

HS100/230

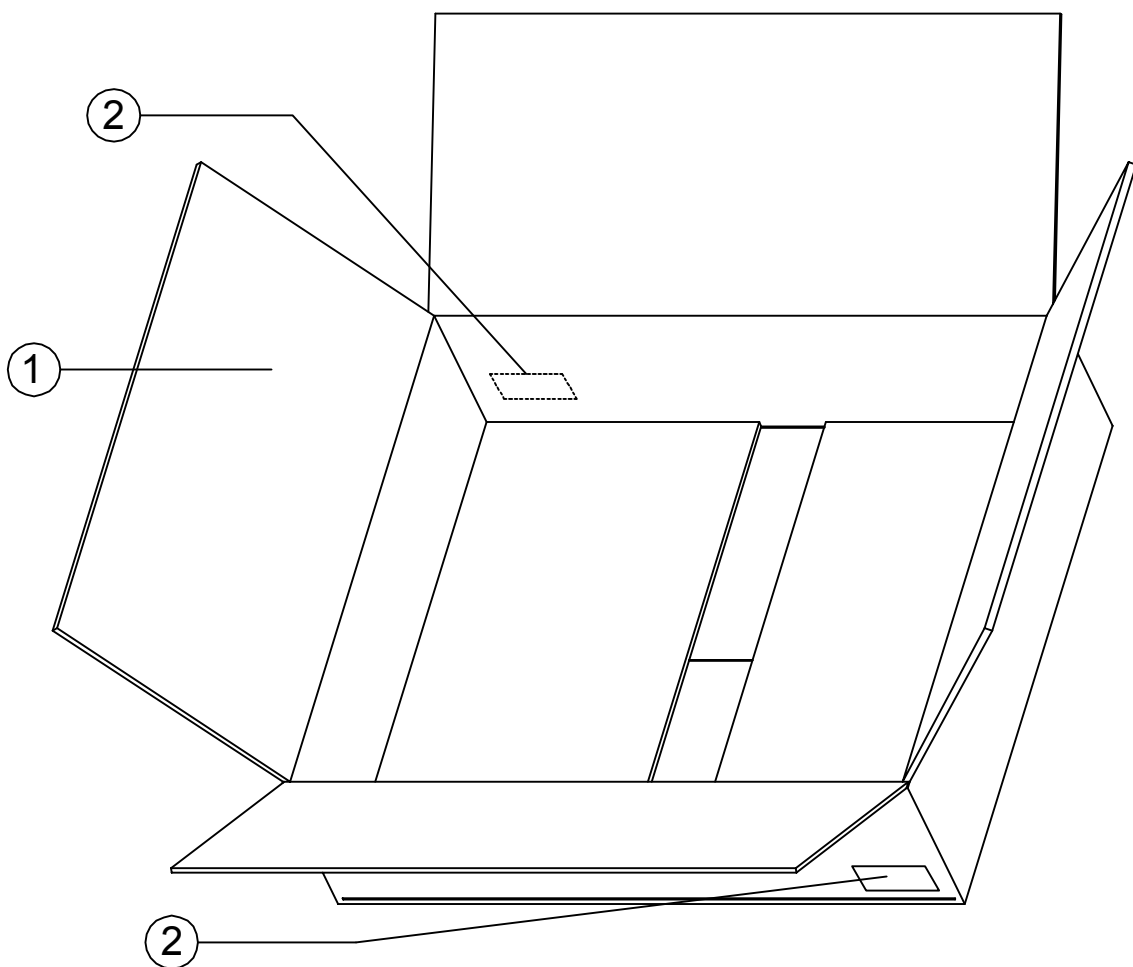
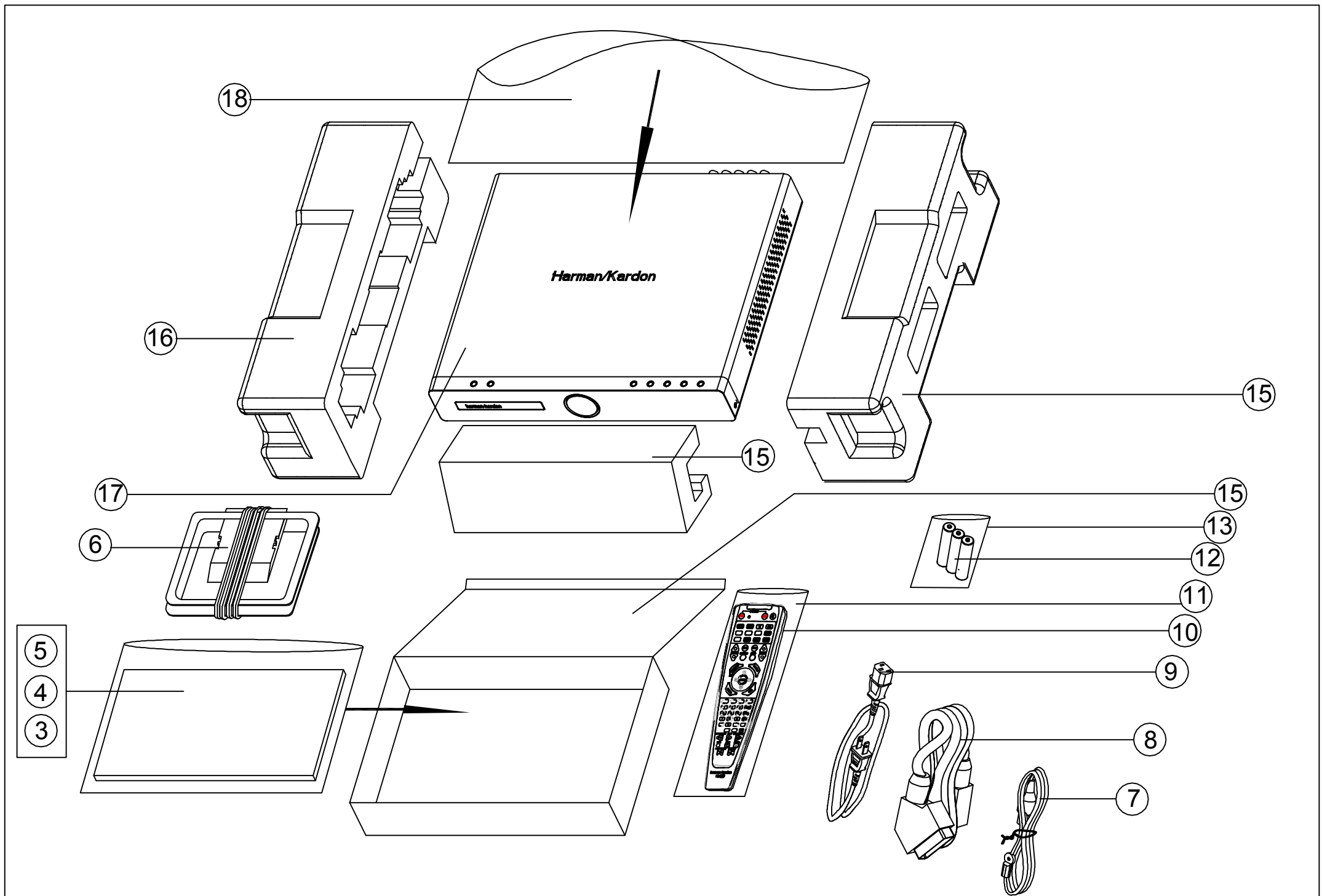
SERVICE MANUAL

(See separate service manual for HKTS7/230 speaker system)

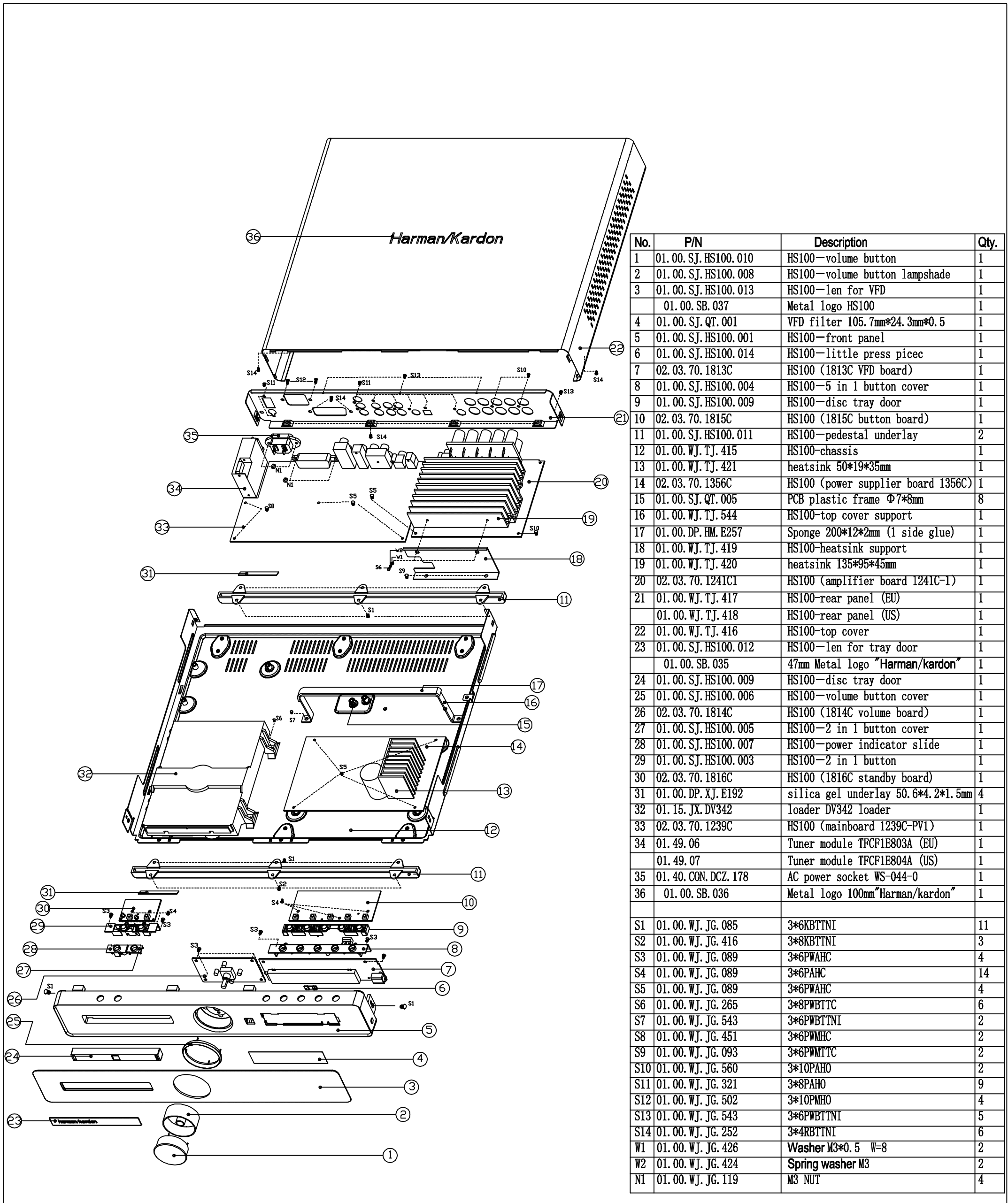


harman/kardon®

Power for the Digital Revolution®



No	Part No.	Description	Qty.
1	01.00.BZ.X.W.E232	Carton box HS100 EU version	1
	01.00.BZ.X.W.E231	Carton box HS100 US version	1
2		Barcod label	1
3	01.00.YS.SM1.E261	Owner manual HS100 US version	1
	01.00.YS.SM1.E262	Owner manual HS100 EU version	1
4	01.00.BZ.D.Z.E020	Plastic bag for manual 25*35cm	1
5	01.00.YS.FY3.345	Safety instruction manual HS100 EU	1
	01.00.YS.FY3.346	Warning card HS100 US version	1
	01.00.YS.FY3.347	Guarantee card HS100 US version	1
6	01.47.CNT.CTX.042	AM antenna AM-300-AWM	1
7	01.47.CNT.CTX.037	FM antenna FM-075	1
	01.47.CNT.CTX.038	FM antennab FM-TV-75-A	1
8	01.47.CNT.LJX.5.012	SCART cabel	1
9	01.47.CNT.ACX.E052	AC power cord EU version	1
	01.47.CNT.ACX.E053	AC power cord US version	1
10	01.00.RC.100	Remote control HS100-RC	1
11	01.00.BZ.D.H.E034	Plastic bag for RC 9*27.5cm	1
12	01.14.DX.B.0007	battery 7# battery	3
13	01.00.BZ.D.Z.E008	Plastic bag for battery 6*9cm	1
14	01.00.BZ.X.B.E178	accessories box	1
15		accessories Polyfoam	2
	01.00.BZ.F.P.E100	Polyfoam HS100- left	1
	01.00.BZ.F.P.E101	Polyfoam HS100- right	1
16		Main unit	1
17	01.00.BZ.D.C.E065	Plastic bag for unit 54.5*60cm	1



No.	P/N	Description	Qty.
1	01.00.SJ.HS100.010	HS100—volume button	1
2	01.00.SJ.HS100.008	HS100—volume button lampshade	1
3	01.00.SJ.HS100.013	HS100—len for VFD	1
	01.00.SB.037	Metal logo HS100	1
4	01.00.SJ.QT.001	VFD filter 105.7mm*24.3mm*0.5	1
5	01.00.SJ.HS100.001	HS100—front panel	1
6	01.00.SJ.HS100.014	HS100—little press piece	1
7	02.03.70.1813C	HS100 (1813C VFD board)	1
8	01.00.SJ.HS100.004	HS100—5 in 1 button cover	1
9	01.00.SJ.HS100.009	HS100—disc tray door	1
10	02.03.70.1815C	HS100 (1815C button board)	1
11	01.00.SJ.HS100.011	HS100—pedestal underlay	2
12	01.00.WJ.TJ.415	HS100—chassis	1
13	01.00.WJ.TJ.421	heatsink 50*19*35mm	1
14	02.03.70.1356C	HS100 (power supplier board 1356C)	1
15	01.00.SJ.QT.005	PCB plastic frame $\Phi 7*8$ mm	8
16	01.00.WJ.TJ.544	HS100—top cover support	1
17	01.00.DP.HM.E257	Sponge 200*12*2mm (1 side glue)	1
18	01.00.WJ.TJ.419	HS100—heatsink support	1
19	01.00.WJ.TJ.420	heatsink 135*95*45mm	1
20	02.03.70.1241C1	HS100 (amplifier board 1241C-1)	1
21	01.00.WJ.TJ.417	HS100—rear panel (EU)	1
	01.00.WJ.TJ.418	HS100—rear panel (US)	1
22	01.00.WJ.TJ.416	HS100—top cover	1
23	01.00.SJ.HS100.012	HS100—len for tray door	1
	01.00.SB.035	47mm Metal logo "Harman/kardon"	1
24	01.00.SJ.HS100.009	HS100—disc tray door	1
25	01.00.SJ.HS100.006	HS100—volume button cover	1
26	02.03.70.1814C	HS100 (1814C volume board)	1
27	01.00.SJ.HS100.005	HS100—2 in 1 button cover	1
28	01.00.SJ.HS100.007	HS100—power indicator slide	1
29	01.00.SJ.HS100.003	HS100—2 in 1 button	1
30	02.03.70.1816C	HS100 (1816C standby board)	1
31	01.00.DP.XJ.E192	silica gel underlay 50.6*4.2*1.5mm	4
32	01.15.JX.DV342	loader DV342 loader	1
33	02.03.70.1239C	HS100 (mainboard 1239C-PV1)	1
34	01.49.06	Tuner module TFCF1E803A (EU)	1
	01.49.07	Tuner module TFCF1E804A (US)	1
35	01.40.CON.DCZ.178	AC power socket WS-044-0	1
36	01.00.SB.036	Metal logo 100mm "Harman/kardon"	1
S1	01.00.WJ.JG.085	3*6KBTNI	11
S2	01.00.WJ.JG.416	3*8KBTNI	3
S3	01.00.WJ.JG.089	3*6PWAHC	4
S4	01.00.WJ.JG.089	3*6PAHC	14
S5	01.00.WJ.JG.089	3*6PWAHC	4
S6	01.00.WJ.JG.265	3*8PWBTTTC	6
S7	01.00.WJ.JG.543	3*6PWBTTNI	2
S8	01.00.WJ.JG.451	3*6PMMHC	2
S9	01.00.WJ.JG.093	3*6PMMTTC	2
S10	01.00.WJ.JG.560	3*10PAHO	2
S11	01.00.WJ.JG.321	3*8PAHO	9
S12	01.00.WJ.JG.502	3*10PMHO	4
S13	01.00.WJ.JG.543	3*6PWBTTNI	5
S14	01.00.WJ.JG.252	3*4RBTNI	6
W1	01.00.WJ.JG.426	Washer M3*0.5 W=8	2
W2	01.00.WJ.JG.424	Spring washer M3	2
NI	01.00.WJ.JG.119	M3 NUT	4

Component List

Location.No.	Description	Specification	P/N	Qty
HS100-PT01	HS100 metals part	HS100-chassis	01.00.WJ.TJ.415	1
HS100-PT02	HS100 metals part	HS100-top cover	01.00.WJ.TJ.416	1
HS100-PT03	HS100 metals part	HS100-rear panel (EU)	01.00.WJ.TJ.417	1
HS100-PT03	HS100 metals part	HS100-rear panel (US)	01.00.WJ.TJ.418	1
DSC1000-PT07	HS100 metals part	HS100-heatsink support	01.00.WJ.TJ.419	1
HS100-PT04	HS100 metals part	HS100-top cover support	01.00.WJ.TJ.544	1
	Magnetism annulus toggle headphone line	H16*9*28-HA	01.13.L.H.011	1
DSC1000-PT08	heatsink for AMP board	135*95*45mm	01.00.WJ.TJ.420	1
match D17 , D18	heatsink	16*12*32mm	01.00.WJ.TJ.317	2
match Q6 on SMPS	heatsink	50*19*35mm	01.00.WJ.TJ.421	1
for U4 on mainboard	heatsink	28*28*10mm	01.00.WJ.TJ.268	1
G1 G2 G3 G4 on SMPS	3 pin grounding piece	M4	01.00.WJ.QT.041	4
HS100-RE01	HS100 plastic part	HS100 - front panel	01.00.SJ.HS100.001	1
HS100-RE02	HS100 plastic part	HS100 - 5 in 1 button	01.00.SJ.HS100.002	1
HS100-RE03	HS100 plastic part	HS100 - 2 in 1 button	01.00.SJ.HS100.003	1
HS100-RE04	HS100 plastic part	HS100 - 5 in 1 button collar	01.00.SJ.HS100.004	1
HS100-RE05	HS100 plastic part	HS100 - Open/Close button collar	01.00.SJ.HS100.005	1
HS100-RE06	HS100 plastic part	HS100 - volume chamfer	01.00.SJ.HS100.006	1
HS100-RE07	HS100 plastic part	HS100 - power indicator lampshade	01.00.SJ.HS100.007	1
HS100-RE08	HS100 plastic part	HS100 - volume button lampshade	01.00.SJ.HS100.008	1
HS100-RE09	HS100 plastic part	HS100 - disc tray door	01.00.SJ.HS100.009	1
HS100-RE10	HS100 plastic part	HS100 - volume button	01.00.SJ.HS100.010	1
HS100-RE11	HS100 plastic part	HS100 - pedestal underlay	01.00.SJ.HS100.011	2
HS100-RE12	HS100 plastic part	HS100 - len for tray door	01.00.SJ.HS100.012	1
HS100-RE13	HS100 plastic part	HS100 - len for VFD	01.00.SJ.HS100.013	1
HS100-RE14	HS100 plastic part	HS100 - little plastic piece	01.00.SJ.HS100.014	1
	HS100 plastic part	1000A-IR receiver support	01.00.SJ.1000A.016	1

Component List

Location.No.	Description	Specification	P/N	Qty
	Screw map	Φ3*4mm	01.00.FZ.TG.025	2
	PCB plastic frame	Φ7*8mm	01.00.SJ.QT.005	8
between volume button and PCB	astigmatism PVC	Φ45.5*Φ9.5mm	01.00.FZ.QT.153	1
	VFD filter	105.7mm*24.3mm*0.5	01.00.SJ.QT.001	1
	AC power socket	WS-044-0	01.40.CON.DCZ.178	1
stick on the len for tray door	Metal logo	47mm"Harmarn" supper slim logo	01.00.SB.035	1
stick on the top cover	Metal logo	100mm"Harmarn" supper slim logo	01.00.SB.036	1
stick on len for front panel	Metal logo	HS100 supper slim logo	01.00.SB.037	1
for AC power cord	Magnetism annulus	M248	01.13.L.H.020	1
	Owner manual	HS100 US version	01.00.YS.SM1.E261	1
	Owner manual	HS100 EU version	01.00.YS.SM1.E262	1
	paster	Laser precausion mark	01.00.YS.TZ.T.E363	1
	paster	Laser precausion guide	01.00.YS.TZ.T.E364	1
EU version	MADE IN P.R.C. label	23*7MM transparent PET	01.00.BZ.B.021	1
	Safety instruction manual	HS100 EU version	01.00.YS.FY3.345	1
	Warning card	HS100 US version	01.00.YS.FY3.346	1
	Guarantee card	HS100 US version	01.00.YS.FY3.347	1
	Remote control	HS100-RC	01.00.RC.100	1
	battery	7# battery	01.14.DX.B.0007	3
EU version	AC power cord	WS-002E+WS-019 HO5VV-F 0.75×2C	01.47.CNT.ACX.E052	1
US version	AC power cord	WS-002E+WS-004A SJT18AWG×2C	01.47.CNT.ACX.E053	1
	SCART cabel	SCART	01.47.CNT.LJX.5.012	1
	FM antenna	FM-075	01.47.CNT.CTX.037	1
	FM antenna	FM-TV-75-A	01.47.CNT.CTX.038	1
	AM antenna	AM-300-AWM	01.47.CNT.CTX.042	1
	loader	DV342 loader	01.15.JX.DV342	1
EU version	Tuner module	TFCF1E803A EU version	01.49.06	1

Component List

Location.No.	Description	Specification	P/N	Qty
US version	Tuner module	TFCF1E804A US version	01.49.07	1
stick inside the volume button	mask PVC	Φ38.5	01.00.FZ.QT.187	1
EU version	Carton box	HS100 EU version	01.00.BZ.X.W.E232	1
US version	Carton box	HS100 US version	01.00.BZ.X.W.E231	1
for accessories	accessories box	320*255*70mm	01.00.BZ.X.B.E178	1
	Polyfoam	HS100- left	01.00.BZ.F.P.E100	1
	Polyfoam	HS100- right	01.00.BZ.F.P.E101	1
for unit	Plastic bag for unit	54.5*60cm	01.00.BZ.D.C.E065	1
for owner manual	Plastic bag for user's manual	25*35cm	01.00.BZ.D.Z.E020	1
for remote control	Plastic bag for remote control	10*34.5cm	01.00.BZ.D.H.E063	1
for battery	Plastic bag for battery	6*9cm	01.00.BZ.D.Z.E008	1
for logo on top cover	safeguard film	15*110mm	01.00.BZ.B.025	1
	Plastic fastener	12mm	01.00.FZ.QT.122	3
connect loader and mainboard	Connect cable	2.0-5Y-5Y-260mm -B	01.47.CNT.LJX.7.026	1
connect loader and mainboard	Connect cable	2.0-6Y-6Y-320mm -B	01.47.CNT.LJX.7.087	1
for CN1 on power supplier board	Connect cable	VH 40mm	01.47.CNT.LJX.7.096	1
connect VFD board and mainboard	Connect cable	2.0-9Y-9Y-320mmA	01.47.CNT.LJX.7.088	1
connect power supplier board and mainboard	Connect cable	2.54-10Y-2.0-160mmB	01.47.CNT.LJX.4.015	1
connect power supplier board and amplifier board	Connect cable	2.54-5Y-2.0-200mmA	01.47.CNT.LJX.4.016	1
connect power supplier board and amplifier board	Connect cable	VH-3Y-2Y-2Y-180mmB	01.47.CNT.LJX.7.097	1
connect power supplier board and AC power socket	Connect cable	VH-3Y-2Y-700mm	01.47.CNT.LJX.7.172	1
connect front panel board and mainboard	Connect cable	2.0-5Y-5Y-720mmA (with shield)	01.47.CNT.LJX.7.173	1
connect VFD board and power supplier board	Connect cable	2.54-3Y-3Y-150mmA	01.47.CNT.LJX.4.013	1
connect 1815C and 1816C	Connect cable	2.0-7Y-7Y-240mmA	01.47.CNT.LJX.7.090	1
connect 1815C and 1813C	Connect cable	2.0-9Y-9Y-60mmB	01.47.CNT.LJX.7.150	1

Component List

Location.No.	Description	Specification	P/N	Qty
connect 1814C and 1813C	Connect cable	2.0-7Y-7Y-80mmA	01.47.CNT.LJX.7.092	1
connct 1813C and ground	Grounding cable	40mm(01.47.CNT.LJX.5.052	1
connect point A and B on power supplier board	Grounding cable	35mm	01.47.CNT.LJX.5.023	1
connect amplifier board and mainboard	flat cable	1.0*16P*50mmA	01.48.BPX.1.E084	1
connect tuner module and mainboard	flat cable	1.25*11P*70mmA	01.48.BPX.1.E085	1
connect loader and mainboard	flat cable	0.5*24P*190mmB	01.48.BPX.2.E031	1
for IR receiver support	sponge	10*10*4mm (with double sides glue)	01.00.DP.HM.E165	1
for VFD	sponge	20*20*7mm (with double sides glue)	01.00.DP.HM.E199	2
fixed plat cable on the chassie	sponge	20*10*2.5mm (with double sides glue)	01.00.DP.HM.E142	1
for power supplier	Insulated PVC	130*126mm (with single side glue)	01.00.DP.JY.E110	1
stick on the top cover support	Insulated PVC	80*55*0.5mm (transparence PVC)	01.00.DP.JY.E149	1
place between the main transfer and chassis	sponge	20*20*11mm (with double sides glue)	01.00.DP.HM.E198	1
place under the amplifier board	sponge	20*20*10mm (with single side glue)	01.00.DP.HM.E250	3
place under the amplifier board	sponge	20*10*10mm (with single side glue)	01.00.DP.HM.E207	2
place between the amplifier board and heatsink	sponge	20*20*3.5 (with single side glue)	01.00.DP.HM.E015	2
place between tuner module and left side of chas	sponge	20*20*10mm (with double sides glue)	01.00.DP.HM.E252	1
place on the chassis to support the top cover	sponge	70*30*67mm(+0/-0.5 with single side c	01.00.DP.HM.E255	1
cover on the amplifier output jack	I/O electric interleaver	WNH4P-S-46.2-2-96-N-P	01.00.DD.QT.E049	1
two layers board	mainboard (semi-manufactured goods)	HS100 (1239C-PV1)	02.03.70.1239C	1
two layers board	amplifier board (semi-manufactured goods)	HS100 (1241C-1)	02.03.70.1241C1	1
single layer board	power supplier board (semi-manufactured goo	HS100 (1356C)	02.03.70.1356C	1
two layers board	front panel (semi-manufactured goods)	HS100 (1813C VFD board)	02.03.70.1813C	1
two layers board	front panel (semi-manufactured goods)	HS100 (1814C volume board)	02.03.70.1814C	1
two layers board	front panel (semi-manufactured goods)	HS100 (1815C button board)	02.03.70.1815C	1
two layers board	front panel (semi-manufactured goods)	HS100 (1816C standby board)	02.03.70.1816C	1

MainBoard (1239C-PV1)

Location.No.	Description	Specification	P/N	Qty
R1 R116 FB24 FB25 DR1 DR2 DR3 R143	Resistor, chip	0603-0Ω ±5%	01.57.R.2.E000J	8
R61 R62 R63 R114 3R2 3R4 DR4 DR5 DR6	Resistor, chip	0603-10Ω±5%	01.57.R.2.E100J	9
R29 (R30) (R31) (R32) (R33) R202	Resistor, chip	0603-22Ω±5%	01.57.R.2.E220J	6
R145 R146	Resistor, chip	0603-27Ω±5%	01.57.R.2.E270J	2
R184 R185 R186 R189 R190	Resistor, chip	0603-33Ω±5%	01.57.R.2.E330J	5
R149 R150	Resistor, chip	0603-56Ω±5%	01.57.R.2.E560J	2
R9 R37 R39 R40 (R41) (R42) R43 (R44) R45 R46 R47 R48 AR3 AR4 AR5 AR6	Resistor, chip	0603-75Ω±1%	01.57.R.2.E750F	16
R182 R183 R187	Resistor, chip	0603-82Ω±5%	01.57.R.2.E820J	3
AR10	Resistor, chip	0603-91Ω±5%	01.57.R.2.E910J	1
R117 R137 R199 RR11 RR12	Resistor, chip	0603-100Ω±5%	01.57.R.2.E101J	5
R89 R98	Resistor, chip	0603-150Ω±5%	01.57.R.2.E151J	2
R11 (R12)	Resistor, chip	0603-187Ω±1%	01.57.R.2.E1870F	2
RR6 RR7 RR8 RR9	Resistor, chip	0603-220Ω±5%	01.57.R.2.E221J	4
R56 R67	Resistor, chip	0603-330Ω±5%	01.57.R.2.E331J	2
R193 R211 (R212) R213	Resistor, chip	0603-470Ω±5%	01.57.R.2.E471J	4
R55 R66 (3R3) (3R9)	Resistor, chip	0603-680Ω±5%	01.57.R.2.E681J	4
R78 R191 R192 R194 RR3 R173A1 R173B1 R173C1 R173D1	Resistor, chip	0603-1KΩ±5%	01.57.R.2.E102J	9
R204	Resistor, chip	0603-1.2KΩ±5%	01.57.R.2.E122J	1
R57 R68	Resistor, chip	0603-1.78KΩ±1%	01.57.R.2.E1781F	2
R139	Resistor, chip	0603-2.2KΩ±5%	01.57.R.2.E222J	1
(R17) (R18) (R19) (R20) AR11	Resistor, chip	0603-2.7KΩ±5%	01.57.R.2.E272J	5
R81 R120	Resistor, chip	0603-3KΩ±5%	01.57.R.2.E302J	2
(R195)	Resistor, chip	0603-3.9KΩ±5%	01.57.R.2.E392J	1
R4 R7 R15 (R53) (R65) R93 R99 R106 R107 R108 R109 R110 R111 R113 AR2 AR12 (R4B1) (R5A1) (R121) (R122) (R123) AR7 R144	Resistor, chip	0603-4.7KΩ±5%	01.57.R.2.E472J	23

MainBoard (1239C-PV1)

Location.No.	Description	Specification	P/N	Qty
R54 R64	Resistor, chip	0603-4.75KΩ 1%	01.57.R.2.E4752F	2
R133 R197	Resistor, chip	0603-5.6KΩ±5%	01.57.R.2.E562J	2
R128	Resistor, chip	0603-6.2KΩ±5%	01.57.R.2.E622J	1
R86 R97	Resistor, chip	0603-6.8KΩ±5%	01.57.R.2.E682J	2
R58 R69 R126 R196 R131 R134	Resistor, chip	0603-7.5KΩ±5%	01.57.R.2.E752J	6
R90 R96	Resistor, chip	0603-8.2KΩ±5%	01.57.R.2.E822J	2
(R2) (R3) (R5) (R6) (RR1) (RR2) (RR10) (R16) (R21) (R22) (R23) (R24) (R27) (R34) R35 (R36) R38 R59 (R60) (R71) R72 (R79) R80 R84 (R85) R112 (R118) (R125) R132 R151 R152 R153 R154 R155 R158 R159 R167 R172 R175 (R176) (R177) (R178) R180 R188 (R205) (R206) (R207) (R208) R209 (R215) R156 R157	Resistor, chip	0603-10KΩ±5%	01.57.R.2.E103J	52
R130 R135	Resistor, chip	0603-10KΩ±1%	01.57.R.2.E103F	2
R26 (R119) (R210)	Resistor, chip	0603-15KΩ±5%	01.57.R.2.E153J	3
R124 R141 R201	Resistor, chip	0603-18KΩ±5%	01.57.R.2.E183J	3
3R1 3R5 3R6 3R10	Resistor, chip	0603-20KΩ±5%	01.57.R.2.E203J	4
R203	Resistor, chip	0603-27KΩ±5%	01.57.R.2.E273J	1
R127	Resistor, chip	0603-33KΩ±5%	01.57.R.2.E333J	1
R115	Resistor, chip	0603-47KΩ±5%	01.57.R.2.E473J	1
R181	Resistor, chip	0603-68KΩ±5%	01.57.R.2.E683J	1
(R28) R95 R102 (R129) 3R7	Resistor, chip	0603-100KΩ±5%	01.57.R.2.E104J	5
(R14) (R138) R198 3R8	Resistor, chip	0603-1MΩ±5%	01.57.R.2.E105J	4
R147 R148	Resistor, chip	0805-2.2Ω±5%	01.57.R.3.E2R2J	2
RN13 RN16 RN17 RN18	Resistor, thick film chip network	33Ω*4 ±5%	01.57.R.8.EP3304	4
RN12	Resistor, thick film chip network	82Ω*4 ±5%	01.57.R.8.EP0824	1
RN2	Resistor, thick film chip network	47KΩ*4 ±5%	01.57.R.8.EP4734	1
R75	Fixed carbon film	RT1/4W-75Ω	01.57.R.C.ED750	1
ESD10 ESD11	Zinc oxide varistor, for ESD	AVR-M1608C270MTABB	01.57.R.Y.270	2

MainBoard (1239C-PV1)

Location.No.	Description	Specification	P/N	Qty
C24	Capacitor,multilayer ceramic, chip	0603-6.8P X7R	01.54.CS.2.E6P8X	1
(C21) C124 C125 (C151)	Capacitor,multilayer ceramic, chip	0603-10P NPO±5%/50V	01.54.CS.2.E100N	4
(2C4) (2C8) (C31) (C35) (C37) (C43)	Capacitor,multilayer ceramic, chip	0603-20P NPO±5%/50V	01.54.CS.2.E200N	6
(C22) (C23) (C47)	Capacitor,multilayer ceramic, chip	0603-22P NPO±5%/50V	01.54.CS.2.E220N	3
(C91) (C95) C119	Capacitor,multilayer ceramic, chip	0603-33P NPO±5%/50V	01.54.CS.2.E330N	3
(C20) C81 C83 C108 C115 C60 C61 C87	Capacitor,multilayer ceramic, chip	0603-47P NPO±5%/50V	01.54.CS.2.E470N	8
(C38) (C42)	Capacitor,multilayer ceramic, chip	0603-51P NPO±5%/50V	01.54.CS.2.E510N	2
C59 C74	Capacitor,multilayer ceramic, chip	0603-200P NPO±5%/50V	01.54.CS.2.E201N	2
C109	Capacitor,multilayer ceramic, chip	0603-220P NPO±5%/50V	01.54.CS.2.E221N	1
C90	Capacitor,multilayer ceramic, chip	0603-270P NPO±5%/50V	01.54.CS.2.E271N	1
(C26) (C72) C94	Capacitor,multilayer ceramic, chip	0603-560P NPO±5%/50V	01.54.CS.2.E561N	3
(C139)	Capacitor,multilayer ceramic, chip	0603-102 X7R±10%/50V	01.54.CS.2.E102X	1
C110	Capacitor,multilayer ceramic, chip	0603-152 X7R±10%/50V	01.54.CS.2.E152X	1
C116	Capacitor,multilayer ceramic, chip	0603-562 X7R±10%/50V	01.54.CS.2.E562X	1
C82 C84 (C114) (C158) (C161)	Capacitor,multilayer ceramic, chip	0603-103 Y5V-20+80%/50V	01.54.CS.2.E103Y	5
(C122) (C28) (C36)	Capacitor,multilayer ceramic, chip	0603-183 X7R±10%/50V	01.54.CS.2.E183X	3
(C112)	Capacitor,multilayer ceramic, chip	0603-333 X7R±10%/50V	01.54.CS.2.E333X	1
CB1 CB2 CB3 CB4 CB5 CB6 CB7 CB8 CB9 CB10 CB11 CB12 CB13 CB14 CB15 CB16 CB17 CB18 CB19 CB20 CB21 CB22 CB23 CB24 CB25 CB26 CB27 CB28 CB29 CB30 CB31 CB32 CB33 CB34 CB35 CB36 CB37 CB38 CB39 CB40 CB41 CB42 CB43 CB44 CB45 CB46 CB47 CB48 CB49 CB50 CB51 CB52 CB53 CB54 CB55 CB56 CB57 CB58 CB59 CB60 CB61 CB62 CB63 CB64 CB65 CB66 CB67 CB68 CB69 CB70 CB71 CB72 CB73 CB74 CB75 CB76 CB77 CB78 CB79 CB80 CB81 CB82 CB83 CB84 CB85 CB86 CB87 CB88 CB89 CB90 CB91 CB92 CB93 CB94 CB95 CB96 CB97 CB98 CB99 CB102 CB103 CB104 CB105 CB106 CB107 CB108 CB110 CB111 CB112 CB113 CB114 CB115 CB116 CB117 CB135 CB120 CB121 CB122 CB123 CB124 CB125 C85	Capacitor,multilayer ceramic, chip	0603-104 Y5V-20+80%/50V	01.54.CS.2.E104Y	122

MainBoard (1239C-PV1)

Location.No.	Description	Specification	P/N	Qty
(C150) (C156) (C157)	Capacitor,multilayer ceramic, chip	0603-105 Y5V-20+80%/10V	01.54.CS.2.E105Y	3
C54 C64	Capacitor,multilayer ceramic, chip	0805-100P NPO±5%/50V	01.54.CS.3.E101N	2
(C67) (C68)	Capacitor,multilayer ceramic, chip	0805-680P NPO±5%/50V	01.54.CS.3.E681N	2
C56 C69	Capacitor,multilayer ceramic, chip	0805-102 NPO±5%/50V	01.54.CS.3.E102N	2
C41 C44 EC22 EC23 EC24 EC25 3C1 3C2 3C3	Capacitor, AL.electrolytic	CD110-1UF/50V 5*11	01.34.CL.D.E1U50VC	9
C93	Capacitor, AL.electrolytic	CD110-2.2UF/50V 5*11	01.34.CL.D.EV2U250VC	1
EC43 EC44	Capacitor, AL.electrolytic	CD110-4.7UF/50V 5*11	01.34.CL.D.E4U750VC	2
EC15 EC16 EC20 EC21 EC28 EC29 EC33 EC34 EC35 EC36 EC39 C12	Capacitor, AL.electrolytic	CD110-10UF/16V 5*11	01.34.CL.D.E10U16VC	12
C27 C40 C46	Capacitor, AL.electrolytic	CD110-22UF/16V 5*11	01.34.CL.D.E22U16VC	3
C6 C14 C15 C29 C30 C49 C51 C58 C66 C75 C79 C80 C99 C100 C101 EC9 EC10 EC12 EC13 EC14 EC19 EC27 EC42 EC45	Capacitor, AL.electrolytic	CD110-47UF/16V 5*11	01.34.CL.D.E47U16VC	24
C11 C25 C39 C45 EC1 EC2 EC32	Capacitor, AL.electrolytic	CD110-100UF/10V 5*12	01.34.CL.D.E100U10VD	7
C17 C76 EC30 EC31	Capacitor, AL.electrolytic	CD110-100UF/25V 6.3*12	01.34.CL.D.E100U25VD	4
C4 C7	Capacitor, AL.electrolytic	CD110-100UF/50V 8*12	01.34.CL.D.E100U50VD	2
EC3 EC4 EC5 EC6 EC7 EC8 EC11 EC40 EC41 C1 C3 C8 C16 C19 C34 C77 3C6 3C7	Capacitor, AL.electrolytic	CD110-220UF/16V 6.3*12	01.34.CL.D.E220U16VD	18
C52 C53	Capacitor, AL.electrolytic	CD110-330UF/16V 6.3*12	01.34.CL.D.E330U16VD	2
C5 C13 C18	Capacitor, AL.electrolytic	CD110-470UF/16V 8*12	01.34.CL.D.E470U16VD	3
C48	Capacitor, AL.electrolytic	CD110-1500UF/6.3V 8*17	01.34.CL.D.EV1500U6V3	1
R136	Inductor, multilayer ceramic, chip	0603-10UH	01.13.L.L.S.E002	1
(L18)	Inductor, multilayer ceramic, chip	0805-0.39UH	01.13.L.L.S.E117	1
(L16) (L17)	Inductor, multilayer ceramic, chip	0805-0.68UH	01.13.L.L.S.E118	2
Z1 Z2	Tuner 19k filter	EJ219	01.13.L.R.068	2
R74	Bead, chip	0603-300Ω	01.13.L.Z.ESA300	1
FB10 FB11 FB12 (FB13) (FB14) (FB15) FB26 FB31 FB32 FB33 (FB34)	Bead, chip	0603-50Ω	01.13.L.Z.ESA50	11

MainBoard (1239C-PV1)

Location.No.	Description	Specification	P/N	Qty
FB1 FB2 FB4 FB6 FB7 FB8 FB27 FB28 FB29 L1 L2 L3 L4 L5 L6 L7 (L8) L9 L10 L11 L12 L13 L14 L15 L19 L20 L21 L22 (L23) L24 L25 L26 L28 L29 L30 L31 L33	Bead, chip	0805-50Ω	01.13.L.Z.ESB50	37
FB3 FB5 FB9 FB30	Bead, leaded fixed	50Ω (3.5*6.0*0.8)	01.13.L.Z.ED50A	4
match with Y1	Bead, without pin	HFSFB3.5*6*0.8	01.13.L.Z.EHFSF	2
D15 D17 D18 D19 D20	Diode	IN4148 DIP	01.41.D.PD.IN4148	5
D24 D26 D27	Diode	IN5393 DIP	01.41.D.PD.5393	3
D16 D25	Diode	LL4148 SMD	01.41.D.PS.LL4148	2
Q3 Q4 Q5 Q6 Q7 Q8 Q13	Transistor	C9014 SMD	01.42.Q.S.9014	7
Q23 Q24 Q25 2Q4 2Q5 Q20	Transistor	KTC8050 SMD	01.42.Q.S.8050	6
Q1 Q2 Q12 Q17 Q26	Transistor	S8550 SMD	01.42.Q.S.8550	5
Q9 Q10 (Q19) (Q27)	Transistor	DTC343TKT146 SMD	01.42.Q.S.EDTC343	4
Q22	Transistor	DTA114EKAT146 SMD	01.42.Q.S.DTA114	1
Q18	Transistor	2SK3018T106 SMD	01.42.Q.S.E3018	1
Q16	Transistor	8050 DIP	01.42.Q.D.8050	1
Q15	Transistor	8550 DIP	01.42.Q.D.8550	1
Y1	Fundamental. Oscillator	27.000MHZ-49S-20P	01.00.JZ.E27000	1
Y2	Fundamental. Oscillator	33.8688MHZ-49S-20P	01.00.JZ.E33868	1
Y3	Fundamental. Oscillator	4.332MHz-49S-20P	01.00.JZ.E4332	1
U1	IC, Panasonic, Motor Driver	AN8785SB, HSOP042	01.44.IC.S.8785	1
U2	IC, Sharp, Voltage Regulator	O18EZ01, PQ025	01.44.IC.S.018EZ01	1
U3	IC, NS, Voltage Regulator	79L05, 3P, TO-92	01.44.IC.D.79L05	1
U4	IC, Amlogic, decoder	AML3390DTS, 208P, PQFP	01.44.IC.S.3390	1
U5	IC, TI, 8-bit serial-in/ parallel-out shift register	74HC164, 14P, SO14	01.44.IC.S.74HC164	1
U7 (burn-in firmware)	IC, AMD, Flash	AM29LV160DB-90EC, 48P, TSOP48	01.44.IC.S.29LV160DB	1
U8 (burn-in servo code)	IC, Atmel Servo FLASH.	AT27C020-70ZC, PLCC	01.46.IC.27C02	1
U9	IC, Panasonic, Servo chip	MN103S47JRB, 176P, QFP	01.44.IC.S.103S47	1
(U6)	IC, Hyundai, SDRAM	HY57V641620HGT-7, 54P, TSOP54	01.46.IC.641620	1
U12	IC, JRC, Pre-amp	NJM4558, 8P, SOP	01.44.IC.S.4558	1

MainBoard (1239C-PV1)

Location.No.	Description	Specification	P/N	Qty
U11 U20	IC, NS, Pre-amp	LM833, 8P, SOP	01.44.IC.S.833	2
U14	IC, Rohm, Video Buffer	BH7862FS, 32P, SSOP-A32	01.44.IC.S.7862	1
3U2	IC, NS, Audio Power Amplifier	LM4880, 8P, SOP8	01.44.IC.S.4880	1
U15 (burn-in EU or US firmware)	IC, Atmel, EEPROM	AT24C64, 8P, SOP	01.44.IC.S.24C64	1
U16	IC, Wolfson, Audio DAC	WM8728, 20P, SSOP20	01.44.IC.S.8728	1
U10 U13 U19	IC, NS, Voltage Regulator	78L05, 3P, TO-92	01.44.IC.D.78L05	3
U21	IC, NS, Analog Multiplexer	CD4052, 16P, SOP16	01.44.IC.S.4052	1
U22	IC, TI, Data selectors	74HC158, 16P, SOP16	01.44.IC.S.74HC158	1
U23	IC, Crystal, A/D Converter	CS5333, 16P, TSSOP16	01.44.IC.S.5333	1
U24	IC, NS, Voltage Regulator	L7809, 3P, TO-220	01.44.IC.D.L7809	1
U25	IC, Rohm, RDS decoder	BU1924, 16P, SOP16	01.44.IC.S.1924	1
U26	IC, Philips, Hex inverting Schmitt trigger	74HCT14, 14P, SO14	01.46.IC.7414	1
CN3	Connector	FPC-0.5-24P (upward touching)	01.40.CON.S05.E007	1
CN2	Jack, Sharp, Fiber optic input jack	GP1FA513RZ, In-line Package	01.43.004	1
CN1	Connector	1.25-11P	01.40.CON.DCZ.062	1
CN4 CN6	Connector	PH-5A, 5P, In-line Package	01.40.CON.DPH.023	2
CN5	Connector	PH-6A, 6P, In-line Package	01.40.CON.DPH.027	1
CON6	Connector	PH-9A, 5P, In-line Package	01.40.CON.DPH.041	1
CON7	Connector	PH-10A, 6P, In-line Package	01.40.CON.DPH.001	1
CON8	Jack, YuanChang, Video&S-Video output jack	SAV-01 (yellow)	01.40.CON.DCZ.142	1
CON4	Jack, YuanChang, Component Video output jack	AV3-8.4-13G	01.40.CON.DCZ.183	1
CON9	Jack, YuanChang, Audio output&input jack	AV4-8.4-5	01.40.CON.DCZ.173	1
CON5	Jack, YuanChang, Coaxial output jack	AV1-8.4-6G (orange)	01.40.CON.DCZ.123	1
CON1	Connector	1.0-16P	01.40.CON.S10.E024	1

MainBoard (1239C-PV1) only for US version

Location.No.	Description	Specification	P/N	Qty
R92 R101 R104 R105	Resistor, chip	0603-4.7KΩ±5%	01.57.R.2.E472J	4
R88 R94	Resistor, chip	0603-8.2KΩ±5%	01.57.R.2.E822J	2
hand-make solder	Fixed carbon film	RT1/6W-3KΩ	01.57.R.C.EC302	2
ESD4 ESD5	Zinc oxide varistor, for ESD	AVR-M1608C270MTABB	01.57.R.Y.270	2
CON3	Connector	AV2-8.4-7B/PB	01.40.CON.DCZ.182	1

MainBoard (1239C-PV1) only for EU version

Location.No.	Description	Specification	P/N	Qty
R49 R50 R51 R52	Resistor, chip	0603-75Ω±1%	01.57.R.2.E750F	4
2R11 2R12	Resistor, chip	0603-2KΩ±5%	01.57.R.2.E202J	2
2R3 2R4 2R6 2R7 2R8 2R9	Resistor, chip	0603-3.3KΩ±5%	01.57.R.2.E332J	6
R104 R105 2R10	Resistor, chip	0603-4.7KΩ±5%	01.57.R.2.E472J	3
R88 R94 R92 R101	Resistor, chip	0603-8.2KΩ±5%	01.57.R.2.E822J	4
(2R13)	Resistor, chip	0603-15KΩ±5%	01.57.R.2.E153J	1
2R5	Fixed carbon film	RT1/4W-150Ω	01.57.R.C.ED151	1
2R1 2R2	Fixed carbon film	RT1/4W-1KΩ	01.57.R.C.ED102	2
ESD4 ESD5 ESD6 ESD7 ESD8 ESD9	Zinc oxide varistor, for ESD	AVR-M1608C270MTABB	01.57.R.Y.270	6
CB100 CB101 CB109	Capacitor, multilayer ceramic, chip	0603-104 Y5V-20+80%/50V	01.54.CS.2.E104Y	3
FB18 FB19 FB20 FB21 FB22 FB23	Bead, chip	0603-50Ω	01.13.L.Z.ESA50	6
2Q1 2Q2 2Q3	Transistor	DTC343TKT146 SMD	01.42.Q.S.EDTC343	3
CON3	SCART Connector	CS-101 with shield	01.40.CON.DCZ.181	1

Amplifier Board (1241C-1)

Location.No.	Description	Specification	P/N	Qty
RR1 RR2 RR3 RR7 RR8 RR9	Resistor, chip	0603-0Ω ±5%	01.57.R.2.E000J	6
R11	Resistor, chip	0603-150Ω±5%	01.57.R.2.E151J	1
R15	Resistor, chip	0603-270Ω±5%	01.57.R.2.E271J	1
R8 R12	Resistor, chip	0603-1KΩ±5%	01.57.R.2.E102J	2
R7 R9 R10	Resistor, chip	0603-1.5KΩ±5%	01.57.R.2.E152J	3
AR5	Resistor, chip	0603-3.3KΩ±5%	01.57.R.2.E332J	1
R3 R4 R5 R6 AR9 AR16 AR23	Resistor, chip	0603-10KΩ±5%	01.57.R.2.E103J	7
R13	Resistor, chip	0603-47KΩ±5%	01.57.R.2.E473J	1
AR6 AR7 AR10 AR11 AR13 AR14 AR17 AR18 AR20 AR21	Resistor, chip	1206-4.7Ω±5%	01.57.R.4.E4R7J	10
AR8 AR12 AR15 AR19 AR22	Resistor, chip	1206-15Ω±5%	01.57.R.4.E150J	5
C2	Capacitor,multilayer ceramic, chip	0603-27P NPO±5%/50V	01.54.CS.2.E270N	1
C5	Capacitor,multilayer ceramic, chip	0603-100P NPO±5%/50V	01.54.CS.2.E101N	1
AC22	Capacitor,multilayer ceramic, chip	0603-220P NPO±5%/50V	01.54.CS.2.E221N	1
AC6 C4	Capacitor,multilayer ceramic, chip	0603-102 X7R±10%/50V	01.54.CS.2.E102X	2
C1	Capacitor,multilayer ceramic, chip	0603-153 Y5V-20+80%/50V	01.54.CS.2.E153Y	1
(CB2) CB3 (CB4) (AC1) (AC2) (AC3) (AC4) (AC7) (AC8) (AC9) (AC10) (AC13) (AC14) (AC15) AC18 (AC19) AC23 AC25 (AC26) (AC27) (AC29) AC31 AC32 AC40 AC42 AC50 AC51 AC55 AC59 AC60 AC68 AC70 AC78 AC79 AC83 AC87 AC88 AC98 AC96 AC100 AC101 AC102	Capacitor,multilayer ceramic, chip	0603-104 Y5V-20+80%/50V	01.54.CS.2.E104Y	42
(CB7) (CB8) (CB9) (CB10) (CB11) (CB12) (CB13) (CB14) (CB15) (CB16)	Capacitor,multilayer ceramic, chip	0805-102 NPO±5%/50V	01.54.CS.3.E102N	10
AC20	Capacitor,multilayer ceramic, chip	0603-122 X7R±10%/50V	01.54.CS.2.E122X	1
AC28 AC33 AC38 AC41 AC43 AC47 AC52 AC54 AC56 AC61 AC66 AC69 AC71 AC75 AC80 AC82 AC84 AC89 AC94 AC97	Capacitor,multilayer ceramic, chip	0805-104 Y5V+80-20%/50V	01.54.CS.3.E104Y	20
AC30 AC46 AC58 AC74 AC86	Capacitor,multilayer ceramic, chip	1206-470P X7R±10%/50V	01.54.CS.4.E470	5
AC37 AC44 AC65 AC72 AC93	Solid Electrolyte Tantalum Chip Capacitor	C-1UF-50V	01.33.CT.C1U50V	5
AC11 AC24	Solid Electrolyte Tantalum Chip Capacitor	B-22UF-10V	01.33.CT.B22U10V	2
AC36 AC49 AC64 AC77 AC92	Box-type metallized polyester film capacitor	0.68uF 63V J NPO P=5	01.34.CL.D.E68463J	5

Amplifier Board (1241C-1)

Location.No.	Description	Specification	P/N	Qty
EC5	Capacitor, AL.electrolytic 105□	CD110-10UF/25V 5*11 105C	01.34.CL.D.E10U25VC	1
EC1 EC2 AC12	Capacitor, AL.electrolytic	CD110-100UF/16V 5*11 105C	01.34.CL.D.E100U16VC	3
AC34 AC62 AC90	Capacitor, AL.electrolytic	CD288H-1000UF/50V 13*25 105C	01.34.CL.D.E1000U50V	3
EC3 EC4	Capacitor, AL.electrolytic	CD110-47UF/16V 5*11 105C	01.34.CL.D.E47U16VC	2
FB1	Bead, chip	0805-50Ω	01.13.L.Z.ESB50	1
L2 L3	Bead, chip	0805-300Ω	01.13.L.Z.ESB300	2
LL1 LL2 LL3 LL4 LL5 LL6 LL7 LL8 LL9 LL10	Magnetic shielding Inductor	983BN-1003-15UH	01.13.L.L.D.127	10
D4 D5	Diode	LL4148 SMD	01.41.D.PS.LL4148	2
Q2	Transistor	DTC343TKT146 SMD	01.42.Q.S.EDTC343	1
Q1	Jumper	5mm	01.00.FZ.ZZ.009	1
AU1 AU2 AU3	IC, Apogee, Power Device	DDX2100, 36P	01.44.IC.S.2100	3
U3	IC, Apogee, Digital Audio Processor	DDX8001, 64P, TQFP64	01.44.IC.S.8001	1
U2	IC, Analogic, Microprocessor Reset Circuit	AAT3522IGY-3.08, 3P, SST3	01.44.IC.S.3522	1
U4	IC, JRC, Pre-amp	NJM4558, 8P, SOP	01.44.IC.S.4558	1
U1	IC, RichTek, Voltage Regulator	RT9161/A-33, 4P, SOT-89	01.44.IC.S.9161A	1
CN1	Connector - horizontal	Vertical VH three holes two pins	01.40.CON.DCZ.129	1
CN5	Connector	1.0-16P	01.40.CON.S10.E024	1
CN3	Jack, YuanChang, Sub output jack	AV1-8.4-6G (Purple)	01.40.CON.DCZ.172	1
CN4	Amplifier output jack	WP10-23-3	01.40.CON.DCZ.184	1
CN6	Connector - horizontal	PH-5A	01.40.CON.DPH.058	1

Power Supply Board (1356C)

Location.No.	Description	Specification	P/N	Qty
NTC	NTC thermistor	NTC-5D-9	01.57.R.R.5D9	1
RV1	Zinc oxide varistor	10K.471	01.57.R.Y.10K	1
R3 R5 R23 R25	Fixed carbon film	RT1/6W-10Ω	01.57.R.C.EC100	4
R16	Fixed carbon film	RT1/6W-100Ω	01.57.R.C.EC101	1
R13 R14	Fixed carbon film	RT1/6W-220Ω	01.57.R.C.EC221	2
R30	Fixed carbon film	RT1/6W-330Ω	01.57.R.C.EC331	1
R27 R31 R36	Fixed carbon film	RT1/6W-1KΩ	01.57.R.C.EC102	3
R18 R19 R20 R29	Fixed carbon film	RT1/6W-2.2KΩ	01.57.R.C.EC222	4
R33 R32 R11 R12 R15 R17	Fixed carbon film	RT1/6W-5.1KΩ	01.57.R.C.EC512	6
R10	Fixed carbon film	RT1/6W-10KΩ	01.57.R.C.EC103	1
R22	Fixed carbon film	RT1/6W-12KΩ	01.57.R.C.EC123	1
R9	Fixed carbon film	RT1/6W-30KΩ	01.57.R.C.EC303	1
R21	Fixed carbon film	RT1/6W-100KΩ	01.57.R.C.EC104	1
R26	Fixed carbon film	RT1/4W-20Ω	01.57.R.C.ED200	1
R39	Fixed carbon film	RT1/4W-300Ω	01.57.R.C.ED301	1
R35	Fixed carbon film	RT1/4W-1KΩ	01.57.R.C.ED102	1
R4	Fixed carbon film	RT1/4W-47KΩ	01.57.R.C.ED473	1
R7 R8	Fixed carbon film	RT1/4W-30KΩ	01.57.R.C.ED303	2
R2	Fixed carbon film	RT1/4W-470KΩ	01.57.R.C.ED474	1
R0	Fixed carbon film	RT1/4W-1MΩ	01.57.R.C.ED105	1
R6	Cermet Resistor	RI40-1/2W-4.3MΩ	01.57.R.C.40E435	1
R1 R24	Fixed carbon film	RT1W-68KΩ	01.57.R.C.EF683	2
R28	Fixed carbon film	RT2W-0.22Ω	01.57.R.C.EGR22	1
R34 R38	Fixed carbon film	RT2W-1KΩ	01.57.R.C.EG102	2
CX3 CX1 CX2	High-voltage metallized polyester film	104/275V X2	01.00.CD.GY.E104275V	3
CY3 CY4 CY5 CY6	High-voltage metallized polyester film	471/400V Y1	01.00.CD.GY.E471400V	4
CY1 CY2	High-voltage metallized polyester film	221/400V Y1	01.00.CD.GY.E221400V	2
C1 C10	High-voltage metallized polyester film	103/1KV	01.00.CD.CP.E1031KV	2
C13	Radial leads mlcc	471/50V X7R±10%	01.00.CD.DS.E47150V	1

Power Supply Board (1356C)

Location.No.	Description	Specification	P/N	Qty
C2 C8 C14	Radial leads mlcc	473/25V X7R±10%	01.00.CD.DS.E47325V	3
C3 C4 C5 C6 C7 C11	Radial leads mlcc	104/25V X7R±10%	01.00.CD.DS.E10425V	6
C12	Radial leads mlcc	272/50V X7R±10%	01.00.CD.DS.E27250V	1
C16	Metallized capacitor	CT-104/100V	01.00.CD.JZ.104100VJ	1
EC22 EC25	Capacitor, AL.electrolytic	CD110-1UF/50V 5*11	01.34.CL.D.E1U50VC	2
EC10	Capacitor, AL.electrolytic	CD110-2.2UF/25V 5*11	01.34.CL.D.E2U225VC	1
EC1 EC17	Capacitor, AL.electrolytic	CD110-47UF/50V 6.3*12	01.34.CL.D.E47U50VCD	2
EC23 EC24 C9	Capacitor, AL.electrolytic	CD110-100UF/16V 5*11	01.34.CL.D.E100U16VC	3
EC3 EC4 EC5 EC6	Capacitor, AL.electrolytic	CD110-100UF/25V 6.3*12 105C	01.34.CL.D.E100U25VD	4
EC18 EC19 EC20 EC21	Capacitor, AL.electrolytic	CD288H-1000UF/35V 12*25	01.34.CL.D.E1000U35V	4
EC13 EC14	Capacitor, AL.electrolytic	CD288H-1000UF/16V 10*20 105C	01.34.CL.D.E1000U16VG	2
EC9 EC15	Capacitor, AL.electrolytic	CD110-220UF/10V 5*12	01.34.CL.D.E220U10VD	2
EC7 EC8 EC11 EC12	Capacitor, AL.electrolytic	CD110-220UF/16V 6.3*12	01.34.CL.D.E220U16VD	4
EC16	Capacitor, AL.electrolytic	CD294-220UF/400V 25*40 105C	01.34.CL.D.E220U400V	1
EC2	Capacitor, AL.electrolytic	CD110-4.7UF/160V 8*13	01.34.CL.D.E4U7160V	1
L7	Filter inductor	L630-100	01.13.L.L.D.013	1
L6	Filter inductor	L630(10UH)	01.13.L.L.D.085	1
L2 L3 L4 L5	Filter inductor	LH0608-20UH	01.13.L.L.D.E002	4
LF2	Common Mode Choke	LCL-UF1601(30mH)	01.13.L.L.D.132	1
LF1	Common Mode Choke	LCL-203A(20mH)	01.13.L.L.D.133	1
FB1	Inductor	10UH Axial 0.4	01.13.L.L.D.037	1
LF3	Filter inductor	470UH	01.13.L.L.D.134	1
BG1	Bridge Rectifiers	KBU8M	01.41.D.PD.8M	1
D7	Diode	21DQ10 DIP	01.41.D.PD.21DQ10	1
D9	Diode	31DQ06 DIP	01.41.D.PD.31DQ06	1
D1 D2 D3 D5 D6 D8 D13 D15	Fast recovery rectifiers diode	FR107 DIP	01.41.D.PD.FR107	8
D10 D11 D12 D16	Switching Diode	IN4148 DIP	01.41.D.PD.IN4148	4
D17 D18	Schottky diode	FCH20A20 DIP	01.41.D.PD.20A20	2
D14	Fast recovery rectifiers diode	FR207 DIP	01.41.D.PD.207	1

Power Supply Board (1356C)

Location.No.	Description	Specification	P/N	Qty
ZD1	Zener Diode	24V	01.41.D.WD.24V	1
ZD2	Zener Diode	18V	01.41.D.WD.18V	1
SC1	Silicon controlled rectifiers	MCR100-6 DIP	01.41.D.PD.MCR100-6	1
Q1 Q3	NPN Transistor	2N5551 DIP	01.42.Q.D.5551	2
Q4 Q7	NPN Transistor	C9014 DIP	01.42.Q.D.9014	2
Q5	PNP Transistor	8550 DIP	01.42.Q.D.8550	1
Q6	MOS-FET	FQA11N90 DIP	01.44.IC.D.11N90	1
IC5	IC, NS, Voltage Regulator	L7805 DIP	01.44.IC.D.L7805	1
IC3	IC, NS, Voltage Regulator	L7812 DIP	01.44.IC.D.7812	1
IC4	IC, NS, Voltage Regulator	L7912 DIP	01.44.IC.D.7912	1
IC6	IC, Rohm, Voltage Regulator	BA033T DIP	01.44.IC.D.BA033T	1
IC2	IC, Fairchild, Versatile PWM Controller	FAN7554 DIP	01.44.IC.D.7554	1
IC1	IC, Fairchild, Power Switch	KA5L0380RYDTU DIP	01.44.IC.D.5L0380R	1
IC7 IC8	IC, Fairchild, Precision Adjustable Voltage Regulator	KA431AZ DIP	01.44.IC.D.KA431A	2
PH1 PH2	IC, Sharp, Photoelectric Coupler	PC817 DIP	01.44.IC.D.PC817	2
CN2 CN3	Connector	Vertical VH three holes two pins (white)	01.40.CON.DCZ.129	2
CN1	Connector	Vertical VH three holes two pins (orange)	01.40.CON.DCZ.130	1
CN4	Connector	TJC3-3A	01.40.CON.DTJ.006	1
CN5	Connector	TJC3-10A	01.40.CON.DTJ.028	1
CN6	Connector	TJC3-5A	01.40.CON.DTJ.011	1
FU1	Fuse Holder	BLX-2A	01.40.CON.DCZ.131	1
FU1	Fuse	T3.15AL/250V	01.38.FUSE.D.315AL	1
TR1	Transformer	BCK-ER2802S1	01.13.L.R.082	1
TR2	Transformer	BCK-EC4201A	01.13.L.R.081	1

Front Panel Board - Display board (1813C)

Location.No.	Description	Specification	P/N	Qty
3R35	Resistor, chip	0805-4.7KΩ±5%	01.57.R.3.E472J	1
3R1 3R2 3R14	Resistor, chip	0805-10KΩ±5%	01.57.R.3.E103J	3
3R13	Resistor, chip	0805-20KΩ±5%	01.57.R.3.E203J	1
ESD1 ESD2	Zinc oxide varistor, for ESD	AVR-M1608C270MTABB	01.57.R.Y.270	2
3C18	Capacitor,multilayer ceramic, chip	0805-30P NPO±5%/50V	01.54.CS.3.E300N	1
C90 C91	Capacitor,multilayer ceramic, chip	0805-56P NPO±5%/50V	01.54.CS.3.E560N	2
3C4 3C19 3C20	Capacitor,multilayer ceramic, chip	0805-100P NPO±5%/50V	01.54.CS.3.E101N	3
3C21 3C22	Capacitor,multilayer ceramic, chip	0805-473 X7R±10%/50V	01.54.CS.3.E473X	2
3CB1	Capacitor,multilayer ceramic, chip	0805-104 Y5V+80-20%/50V	01.54.CS.3.E104Y	1
3CB5	Capacitor,multilayer ceramic, chip	0805-225 Y5V-20+80%/16V	01.54.CS.3.E225Y	1
FB9 FB10	Bead, chip	0805-220Ω	01.13.L.Z.ESB220	2
FB5	Bead, chip	0805-50Ω	01.13.L.Z.ESB50	1
FB11	Inductance, chip	0805-10UH	01.13.L.L.S.E007	1
3C5	Capacitor, AL.electrolytic	CD11X-100UF/16V 6.3*7	01.34.CL.D.EX100U16VB	1
3D12	Diode	LL4148 SMD	01.41.D.PS.LL4148	1
3Q2	Transistor	KTC8050 SMD	01.42.Q.S.8050	1
3Q1	Transistor	S8550 SMD	01.42.Q.S.8550	1
3U2	IC, Sanyo, VFD driver	LC75710	01.44.IC.S.75710	1
3IR1	IR receiver	HL38B17, DIP	01.44.IC.D.38B17	1
VFD	VFD	VFD22-1301F	01.16.1301F	1
3J5	Headpnone jack	CKX-3.5-12	01.40.CON.DCZ.219	1
3J3	Connector	PH-5A	01.40.CON.DPH.023	1
3J10	Connector	PH-7A	01.40.CON.DPH.031	1
3J11 3J12	Connector	PH-9A	01.40.CON.DPH.041	2

Front Panel Board - Volume board (1814C)

Location.No.	Description	Specification	P/N	Qty
3R15 3R21	Resistor, chip	0805-0Ω ±5%	01.57.R.3.E000J	2
3R17 3R19	Resistor, chip	0805-100Ω±5%	01.57.R.3.E101J	2
3R6 3R28 3R29 3R30	Resistor, chip	0805-300Ω±5%	01.57.R.3.E301J	4
3R24	Resistor, chip	0805-2.2KΩ±5%	01.57.R.3.E222J	1
3R20 3R22 3R23	Resistor, chip	0805-10KΩ±5%	01.57.R.3.E103J	3
3R18	Resistor, chip	0805-100KΩ±5%	01.57.R.3.E104J	1
3CB8	Capacitor,multilayer ceramic, chip	0805-123 X7R±10%/50V	01.54.CS.3.E123X	1
3CB4	Capacitor,multilayer ceramic, chip	0805-104 Y5V+80-20%/50V	01.54.CS.3.E104Y	1
3CB7	Capacitor,multilayer ceramic, chip	0805-105 Y5V-20+80%/16V	01.54.CS.3.E105Y	1
3C3	Capacitor, AL.electrolytic	CD11X-47UF/10V 4*7	01.34.CL.D.E47U10V2B	1
3C1 3C8 3C9 3C10 3C11 3C12 3C14 3C15	Capacitor, AL.electrolytic	CD11X-22UF/35V 5*7(105□)	01.34.CL.D.E22U35VB	8
3C6 3C7	Capacitor, AL.electrolytic	CD110-100UF/35V 6.3*12	01.34.CL.D.E100U35VD	2
3C13	Capacitor, AL.electrolytic	CD11X-22UF/50V 6.3*7	01.34.CL.D.E22U50VB	1
3D1 3D2 3D3 3D4 3D5 3D6 3D7 3D8 3D10	Diode	LL4148 SMD	01.41.D.PS.LL4148	9
3DZ1	Zener Diode	6.2V	01.41.D.WD.6V2	1
3U3	IC, NS, Vacuum Fluorescent Display Filament Driver	LM9022, 8P, SO8	01.44.IC.S.9022	1
CON1	Volume encoder	ED1612-24-24HC-F20(Z)	01.36.VR.20K	1
3LD1 3LD2 3LD3 3LD4	Diode, color is blue	HFBA65018CP Φ5	01.41.D.FD.65018	4
3J9	Connector	PH-7A	01.40.CON.DPH.031	1

Front Panel Board - Button board (1815C)

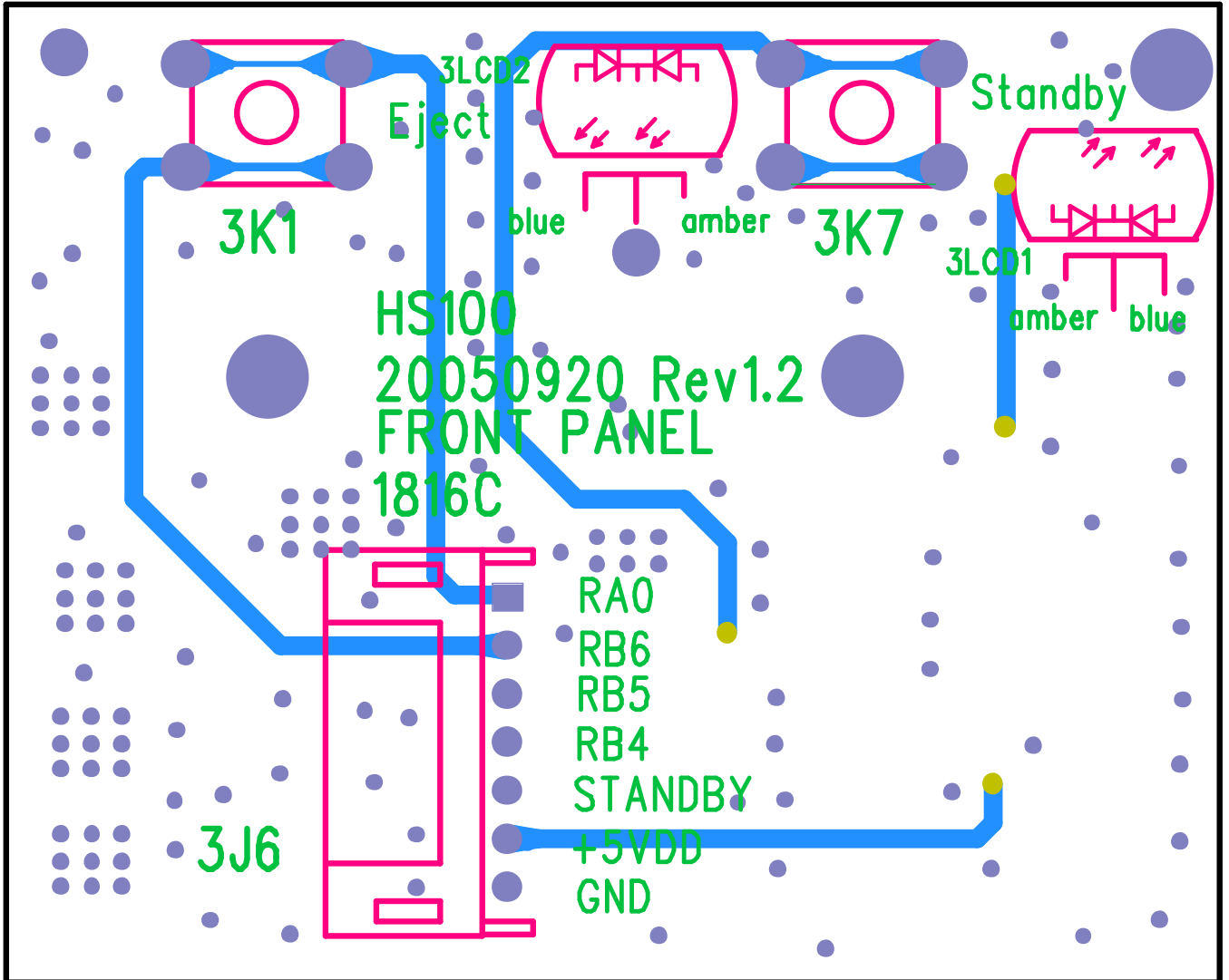
Location.No.	Description	Specification	P/N	Qty
3R38	Resistor, chip	0805-100Ω±5%	01.57.R.3.E101J	1
3R7	Resistor, chip	0805-470Ω±5%	01.57.R.3.E471J	1
3R4	Resistor, chip	0805-1KΩ±5%	01.57.R.3.E102J	1
3R3 3R25 3R26 3R27 3R31 3R34 3R36	Resistor, chip	0805-4.7KΩ±5%	01.57.R.3.E472J	7
3R5	Resistor, chip	0805-15KΩ±5%	01.57.R.3.E153J	1
3C16 3C17	Capacitor,multilayer ceramic, chip	0805-22P NPO±5%/50V	01.54.CS.3.E220N	2

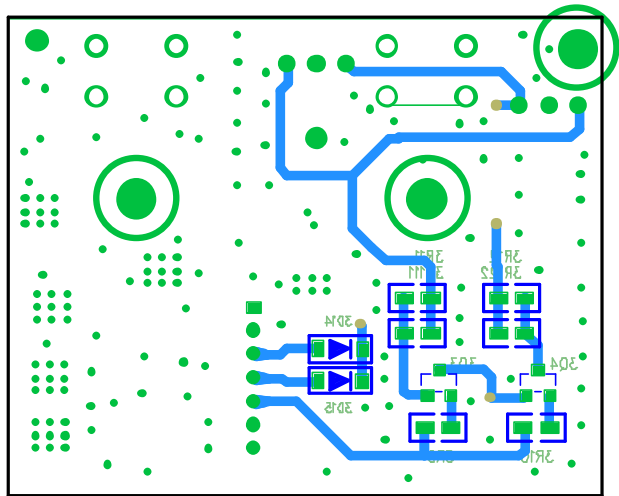
Front Panel Board - Button board (1815C)

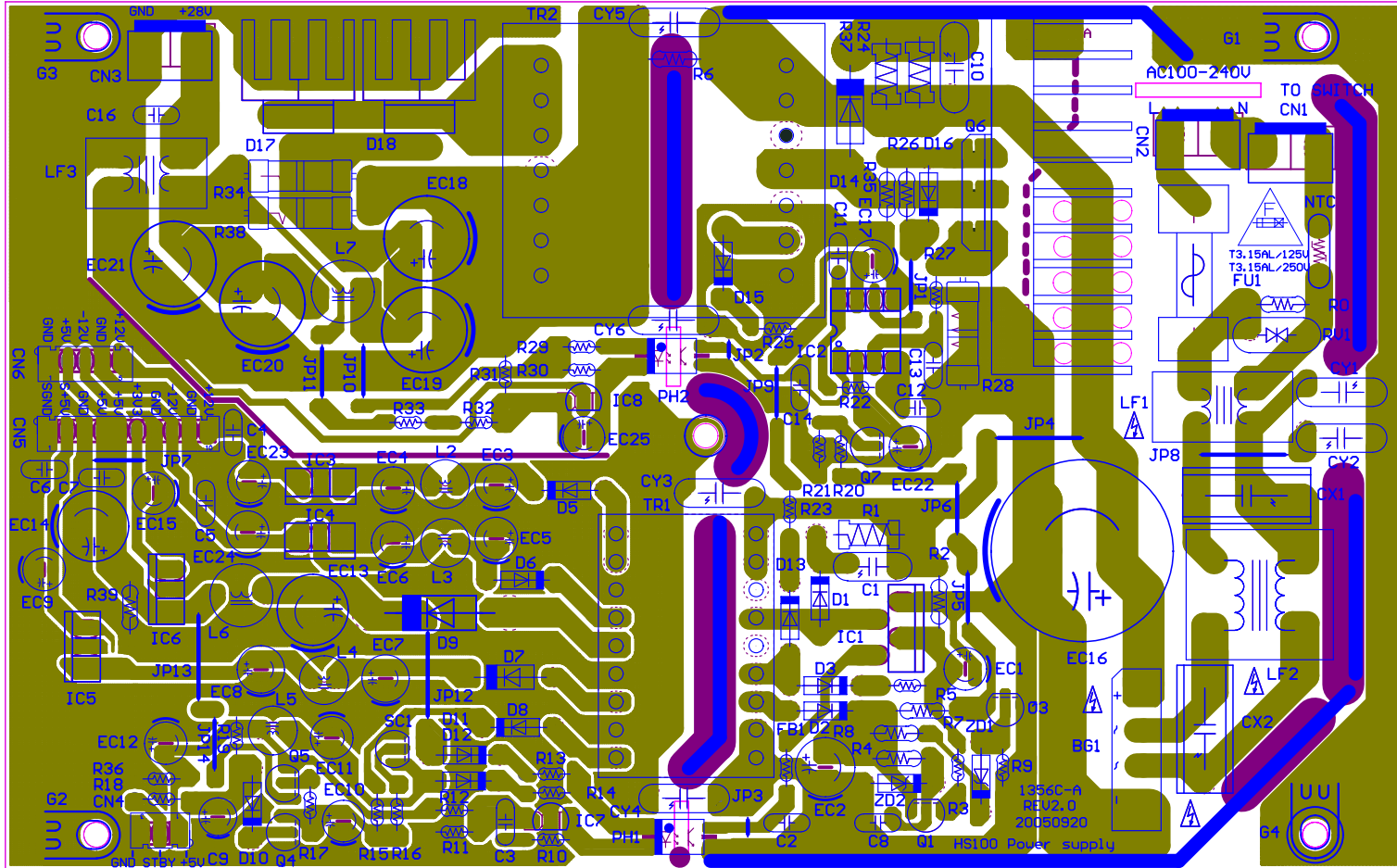
Location.No.	Description	Specification	P/N	Qty
3C23 3C24	Capacitor,multilayer ceramic, chip	0805-820P NPO±5%/50V	01.54.CS.3.E821N	2
3CB3 3CB6	Capacitor,multilayer ceramic, chip	0805-104 Y5V+80-20%/50V	01.54.CS.3.E104Y	2
3CB2	Capacitor,multilayer ceramic, chip	0805-225 Y5V-20+80%/16V	01.54.CS.3.E225Y	1
3C2	Capacitor, AL.electrolytic	CD11X-47UF/10V 4*7	01.34.CL.D.E47U10V2B	1
3D9	Diode	LL4148 SMD	01.41.D.PS.LL4148	1
3Q5	Transistor	S8550 SMD	01.42.Q.S.8550	1
3Y1	Fundamental. Oscillator	4.000MHZ-49S-22P	01.00.JZ.E04000	1
3K2 3K3 3K4 3K5 3K6	Touch switch	6*6*5	01.39.SW.QC.D665	5
3U1 (burn-in MCU code)	IC, Microchip, MCU horizontal	PIC16C56A-04/P	01.44.IC.D.16C56A	1
3J7	Connector	PH-7A	01.40.CON.DPH.060	1
3J8	Connector	PH-9A	01.40.CON.DPH.041	1
3J4	Connector	TJC3-3A	01.40.CON.DTJ.006	1

Front Panel Board - St-by board (1816C)

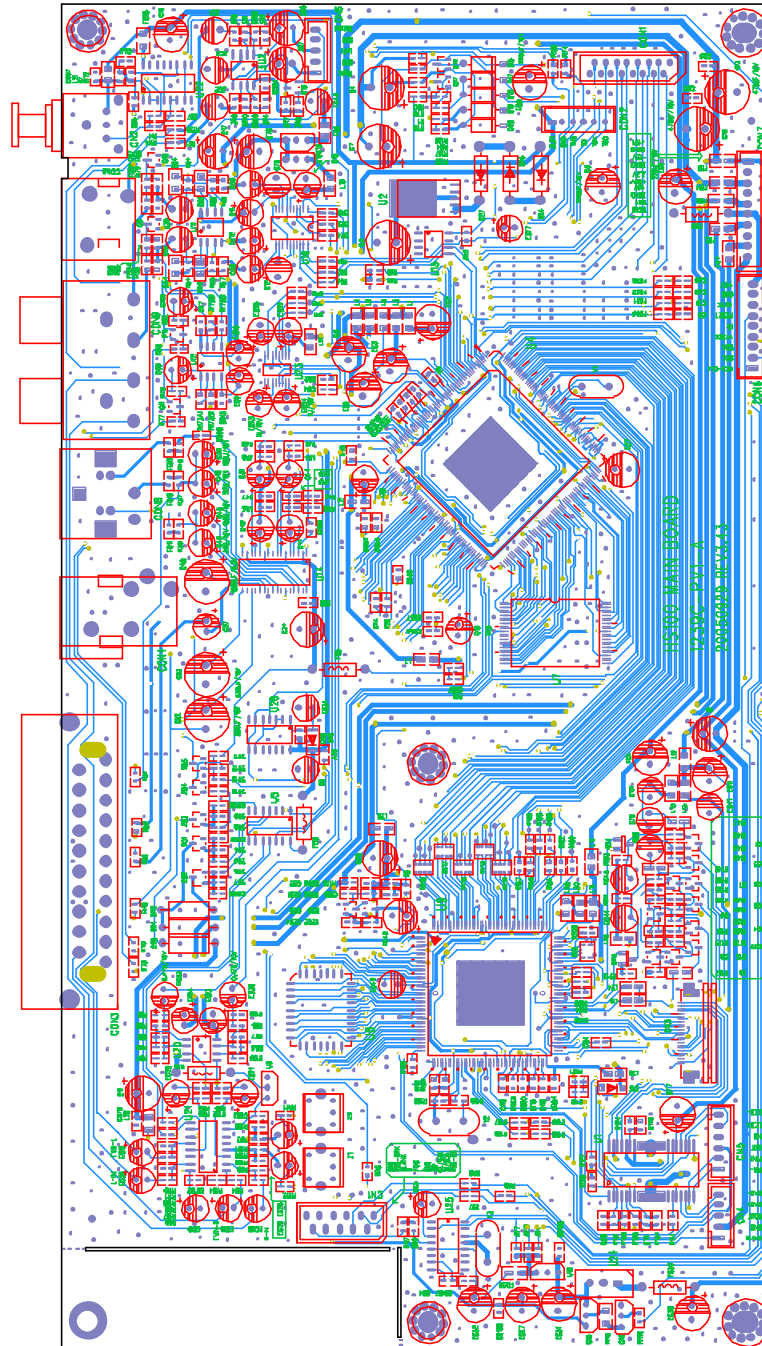
Location.No.	Description	Specification	P/N	Qty
3R11 3R111	Resistor, chip	0805-620Ω±5%	01.57.R.3.E621J	2
3R12 3R122	Resistor, chip	0805-2KΩ±5%	01.57.R.3.E202J	2
3R9 3R10	Resistor, chip	0805-4.7KΩ±5%	01.57.R.3.E472J	2
3D14 3D15	Diode	LL4148 SMD	01.41.D.PS.LL4148	2
3Q3	Transistor	KTC8050 SMD	01.42.Q.S.8050	1
3Q4	Transistor	S8550 SMD	01.42.Q.S.8550	1
3LCD1 3LCD2	Diode, color is blue & orange	HFT503CPB0	01.41.D.FD.503	2
3K1 3K7	Touch switch	6*6*5	01.39.SW.QC.D665	2
3J6	Connector horizontal	PH-7A	01.40.CON.DPH.060	1



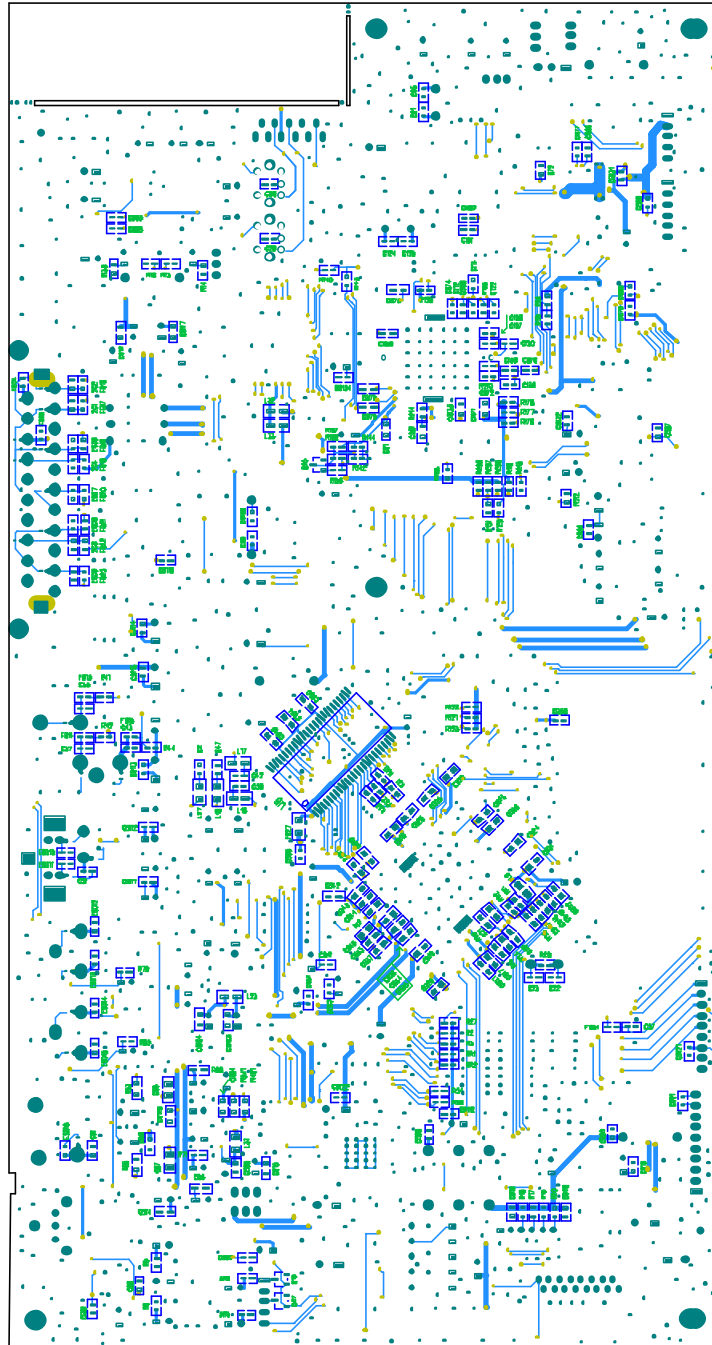




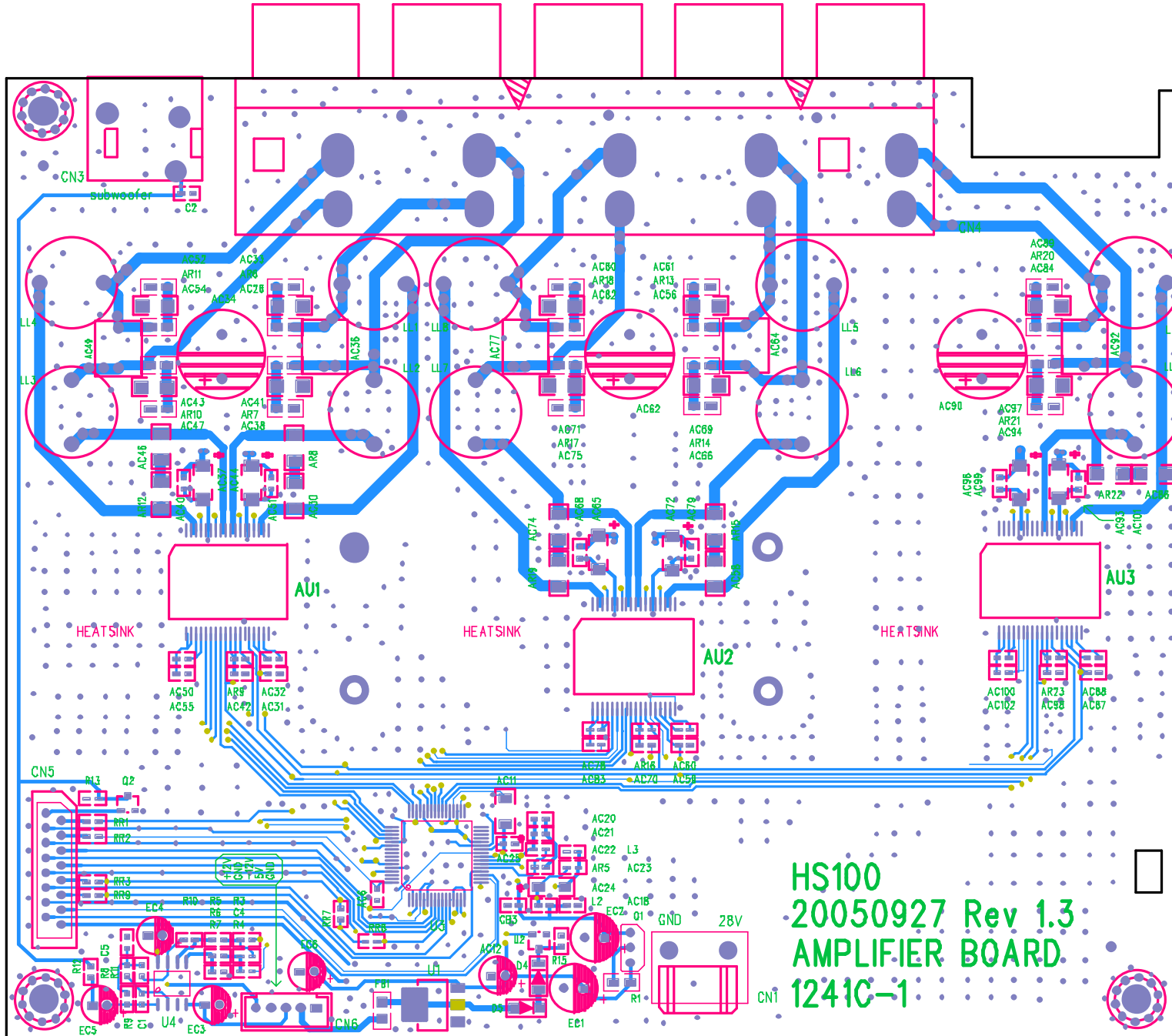
Main



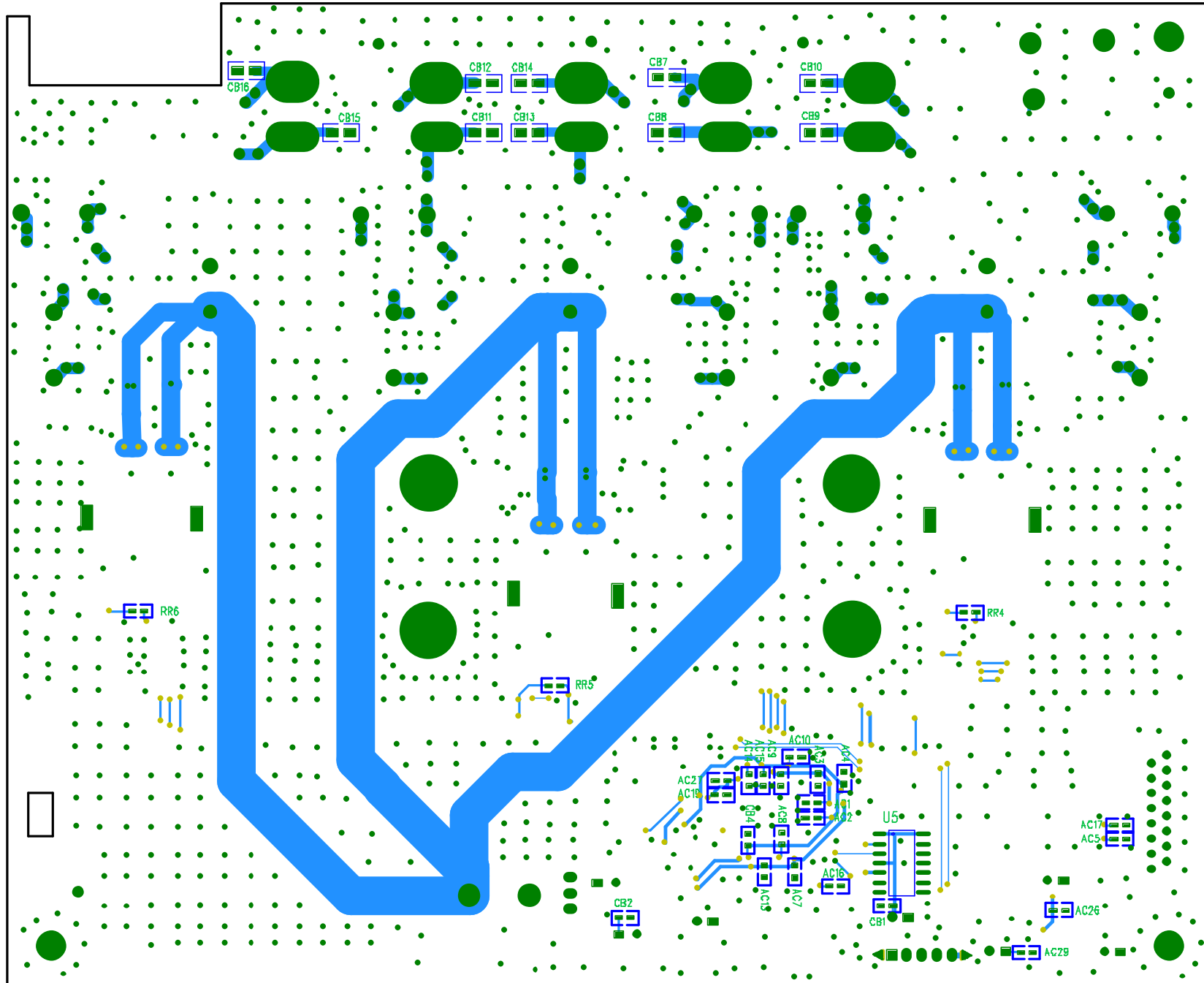
Main



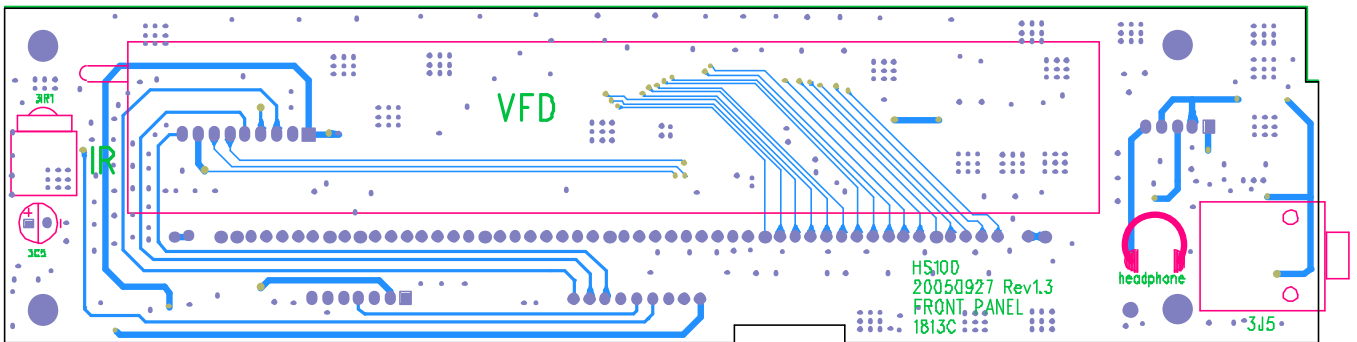
Amp

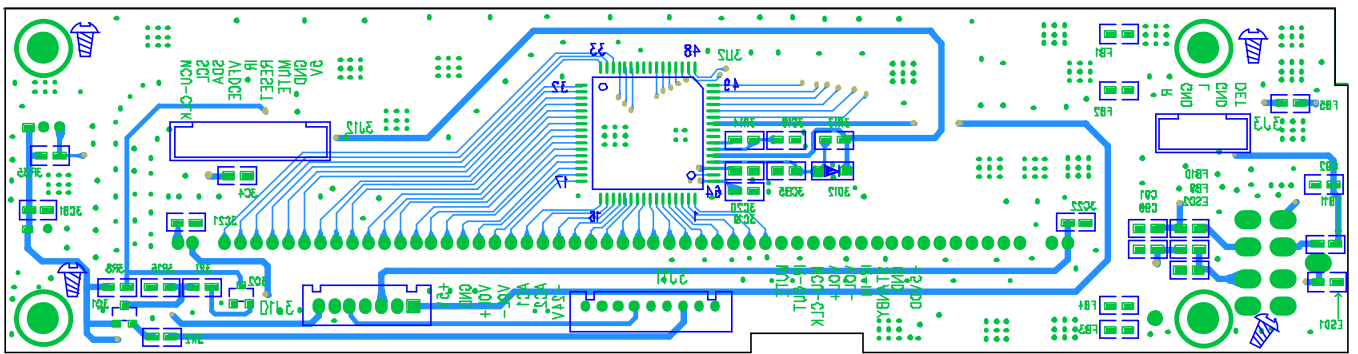


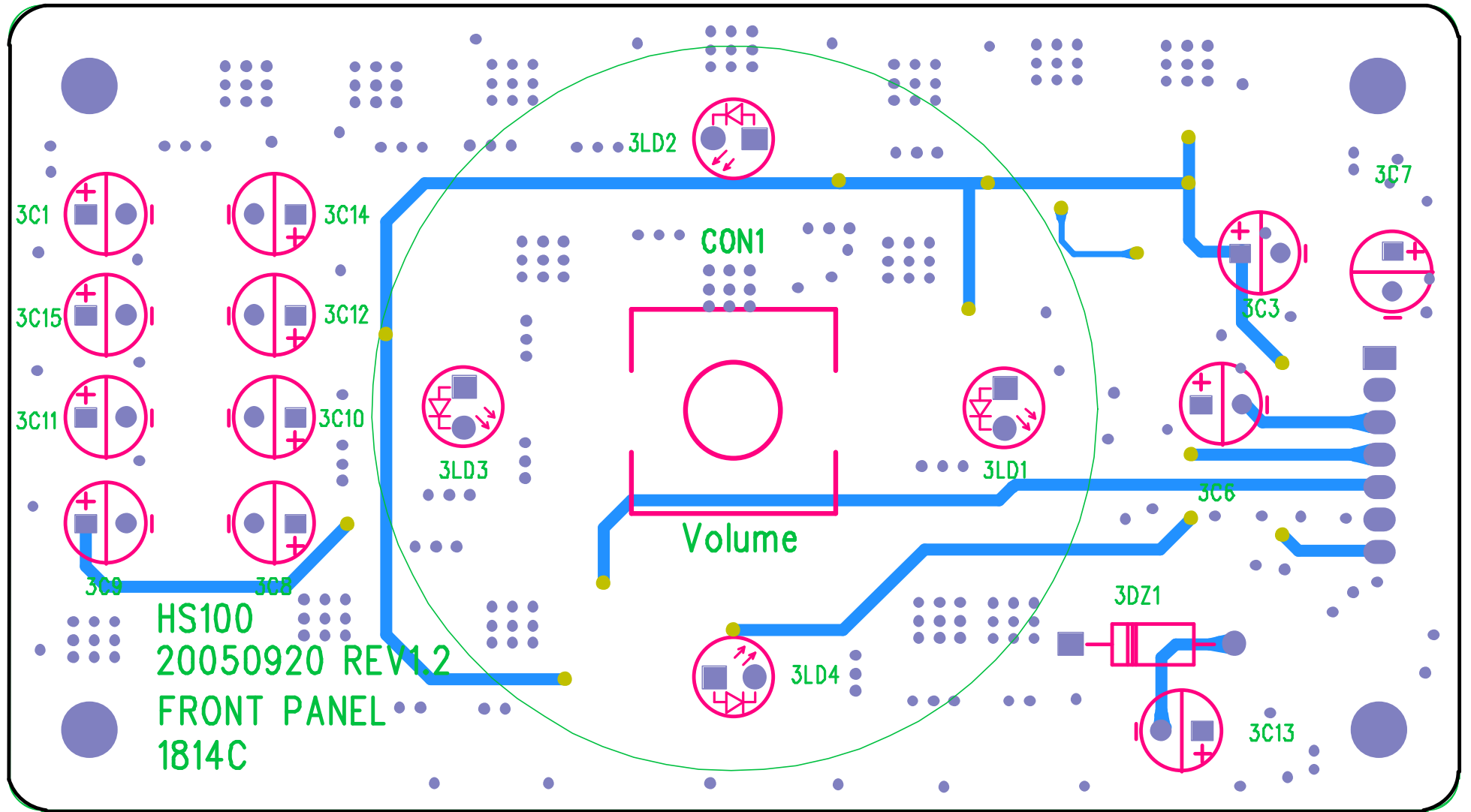
Amp

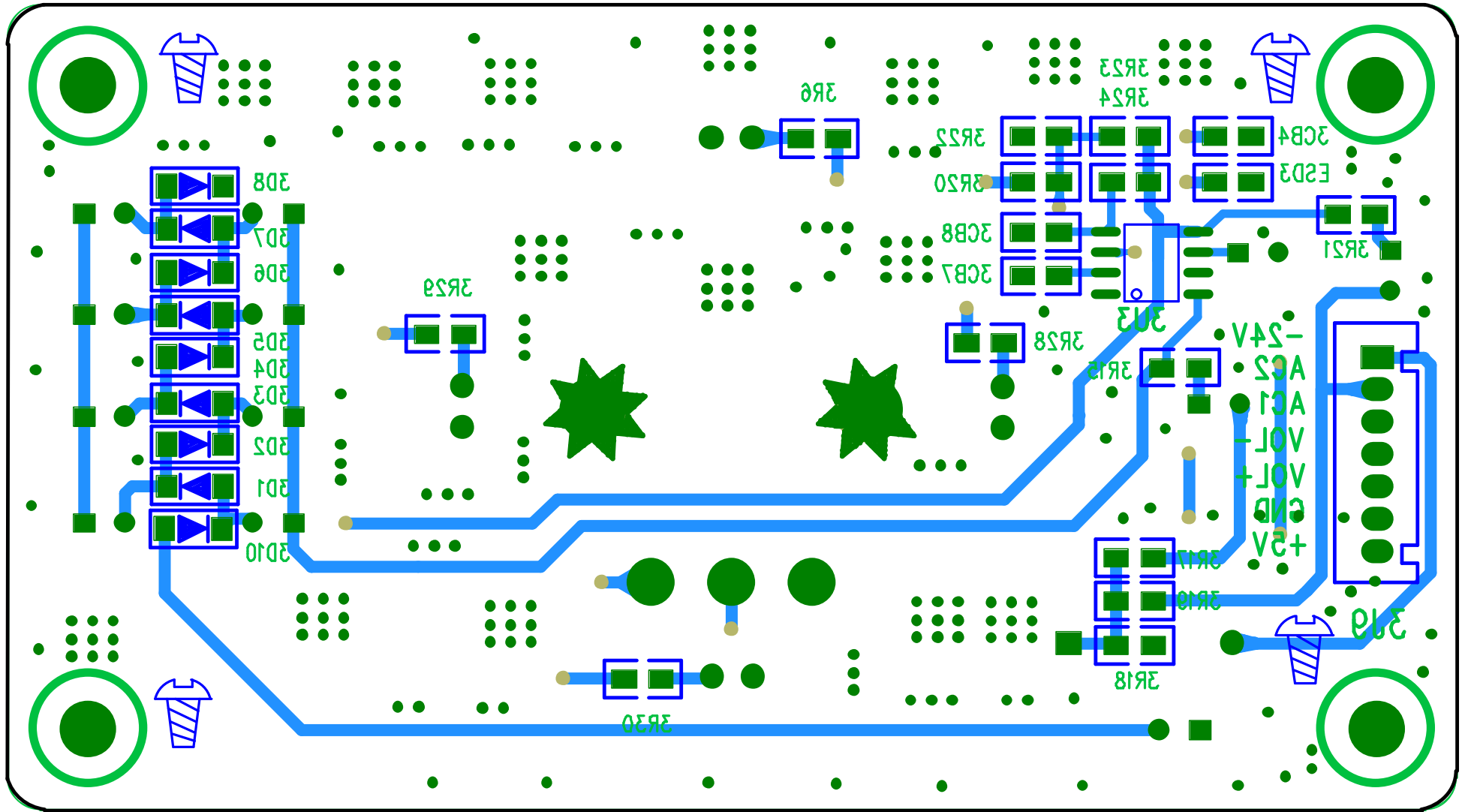


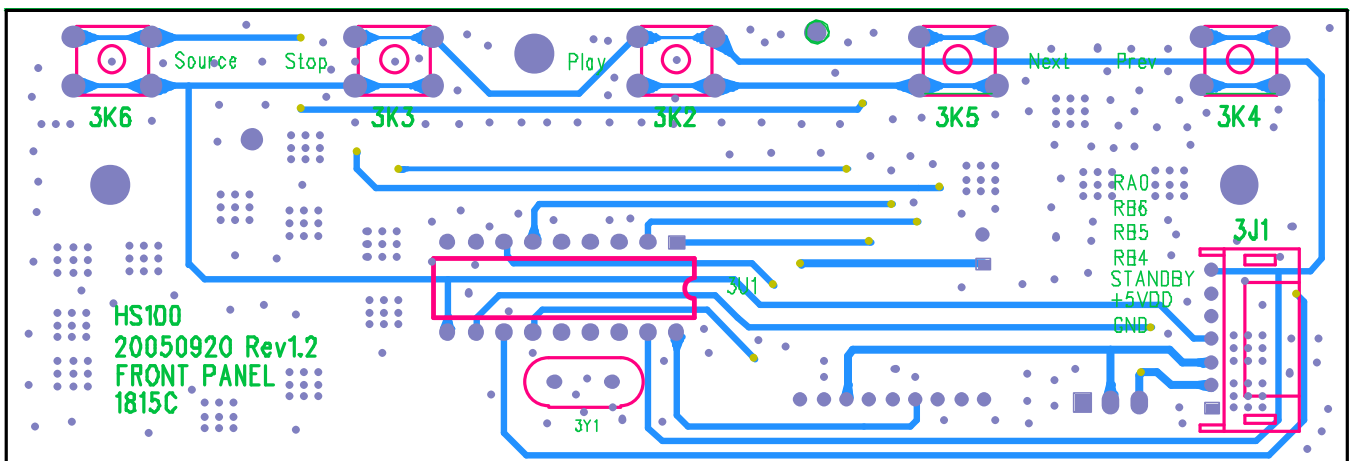
1813C-REV1.2-

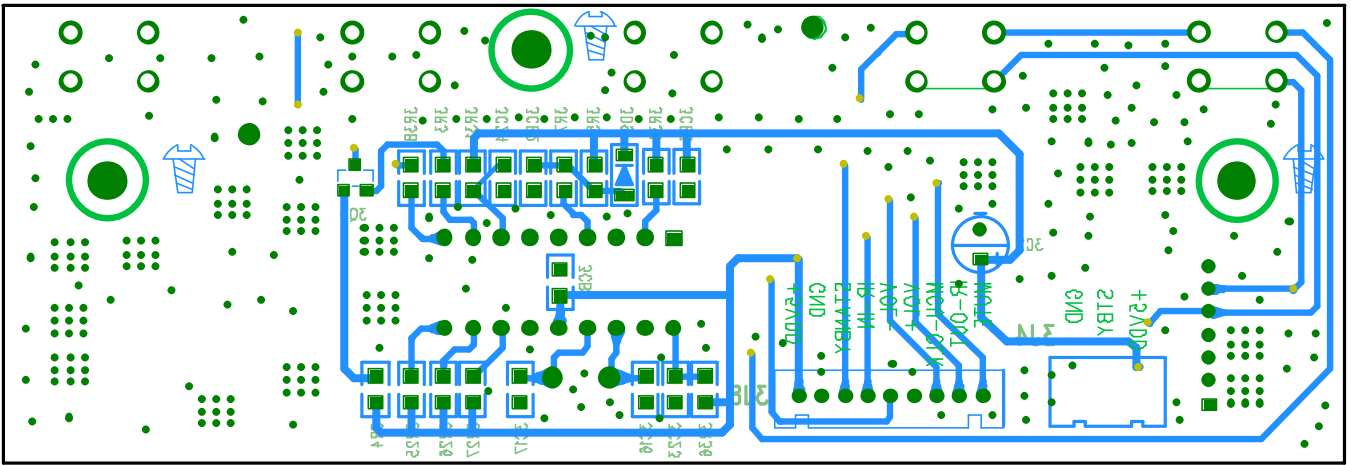


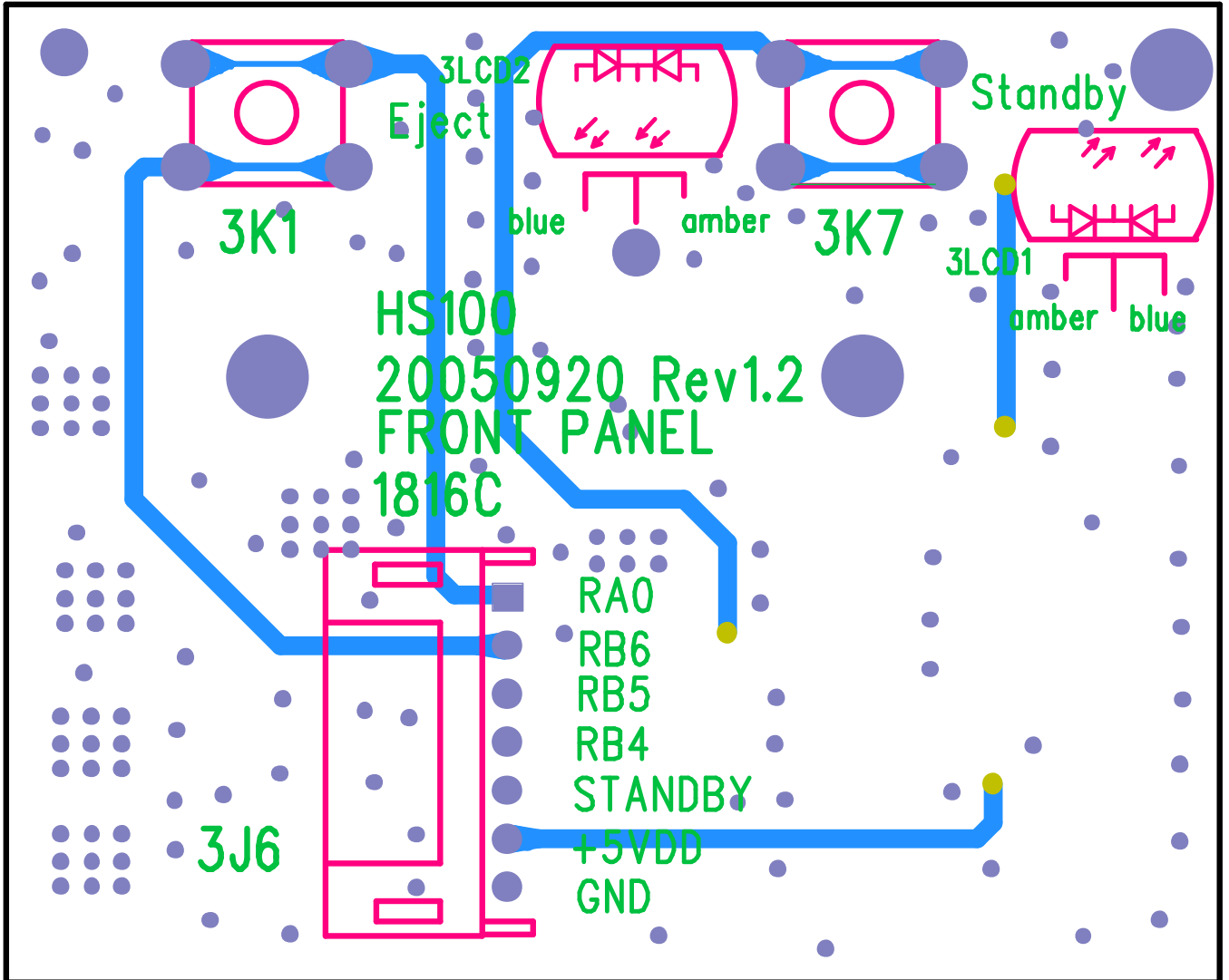




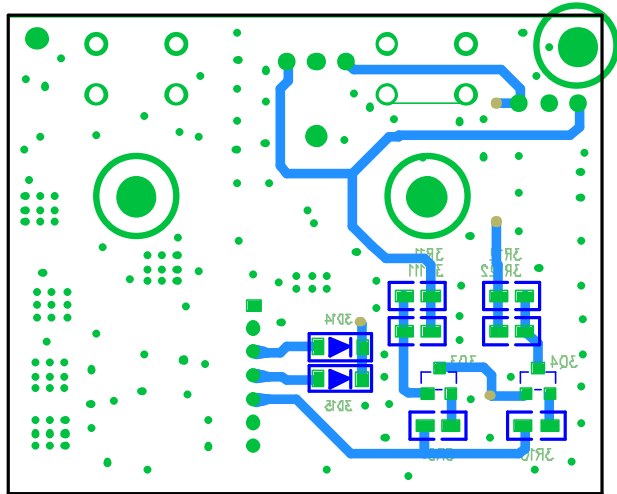




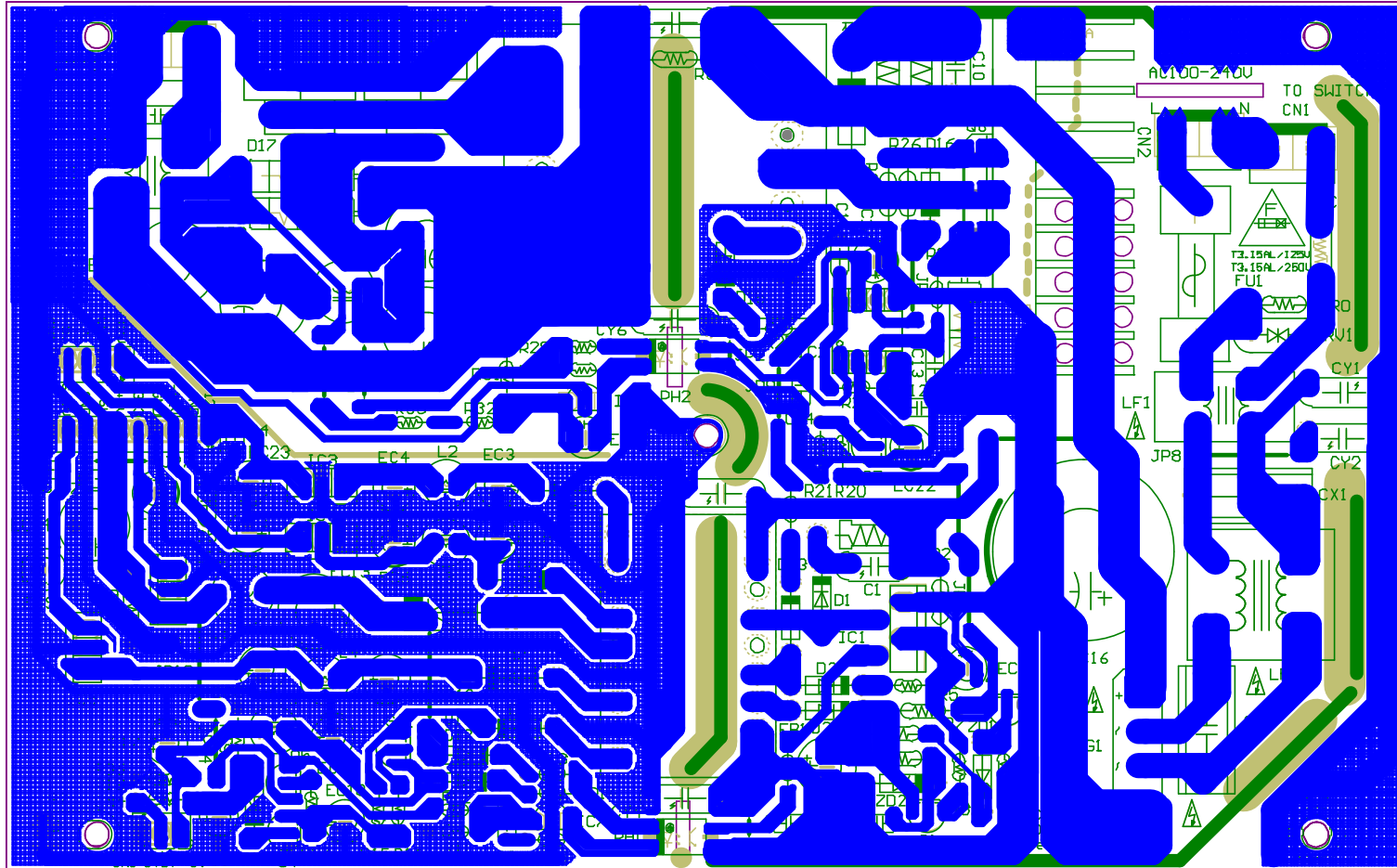




1816C-REV1.1-

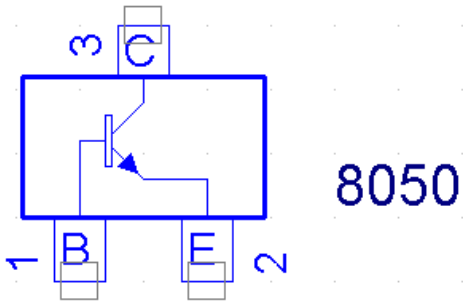


Power supply

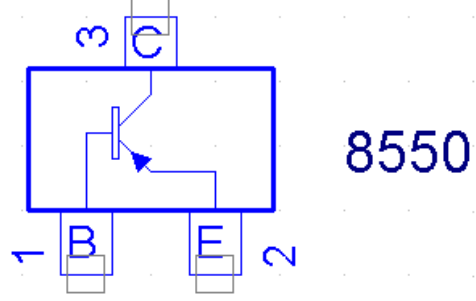


Pinouts for HS 100

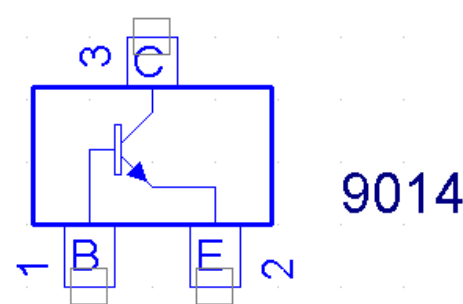
8050, NPN Transistor, SMD



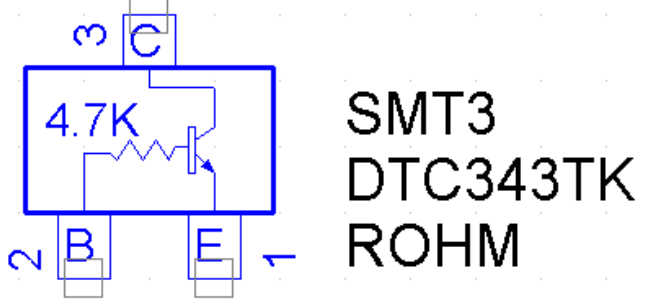
8550, NPN Transistor, SMD



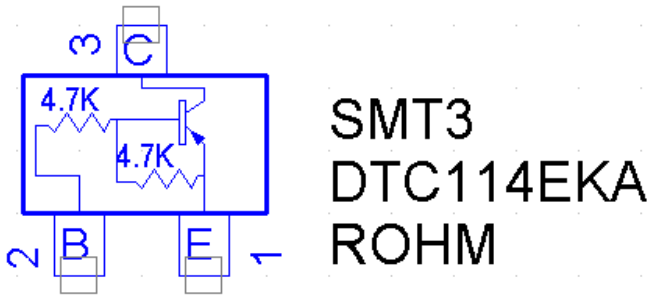
9014, NPN Transistor, SMD



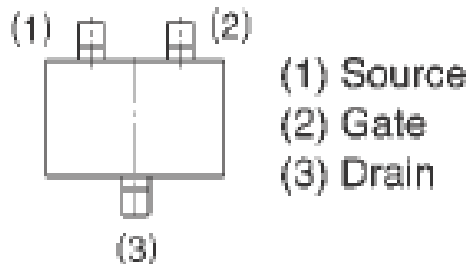
DTC343TK, NPN Transistor, SMD



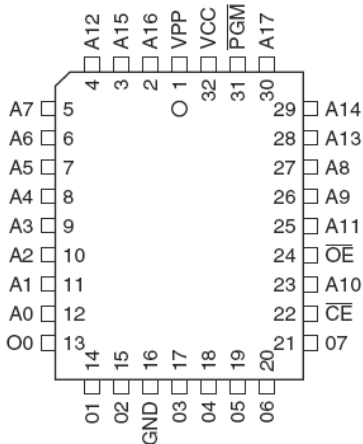
DTC114EKA, PNP Transistor, SMD



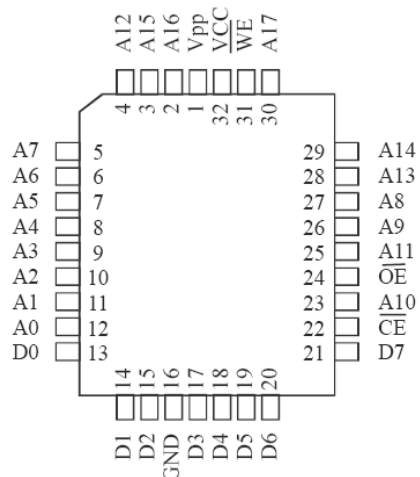
2SK3018, Silicon N-channel MOSFET, SMD



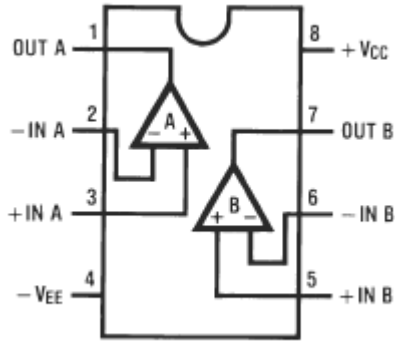
AT27C020-70JC, Servo Memory, SMD



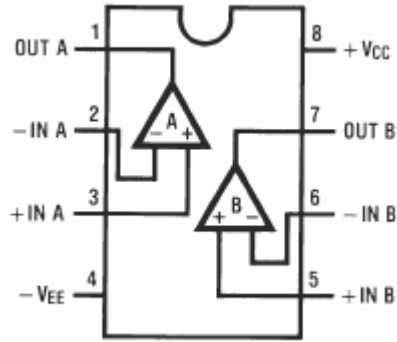
PT28C020P-90, Servo Memory, SMD



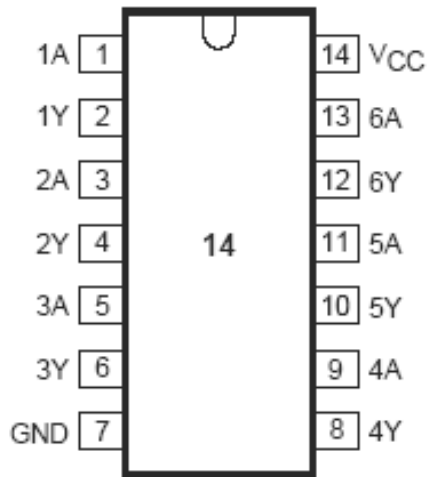
LM833M, pre-amp, SMD



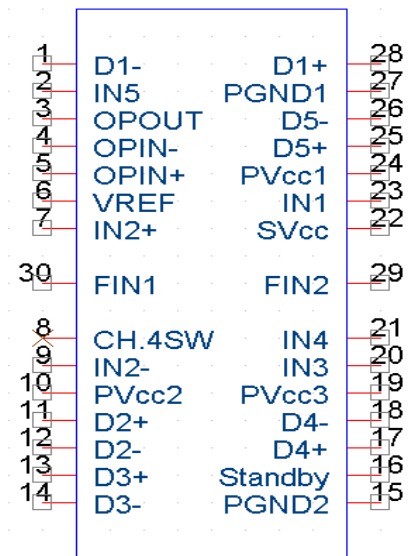
NJM4558, pre-amp, SMD



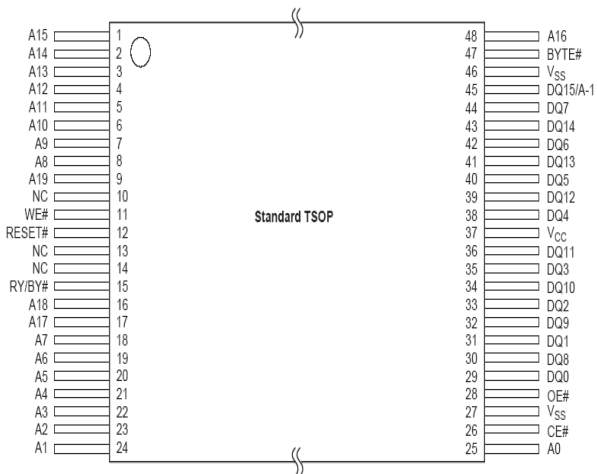
74HCT14, Hex inverting Schmitt trigger, SMD



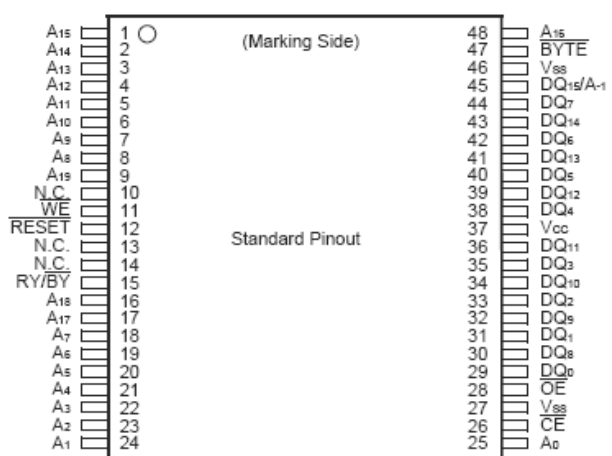
AN8785SB, motor driver, SMD



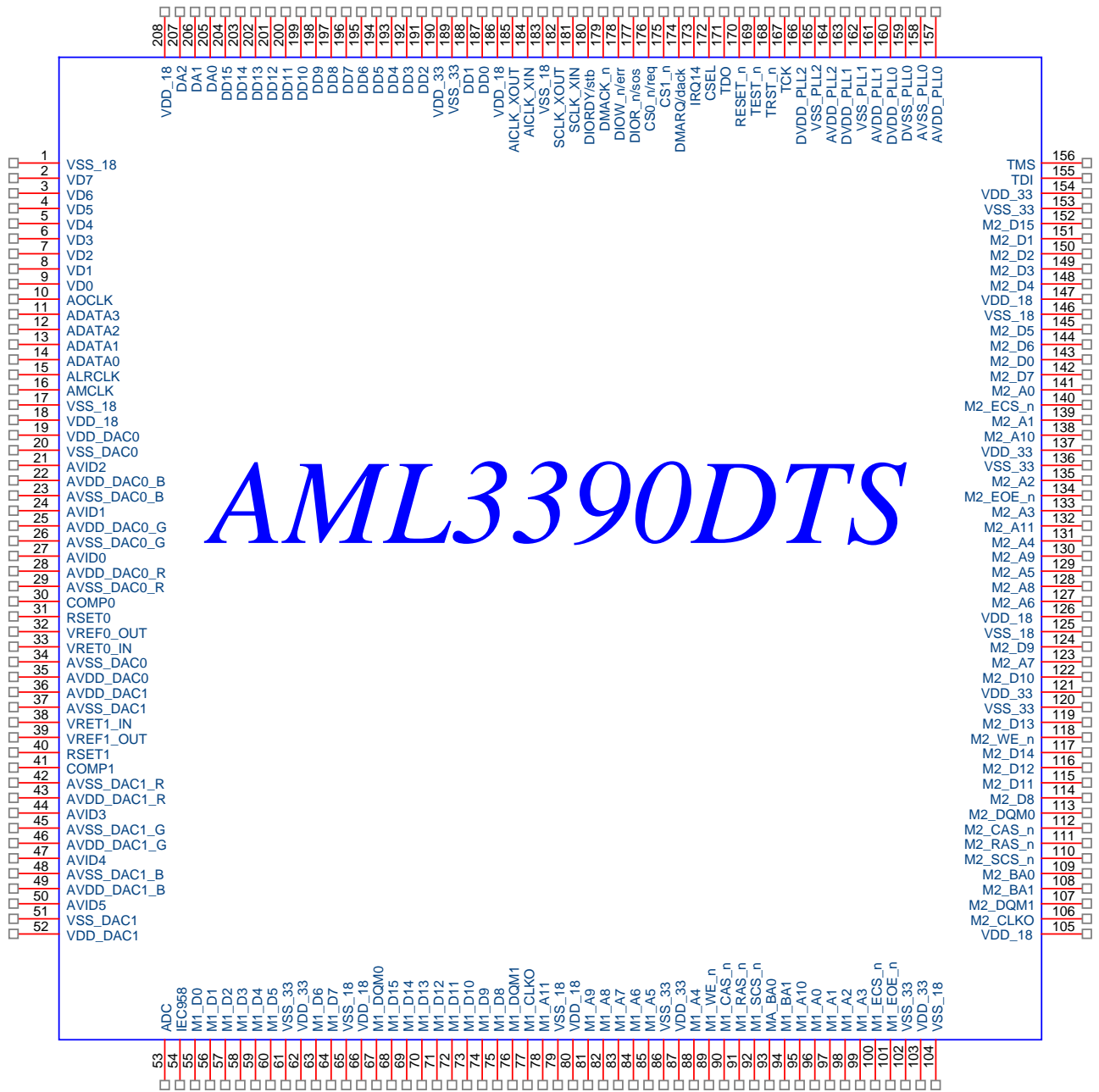
AM29LV160DB-90EC, flash, SMD



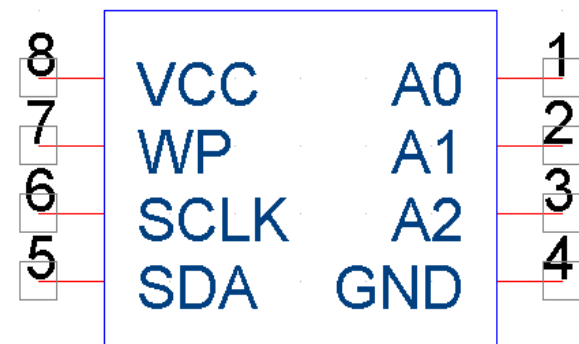
MBM29LV160BE-70P, flash, SMD



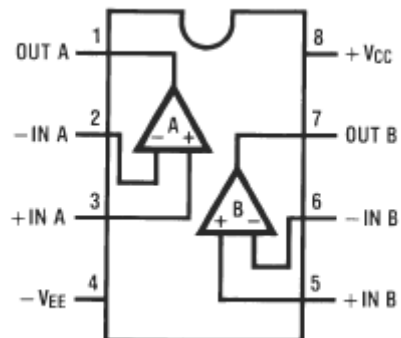
AML3390DTS, decoder, SMD



AT24C64, EEPROM, SMD



OPA2134, pre-amp, SMD



78L05, Voltage Regulator, TO-92



1. Output 2. GND 3. Input

78L12, Voltage Regulator, TO-92



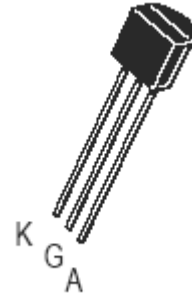
1. Output 2. GND 3. Input

79L05, Voltage Regulator, TO-92



1. GND 2. Input 3. Output

MCR100-6, Silicon controlled rectifiers, TO-92



2N5551, NPN, TO-92



8550, PNP, TO-92



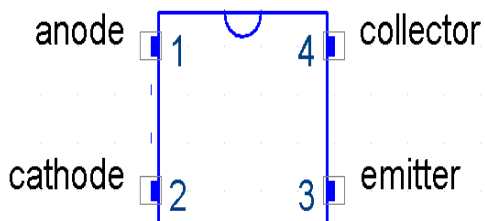
8050, NPN, TO-92



9014, NPN, TO-92

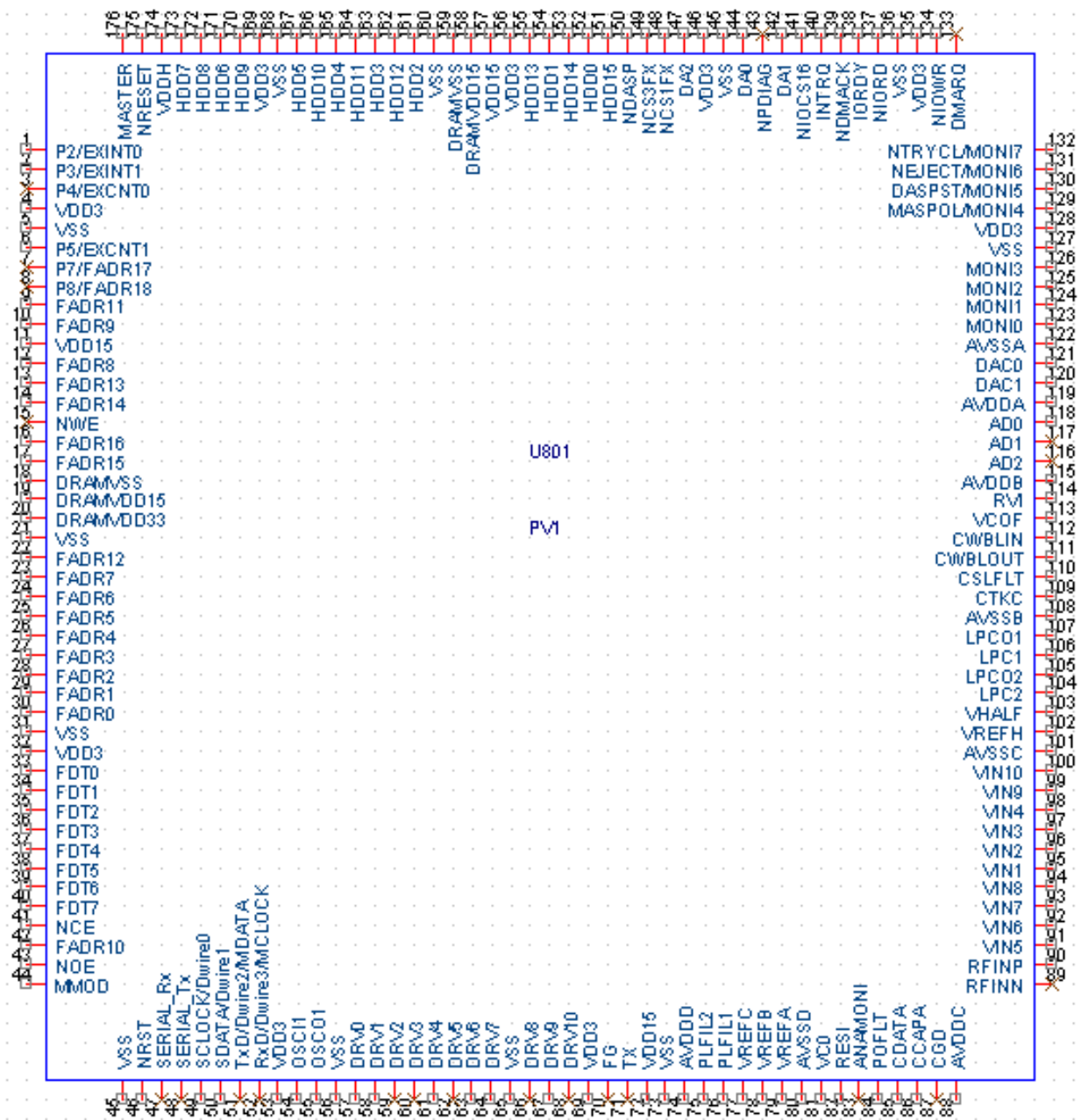


PC817, Photoelectric Coupler, DIP

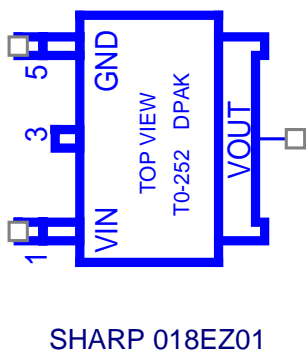


KA431, Precision Adjustable Voltage Regulator, TO-92

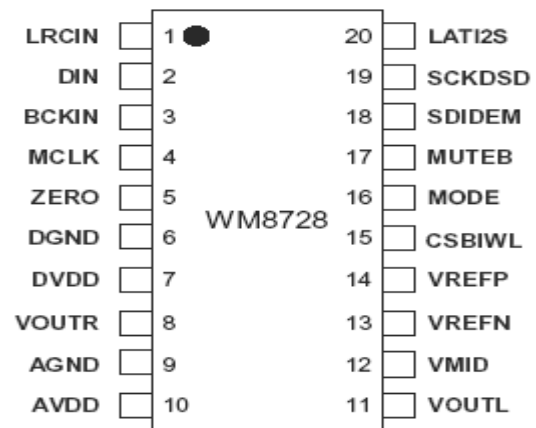




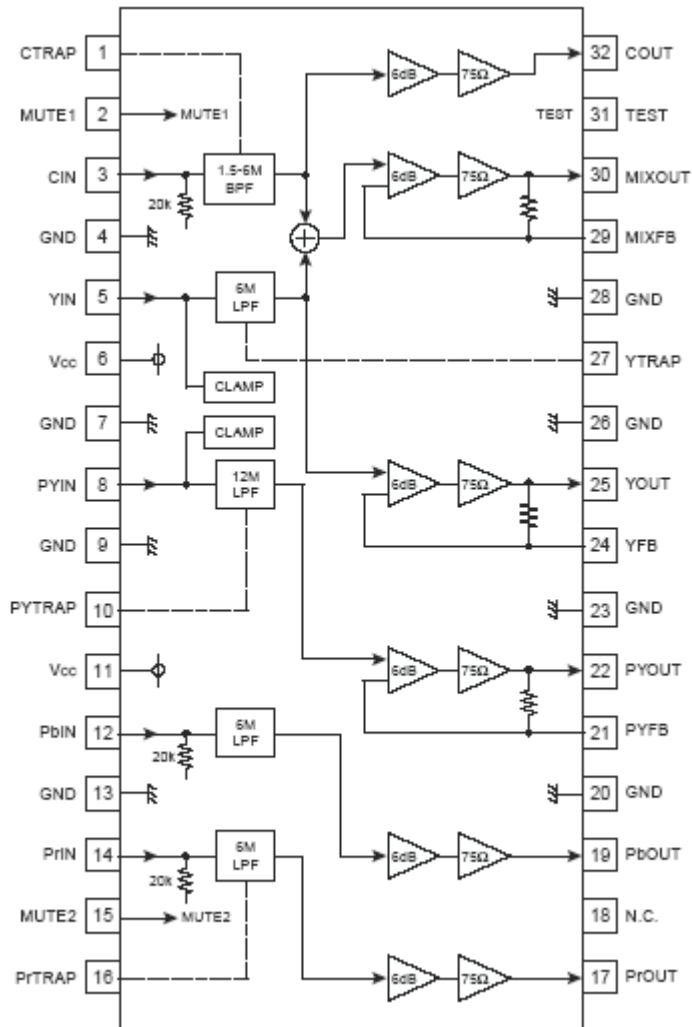
O18EZ01, Voltage Regulator, SMD



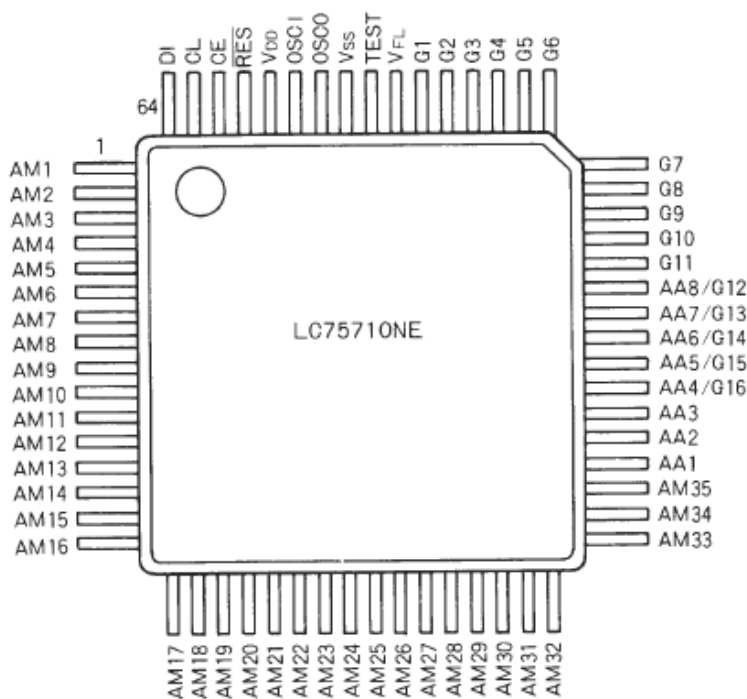
WM8728, Audio DAC, SMD



BH7862FS, Video Buffer, SMD

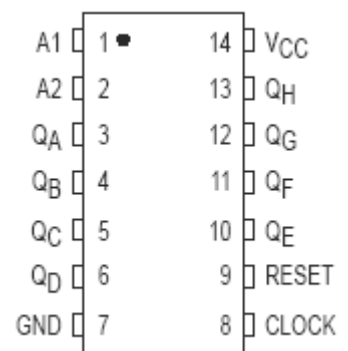


LC75710NE, VFD driver, SMD



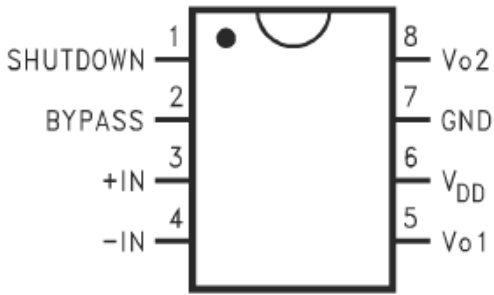
74HC164, SMD

8-bit serial-in/ parallel-out shift register

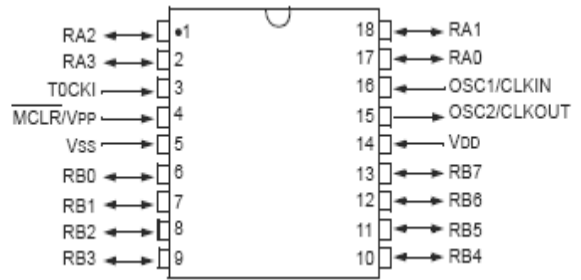


LM9022, SMD

Vacuum Fluorescent Display Filament Driver



PIC16C56A, MCU, DIP



L7809, Voltage Regulator, TO-220



1. Input 2. GND 3. Output

LM7805, Voltage Regulator, TO-220



1. Input 2. GND 3. Output

BA033T, Voltage Regulator, TO-220



1. Input 2. GND 3. Output

BA05T, Voltage Regulator, TO-220



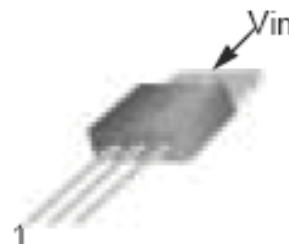
1. Input 2. GND 3. Output

L7812 or LM7812, Voltage Regulator, TO-220



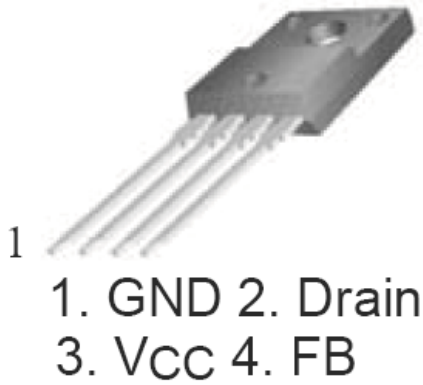
1. Input 2. GND 3. Output

L7912 or LM7912, Voltage Regulator, TO-220

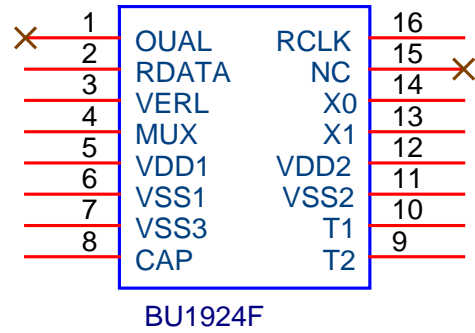


1. GND 2. Input 3. Output

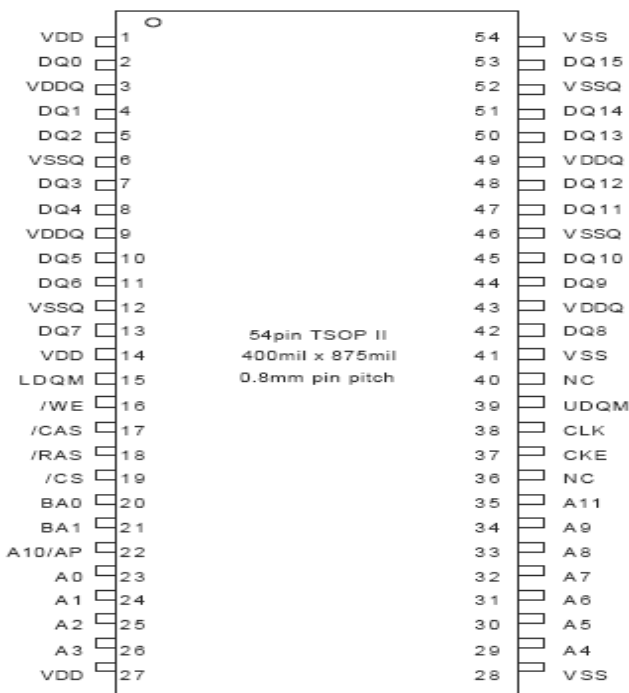
KA5L0380R, Power Switch, In-line Package



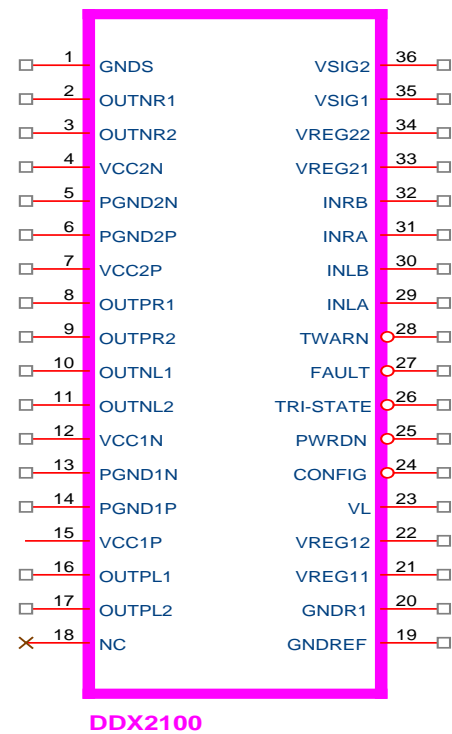
BU1924, RDS decoder, SMD



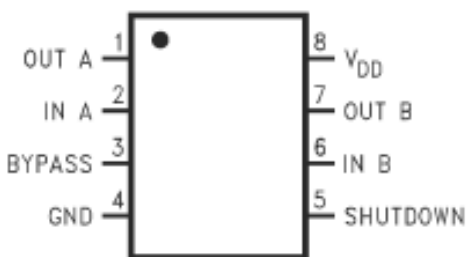
HY57V641620HG, SDRAM, SMD



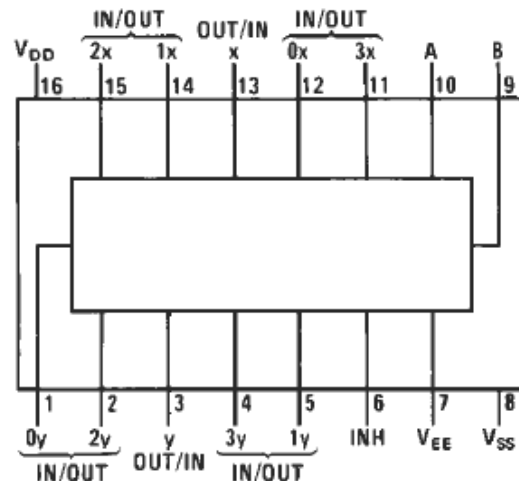
DDX2100, Power Device, SMD



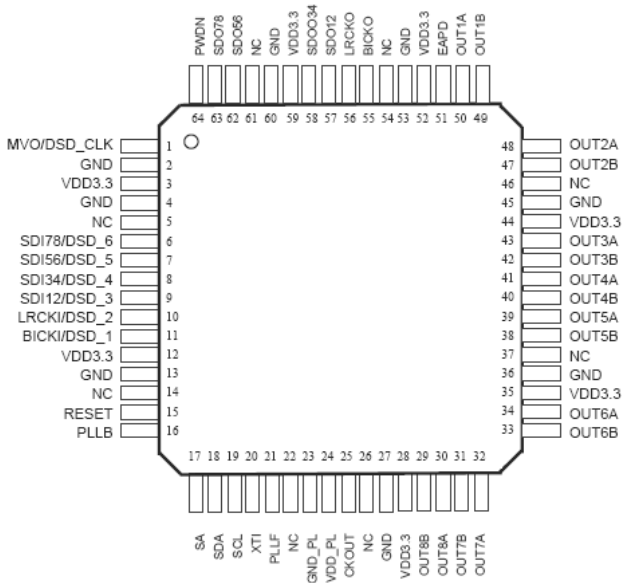
LM4880, Audio Power Amplifier, SMD



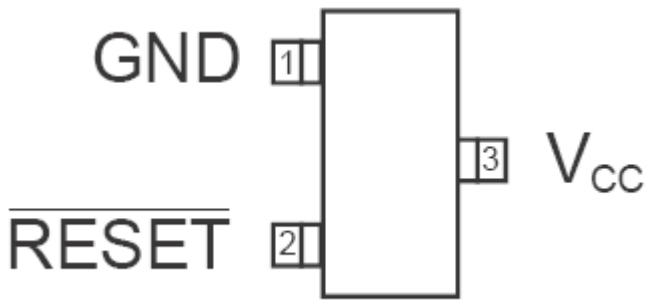
CD4052, Analog Multiplexer, SMD



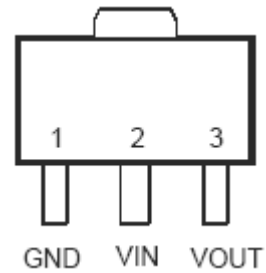
DDX8001, Digital Audio Processor, SMD



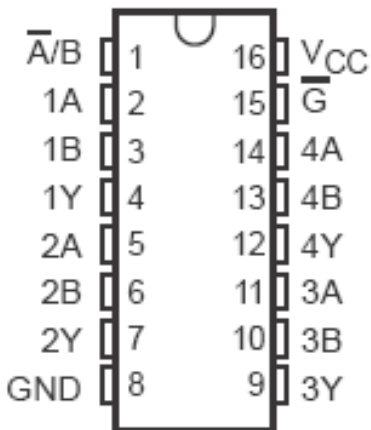
AAT3522IGY-3.08, Microprocessor Reset Circuit, SMD



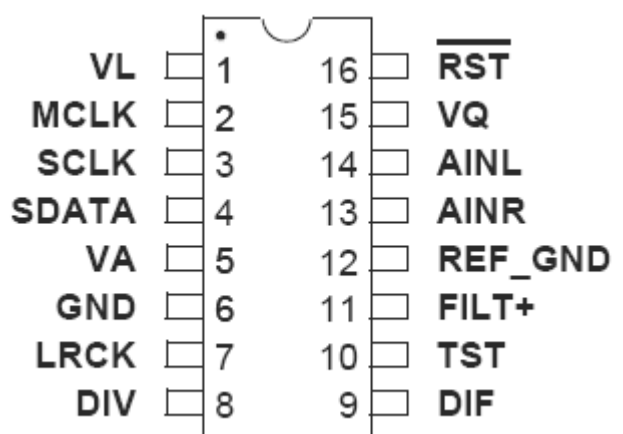
RT9161/A-33, Voltage Regulator, SMD



74HC158, data selectors, SMD



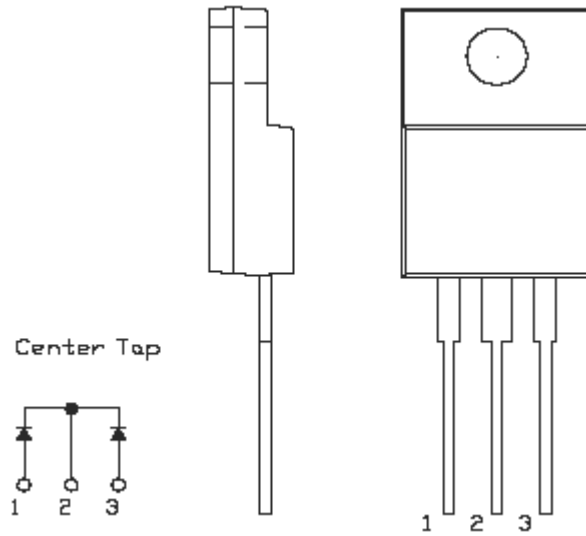
CS5333, A/D Converter, SMD



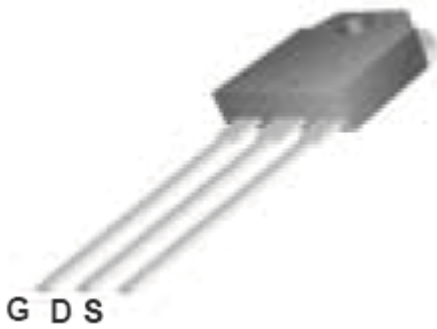
KBU8M, Bridge Rectifiers, In-line Package



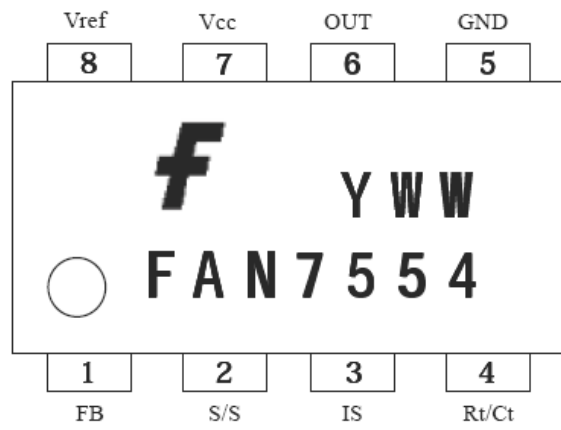
FCH20A20, Schottky diode, In-line Package

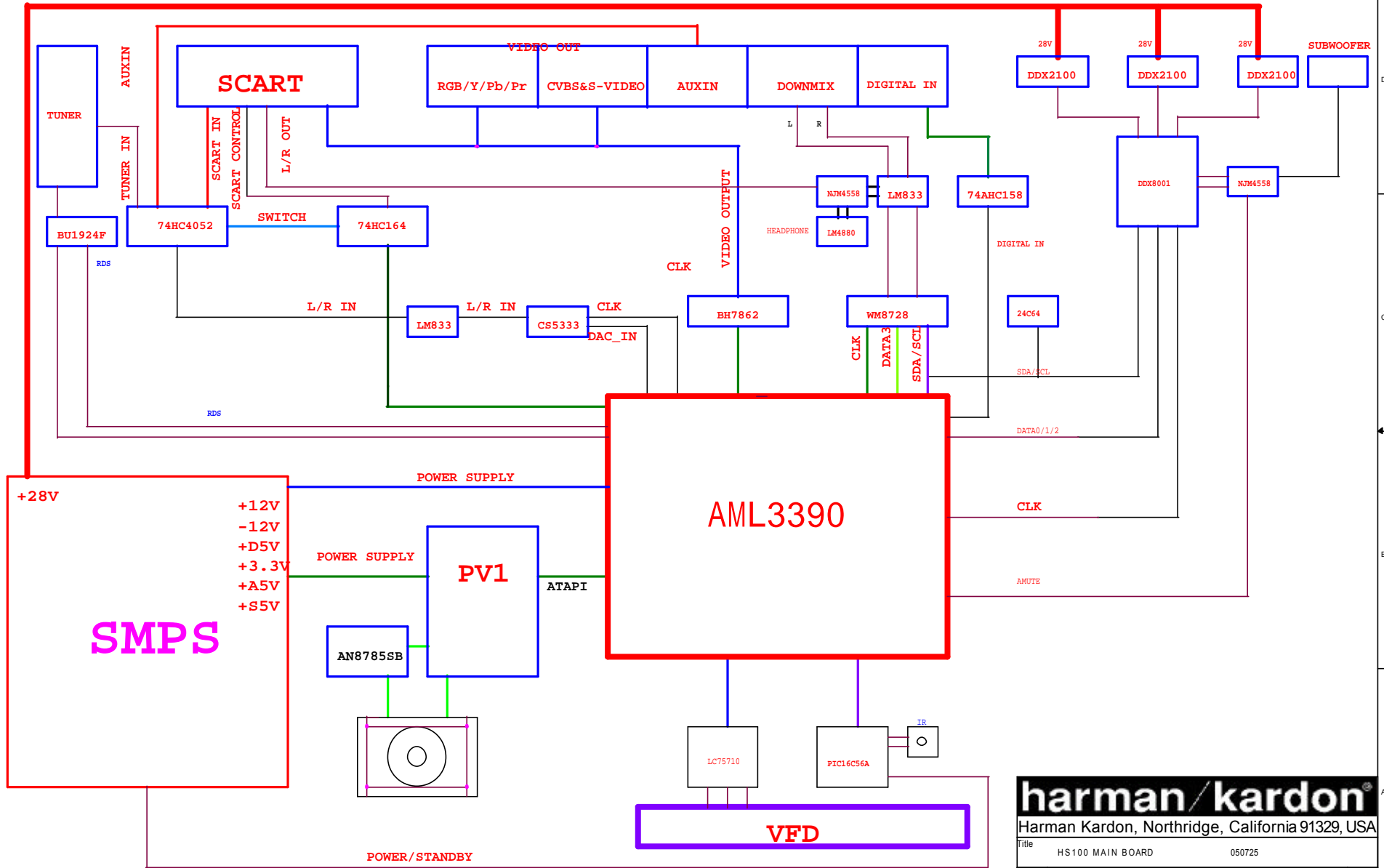


FQA11N90, MOS-FET, In-line Package



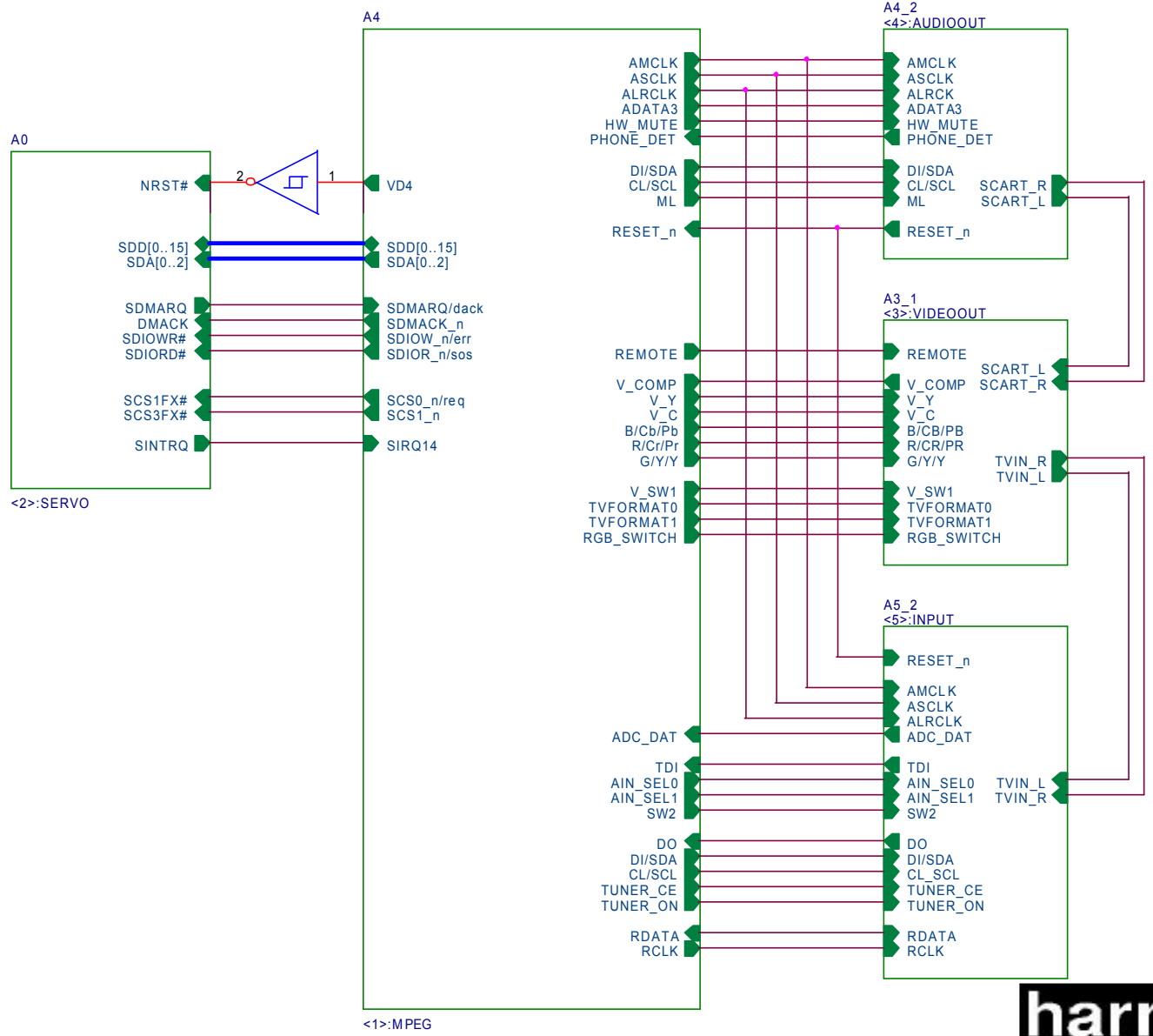
FAN7554, Versatile PWM Controller, DIP





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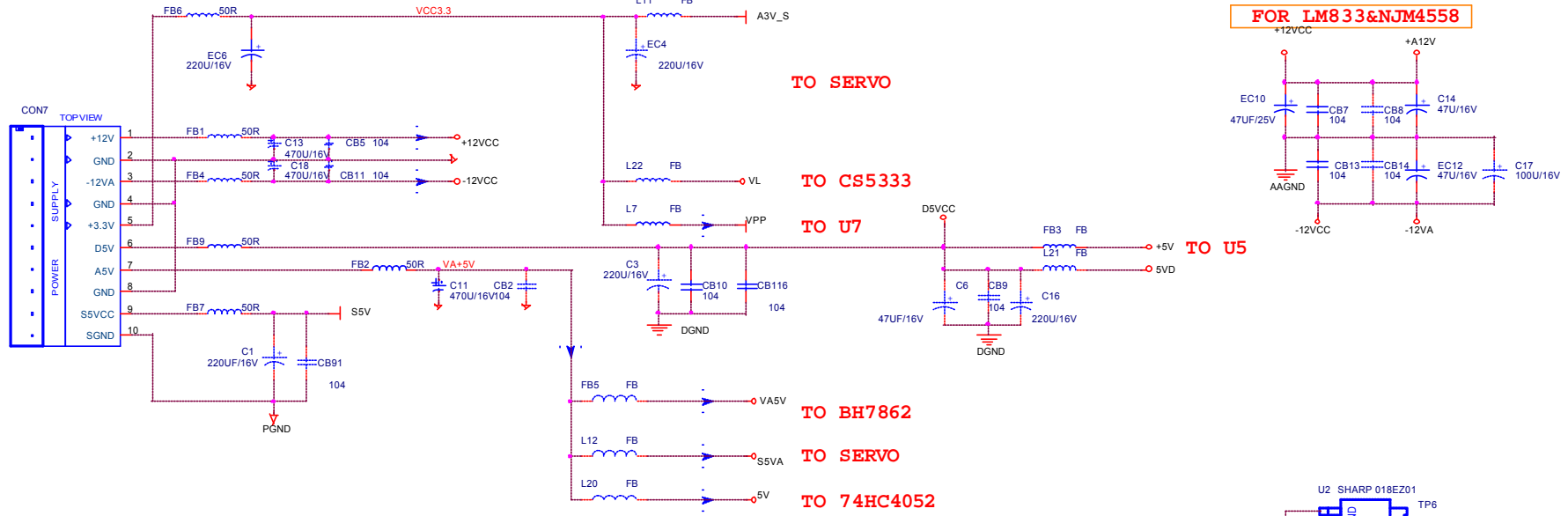
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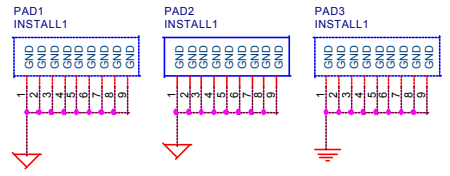
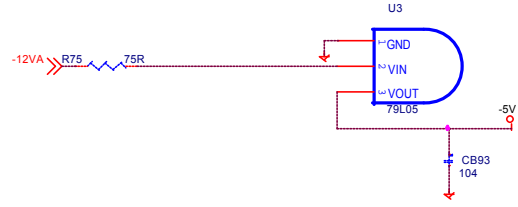
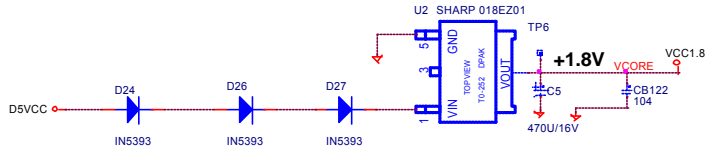
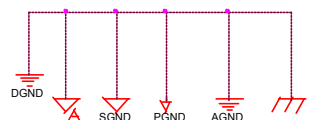
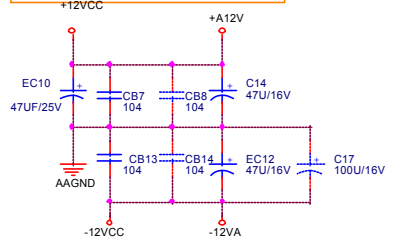
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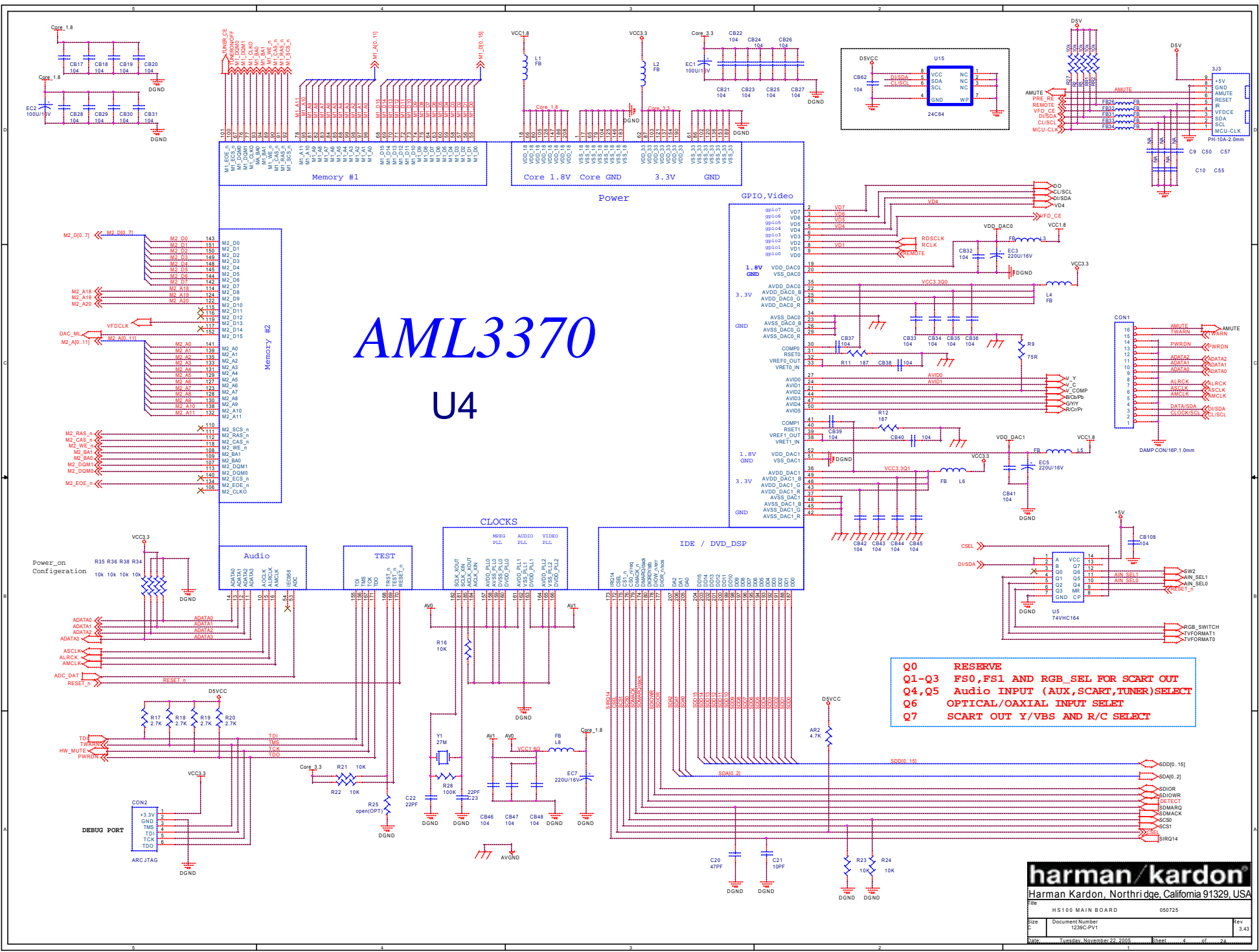
FOR LM833&NJM4558



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AML3370

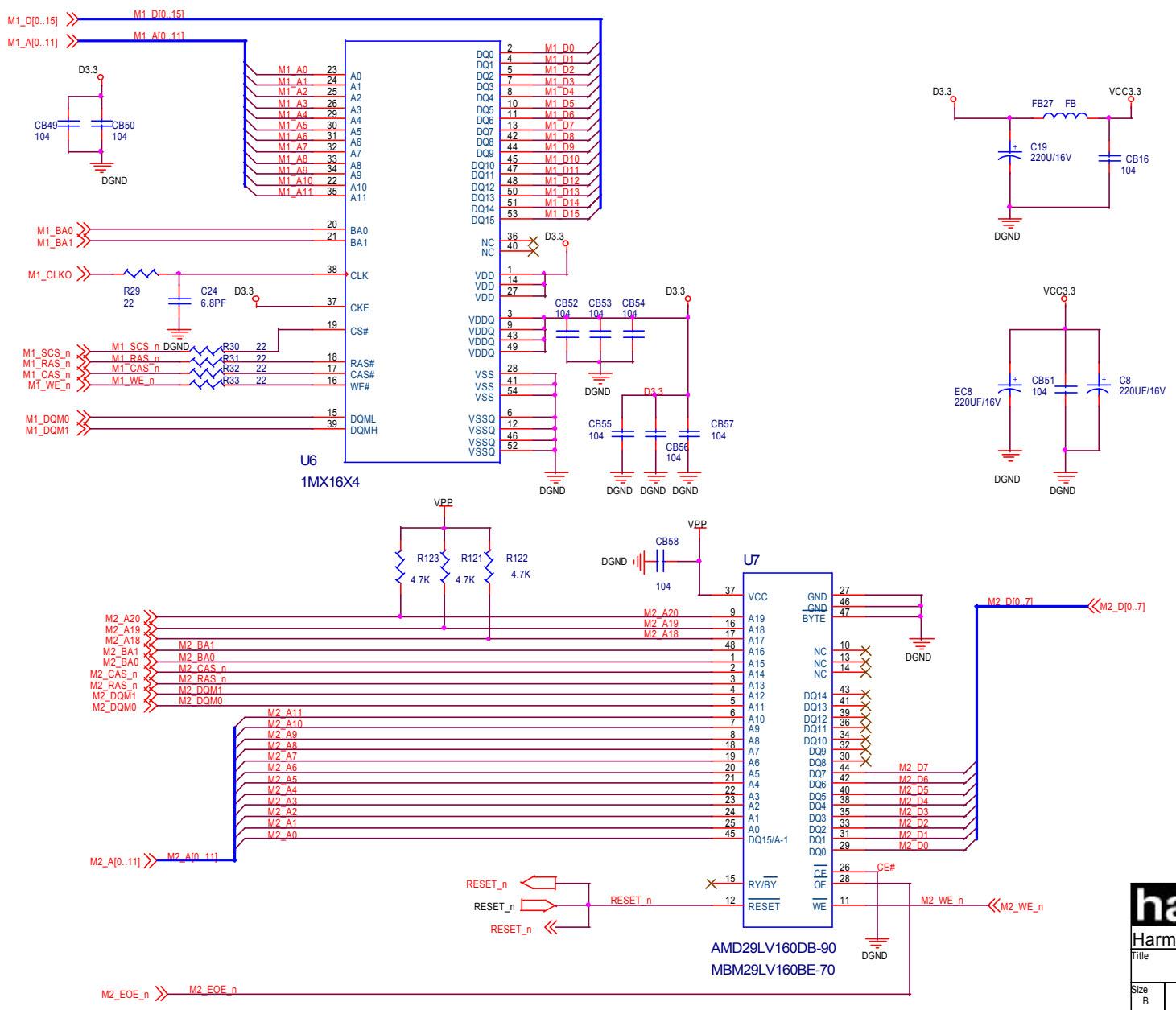
U4



- Q0 RESERVE
- Q1-Q3 FS0,FS1 AND RGB_SEL FOR SCART OUT
- Q4,Q5 Audio INPUT (AUX,SCART,TUNER)SELECT
- Q6 OPTICAL/OAXIAL INPUT SELECT
- Q7 SCART OUT Y/VBS AND R/C SELECT

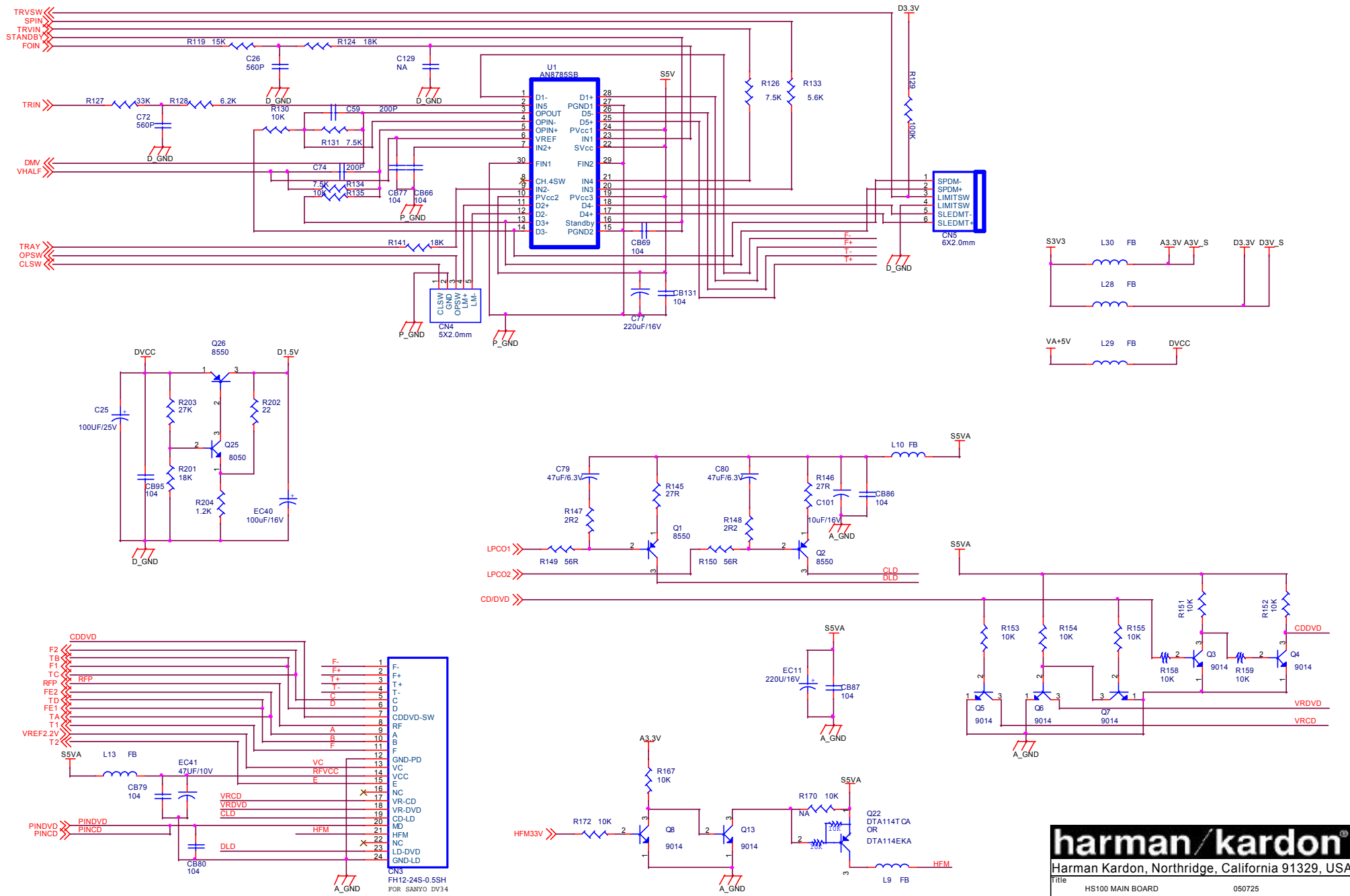
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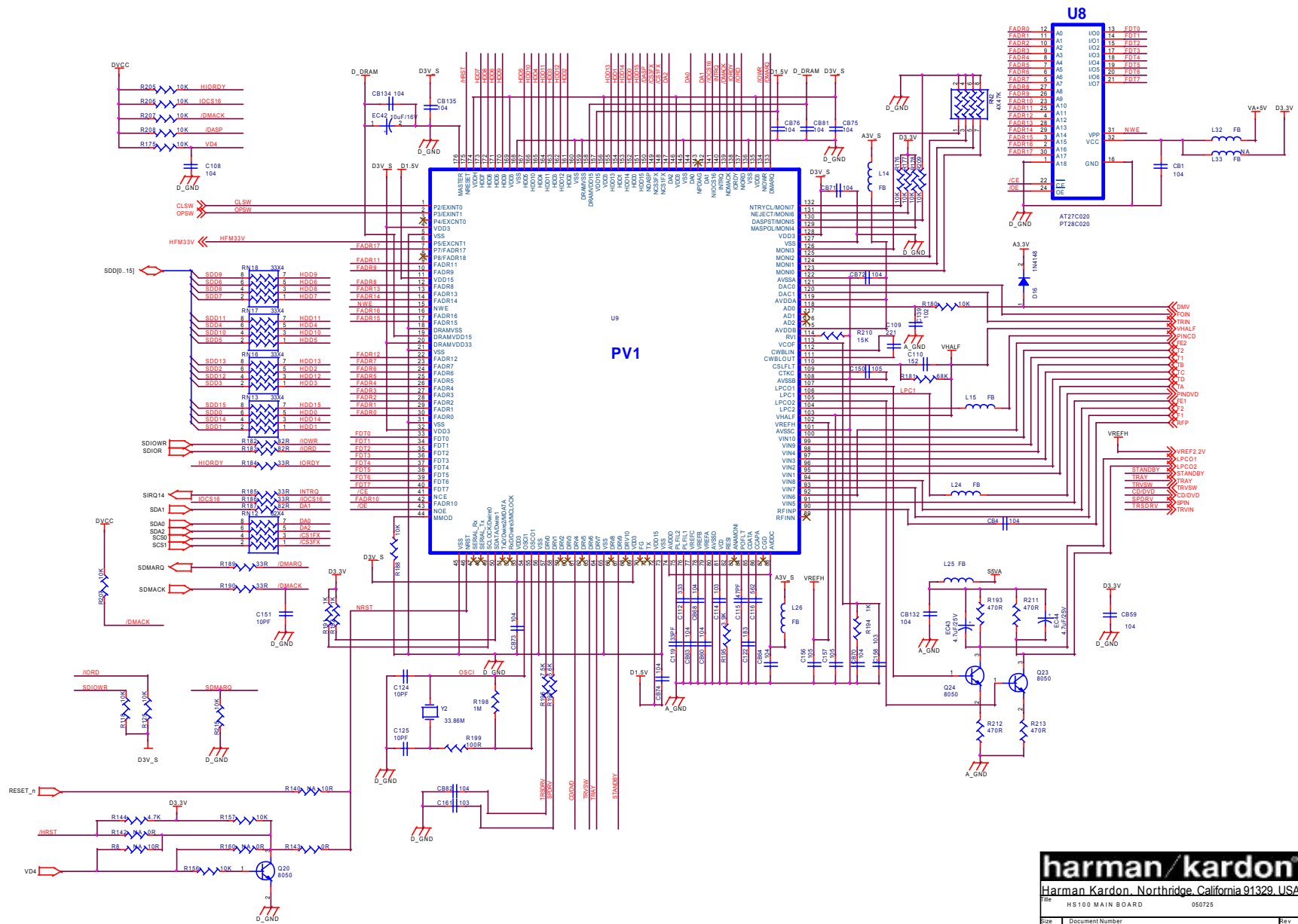
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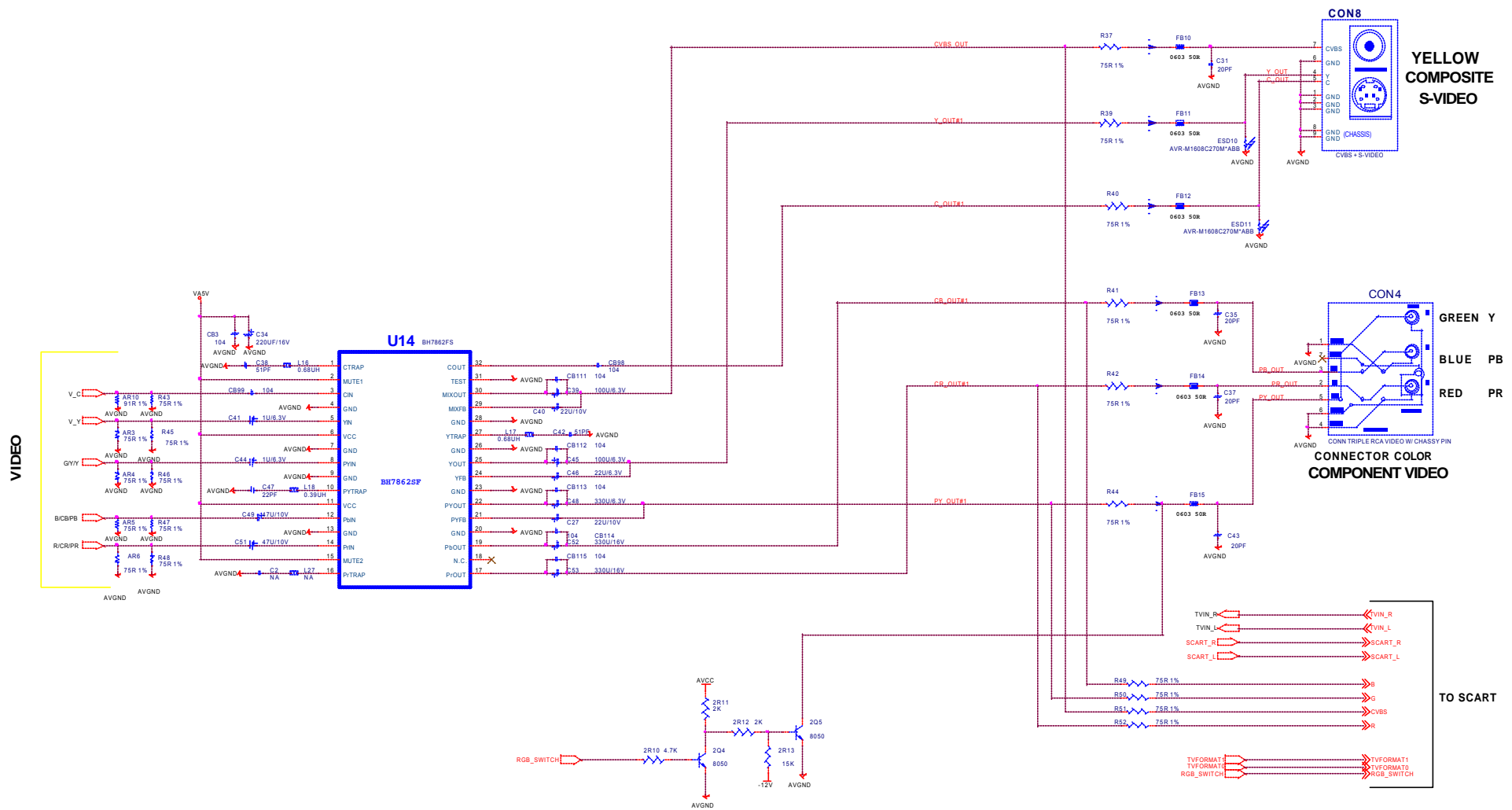
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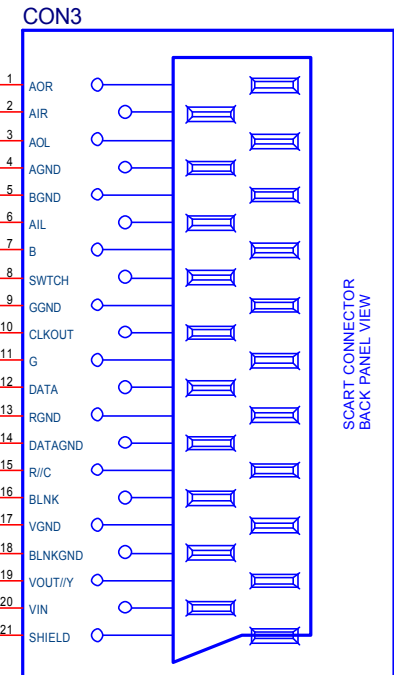
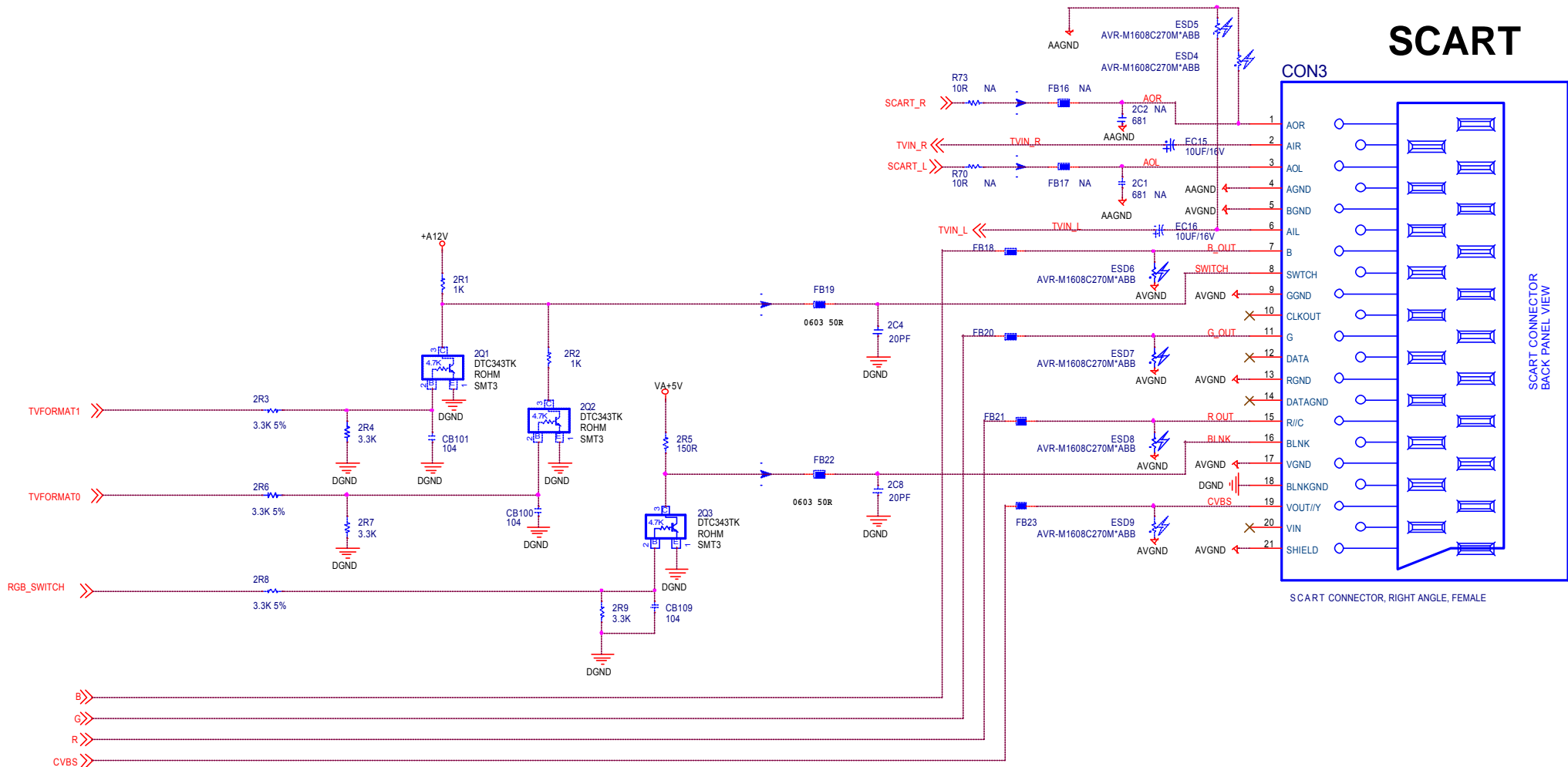
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SCART

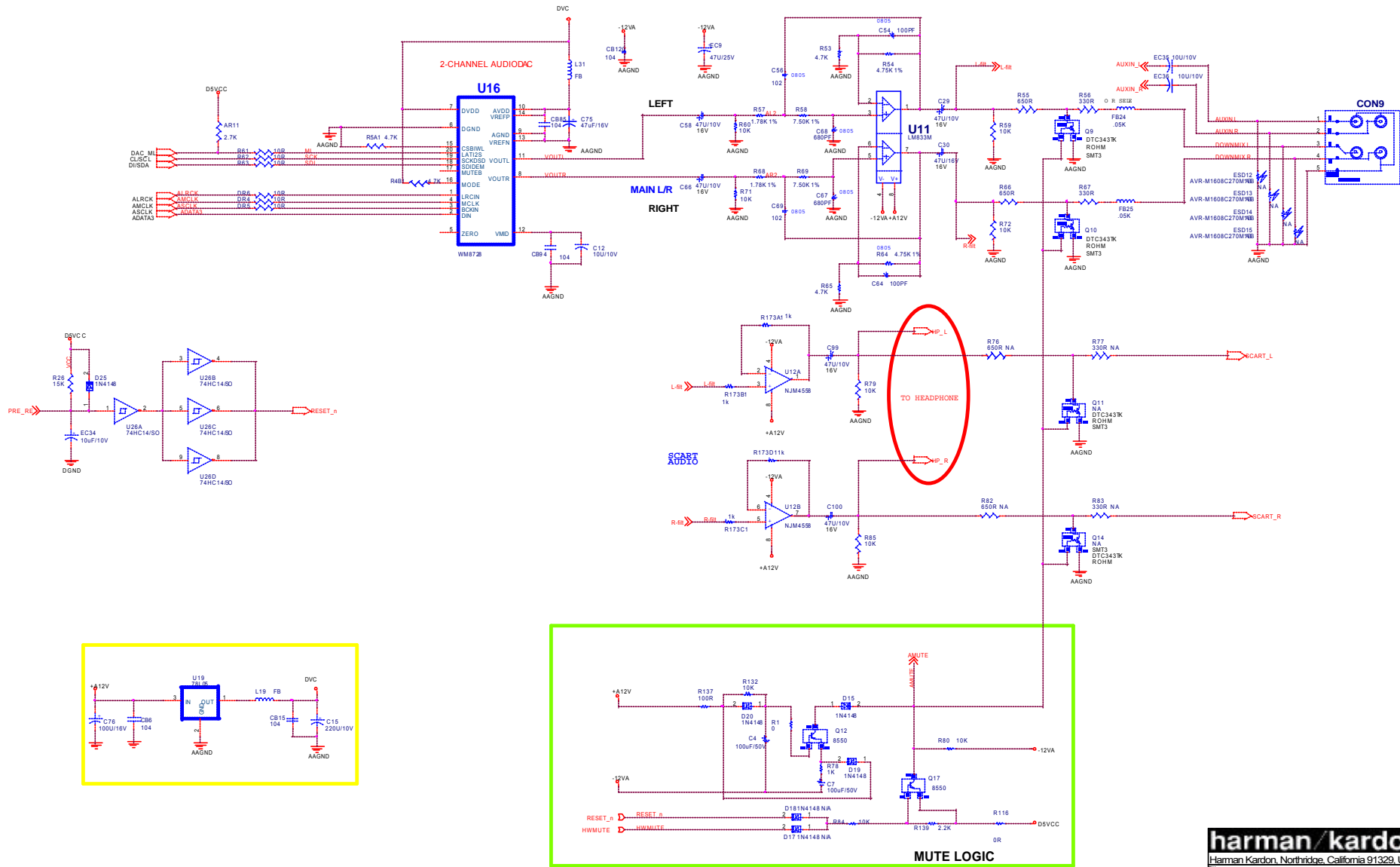


SCART CONNECTOR, RIGHT ANGLE, FEMALE

RGBSWITCH	TVFORMAT0	TVFORMAT1	TV FUNCTION	PIN8 (V)	PIN16 (V)
X	0	1	SCART Inactive (Standby)	0v	X
X	0	0	SCART Active Auto Switch to 4:3 Aspect Ratio	12v	X
X	1	0	SCART Active Auto Switch to 16:9 Aspect Ratio	6v	X
0	X	X	RGB	X	1-3v
1	X	X	CVBS	X	0-0.4v

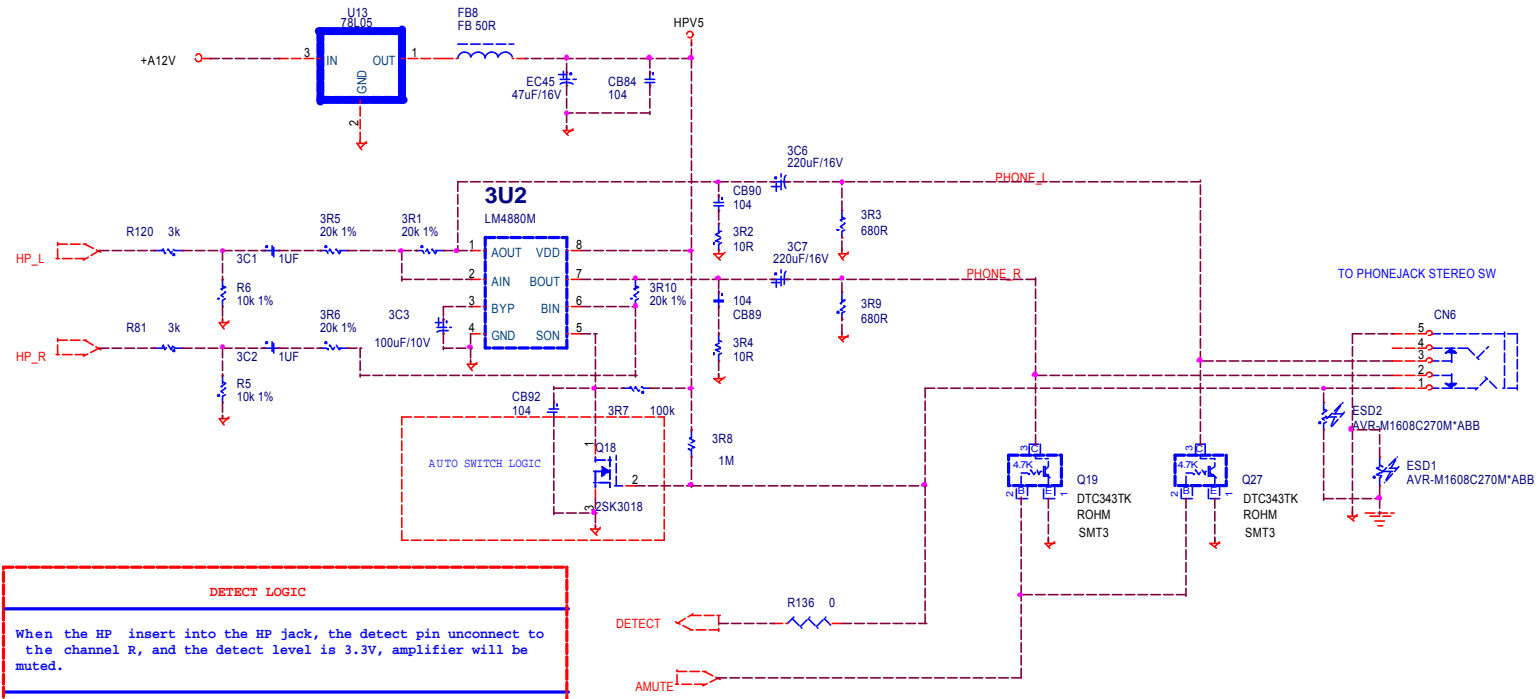
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DETECT LOGIC

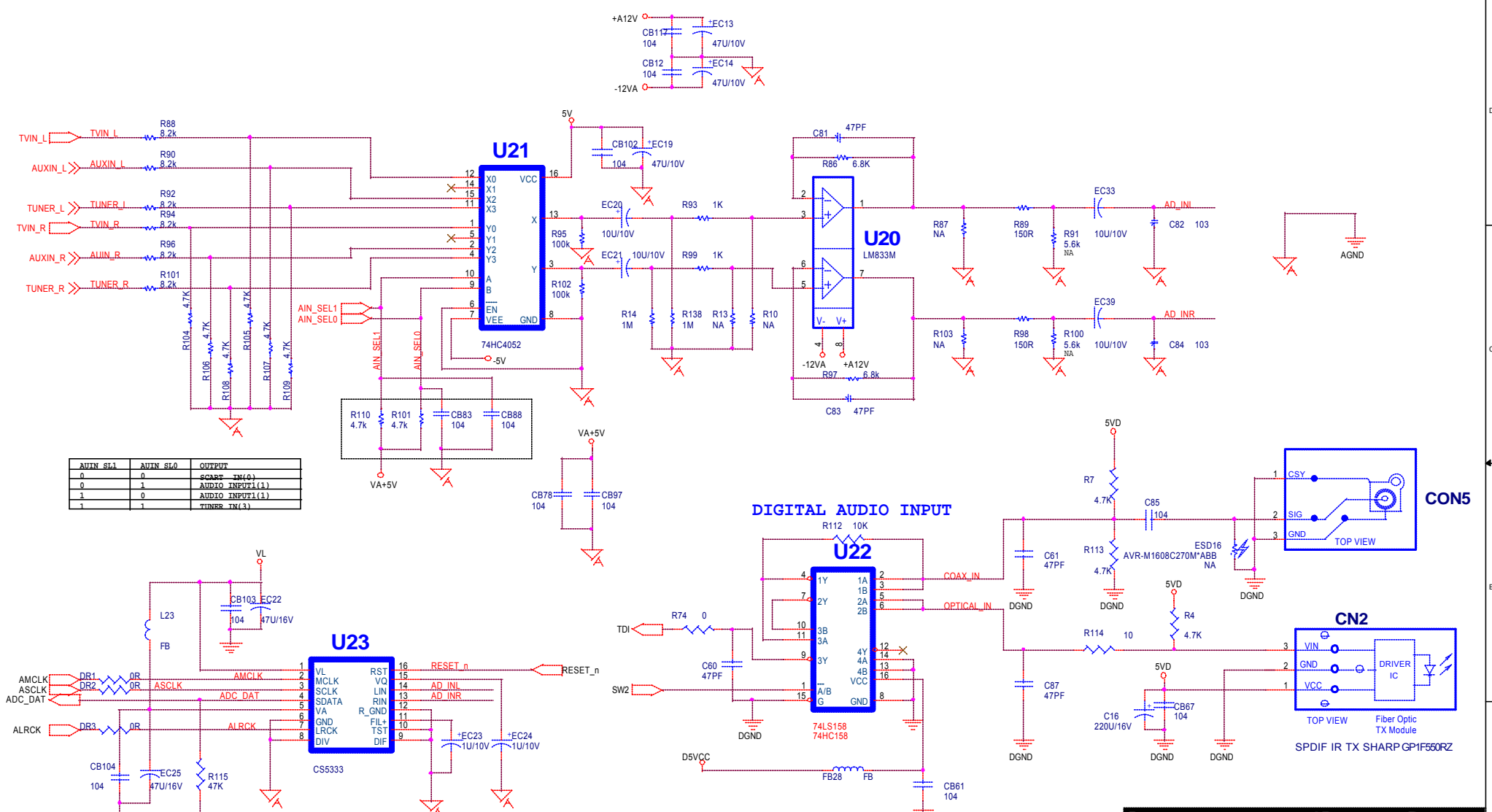
When the HP insert into the HP jack, the detect pin unconnect to the channel R, and the detect level is 3.3V, amplifier will be muted.

When the HP doesn't insert into the HP jack, the detect pin will connect to the channel R, and the detect level is 0V, amplifier will work normally.

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AIN_SEL1	AIN_SEL0	OUTPUT
0	0	SCAN_IN(2)
0	1	AUDIO_INPUT1(1)
1	0	AUDIO_INPUT1(1)
1	1	TUNER_IN(3)

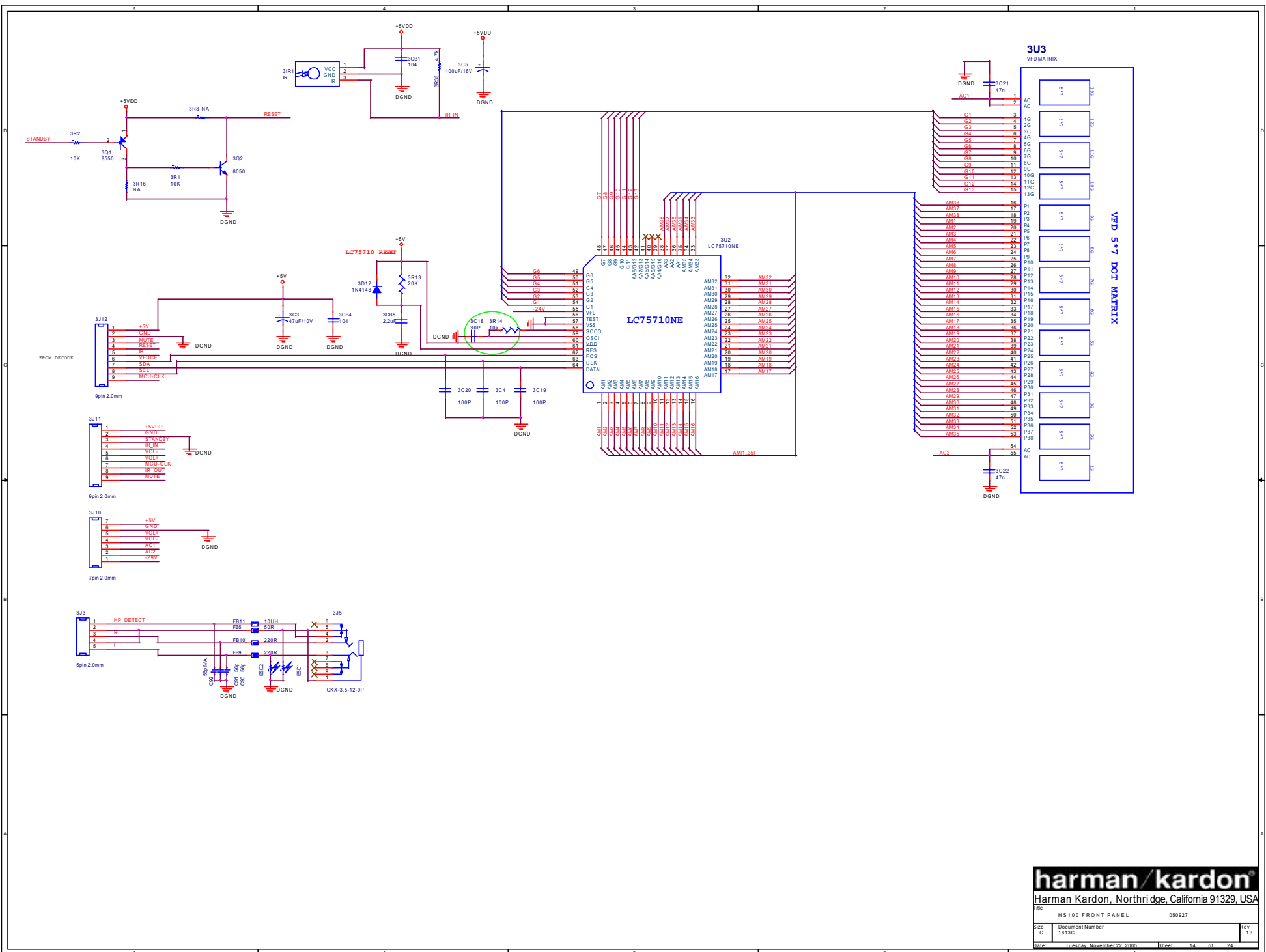
Audio Format: I2S UP TO 24 Bit

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Title: HS100 MAIN BOARD 050725

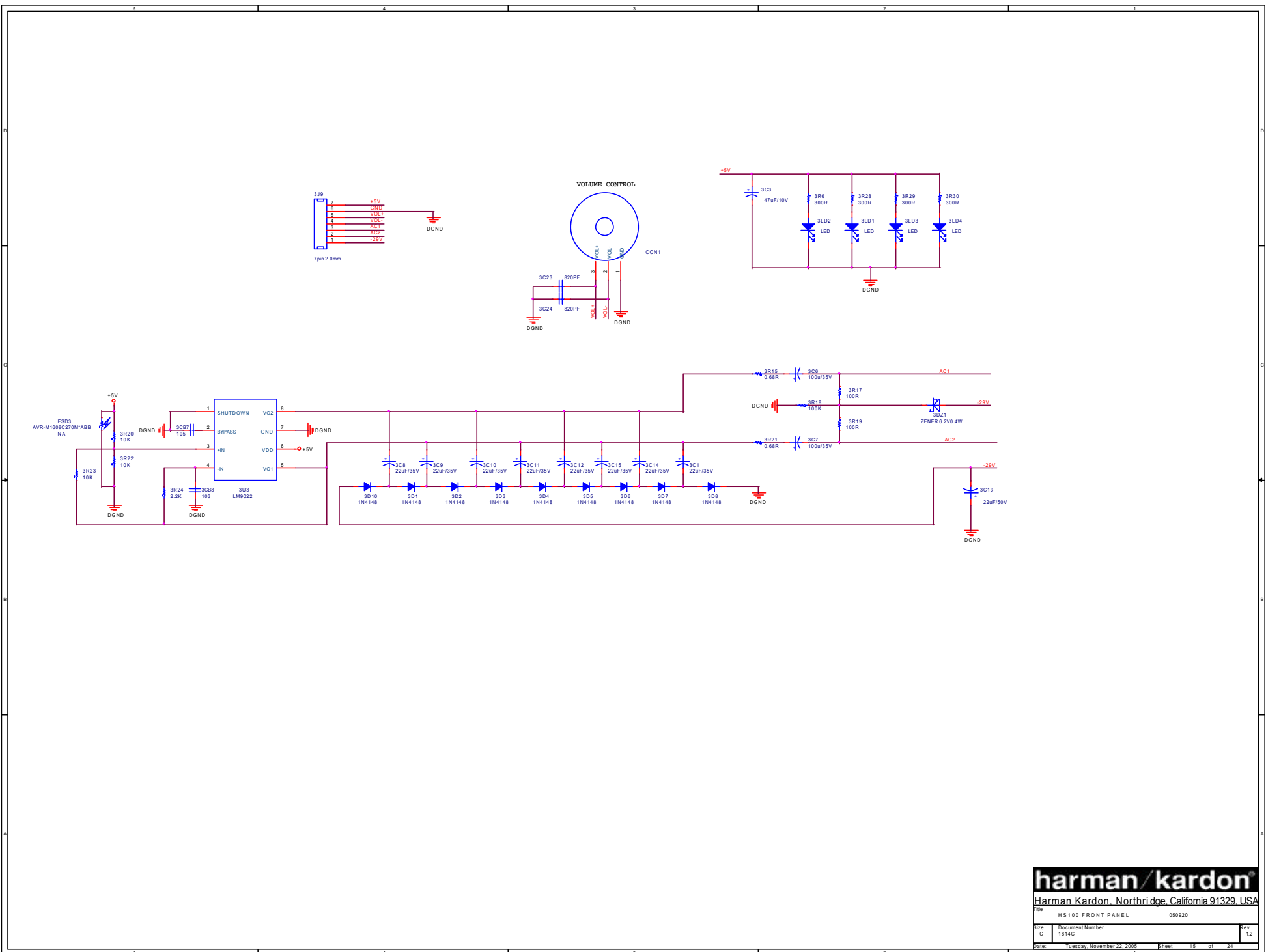
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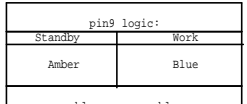
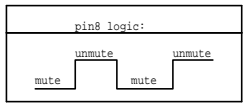
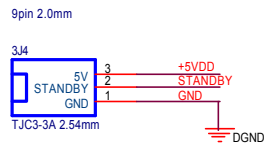
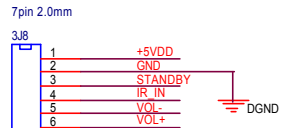
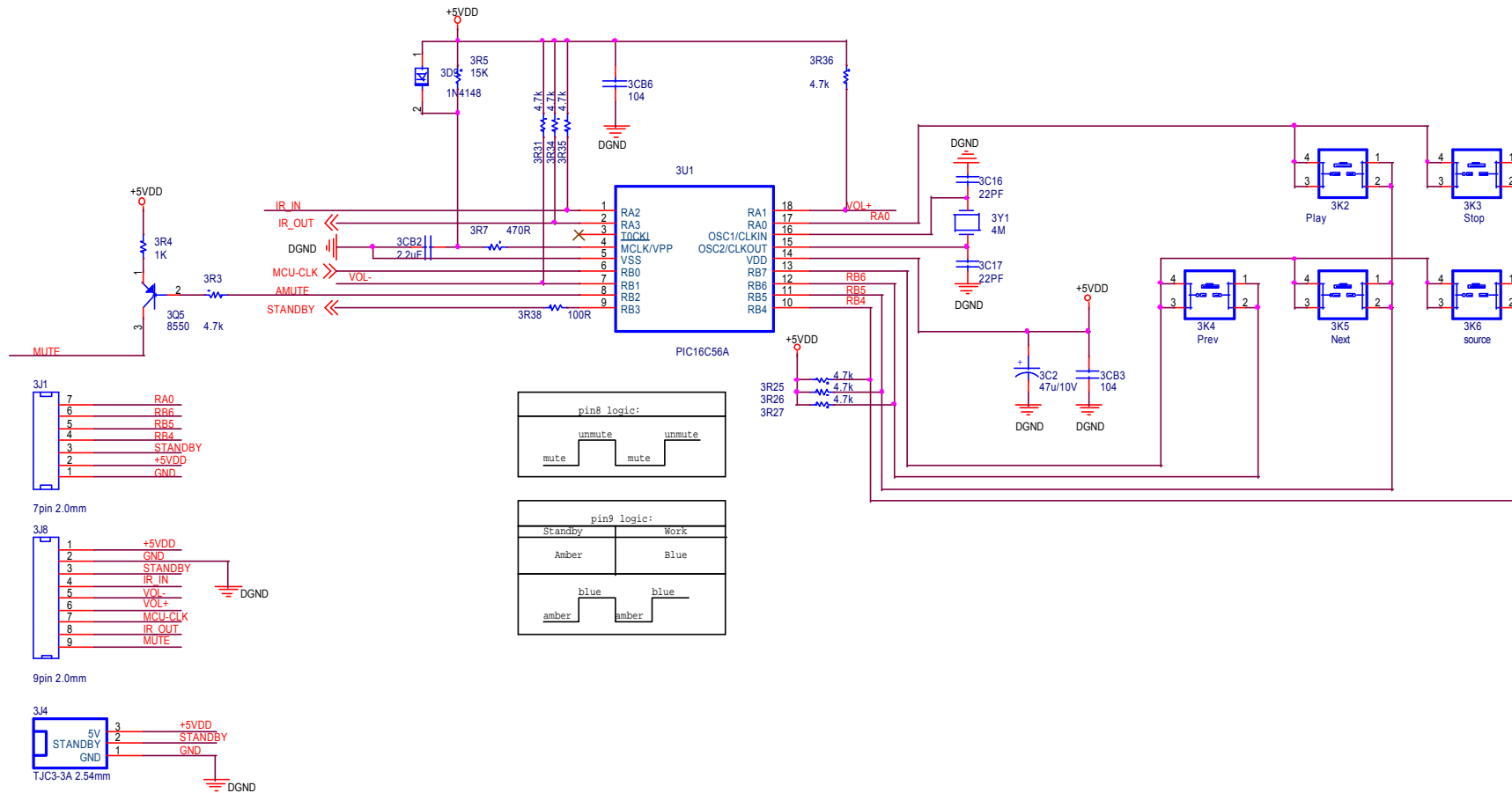
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C	1813C	1.3
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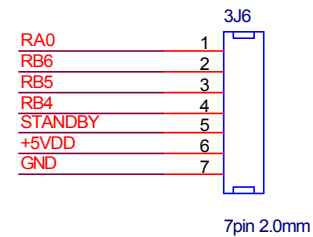
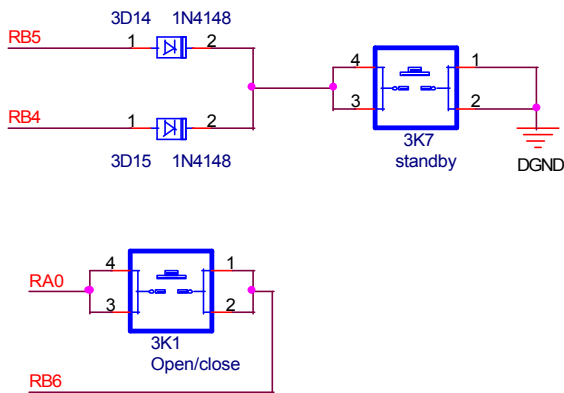
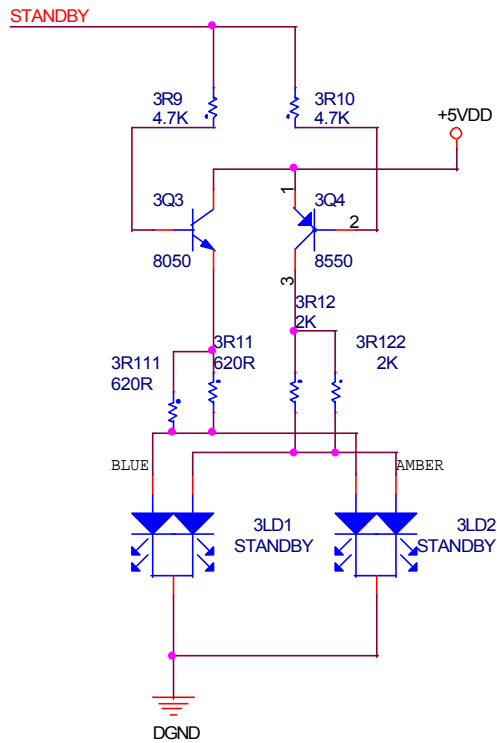


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File	HS100 FRONT PANEL	050920
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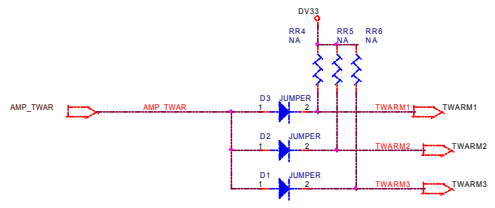
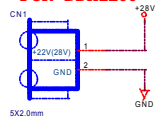
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Title HS100 FRONT PANEL 050920

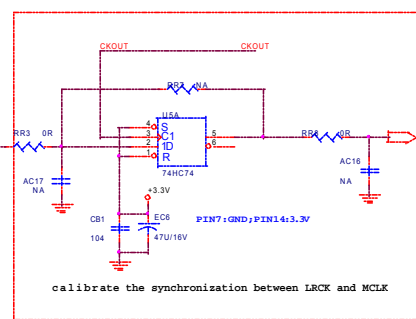
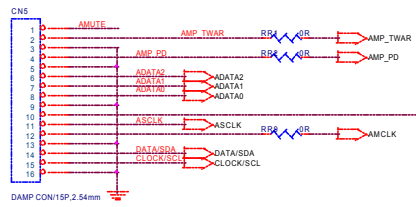
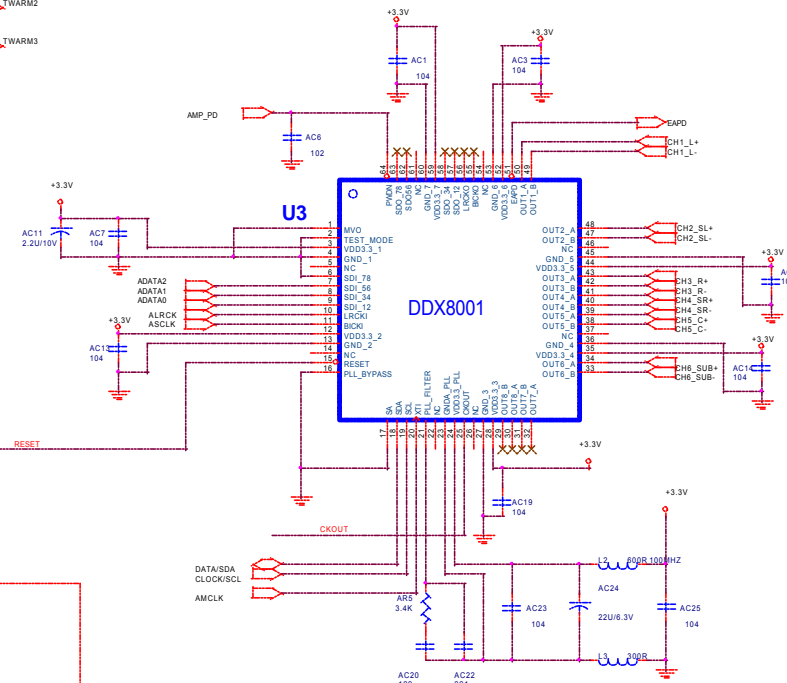
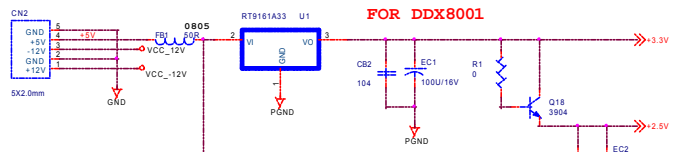
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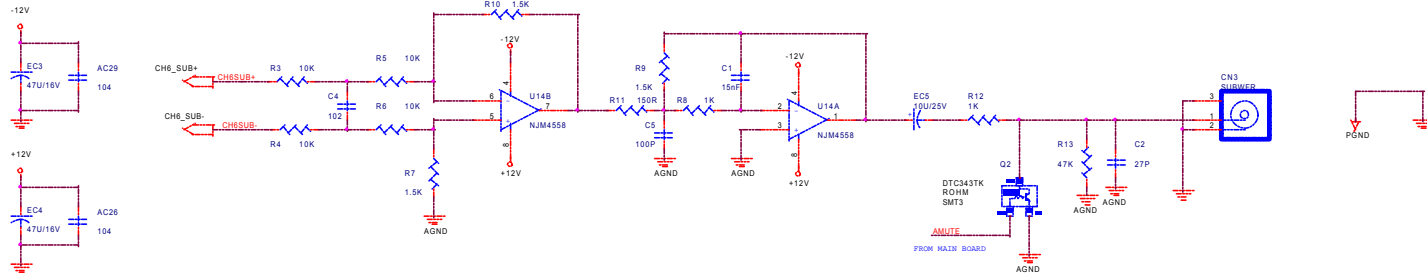


FOR DDX8001

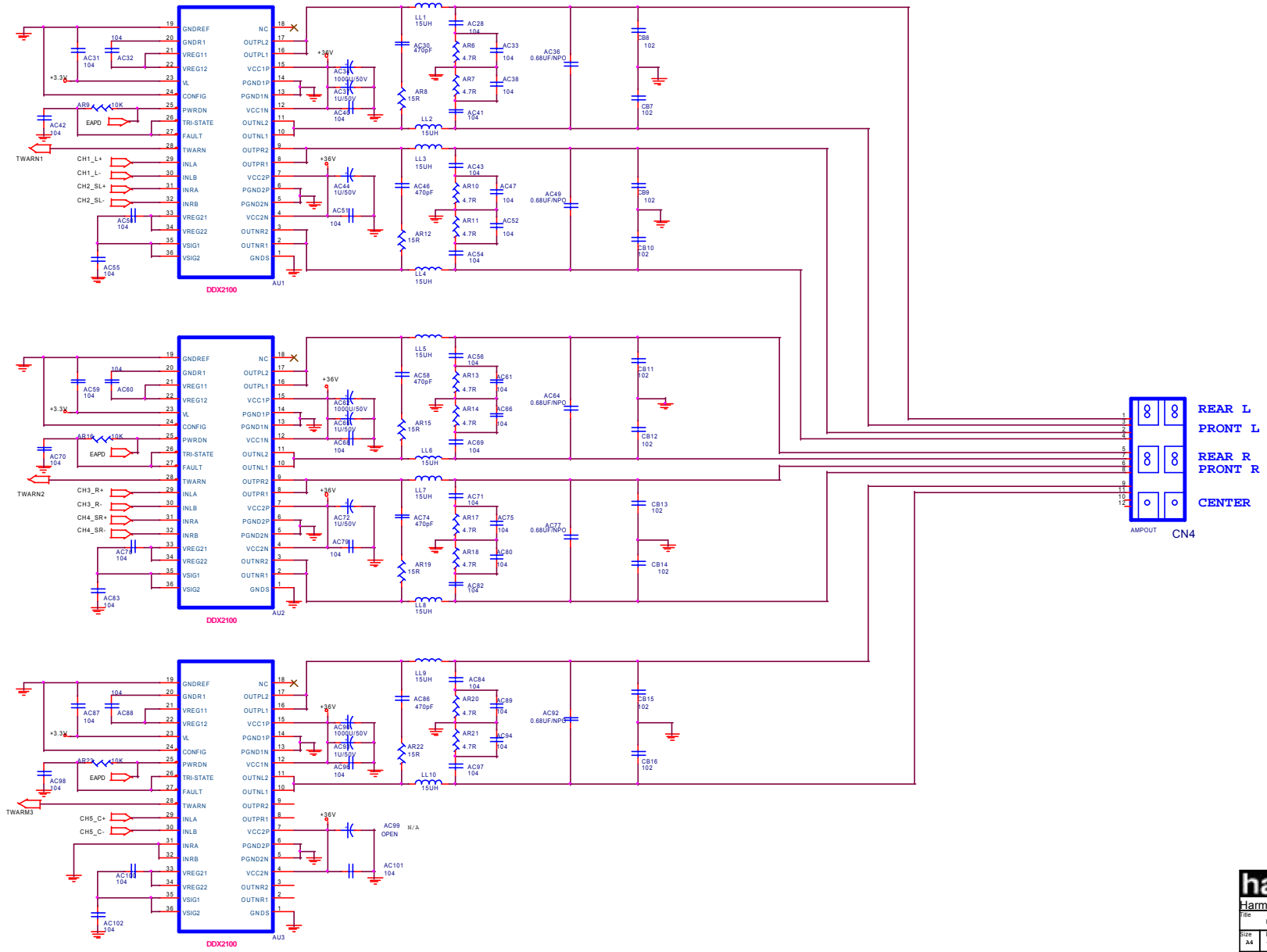


calibrate the synchronization between LRCK and NCLK

	RR3	AC17	RR7	RR8	AC16	RR9	AC5	U5
Option 1	0 ohm	NA	NA	0 ohm	NA	0 ohm	NA	ON
Option 2	0 ohm	NA	0ohm	0 ohm	NA	0 ohm	NA	NA

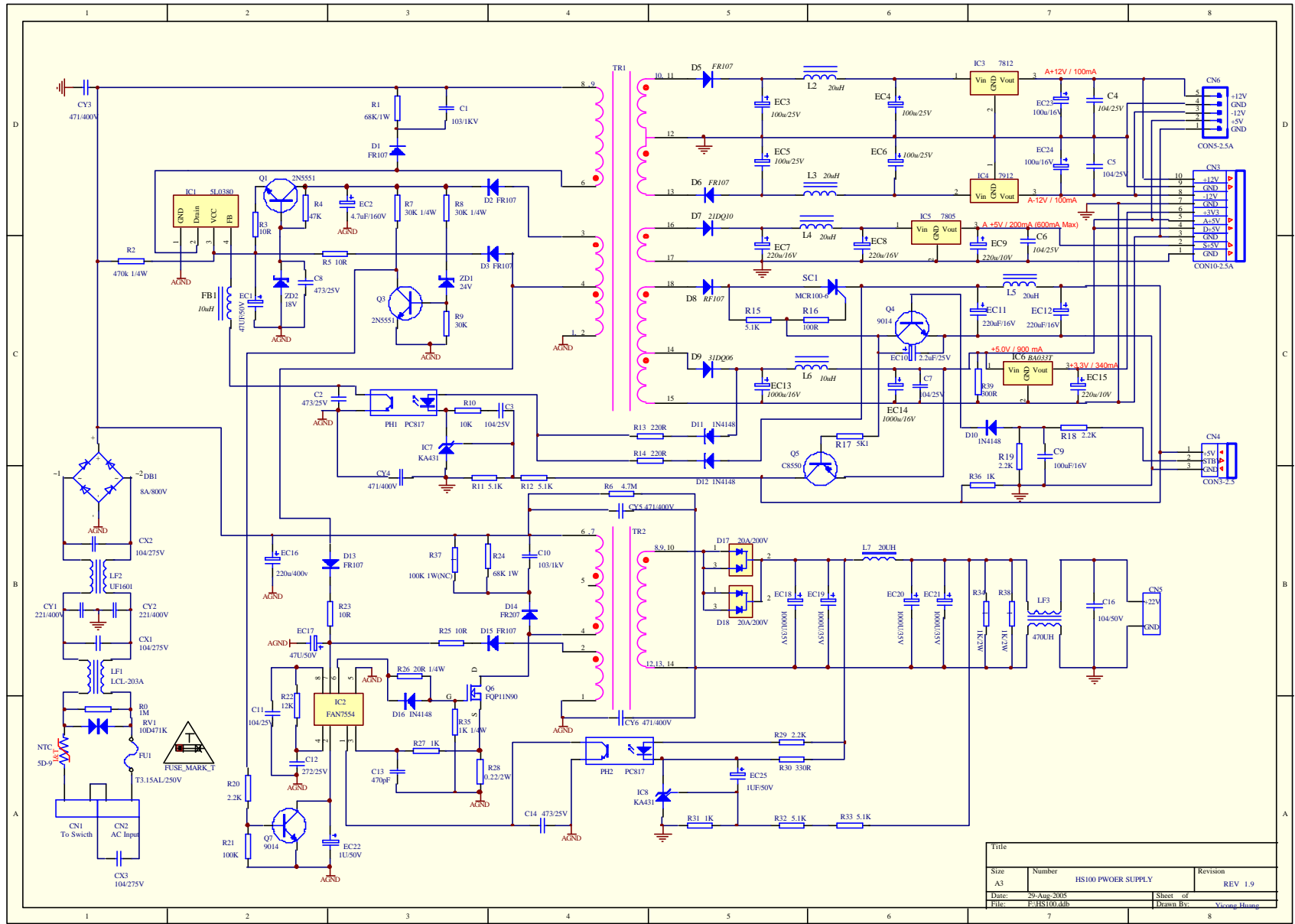


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 rev 1.3



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Title			
Size	Number	HS100 PWOER SUPPLY	Revision
A3			REV 1.9
Date:	29-Aug-2005	Sheet of	
File:	F:\HS100.dtb	Drawn By:	Vicung Huang