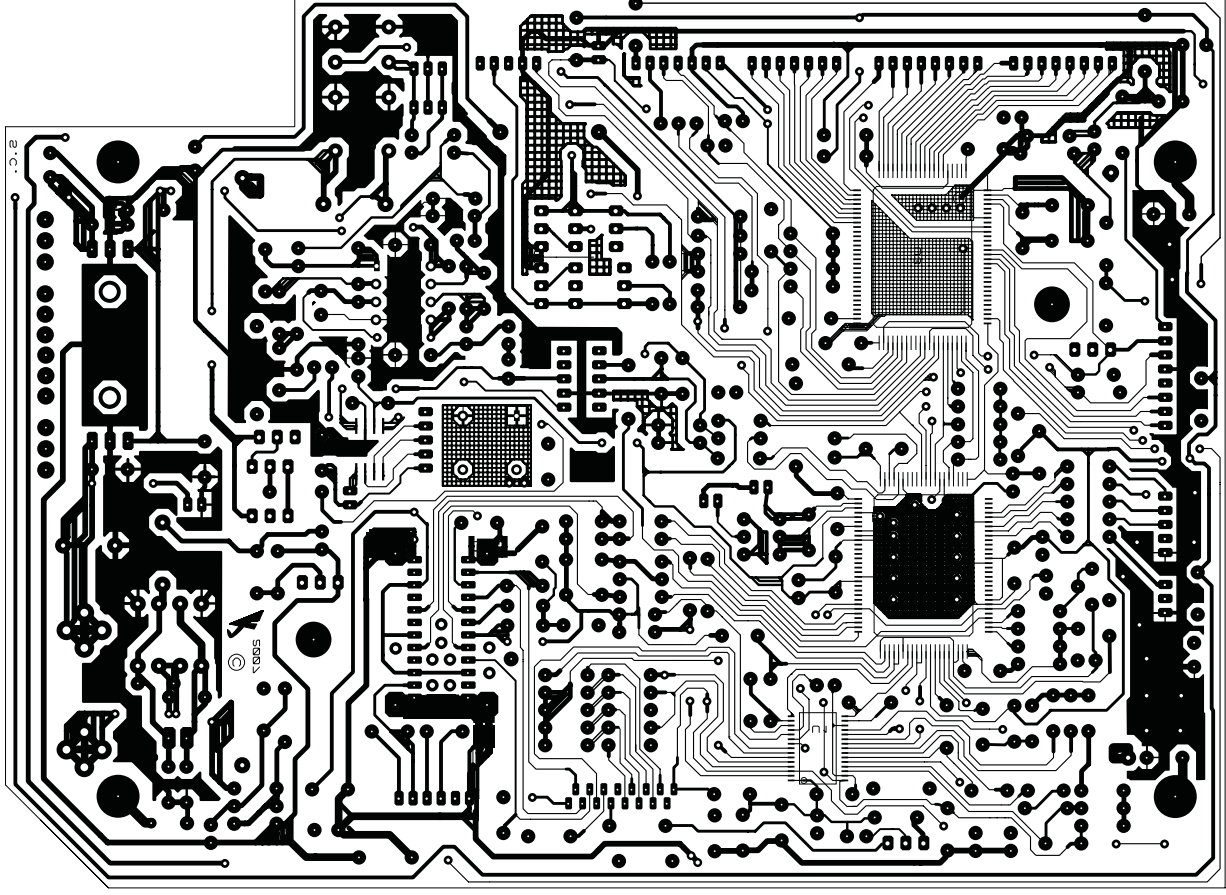
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AP20195/5 Servo Board Layout (Top Side)

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AP20195/5 Servo Board Layout (Bottom Side)

Cambridge Azur 740C Servo PCB Assembly BOM

AP20713/2

AP Part No.	Value	Description/Type	Qty	Component Ident	Factory PN	NOTES
RESISTORS						
	10R	0.25 W Metal Film Resistor	1	R40	1011-000014-000	
	15R	0.125 W Metal Film Resistor	1	R62		
	link	14mm link	1	R67		For 840C ONLY. Use link
	47R	0.125 W Metal Film Resistor	1	R10,	1014-700018-000	
	100R	0.125 W Metal Film Resistor	1	wirelink (J1)	1011-001016-000	Wirelink is positioned between C68 and L1. This must be 100R resistor.
	220R	0.125 W Metal Film Resistor	1	R4,R77,R78,R91,R92	1012-201018-000	
	470R	0.125 W Metal Film Resistor	2	R33, 34	1014-701016-000	
	1K	0.125 W Metal Film Resistor	5	R3, 20, 25, 60	1011-002018-000	
	2K2	0.125 W Metal Film Resistor	2	R1, 66	1012-202016-000	
	3K3	0.125 W Metal Film Resistor	7	R19, 41, 42, 44, 45, 46, 47	1013-302018-000	
	4K7	0.125 W Metal Film Resistor	2	R32, 76	1014-702016-000	
	10K	0.125 W Metal Film Resistor	26	R2, 8, 11, 12, 13, 14, 15, 16, 17, 18, 26, 27, 28, 29, 30, 31, 39, 43, 53, 54, 55, 56, 64, 65	1011-003016-000	
	15K	0.125 W Metal Film Resistor	1	R5,	1011-503018-000	
	22K	0.125 W Metal Film Resistor	1	R21		
	27K	0.125 W Metal Film Resistor	1	R61		
	47K	0.125 W Metal Film Resistor	5	R9, 48, 49, 50, 51	1014-703016-000	
	56K	0.125 W Metal Film Resistor	2	R52, 57		
	68K	0.125 W Metal Film Resistor	2	R7,	1016-803018-000	
	82K	0.125 W Metal Film Resistor	1	R59	1018-203018-000	
	100K	0.125 W Metal Film Resistor	1	R63	1011-004016-000	
	220K	0.125 W Metal Film Resistor	1	R6	1012-204016-000	
CAPACITORS						
	3pF	Ceramic COG 50V 5mm Pitch	1	C1		
	25pF	Ceramic COG 50V 5mm Pitch	2	C80, 81	1100-250042-000	
	47pF	Ceramic COG 50V 5mm Pitch	1	C76	1100-470043-000	
	100pF	Ceramic COG 50V 5mm Pitch	1	C73		
	470pF	Ceramic 50V 5mm Pitch	2	C24, 25	1100-471043-000	
	1nF	Ceramic 50V 5mm Pitch	3	C87, C93, C96	1100-102043-000	

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Cambridge Azur 740C Servo PCB Assembly BOM

AP20713/2

AP Part No.	Value	Description/Type	Qty	Component Ident	Factory PN	NOTES
	10nF	Ceramic 50V 5mm Pitch	1	C75	1100-103043-000	
	10nF	Mylar 5mm Pitch	1	C7		
	15nF	Ceramic 50V 5mm Pitch	1	C8	1100-153043-000	
	47nF	Ceramic 50V 5mm Pitch	11	C5, 11, 13, 15, 19, 22, 23, 26, 27, 60, 66	1100-473044-000	
	100nF	Ceramic 50V 5mm Pitch	24	C2, 4, 44, 45, 48, 49, 51, 52, 53, 54, 57, 58, 59, 61, 62, 64, 67, 71, 79, 86, 91, 94, 98, 101	1106-104044-000	
	220nF	Ceramic 50V 5mm Pitch	2	C3, 72	1100-224044-000	
	2n7	Mylar 5mm Pitch	1	C6	1101-272063-000	
	4n7	Mylar 5mm Pitch	1	C21	1101-472062-000	
	1uF	16V Electrolytic	1	C12	1102-107044-000	
	10uF	16V Electrolytic	1	C82	1102-100024-000	
	22uF	16V Electrolytic	2	C14, 68	1102-220014-000	
	47uF	16V Electrolytic	10	C9, 10, 18, 20, 28, 29, 70, 74, 77, 78	1102-470014-000	
	100uF	16V Electrolytic	2	C69, 85	1102-101014-000	
	220uF	16V Electrolytic	3	C56, 65, 84	1102-221014-000	
	470uF	16V Electrolytic	3	C46, 47, 83	1102-471014-000	
	3300uF	25V Electrolytic	1	C50	1102-332024-000	
SEMICONDUCTORS						
PY474	TA2153FN	TOSHIBA RF Amplifier	1	U1	4121-530103-000	
PY475	TC9462FG	TOSHIBA Digital Servo-chip Processor	1	U2	4194-620123-000	
PY565	TOSHCDMCU	MCU TMP87EP26F-1J15 SOP TOSHIBH	1	U3	4187-260103-000	
PY473	TA2092N	TOSHIBA Power driver IC	1	U6	4120-920053-000	
	7808	TO-220 +8V Regulator	1	U7	4178-080302-600	
	7805	TO-220 +5V Regulator	1	U8	4178-050334-700	
PY014	C8050D	NPN Transistor TO92	4	Q7, 8, 11, 12	1300-805000-100	
PY558	9014C	NPN Transistor	1	Q13	1300-901400-100	
PY559	C8550	PNP Transistor	2	Q9, 10	1301-855000-100	
PY560	9015C	PNP Transistor	1	Q1	1301-901500-100	
	1N4148	Signal Diode	3	D9, 10, 11	1401-141480-000	

Note: resistors, capacitors and other 'generic' electronic components are not usually stocked by the manufacturer. Please obtain these locally.

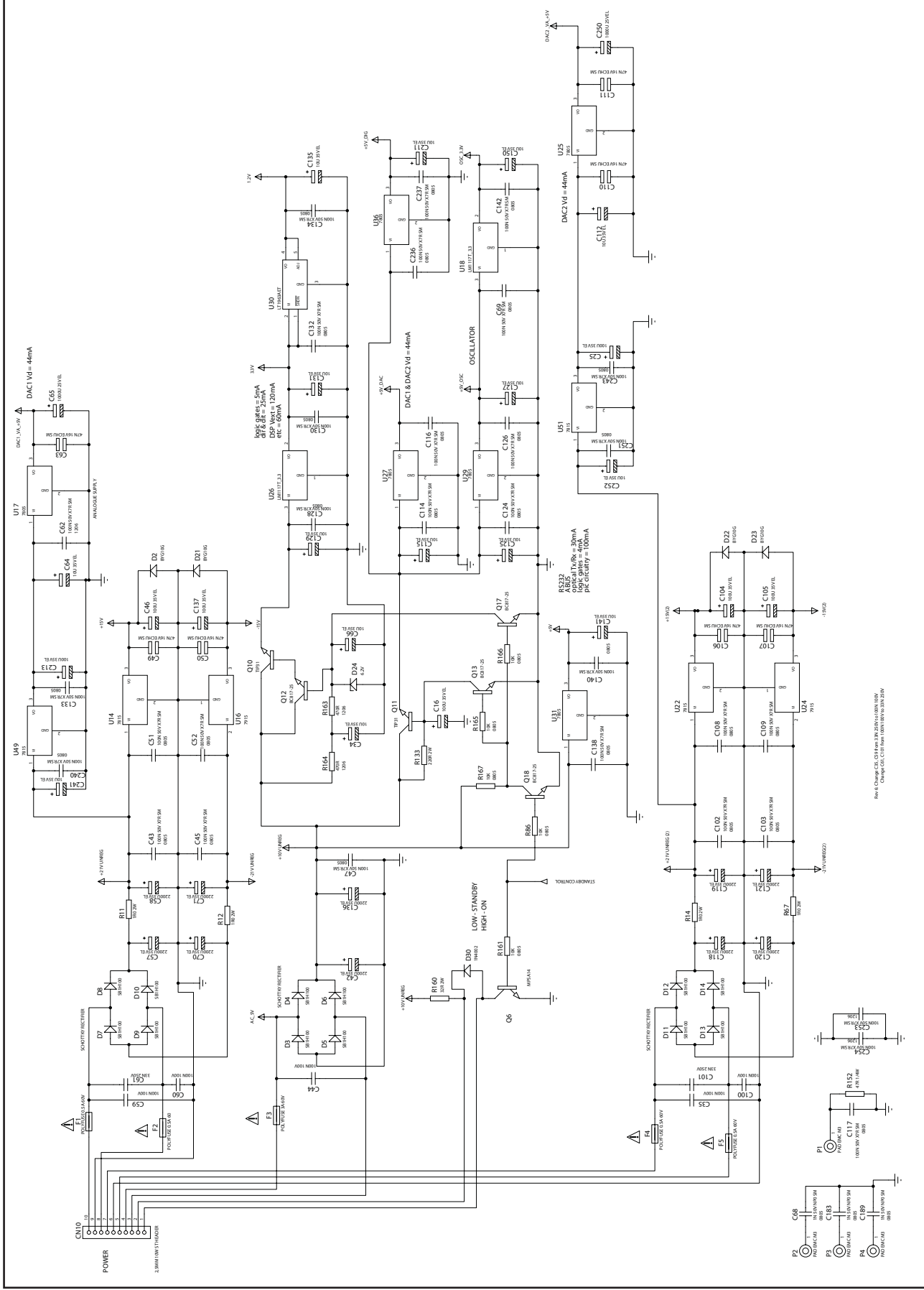
Cambridge Azur 740C Servo PCB Assembly BOM

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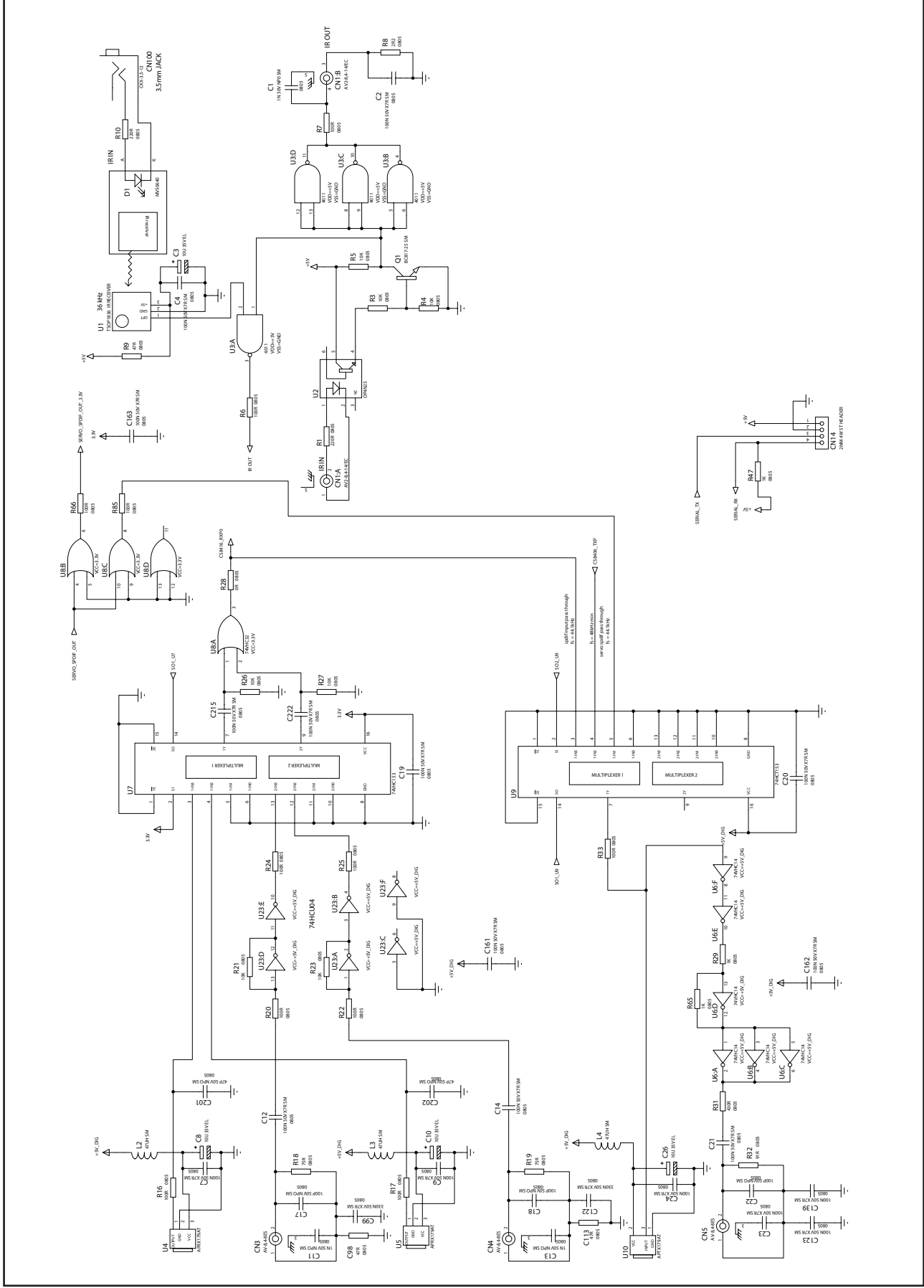
AP Part No.	Value	Description/Type	Qty	Component Ident	Factory PN	NOTES
	1N4004	Rectifier Diode	4	D2, 3, 4, 5	1401-140040-000	
CRYSTALS						
PY561	7.3728MHz	2 Pin 5mm Pitch	1	X2	1600-737282-990	
PY027	16.934MHz	XTAL Oscillator module, 4 pin	1	X3	1600-169343-602	Half size 50ppm as per used on 540/640C
MISCELLANEOUS						
	20mm	PCB Mount Fuse Holder	1	FU1	4031-050100-001	
	T2AL	2A delay 20mm Fuse 250V LBC (low breaking capacity)	1	FU1	4030-618002-001	

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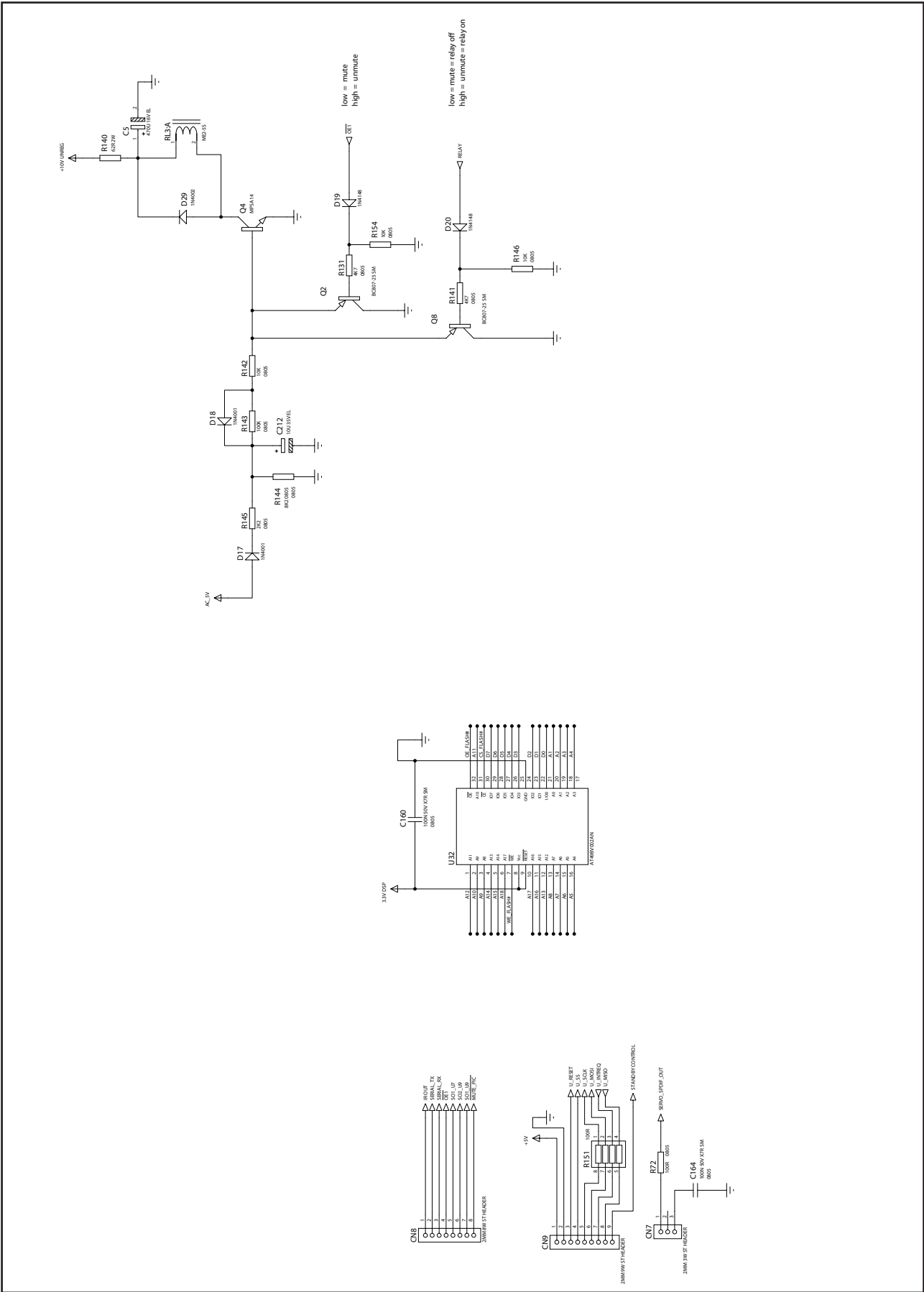
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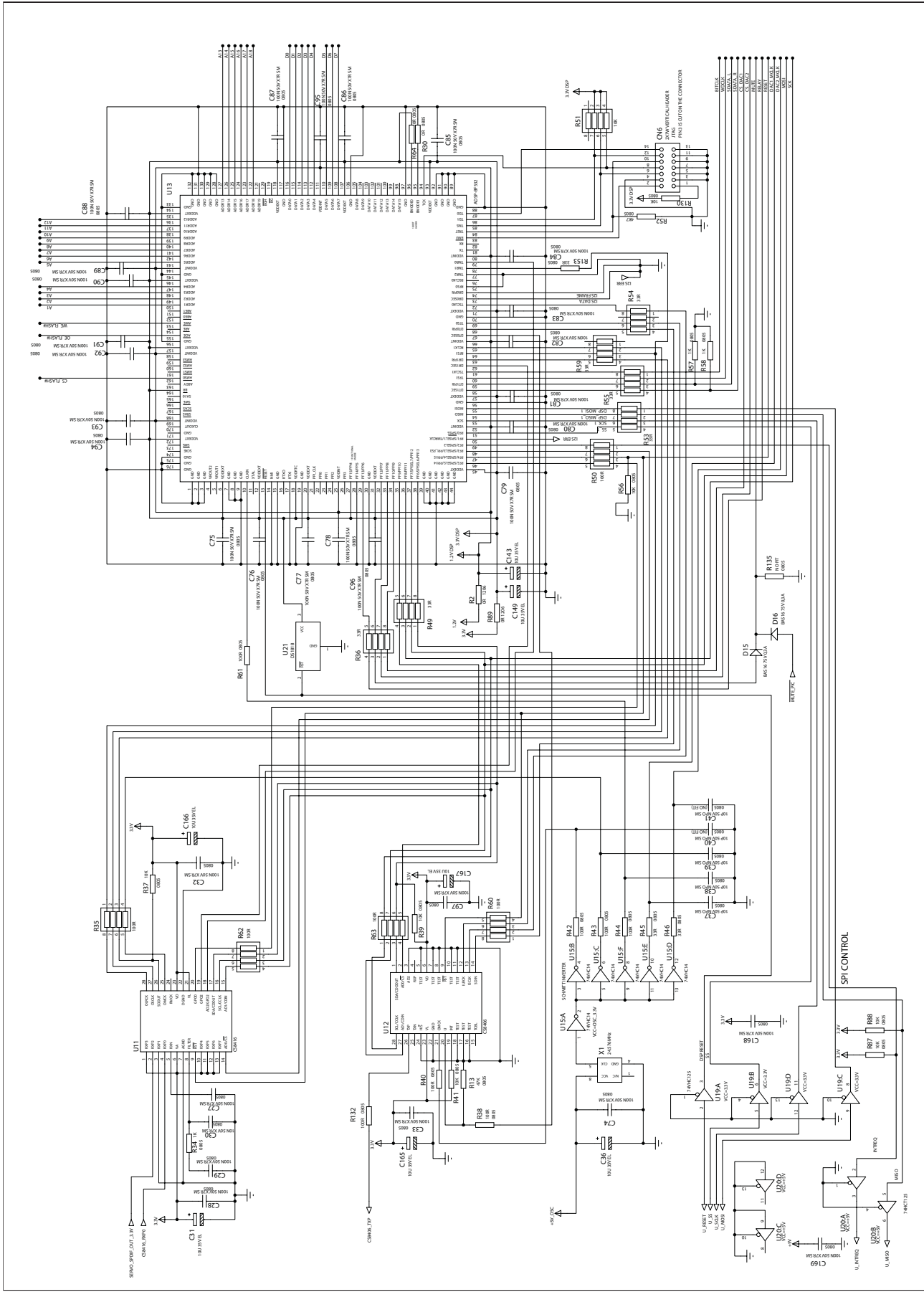
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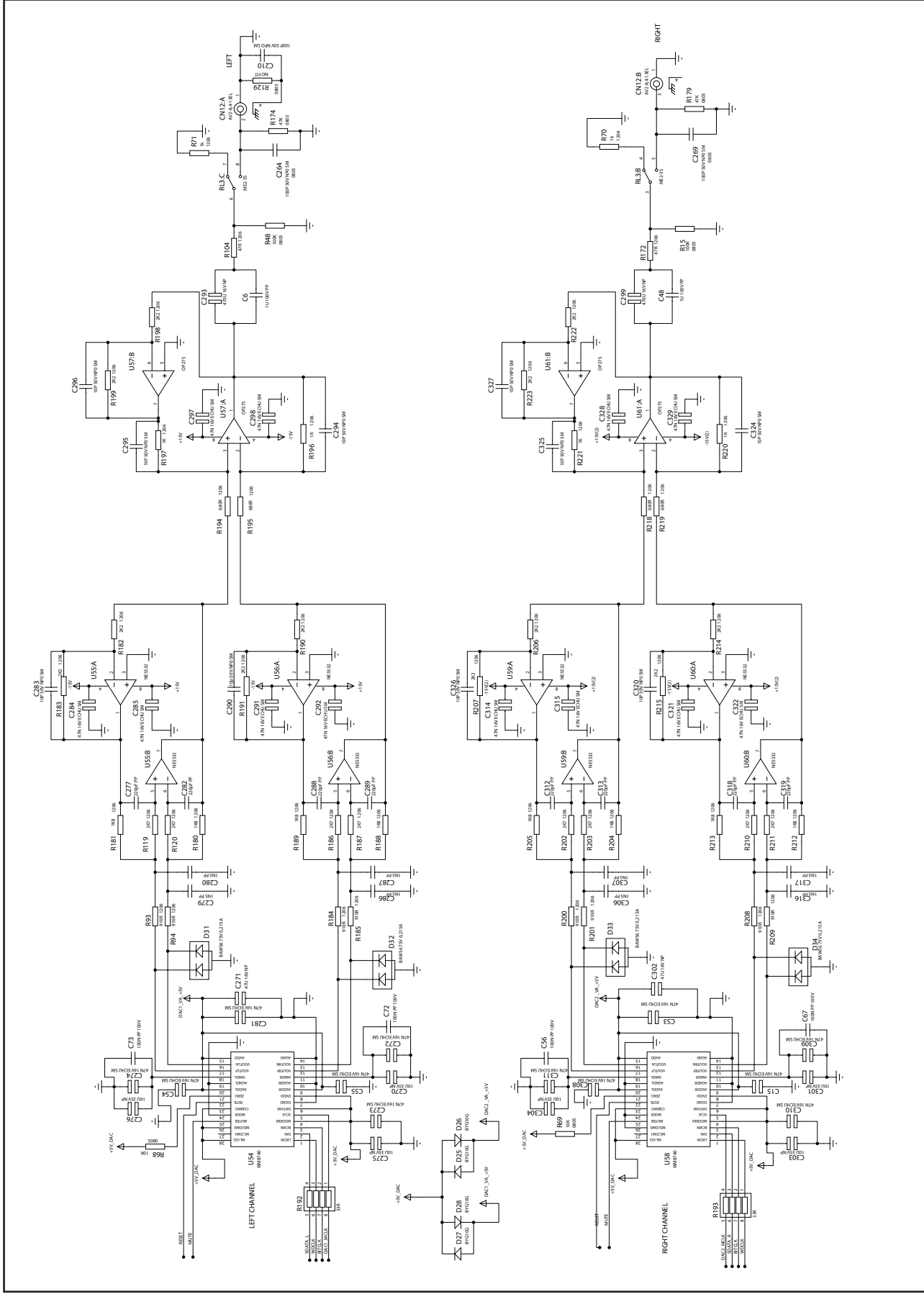
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AP20020/6 DAC Circuit Diagram (DSP)

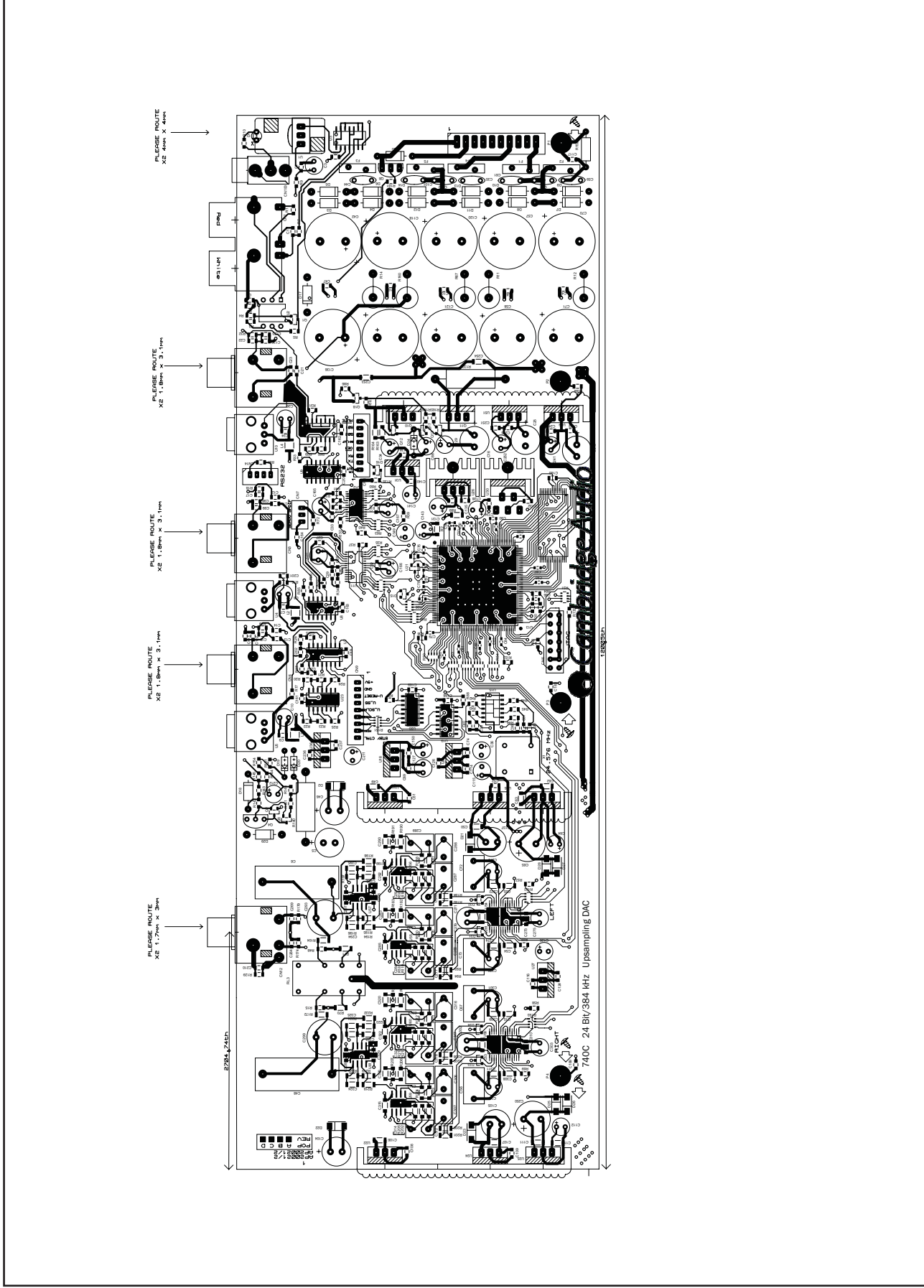
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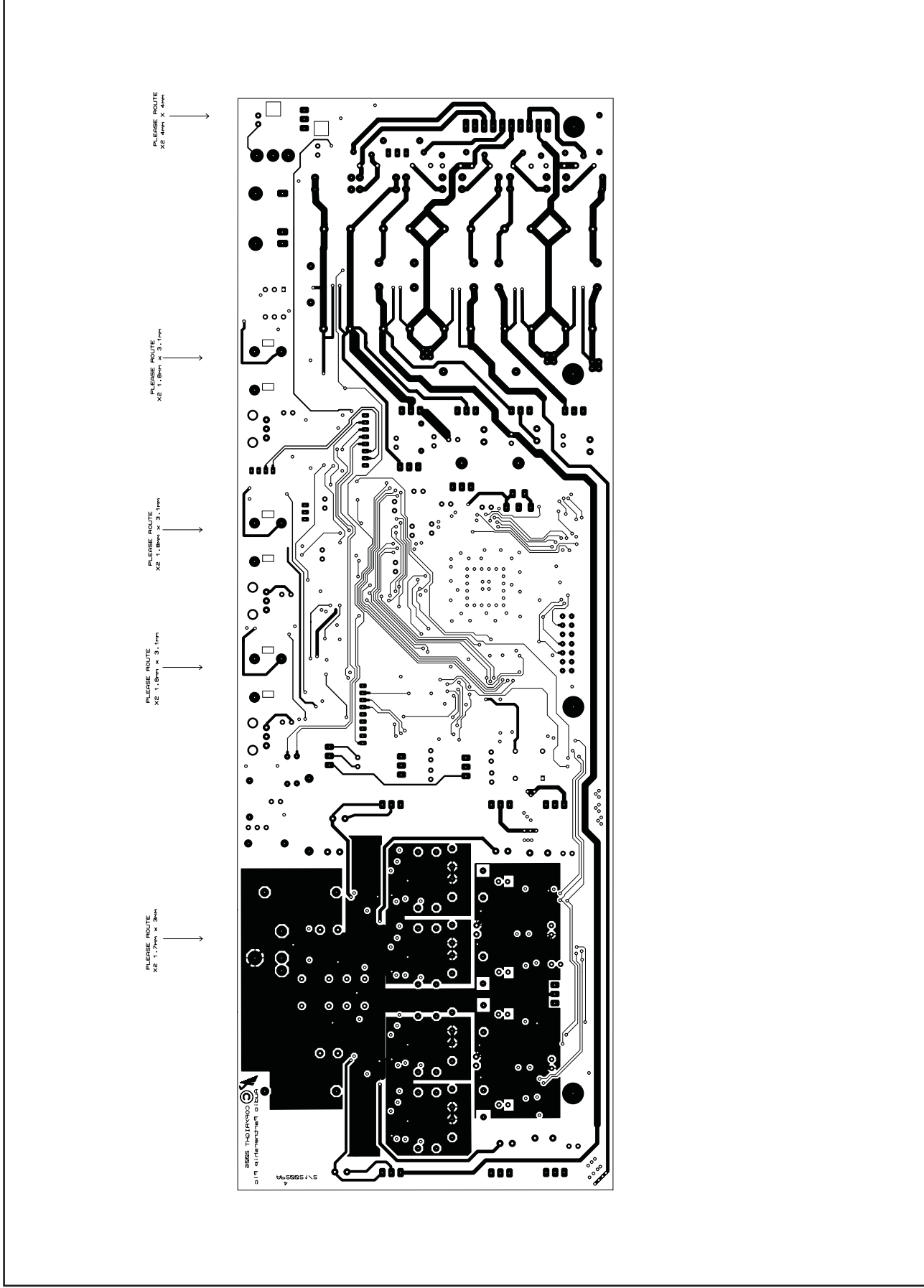
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AP20020/6 DAC Circuit Diagram (Analogue Stage)

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AP20020/2 DAC Board Layout (Bottom Side)

AP Part No.	Value	Description/Type	ManPN	Tolerance	PackageInfo	Qty	Component Ident	NOTES
RESISTORS								
	220R	Thick film 0.063W		1%	0805	2	R1, R10	
	0R	Thick film 1/4W		1%	1206	2	R2, R89	
	10K	Thick film 0.063W		1%	0805	25	R3-R5, R21, R23, R26, R27, R37, R39, R41, R56, R68, R69 R86-R88, R130, R142, R146, R154, R161, R165-R167	
	100R	Thick film 0.063W		1%	0805	19	R6,R7,R16,R17,R20,R22,R24,R25,R33,R38,R40,R42-R44,R61,R66,R72,R85,R132	
	2R2	Thick film 0.063W		1%	0805	1	R8	
	32R 2W	2W Carbon		10%	Through Hole	1	R160	REQUIRES FORMING FOR RADIAL INSERTION
	1R0 2W	2W Carbon		10%	Through Hole	4	R11, R12, R14, R67	REQUIRES FORMING FOR RADIAL INSERTION
	2K2	Thick film 0.063W		1%	0805	1	R145	
	75R	Thick film 0.063W		1%	0805	2	R18, R19	
	0R	Thick film 0.063W		1%	0805	3	R28, R30, R64	
	1K	Thick film 0.063W		1%	0805	6	R29, R34, R47, R57, R58, R65	
	430R	Thick film 0.063W		1%	0805	1	R31	
	47R	Thick film 0.063W		1%	0805	3	R9, C98,C113	
	91R	Thick film 0.063W		1%	0805	1	R32	
	100R	Thick film Array		10%	1206	6	R35,R50,R60,R62,R63,R151	
	33R	Thick film Array		10%	1206	8	R36, R49, R53-R55, R59, R192, R193	
	47K	Thick film 0.063W		1%	0805	3	R41, R179, R174	
	910R	Thick film 1/4W		1%	1206	8	R93,R94,R184,R185,R200,R201,R208,R209	
	1K	Thick film 1/4W		1%	1206	2	R70, R71	
	10K	Thick film Array		10%	1206	1	R51	
	8K2	Thick film 0.063W		1%	0805	1	R144	
	4K7	Thick film 0.063W		1%	0805	3	R52, R131, R141	
	47R	Thick film 1/4W		1%	1206	2	R104,R172	
	1K8	Thick film 1/4W		1%	1206	8	R180,R181,R188,R189,R204,R205,R212,R213	
	2K2	Thick film 1/4W		1%	1206	12	R182,R183,R190,R191,R198,R199,R206,R207,R214,R215,R222,R223	
	680R	Thick film 1/4W		1%	1206	4	R194,R195,R218,R219	
	2K7	Thick film 1/4W		1%	1206	8	R119,R120,R186,R187,R202,R203,R210,R211	
	1K	Thick film 1/4W		1%	1206	4	R196,R197,R220,R221	
	62R 2W	2W Carbon		10%	Through hole	1	R140	
	100K	Thick film 0.063W		1%	0805	3	R15,R48,R143,	
	47R	0.25W metal film		10%	Through hole	1	R152	
	33R	Thick film 0.063W		1%	0805	3	R45, R46, R153	
	220R	2W Carbon		10%	Through Hole	1	R133	
	470R	Thick film 1/4W		1%	1206	2	R163, R164	
CAPACITORS								
	10P 50V	NPO Ceramic			1206	10	C283,C290,C294-C296,C320,C324-C327	
	10P 50V	NPO Ceramic			0805	3	C38-C40	
	47P 50V	NPO Ceramic			0805	2	C201, C202,	
	100P 50V	NPO Ceramic			0805	6	C17, C18, C22, C210, C264,C269	
	100N 100V PP	Polypropylene	CMPA104K100R8075	10%	7.5mm Pitch Box	4	C56, C67, C72,C73	
	1N5 100V PP	Polypropylene	FKP2 series	5%	5mm Pitch Box	8	C279,C280,C286,C287,C306,C307,C316,C317	
	220P 100V PP	Polypropylene	FKP2 series	5%	5mm Pitch Box	8	C277,C282,C288,C289,C312,C313,C318,C319	
	1N 50V	NPO Ceramic			0805	6	C1,C11,C13,C68,C183,C189	
	10N 50V	X7R Ceramic			0805	1	C30	

Note: resistors, capacitors and other 'generic' electronic components are not usually stocked by the manufacturer. Please obtain these locally.

AP Part No.	Value	Description/Type	ManPN	Tolerance	PackageInfo	Qty	Component Ident	NOTES
	47N 16V	ECHU	ECHU1C473GX5		1206	31	C15, C49, C50, C53- C55, C63, C106, C107, C110, C111, C2 72- C274, C281, C284, C285, C291, C292, C297, C298, C308- C311, C314, C315, C321, C322, C328, C329	
	100N 50V	X7R Ceramic			0603	21	C75-C84, C86-C96	
	100N 50V	X7R Ceramic			0805	58	C2, C4, C7, C9, C12, C14, C19- C21, C23, C24, C27- C29, C32, C33, C43, C45, C47, C51, C5 2, C69, C74, C85, C97, C102, C103, C1 08, C109, C114, C116, C117, C123, C1 24, C126, C128, C130, C132- C134, C138-C140, C142, C160- C164, C168, C169, C215, C222, C236, C237, C240, C243, C251	
	100N 50V	X7R Ceramic			1206	3	C62, C253, C254	
	100N 100V	Monolithic Ceramic			5mm Pitch	5	C44, C35, C59, C60, C100	
	33NF 250V	Polyester			5mm Pitch	2	C61, C101	
	330N 50V	X7R Ceramic			0805	2	C99, C122	
	1U 100V PP	Polypropylene	CMPA105K100RB200	10%	20mm pitch	2	C6, C48	
	470U 16V NP	Non Polar			10mm dia	2	C293, C299	
	1000U 25V	Polar Electrolytic			10mm dia	2	C65, C250	5mm pitch
	10U 35V	Polar Electrolytic			5mm diameter	27	C3, C8, C10, C26, C31, C34, C36, C64, C66, C112, C115, C125, C127, C129, C 131, C135, C141, C143, C149, C150, C 165-C167, C211, C212, C241, C252	2.5mm pitch
	10U 35V NP	Non Polar			5mm diameter	6	C270, C275, C276, C301, C303, C304	2.5mm pitch
	47U 16V NP	Non Polar			6.5mm dia	2	C271, C302	2.5mm pitch
	100U 35V	Polar Electrolytic			8mm diameter	7	C16, C25, C46, C104, C105, C137, C213	3.5mm pitch
	470U 16V	Polar Electrolytic			8mm diameter	1	C5	
	2200U 35V	Polar Electrolytic			16mm diameter	10	C42, C57, C58, C70, C71, C118- C121, C136	
TRANSISTORS								
	BC807-25	PNP	BC807-25		SOT23	2	Q2, Q8	
PY1211	MPSA14	NPN (DARLINGTON)	MPSA14		TO92	2	Q4, Q6	
	TIP31	NPN (POWER)	TIP31		T0220	2	Q10, Q11	
	BC817-25	NPN	BC817-25		SOT23	5	Q1, Q12, Q13, Q17, Q18	
DIODES								
PY962	LED	RED LED	MV50640			1	D1	
		SMT DIODE	BYG10G		DO214	8	D2, D21-D23, D25-D28	
PY1191		SCHOTTKY RECTIFIER DIODE 1A	SB1H100		DO41	12	D3-D14	
		DIODE	IN4004		DO41	2	D29, D30	
		DIODE	IN4001		DO41	2	D17, D18	
	BAS16	SMT DIODE	BAS16		SOT23	2	D15, D16	
	BAW56	75V 250mA DIODE	BAW56		SOT23	4	D31-D34	
		DIODE	IN4148		DO35	2	D19, D20	
		6.2V ZENER	BZX79-C6V2		DO35	1	D24	
INTEGRATED CIRCUITS								
		IR Receiver	TSOP1836 IR RECEIVER		TSOP18V	1	U1	
PY1144		Opto-isolator	OP4N25		DIL06	1	U2	
		Quad NAND	4011		SO14	1	U3	
		OPTICAL RECEIVER	APRX179AT			2	U4, U5	
PY343		HEX Inverter	74VHC14		SO14	2	U6, U15	
		Dual 4-1 MUX	74VHC153		SO16	1	U7	
PY990		Dual 4-1 MUX	74HCT153		SO16	1	U9	

Note: resistors, capacitors and other 'generic' electronic components are not usually stocked by the manufacturer. Please obtain these locally.

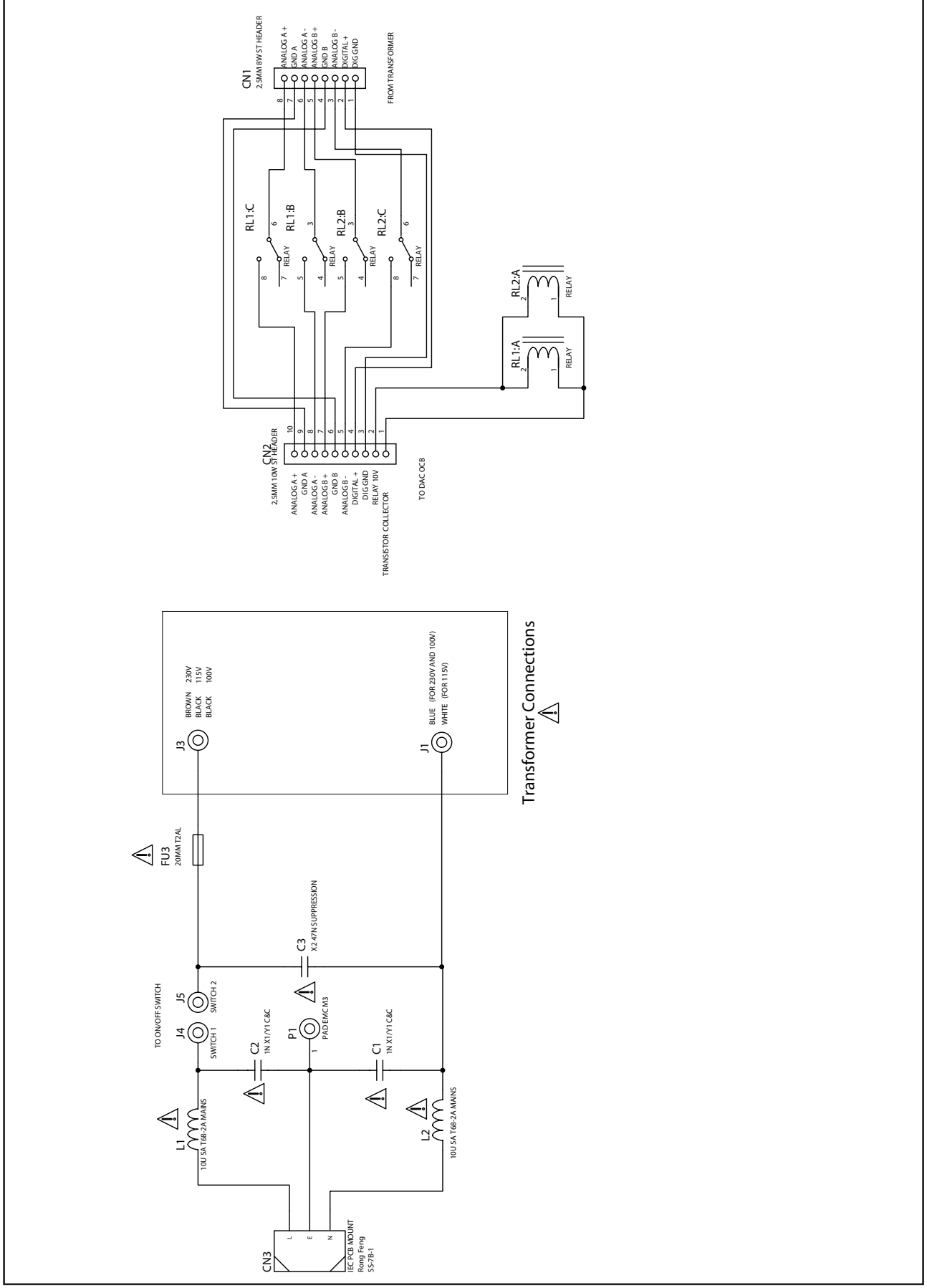
Cambridge Audio 740C DAC PCB Assembly BOM

AP20023/8

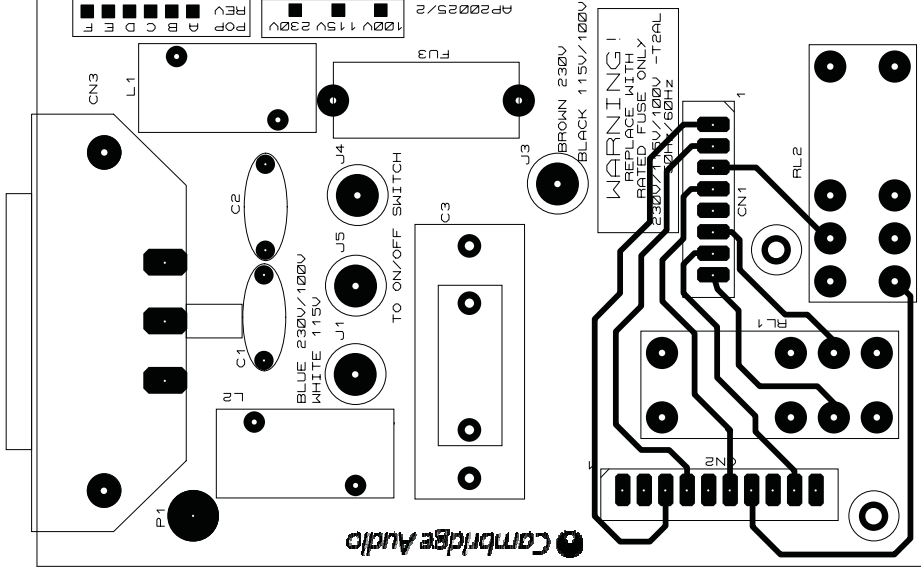
AP Part No.	Value	Description/Type	ManPN	Tolerance	PackageInfo	Qty	Component Ident	NOTES
		Quad OR Gates	74VHC32		SO14	1	U8	
PY363		OPTICAL TRANSMITTER	APT X179AT		APT X179AT	1	U10	
PY980		SPDIF RX IC	CS8416CZ		TSSOP28	1	U11	
PY979		SPDIF TXCIC	CS8406CZ		TSSOP28	1	U12	
PY982		DSP	ADSP-BF532BSTZ400		LQFP176	1	U13	
PD037		+15V REGULATOR	7815		TO220	4	U14, U22, U49, U51	
PD038		-15V REGULATOR	7915		TO220	2	U16, U24	
PD035		+5V REGULATOR	7805		TO220	6	U17, U25, U27, U29, U31, U36	
PY986		+3.3V REGULATOR	LM1117T-3.3		TO220	2	U18, U26	
		Quad Buffer	74VHC125		SO14	1	U19	
PF067		Quad Buffer	74HCT125		SO14	1	U20	
PY984		Reset IC	DS1818		SOT23-3	1	U21	
PF074		Hex Inverter	74HCU04		SO14	1	U23	
PY988		+1.2V REGULATOR	LT1963AET		TO220	1	U30	
		Flash ROM	AT49BV002AN		TSOP32	1	U32	SOFTWARE: AP20213/4 (DSP SOFTWARE VER 0.67). This is provided by AP as pre-programmed flash parts. Binary files for RS232 uploading is updated to AP19130/4
PY1162		DUAL OPAMP	NE5532AD		S08	4	U55, U56, U59, U60	
		DUAL OPAMP	OP275GS		S08	2	U57, U61	
PY585		DAC	WM8740		SSOP28	2	U54, U58	
CONNECTORS								
		Phono Socket	AV2-8.4-14/EC			1	CN1	orange insert, gold plated
		Phono Socket	AV-8.4-8ES			3	CN3-CN5	black insert, gold plated
		2x7 Way Vertical Header			2.5mm Pitch	1	CN6	
		2MM 3W ST HEADER	B3B-PH-KS		2mm Pitch	1	CN7	
		2MM 8W ST HEADER	B8B-PH-KS		2mm Pitch	1	CN8	
		2MM 4W ST HEADER	B4B-PH-KS		2mm Pitch	1	CN14	
		2MM 9W ST HEADER	B9B-PH-KS		2mm Pitch	1	CN9	
		2,5MM 10W ST HEADER	B10B-XH-A		2.5mm Pitch	1	CN10	
		Phono Socket	AV2-8.4-13EL			1	CN12	white insert (top)/red insert (bottom), gold plated
		3.5mm JACK SKT	CKX-3.5-12			1	CN100	black
CRYSTAL								
	24.576MHz	HKC			Through Hole	1	X1	50ppm 5V
INDUCTOR								
	47uH	Inductor			1210	3	L2-L4	Idc min= 150mA
RELAY								
			ME2-5S			1	RL3	
MISCELLANEOUS								
	M3x8	Posidrive machine screw				12	For (U22, U24, U25) (U14, U16, U17) (Q10, Q11, Q49, Q51) (U26,U30)	
	M2.5X6	Posidrive machine screw				2	For (U26,U30)	
		Top hat' insulating washer				12		
	TO220 Silpad					12	For (U22, U24, U25) (U14, U16, U17) (Q10, Q11, Q49, Q51) (U26, U30)	
		Heatsink	6562-010008E000			2	For (U26, U30)	
	Polyfuse	3A	WH60-300			1	F3	
	Polyfuse	0.5A	WH60-050			4	F1,F2,F4,F5	
	AP20214/2	sticker (V 0.67)				1	For U32	
	API9208/2	Azur CA Voltage Reg heatsink				3	For (U22, U24, U25,) (U14, U16, U17,) (Q10, Q11, Q49, Q51)	

Note: resistors, capacitors and other 'generic' electronic components are not usually stocked by the manufacturer. Please obtain these locally.

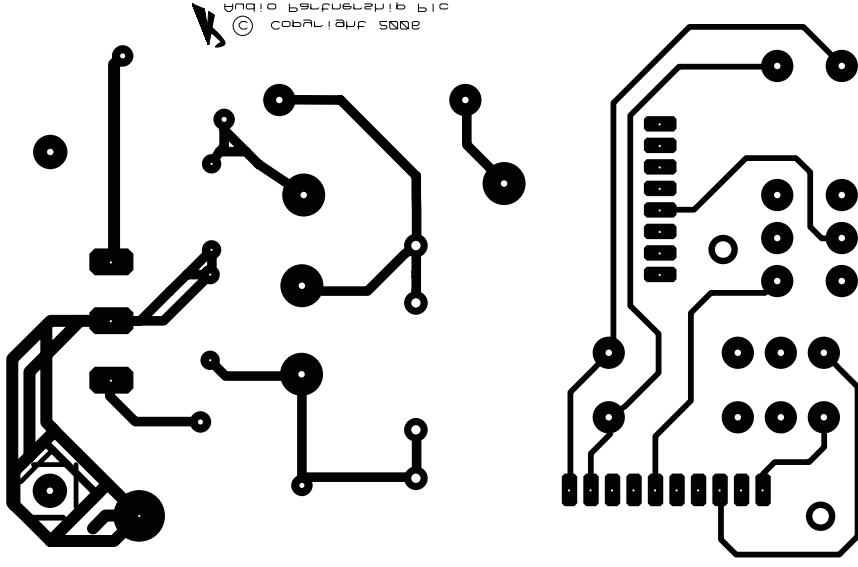
Cambridge Audio Azur 740C CD Player



Cambridge Audio Azur 740C CD Player



Cambridge Audio Azur 740C CD Player



Cambridge Azur 740C Mains PCB BOM

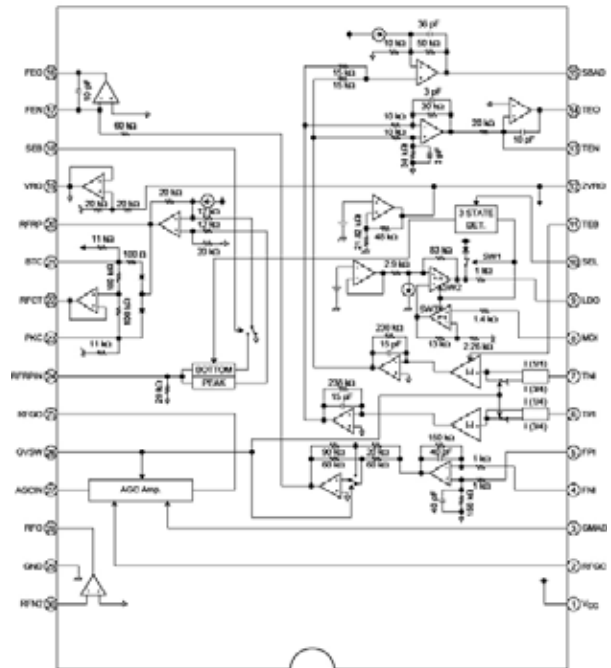
AP20027/2

AP Part No.	Value	Description/Type	Qty	Component Ident	Factory PN	NOTES
CAPACITORS						
	1N X1/Y1	10mm pitch POLYESTER CAPACITOR	2	C1, 2		
	47N X2	15mm pitch POLYESTER CAPACITOR	1	C3		15MM PITCH
CONNECTORS						
	IEC-SOCKET	3 WAY IEC CONNECTOR	1	CN3	2336-003910-002	
	B10B-XH-A	JST 10 WAY 2.54MM	1	CN2		
	B8B-XH-A	JST 8 WAY 2.54MM	1	CN1		
MISCELLANEOUS						
	AP13570/1	10uH 5A mains inductor	2	L1, 2		T68-2A 32.5 TURNS WITH UL HEATSHRINK
	ME-11 005	RELAY 5V ME-11	2	RL1, RL2		
	T2AL	2A slow blow fuse 20mm LBC (low breaking capacity)	1	FU3	4030-618002-001	
		20MM FUSE HOLDER	3	FU 3	4034-000030-000	
		FUSE COVER	3	FU 3	4031-050100-001	

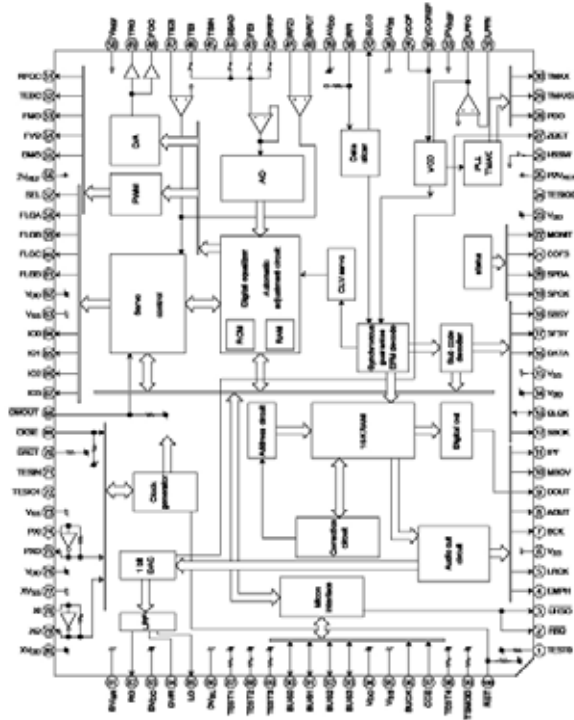
Note: resistors, capacitors and other 'generic' electronic components are not usually stocked by the manufacturer. Please obtain these locally.

Cambridge Audio Azur 740C CD Player – IC Pin Layout Details

TA2153FN
Servo PCB – (U1)

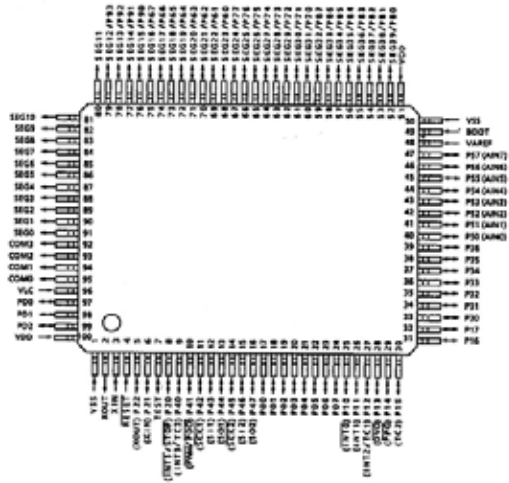


TC9462FG
Servo PCB – (U2)



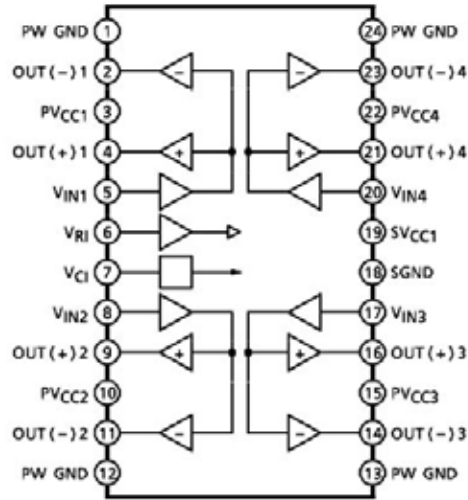
MCU TMP87EP26F-1J15

Servo PCB - (U3)



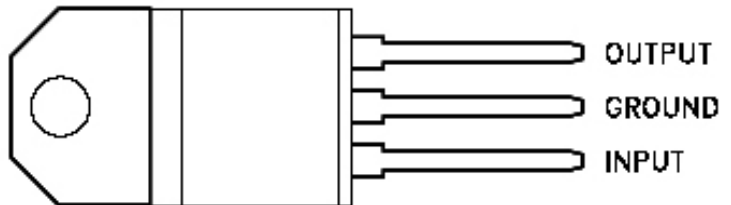
TA2092N

Servo PCB - (U6)



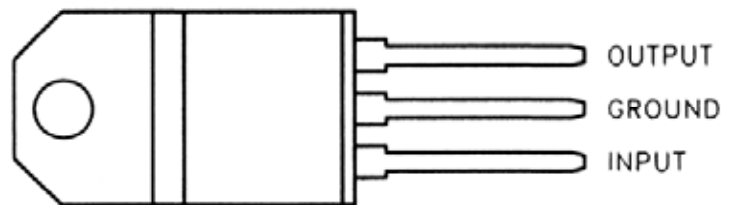
7808

Servo PCB - (U7)



7805

Servo PCB - (U8)
DAC PCB - (U17, U25, U27, U29, U31 & U36)



C8050D

Servo PCB - (Q7, Q8, Q11 & Q12)



9014C
Servo PCB - (Q13)



Pin : 1. Emitter
2. Base
3. Collector

C8550
Servo PCB - (Q9 & Q10)

TO-92A



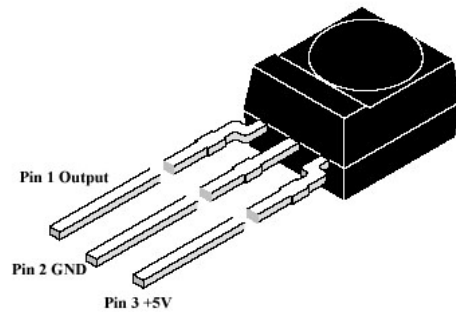
EBC

9015C
Servo PCB (Q1)

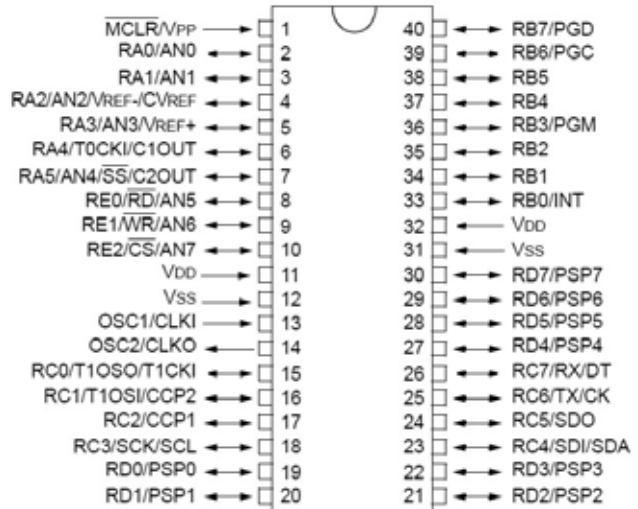


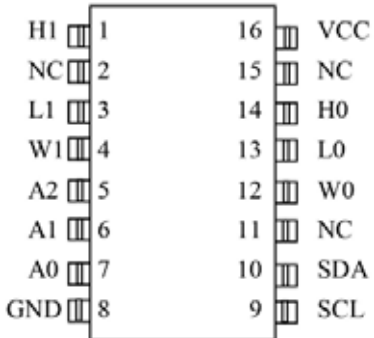
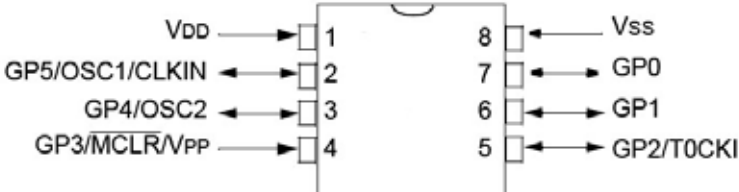
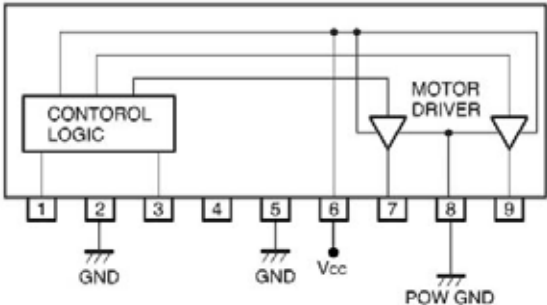
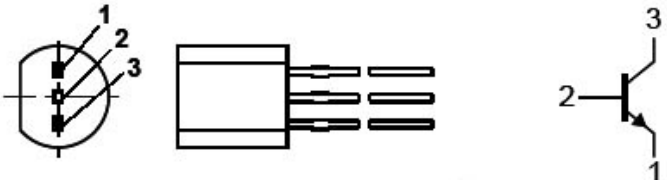
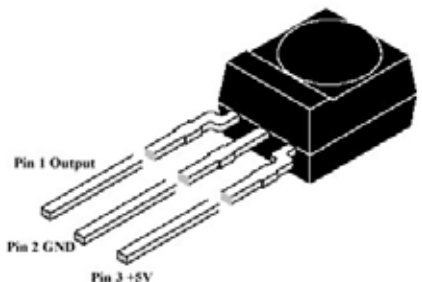
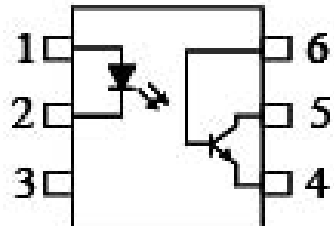
TO-92
1. Emitter 2. Base 3. Collector

TSOP1836SS3V
Front Panel PCB -(U1)

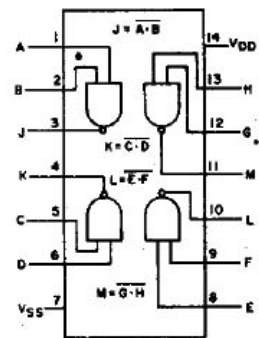


PIC16F877A-I/P Front Panel PCB - (U2)



<p>DS18030-050 Front Panel PCB - (U3)</p>	
<p>PIC12C508A - I/P Front Panel PCB - (U4)</p>	
<p>BA6218 Front Panel PCB - (U5)</p>	
<p>BC337 Front Panel PCB - (Q1, Q2, Q3 & Q4)</p>	
<p>TSOP1836 DAC PCB - (U1)</p>	
<p>OP4N25 DAC PCB - (U2)</p>	

4011
DAC PCB - (U3)

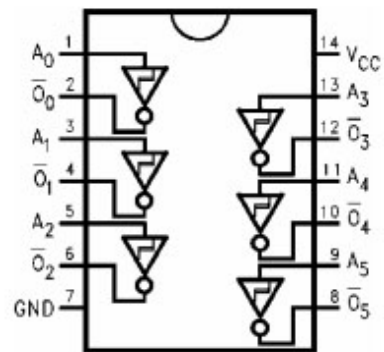


APRX179AT
DAC PCB - (U4 & U5)

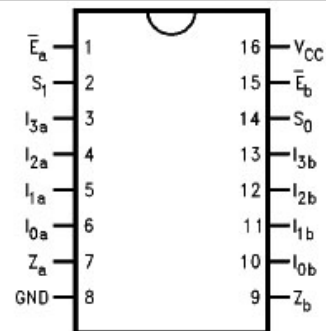


PIN CONNECTION:
1: VOUT
2: GND
3: VCC

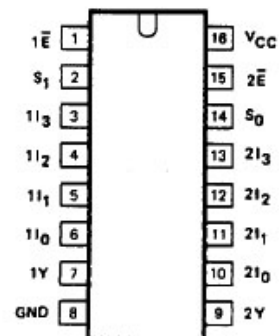
74VHC14
DAC PCB - (U6 & U15)



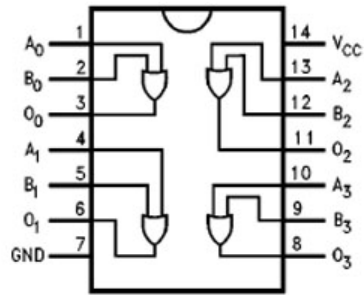
74VHC153
DAC PCB - (U7)



74HCT153
DAC PCB - (U9)



74VHC32
DAC PCB - (U8)

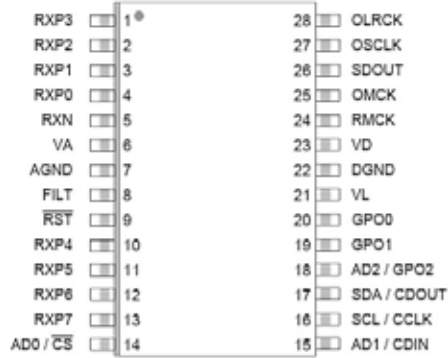


APT179AT
DAC PCB - (U10)

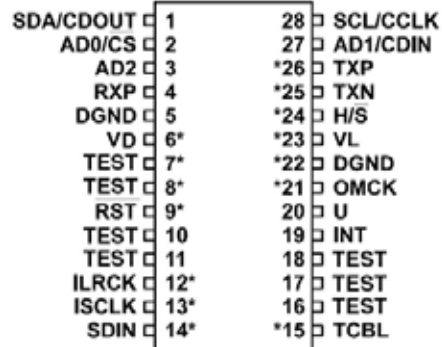


PIN CONNECTION:
1: GND
2: VCC
3: INPUT

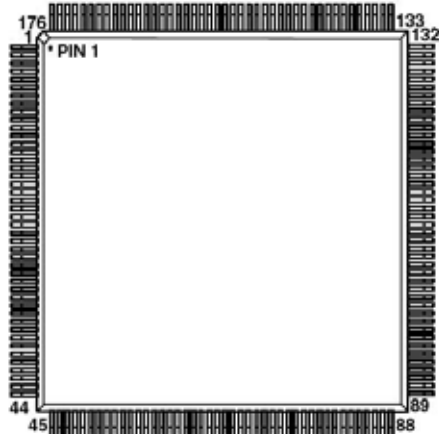
CS8416CZ
DAC PCB - (U11)



CS8406CZ
DAC PCB - (U12)

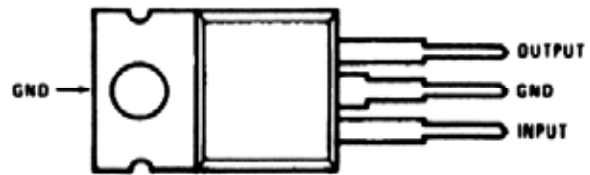


ADSP-BF532BSTZ400 DAC PCB - (U13)



Lead No.	Signal	Lead No.	Signal	Lead No.	Signal	Lead No.	Signal	Lead No.	Signal
1	GND	41	GND	81	TX	121	ADDR19	161	AMS0
2	GND	42	GND	82	RX	122	ADDR18	162	ARDY
3	GND	43	GND	83	EMU	123	ADDR17	163	BR
4	VROUT1	44	GND	84	TRST	124	ADDR16	164	SA10
5	VROUT0	45	VDDEXT	85	TMS	125	ADDR15	165	SWE
6	VDDEXT	46	PF5	86	TDI	126	ADDR14	166	SCAS
7	GND	47	PF4	87	TDO	127	ADDR13	167	SRAS
8	GND	48	PF3	88	GND	128	GND	168	VDDINT
9	GND	49	PF2	89	GND	129	GND	169	CLKOUT
10	CLKIN	50	PF1	90	GND	130	GND	170	GND
11	XTAL	51	PF0	91	GND	131	GND	171	VDDEXT
12	VDDEXT	52	VDDINT	92	GND	132	GND	172	SMS
13	RESET	53	SCK	93	VDDEXT	133	GND	173	SCKE
14	NMI	54	MISO	94	TCK	134	VDDEXT	174	GND
15	GND	55	MOSI	95	BMODE1	135	ADDR12	175	GND
16	RTX0	56	GND	96	BMODE0	136	ADDR11	176	GND
17	RTX1	57	VDDEXT	97	GND	137	ADDR10		
18	VDDRTC	58	DT1SEC	98	DATA15	138	ADDR9		
19	GND	59	DT1PRI	99	DATA14	139	ADDR8		
20	VDDEXT	60	TFS1	100	DATA13	140	ADDR7		
21	PPL_CLK	61	TSCLK1	101	DATA12	141	ADDR6		
22	PR0	62	DR1SEC	102	DATA11	142	ADDR5		
23	PR1	63	DR1PRI	103	DATA10	143	VDDINT		
24	PR2	64	RFS1	104	DATA9	144	GND		
25	VDDINT	65	RSCLK1	105	DATA8	145	VDDEXT		
26	PR3	66	VDDINT	106	GND	146	ADDR4		
27	PF15	67	DT0SEC	107	VDDEXT	147	ADDR3		
28	PF14	68	DT0PRI	108	DATA7	148	ADDR2		
29	PF13	69	TFS0	109	DATA6	149	ADDR1		
30	GND	70	GND	110	DATA5	150	ARET		
31	VDDEXT	71	VDDEXT	111	VDDINT	151	ARE5		
32	PF12	72	TSCLK0	112	DATA4	152	AWE		
33	PF11	73	DR0SEC	113	DATA3	153	ARE		
34	PF10	74	DR0PRI	114	DATA2	154	ACE		
35	PF9	75	RFS0	115	DATA1	155	GND		
36	PF8	76	RSCLK0	116	DATA0	156	VDDEXT		
37	PF7	77	TMR2	117	GND	157	VDDINT		
38	PF6	78	TMR1	118	VDDEXT	158	AMS3		
39	GND	79	TMR0	119	BG	159	AMS2		
40	GND	80	VDDINT	120	BGH	160	AMS1		

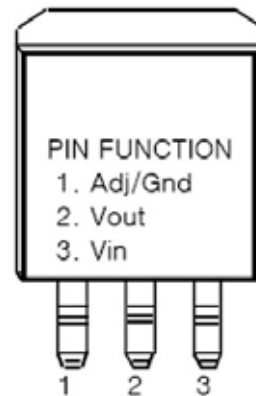
7815
DAC PCB - (U14, U22, U49 & U51)



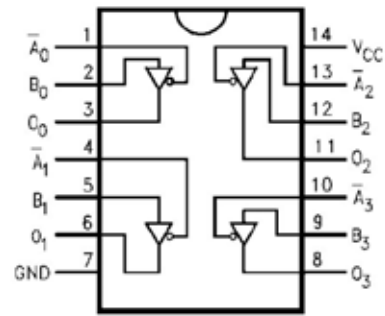
7915
DAC PCB - (U16 & U24)



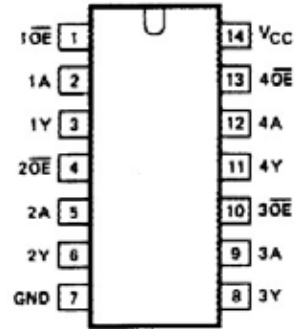
LM1117T-3.3
DAC PCB - (U18 & U26)



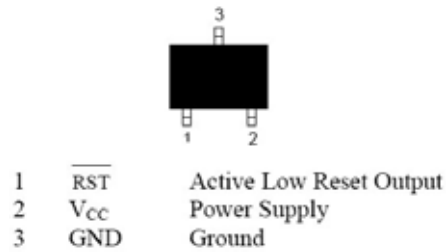
74VHC125
DAC PCB - (U19)



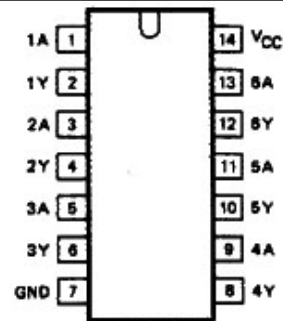
74HCT125
DAC PCB - (U20)



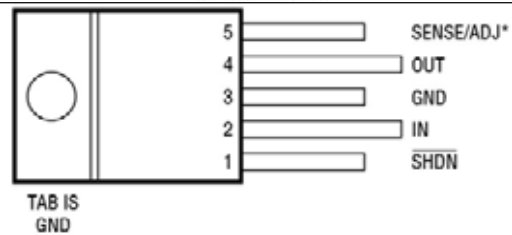
DS1818
DAC PCB - (U21)



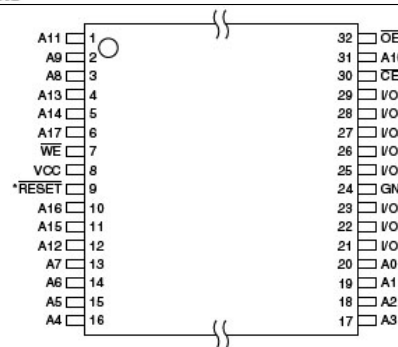
74HCU04
DAC PCB - (U23)



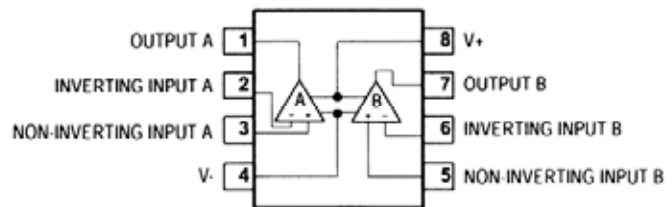
LT1963AET
DAC PCB - (U30)



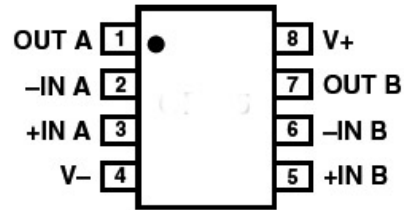
AT49BV002AN70TU DAC PCB - (U32)



NE5532AD
DAC PCB - (U55, U56, U59 & U60)



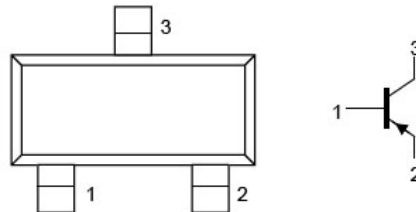
OP275GS
DAC PCB - (U57 & U61)



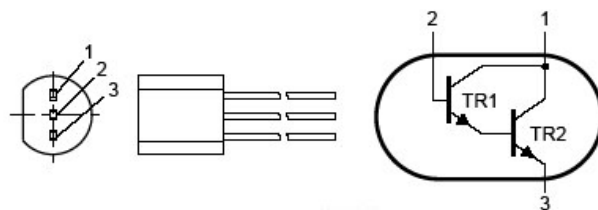
WM8740
DAC PCB - (U54 & U58)



BC807-25
DAC PCB - (Q2 & Q8)



MPSA14
DAC PCB - (Q4 & Q6)



TIP31
DAC PCB - (Q10 & Q11)



BC817-25
DAC PCB - (Q1, Q12, Q13, Q17 & Q18)

