

# SERVICE MANUAL

**M12**  
DIGITAL PREAMP  
DAC



**M12**  
DIGITAL  
PREAMP  
DAC

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# PRODUCT SAFETY SERVICING GUIDELINES FOR AUDIO PRODUCTS

**CAUTION** : DO NOT ATTEMPT TO MODIFY THIS PRODUCT IN ANY WAY, NEVER PERFORM CUSTOMIZED INSTALLATIONS WITHOUT MANUFACTURER'S APPROVAL. UNAUTHORIZED MODIFICATIONS WILL NOT ONLY VOID THE WARRANTY, BUT MAY LEAD TO YOUR BEING LIABLE FOR ANY RESULTING PROPERTY DAMAGE OR USER INJURY.

SERVICE WORK SHOULD BE PERFORMED ONLY AFTER YOU ARE THOROUGHLY FAMILIAR WITH ALL OF THE FOLLOWING SAFETY CHECKS AND SERVICING GUIDELINES. TO DO OTHERWISE, INCREASES THE RISK OF POTENTIAL HAZARDS AND INJURY TO THE USER.

WHILE SERVICING, USE AN ISOLATION TRANSFORMER FOR PROTECTION FROM A.C. LINESHOCK.

## SAFETY CHECKS

AFTER THE ORIGINAL SERVICE PROBLEM HAS BEEN CORRECTED. A CHECK SHOULD BE MADE OF THE FOLLOWING.

### SUBJECT : FIRE & SHOCK HAZARD

1. BE SURE THAT ALL COMPONENTS ARE POSITIONED IN SUCH A WAY AS TO AVOID POSSIBILITY OF ADJACENT COMPONENT SHORTS. THIS IS ESPECIALLY IMPORTANT ON THOSE MODULES WHICH ARE TRANSPORTED TO AND FROM THE REPAIR SHOP.

2. NEVER RELEASE A REPAIR UNLESS ALL PROTECTIVE DEVICES SUCH AS INSULATORS, BARRIERS, COVERS, SHIELDS, STRAIN RELIEFS, POWER SUPPLY CORDS, AND OTHER HARDWARE HAVE BEEN REINSTALLED PER ORIGINAL DESIGN. BE SURE THAT THE SAFETY PURPOSE OF THE POLARIZED LINE PLUG HAS NOT BEEN DEFEATED.

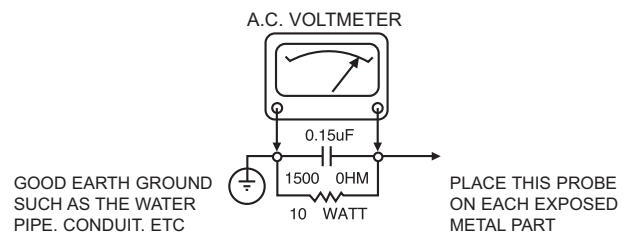
3. SOLDERING MUST BE INSPECTED TO DISCOVER POSSIBLE COLD SOLDER JOINTS, SOLDER SPLASHES OR SHARP SOLDER POINTS. BE CERTAIN TO REMOVE ALL LOOSE FOREIGN PARTICLES.

4. CHECK FOR PHYSICAL EVIDENCE OF DAMAGE OR DETERIORATION TO PARTS AND COMPONENTS. FOR FRAYED LEADS, DAMAGED INSULATION (INCLUDING A.C. CORD). AND REPLACE IF NECESSARY.

5. NO LEAD OR COMPONENT SHOULD TOUCH A RECEIVING TUBE OR A RESISTOR RATED AT 1 WATT OR MORE. LEAD TENSION AROUND PROTRUDING METAL SURFACES MUST BE AVOIDED.

6. ALL CRITICAL COMPONENTS SUCH AS FUSES, FLAMEPROOF RESISTORS, CAPACITORS, ETC. MUST BE REPLACED WITH EXACT FACTORY TYPES, DO NOT USE REPLACEMENT COMPONENTS OTHER THAN THOSE SPECIFIED OR MAKE UNRECOMMENDED CIRCUIT MODIFICATIONS.

7. AFTER RE-ASSEMBLY OF THE SET ALWAYS PERFORM AN A.C. LEAKAGE TEST ON ALL EXPOSED METALLIC PARTS OF THE CABINET, (THE CHANNEL SELECTOR KNOB, ANTENNA TERMINALS. HANDLE AND SCREWS) TO BE SURE THE SET IS SAFE TO OPERATE WITHOUT DANGER OF ELECTRICAL SHOCK. DO NOT USE A LINE ISOLATION TRANSFORMER DURING THIS TEST USE AN A.C. VOLTMETER, HAVING 5000 OHMS PER VOLT OR MORE SENSITIVITY, IN THE FOLLOWING MANNER; CONNECT A 1500 OHM 10 WATT RESISTOR, PARALLELED BY A .15 MFD. 150.V A.C TYPE CAPACITOR BETWEEN A KNOWN GOOD EARTH GROUND (WATER PIPE, CONDUIT, ETC.) AND THE EXPOSED METALLIC PARTS, ONE AT A TIME. MEASURE THE A.C. VOLTAGE ACROSS THE COMBINATION OF 1500 OHM RESISTOR AND .15 MFD CAPACITOR. REVERSE THE A.C. PLUG AND REPEAT A.C. VOLTAGE MEASUREMENTS FOR EACH EXPOSED METALLIC PART. VOLTAGE MEASURED MUST NOT EXCEED 75 VOLTS R.M.S. THIS CORRESPONDS TO 0.5 MILLIAMPS A.C ANY VALUE EXCEEDING THIS LIMIT CONSTITUTES A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED IMMEDIATELY.



### SUBJECT: GRAPHIC SYMBOLS



THE LIGHTNING FLASH WITH APROWHEAD SYMBOL. WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE SERVICE PERSONNEL TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK.



THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE SERVICE PERSONNEL TO THE PRESENCE OF IMPORTANT SAFETY INFORMATION IN SERVICE LITERATURE.

# SERVICING PRECAUTIONS

**CAUTION:** Before servicing the Stereo amplifier covered by this service data and its supplements and addends, read and follow the SAFETY PRECAUTIONS. NOTE: if unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions in this publication, always follow the safety precautions.

Remember Safety First:

## General Servicing Precautions

1. Always unplug the Stereo amplifier AC power cord from the AC power source before:
  - (1) Removing or reinstalling any component, circuit board, module, or any other assembly.
  - (2) Disconnecting or reconnecting any internal electrical plug or other electrical connection.
  - (3) Connecting a test substitute in parallel with an electrolytic capacitor.Caution: A wrong part substitute or incorrect polarity installation of electrolytic capacitors may result in an explosion hazard.
2. Do not spray chemicals on or near this Stereo amplifier or any of its assemblies.
3. Unless specified otherwise in this service data, clean electrical contacts by applying an appropriate contact cleaning solution to the contacts with a pipe cleaner, cottontipped swab, or comparable soft applicator. Unless specified otherwise in this service data, lubrication of contacts is not required.
4. Do not defeat any plug/socket B+ voltage interlocks with which instruments covered by this service manual might be equipped.
5. Do not apply AC power to this Stereo amplifier and/or any of its electrical assemblies unless all solid-state device heat sinks are correctly installed.
6. Always connect test instrument ground lead to the appropriate ground before connecting the test instrument positive lead. Always remove the test instrument ground lead last.

## Insulation Checking Procedure

Disconnect the attachment plug from the AC outlet and turn the power on. Connect an insulation resistance meter (500V) to the blades of the attachment plug. The insulation resistance between each blade of the attachment plug and accessible conductive parts (Note 1) should be more than 1 M-ohm. Note 1: Accessible Conductive Parts including Metal panels, Input terminals, Earphone jacks, etc.

## Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical Es devices are integrated circuits and some field effect transistors and semiconductor chip components.

The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed for potential shock reason prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an antistatic solder removal device. Some solder removal devices not classified a "anti-static" can generate electrical charges sufficient to damage ES devices.
5. Do not use freonpropelled chemicals. These can generate electrical charge sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil, or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

Caution: Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize bodily motions when handling unpackaged replacement ES devices. (Normally harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device.)

## SPECIFICATIONS

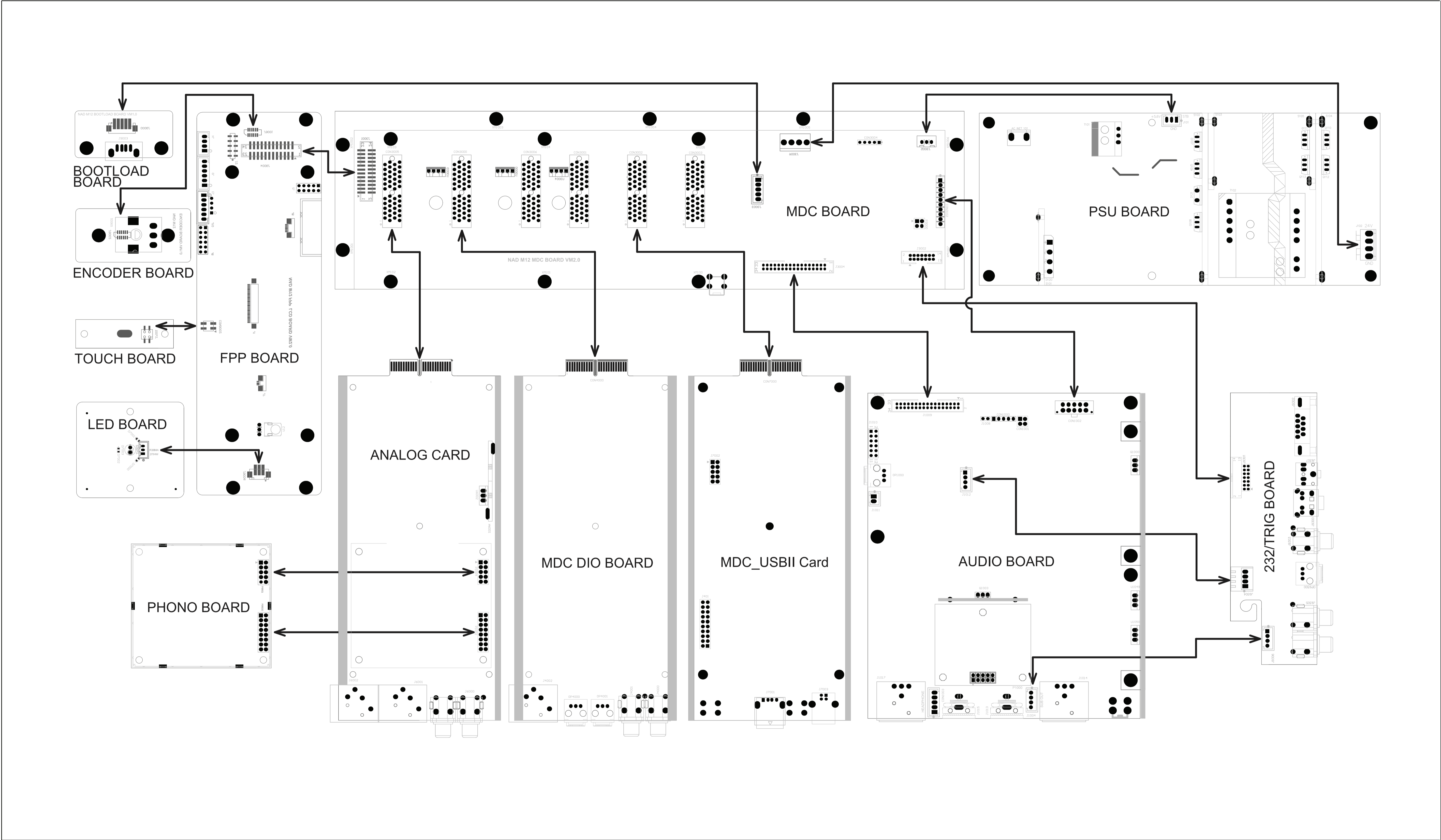
DIGITAL INPUT (COAXIAL, OPTICAL, USB)		M12
Rated Distortion (THD+N with AES 17 filter)		<0.0005% (0dBFS)
IMD Distortion		0.0001%
Input Impedance		75 ohms (coaxial) 110 ohms (AES/EBU)
Sample Rate		32kHz to 192kHz (USB and digital S/PDIF)
Frequency Response		±0.5dB (ref. 20Hz-22kHz @ sample rate)
Channel Separation		>-115dB (ref. 0dBFS Volume -1dB)
Signal / Noise Ratio		>-125dB (ref. 0dBFS 2V out)
Output Level		2V (ref. input 0dBFS)
INPUTS/OUTPUTS		
XLR - AES/EBU		
S/PDIF	Coaxial x 2 Optical x 2	
USB Class 2 Audio: asynchronous 24/192 support		
DD AP-1 Analogue Phono Module		
IR In		
Trigger In		12V ±20%
Trigger Out		12V ±20%
GENERAL		
Idle Power		26W
Standby Power		<0.5W
Unit Dimensions (WxHxD) - Gross*		435 x 133 x 383mm 17 1/8 x 5 1/4 x 15 1/8 inches**
Net Weight		8.1kg (17.9lb)
Shipping Weight		14.5kg (32.0lb)

\* Gross dimensions include feet, extended buttons and rear panel terminals.

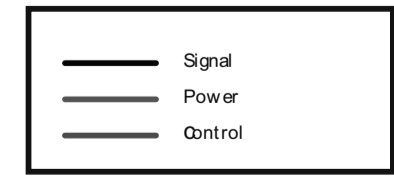
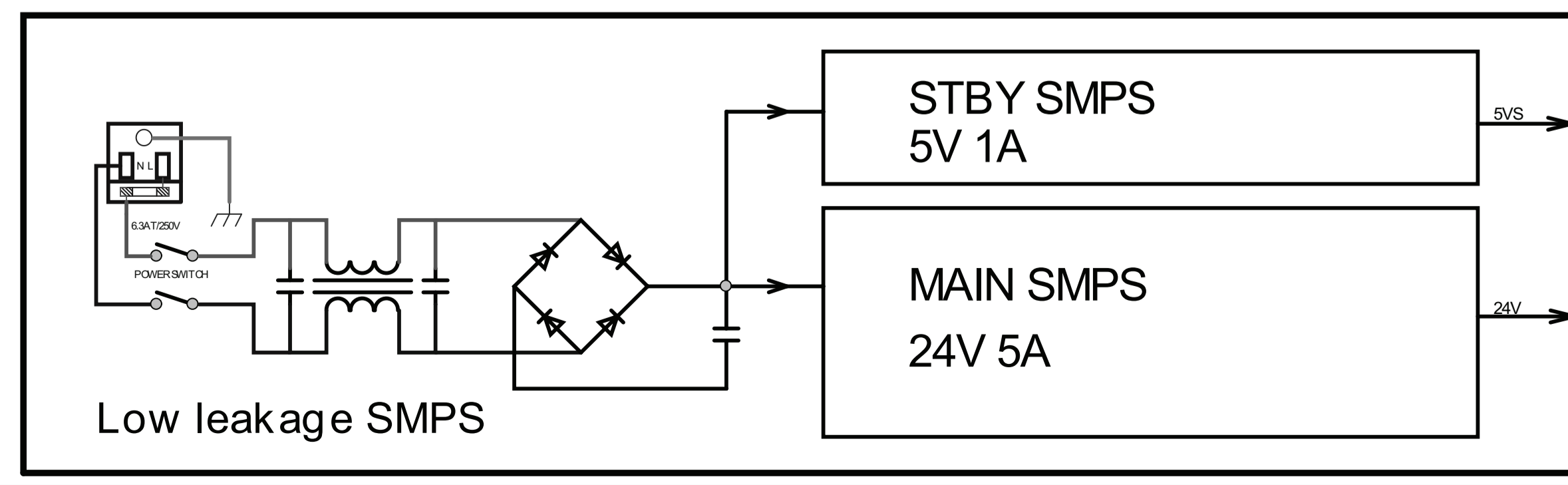
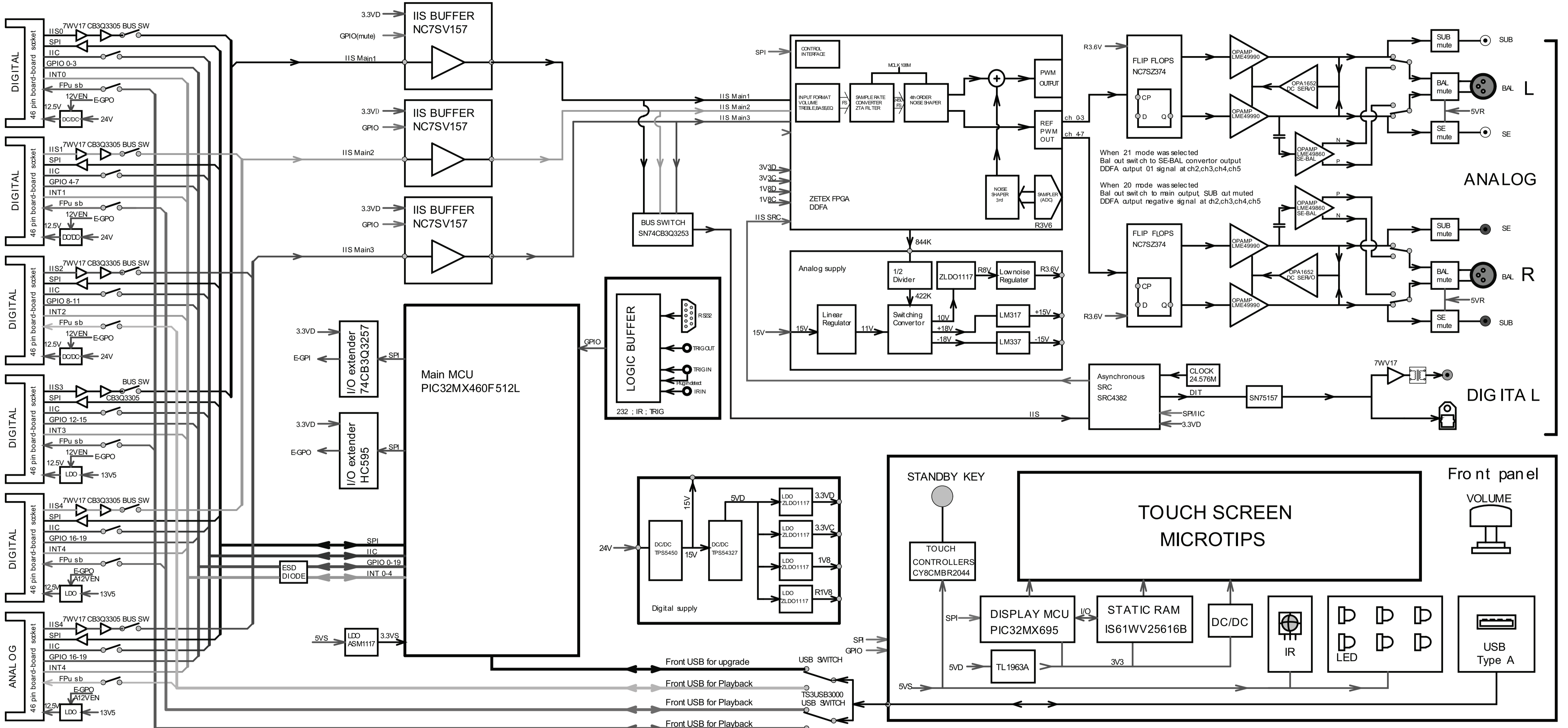
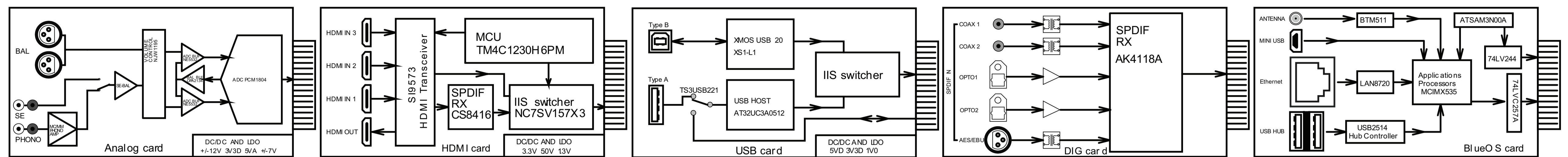
\*\* Non-metric measurements are approximate. NAD Electronics will not assume any liability for errors being made by retailers, custom installers, cabinet makers, or other end users based on information contained in this document.

Note: Installers should allow a minimum clearance of 55mm for wire/cable management.

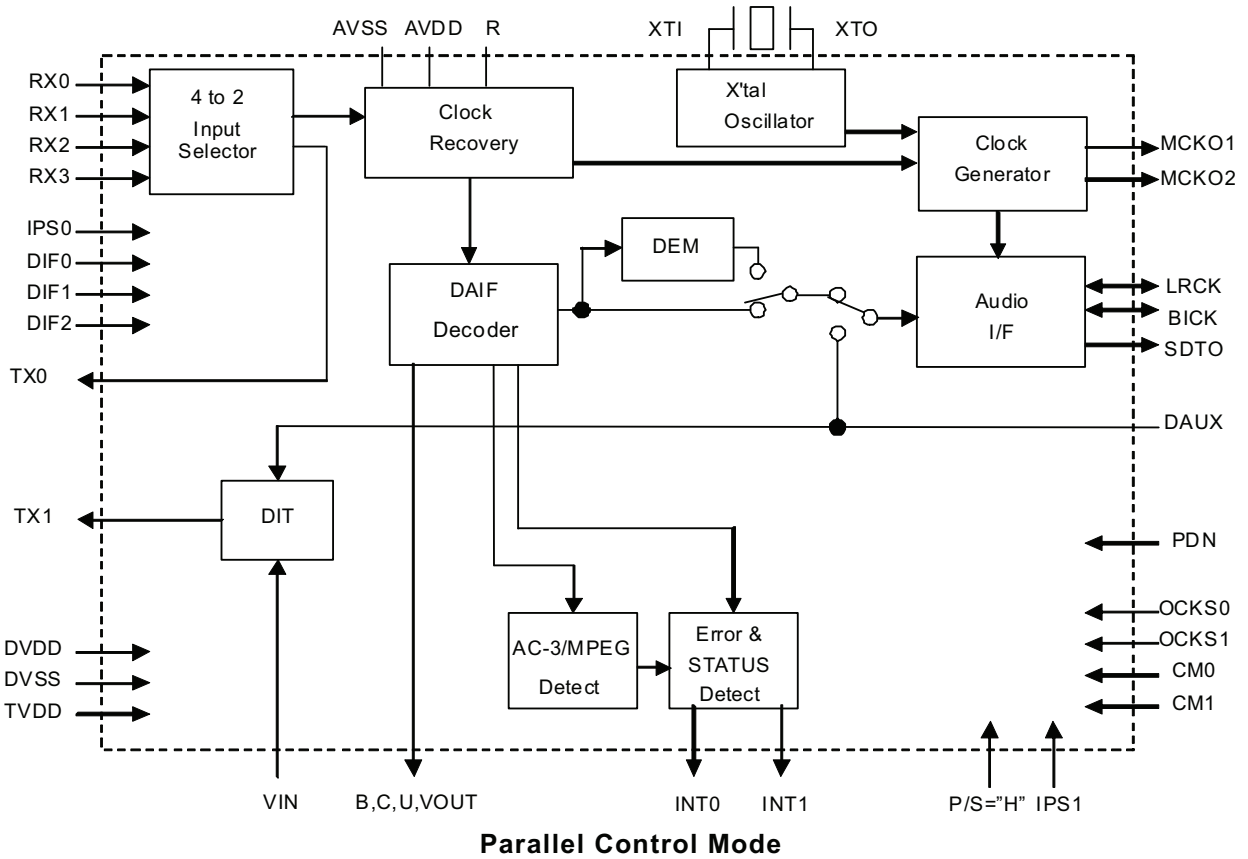
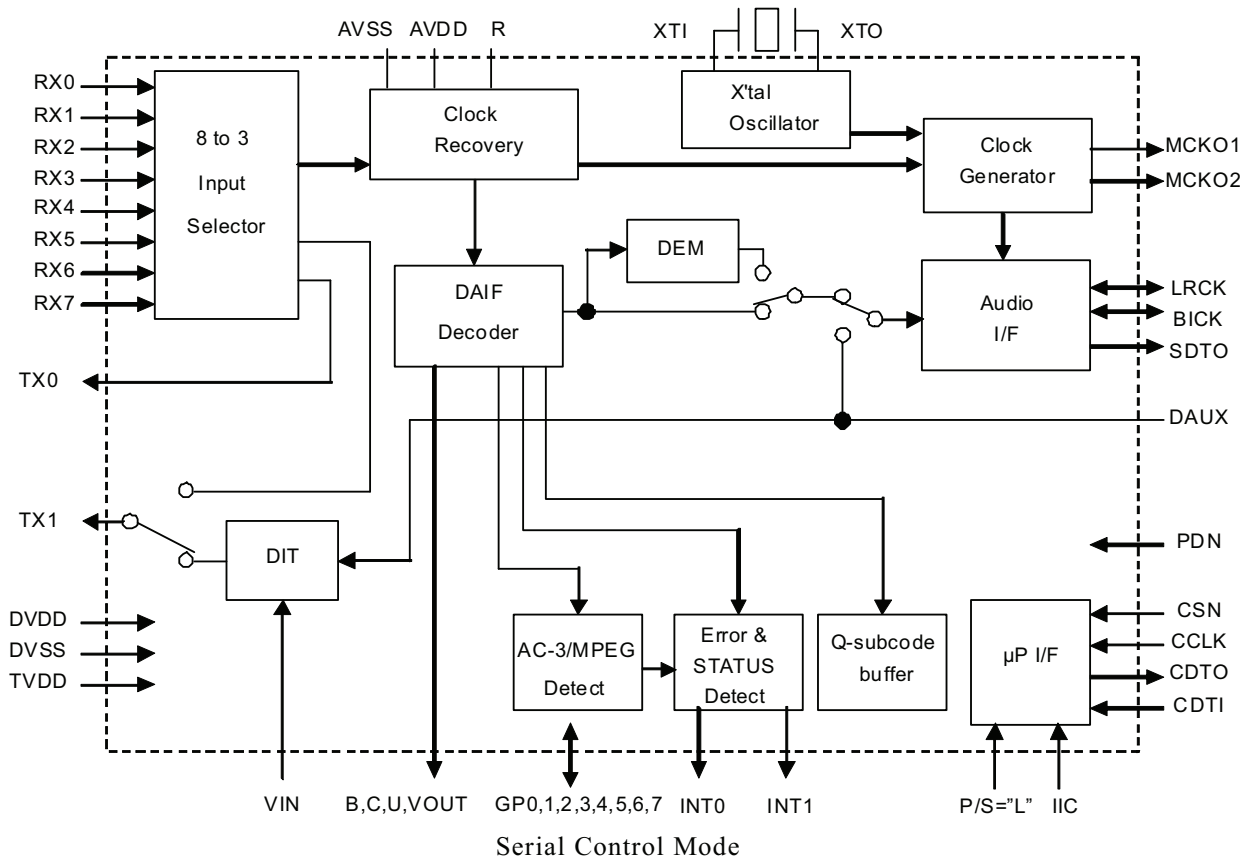
# Wiring diagram



# Block diagram



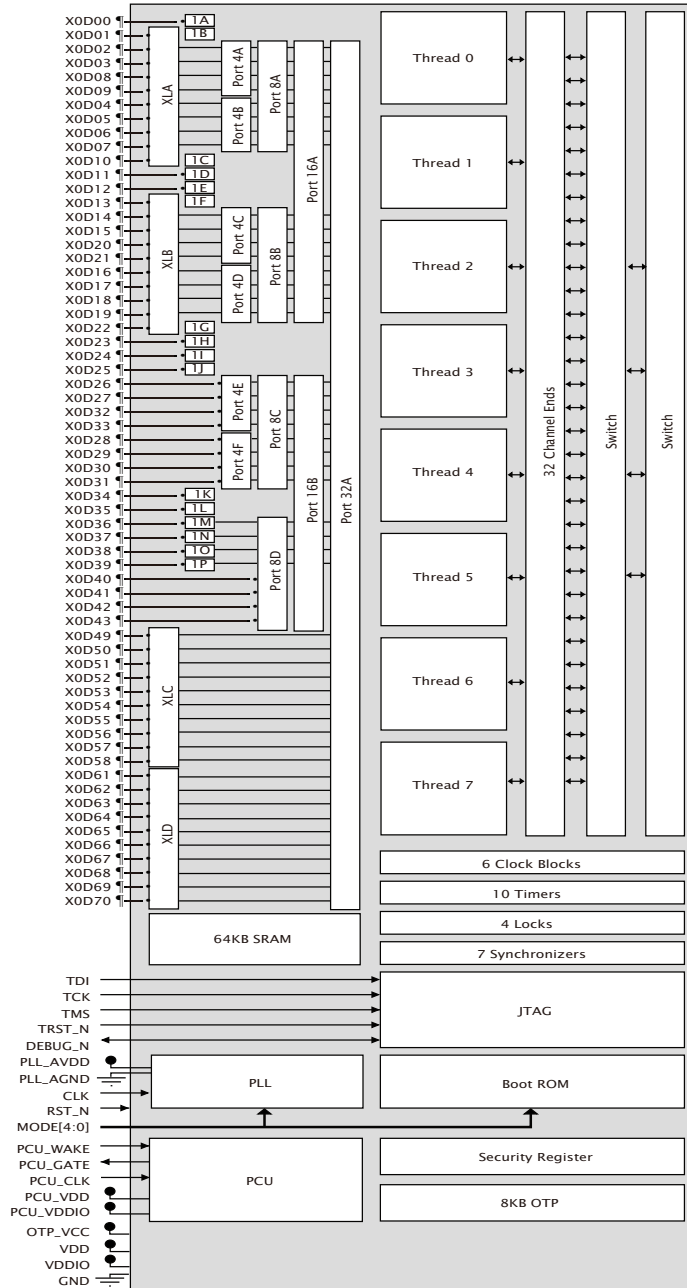
# AL4118A MDC\_DIO BOARD



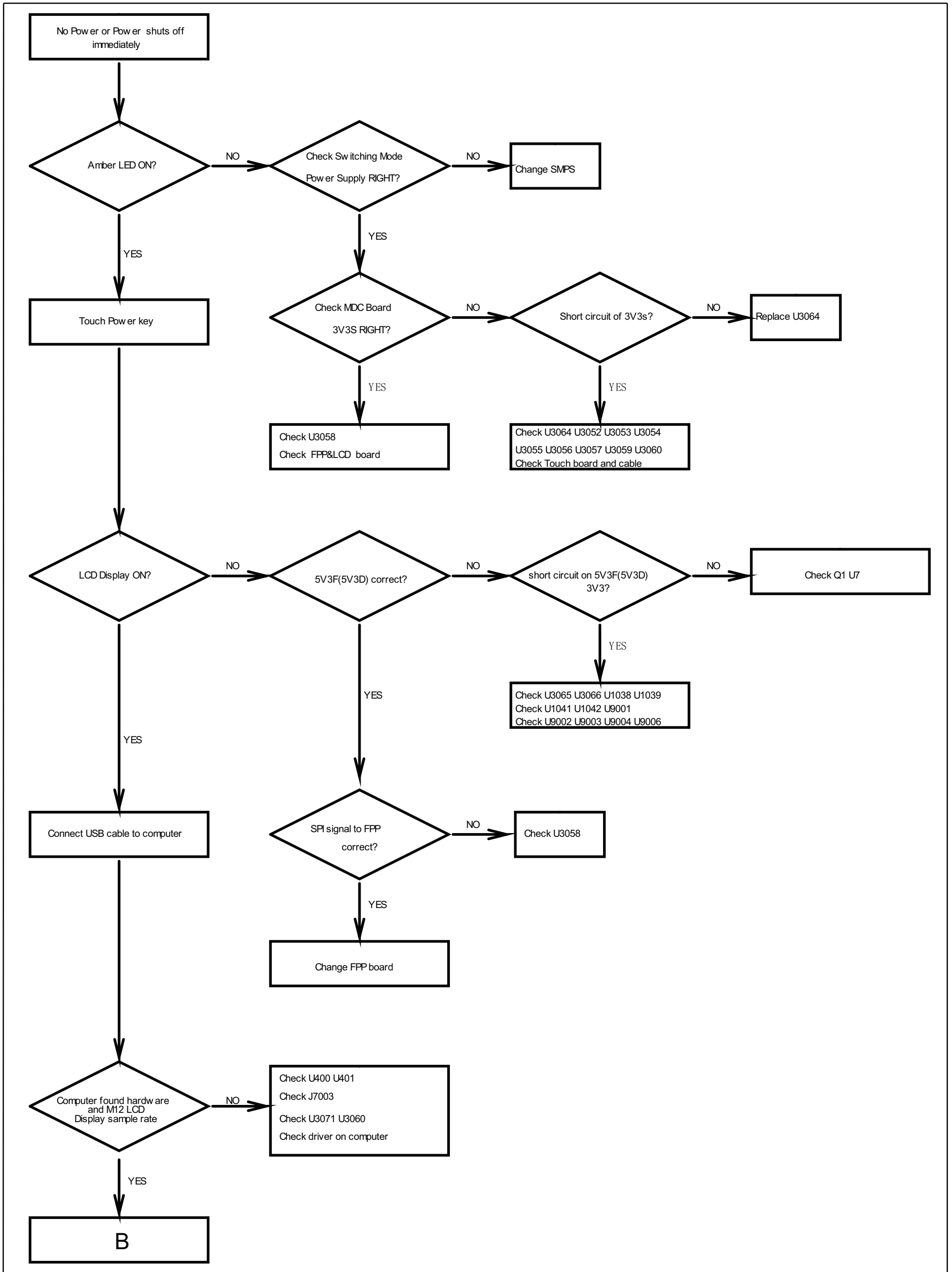


# XS1-L01A-TQ128

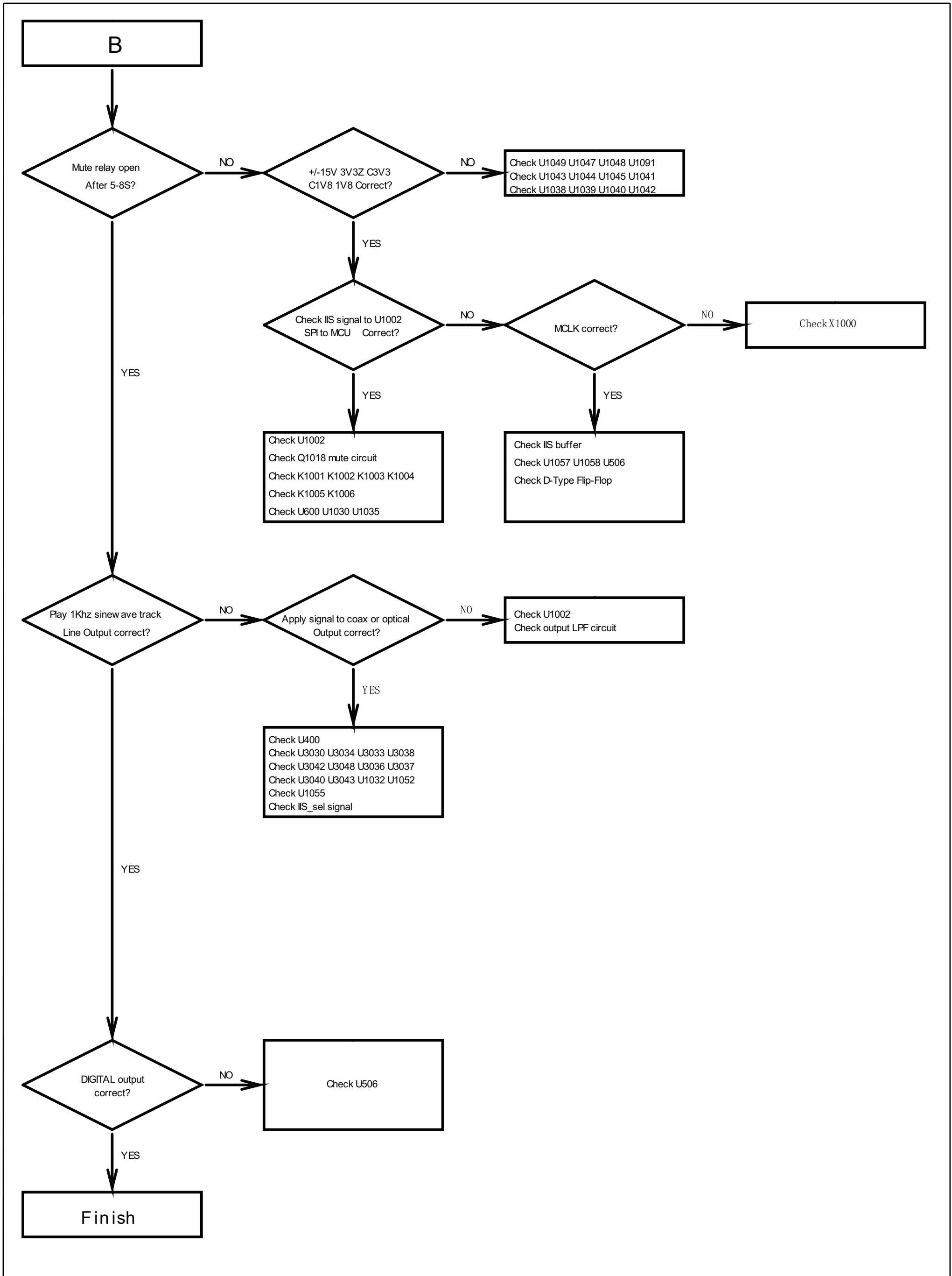
## USB XMOS BOARD



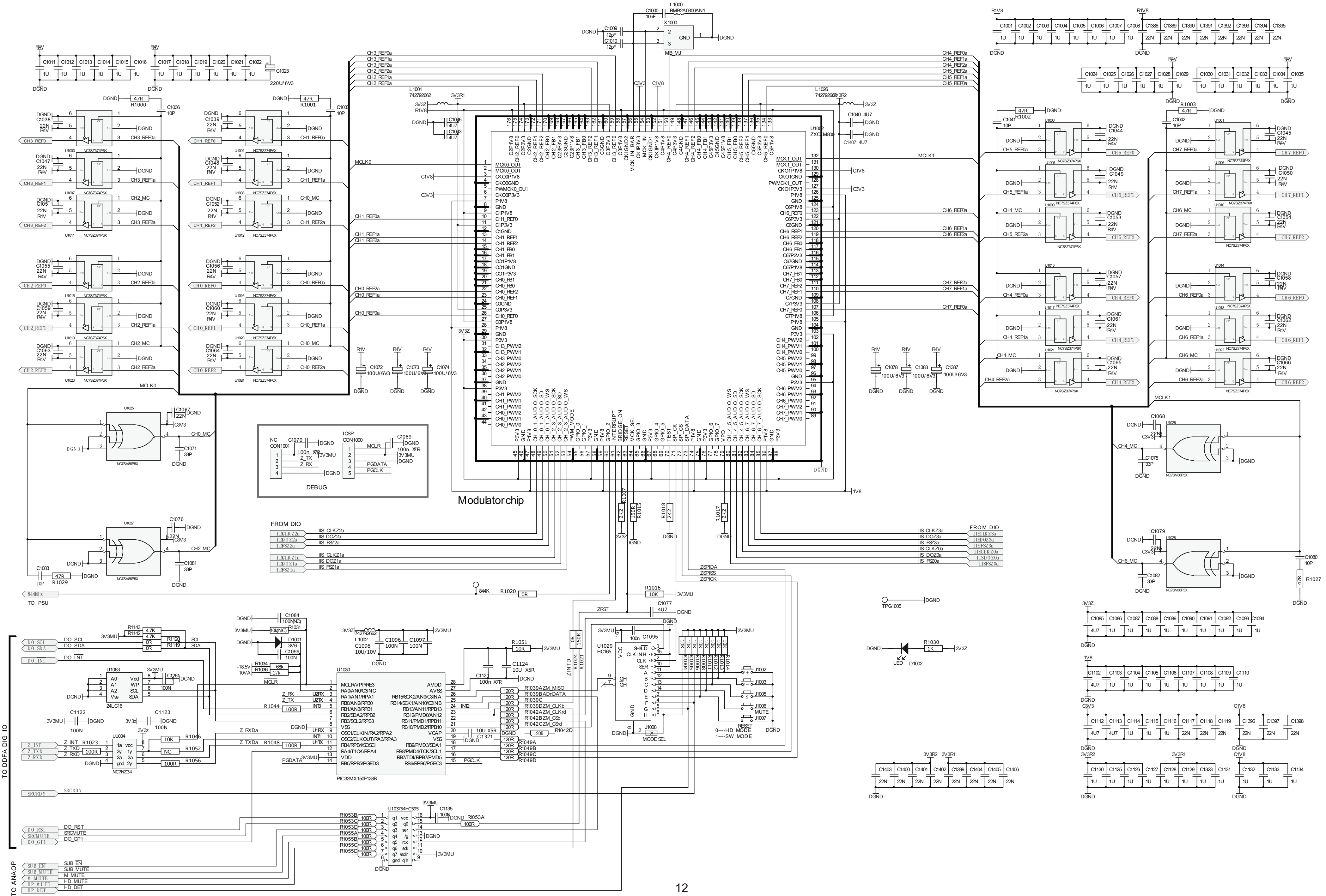
# TROUBLESHOOTING A GUIDE



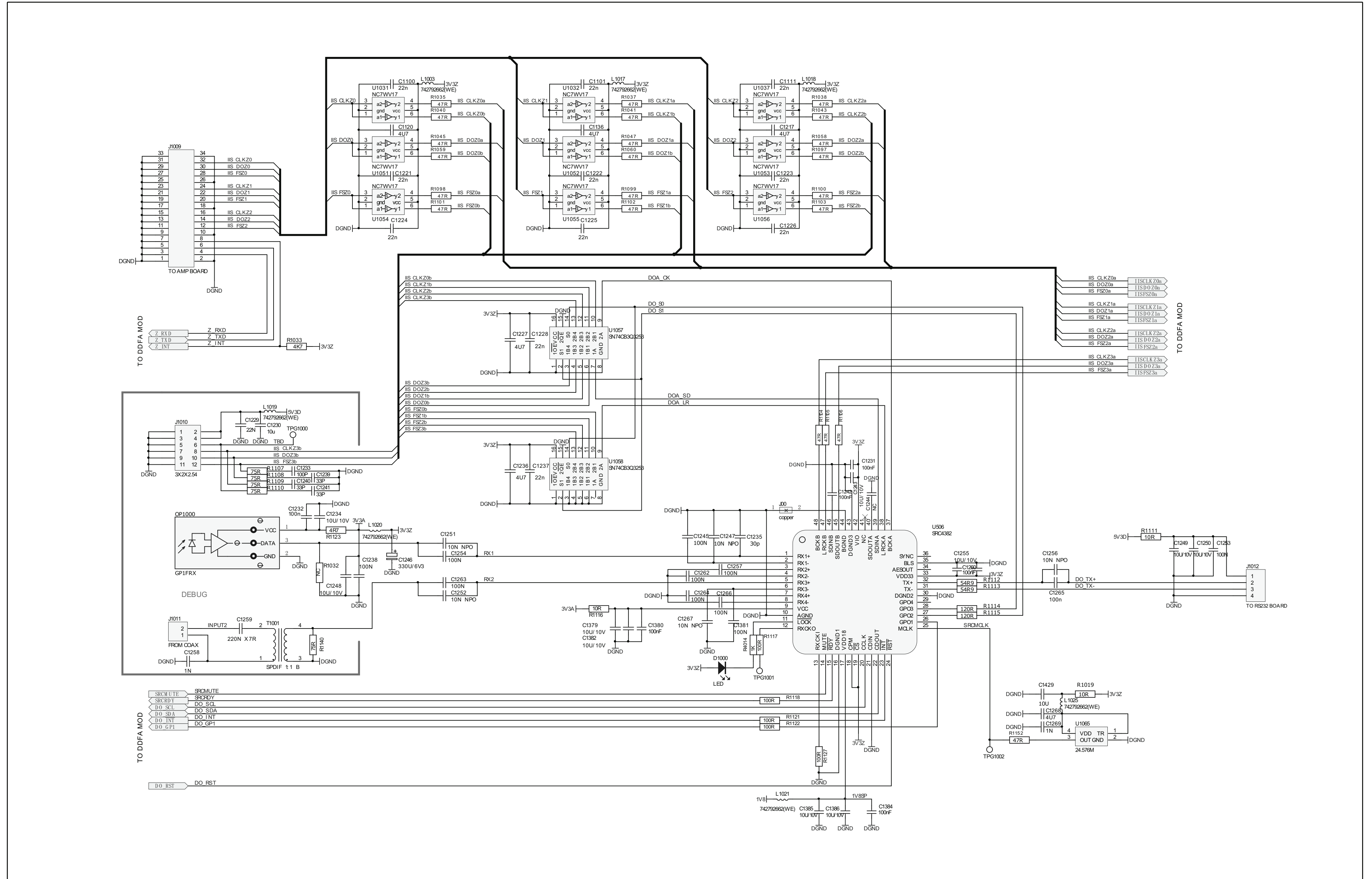
# TROUBLESHOOTING B GUIDE



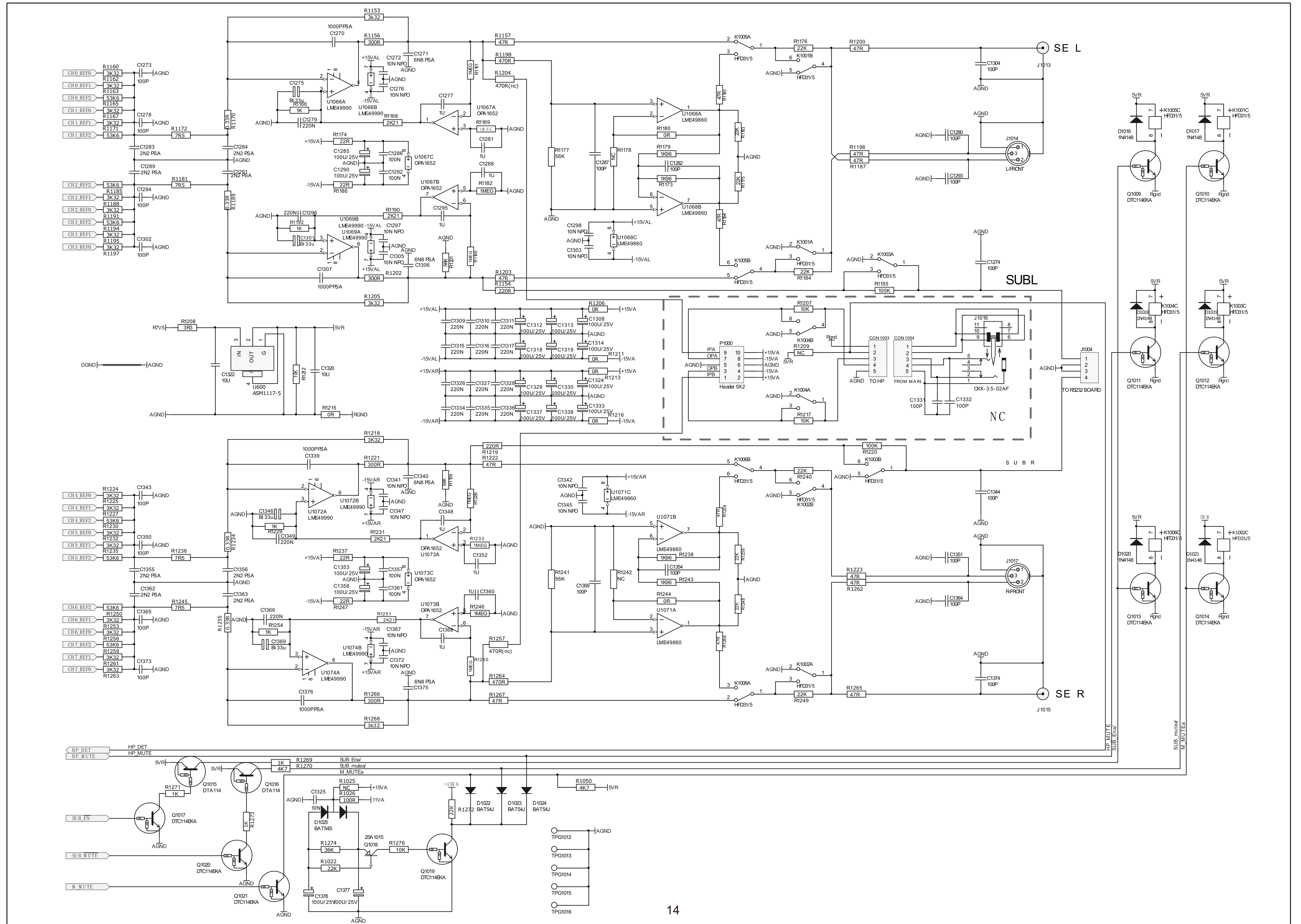
1.AUDIO BOARD (2/4)

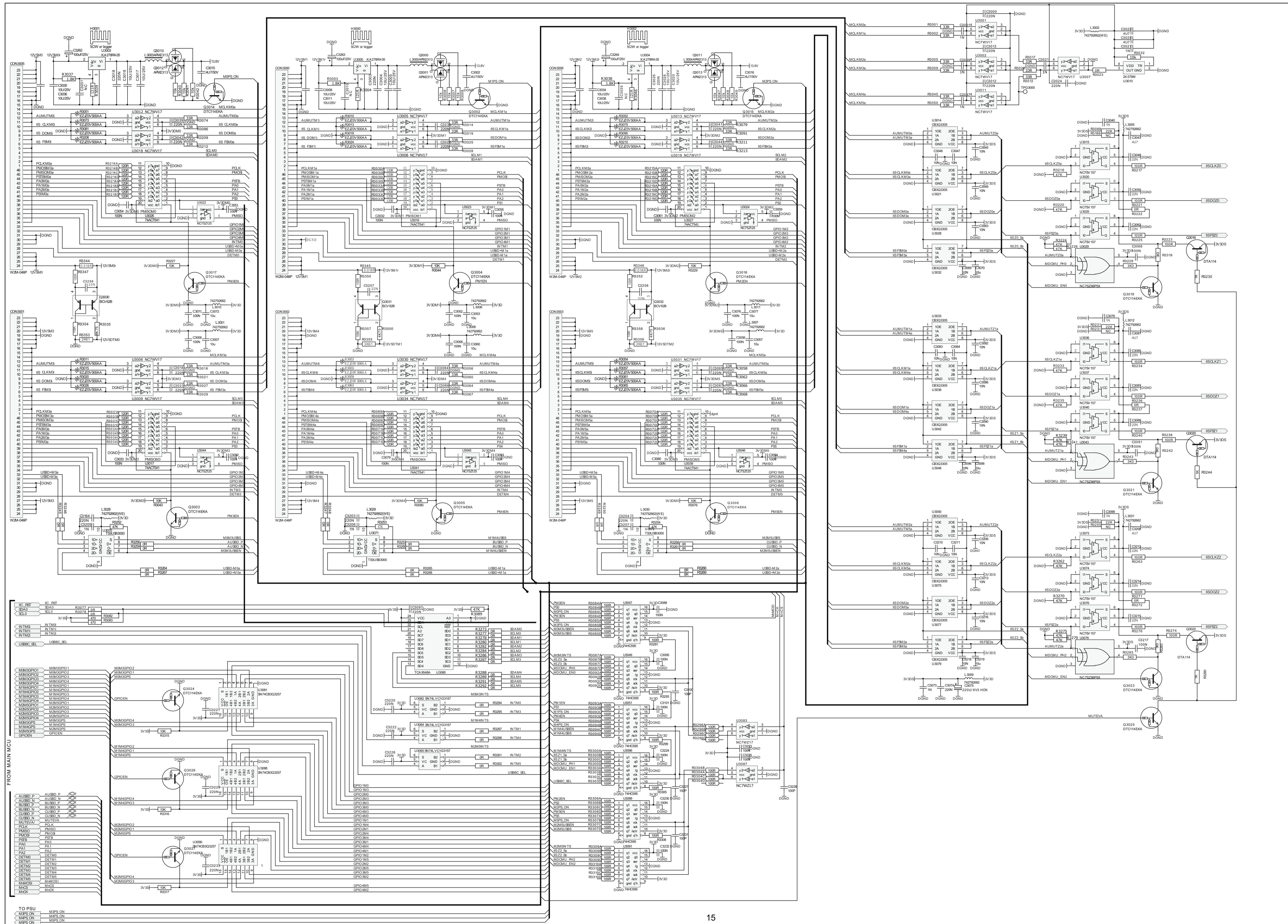


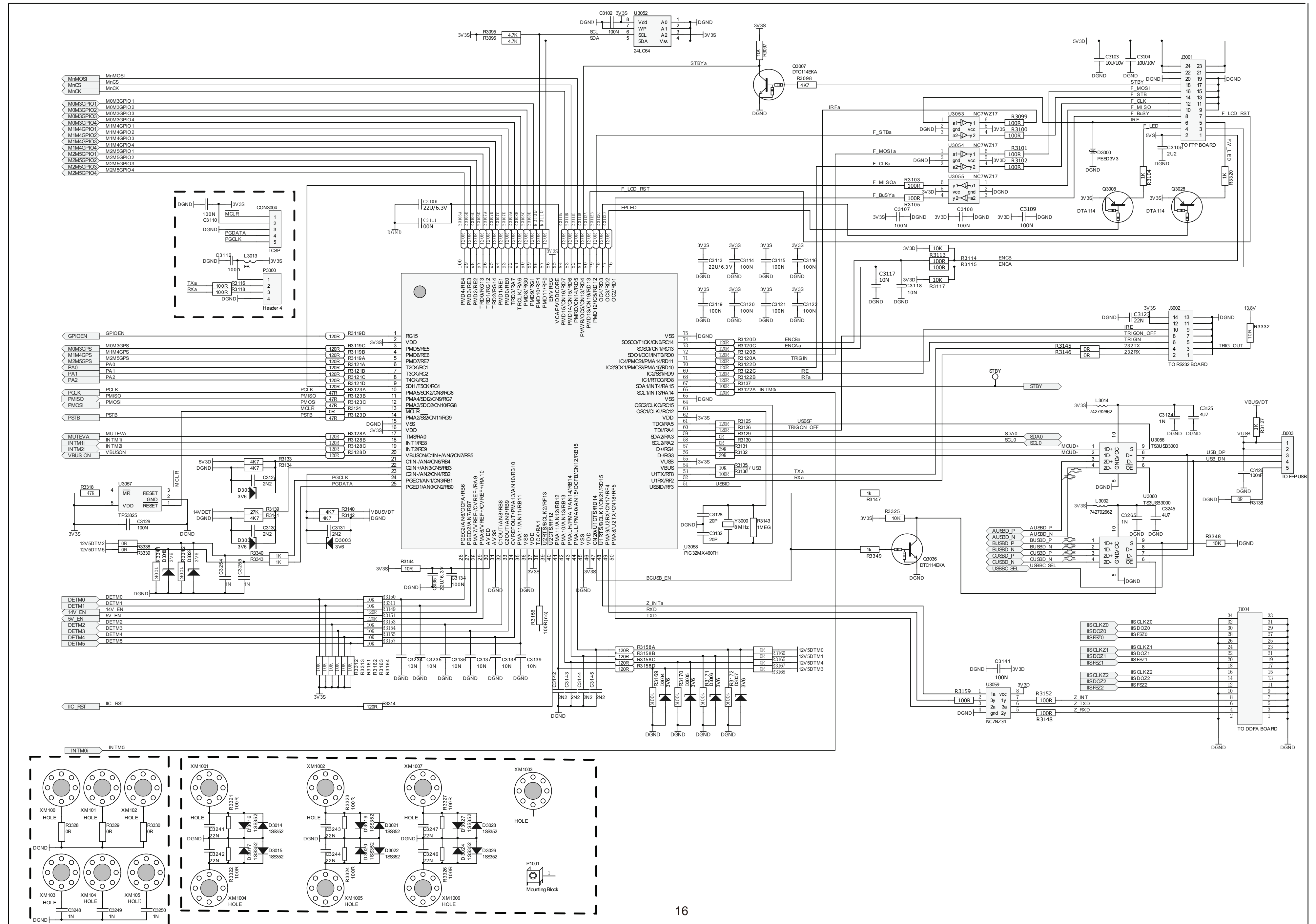
1.AUDIO BOARD (3/4)



1.AUDIO BOARD (4/4)

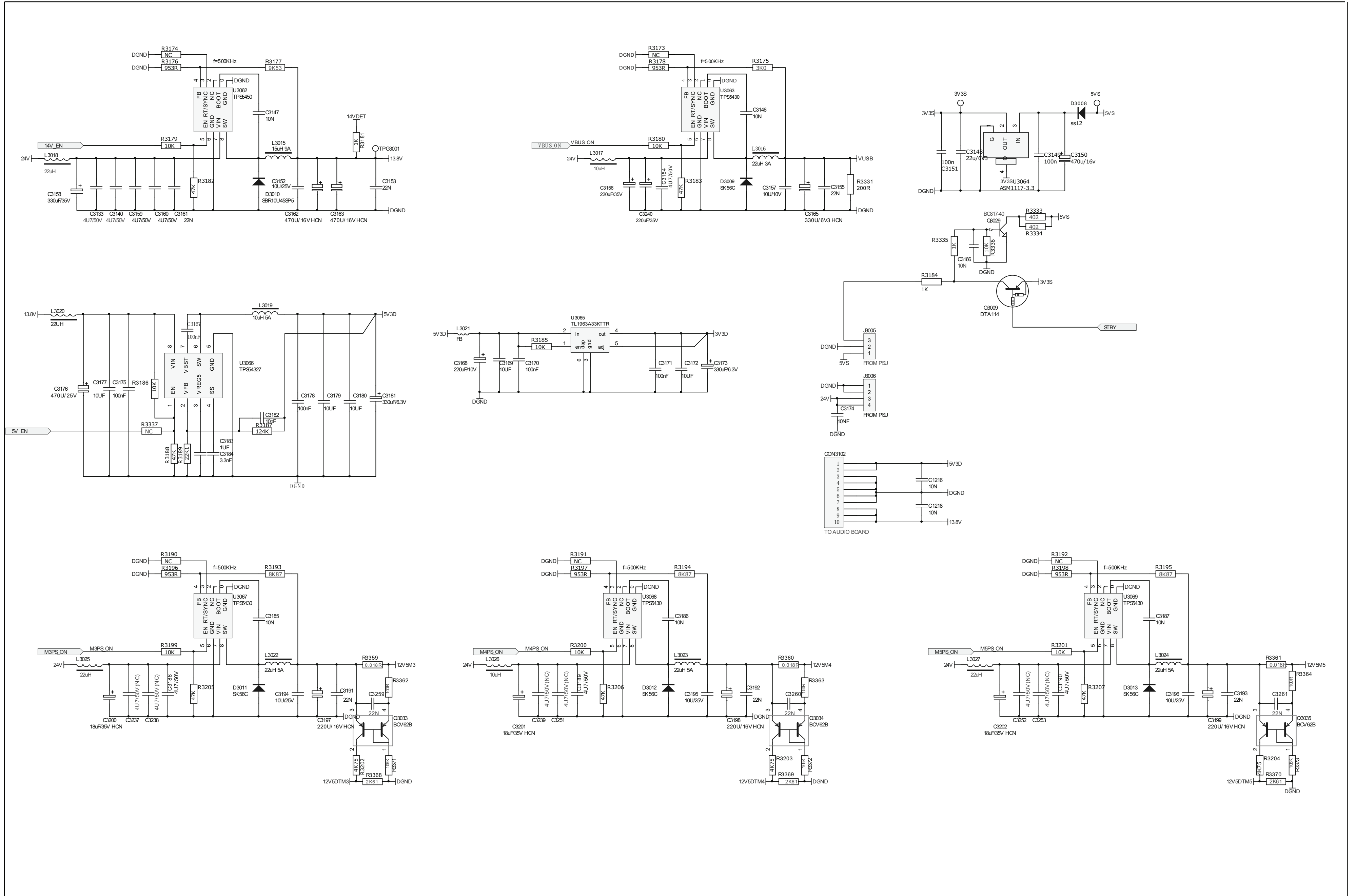




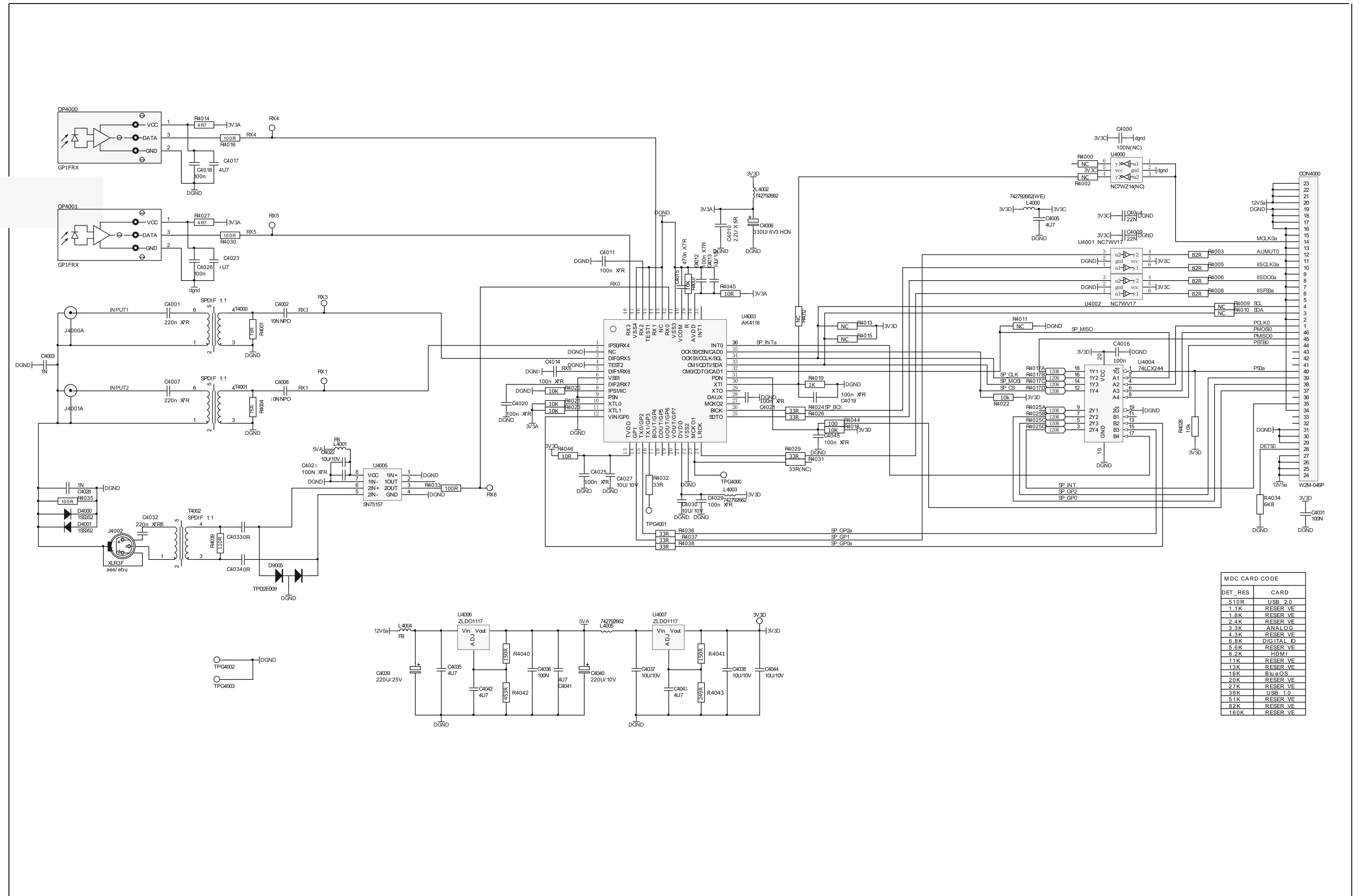




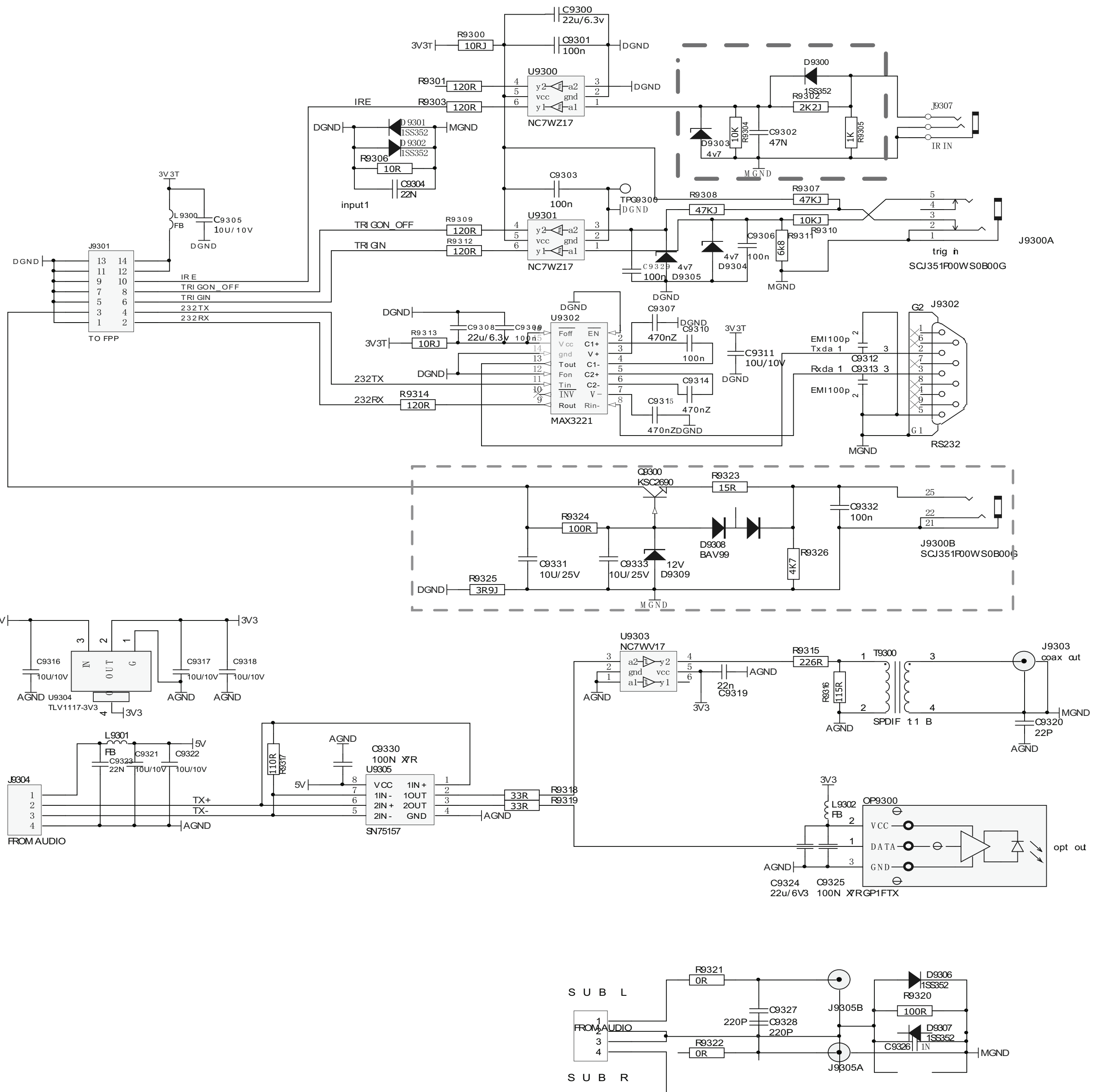
2.MDC BOARD (3/3)



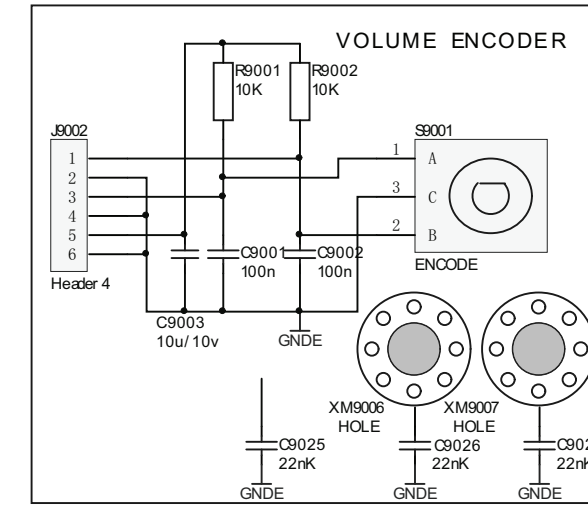
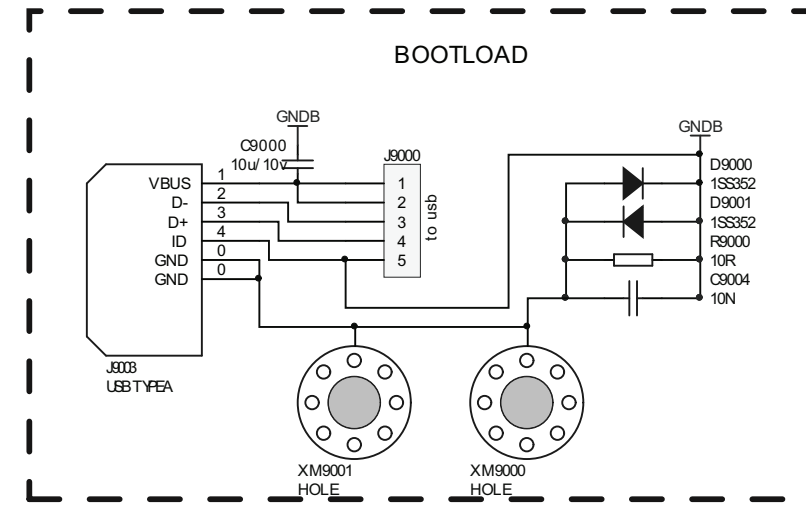
3.MDC DIGITAL IO BOARD



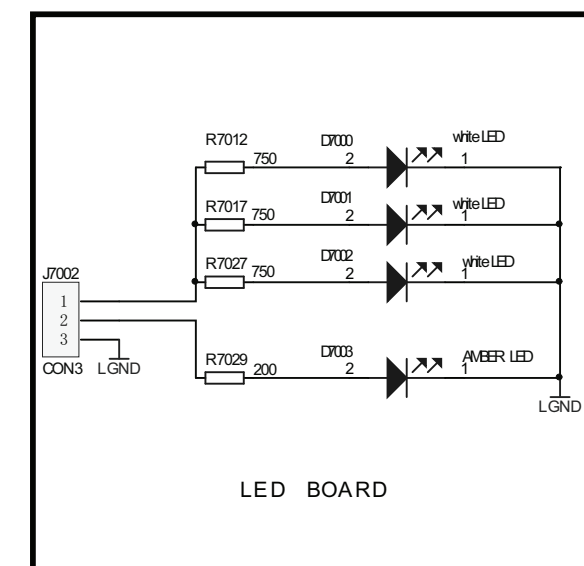
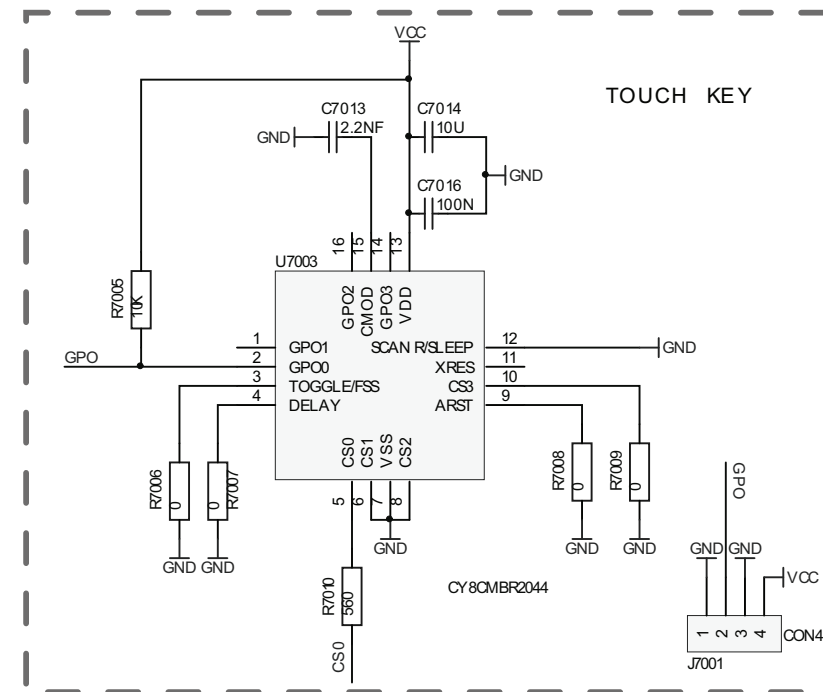
MDC CARD CODE	
DET_RES	CARD
510R	USB 2.0
1.1K	RESER VE
1.8K	RESER VE
2.4K	RESER VE
3.3K	ANALOG
4.3K	RESER VE
6.8K	DIGITAL ID
5.6K	RESER VE
8.2K	HDMI
11K	RESER VE
13K	RESER VE
16K	Bluetooth
20K	RESER VE
27K	RESER VE
36K	USB 1.0
51K	RESER VE
82K	RESER VE
160K	RESER VE

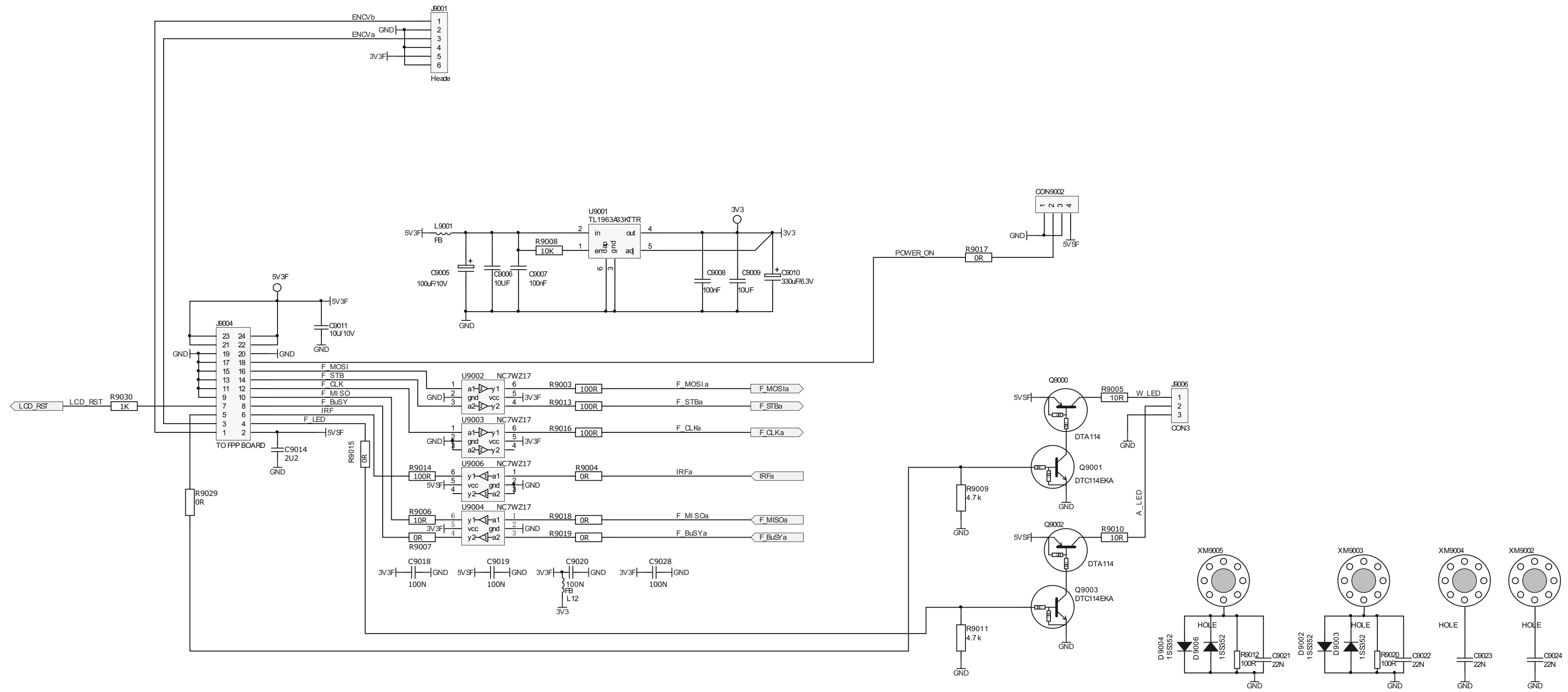


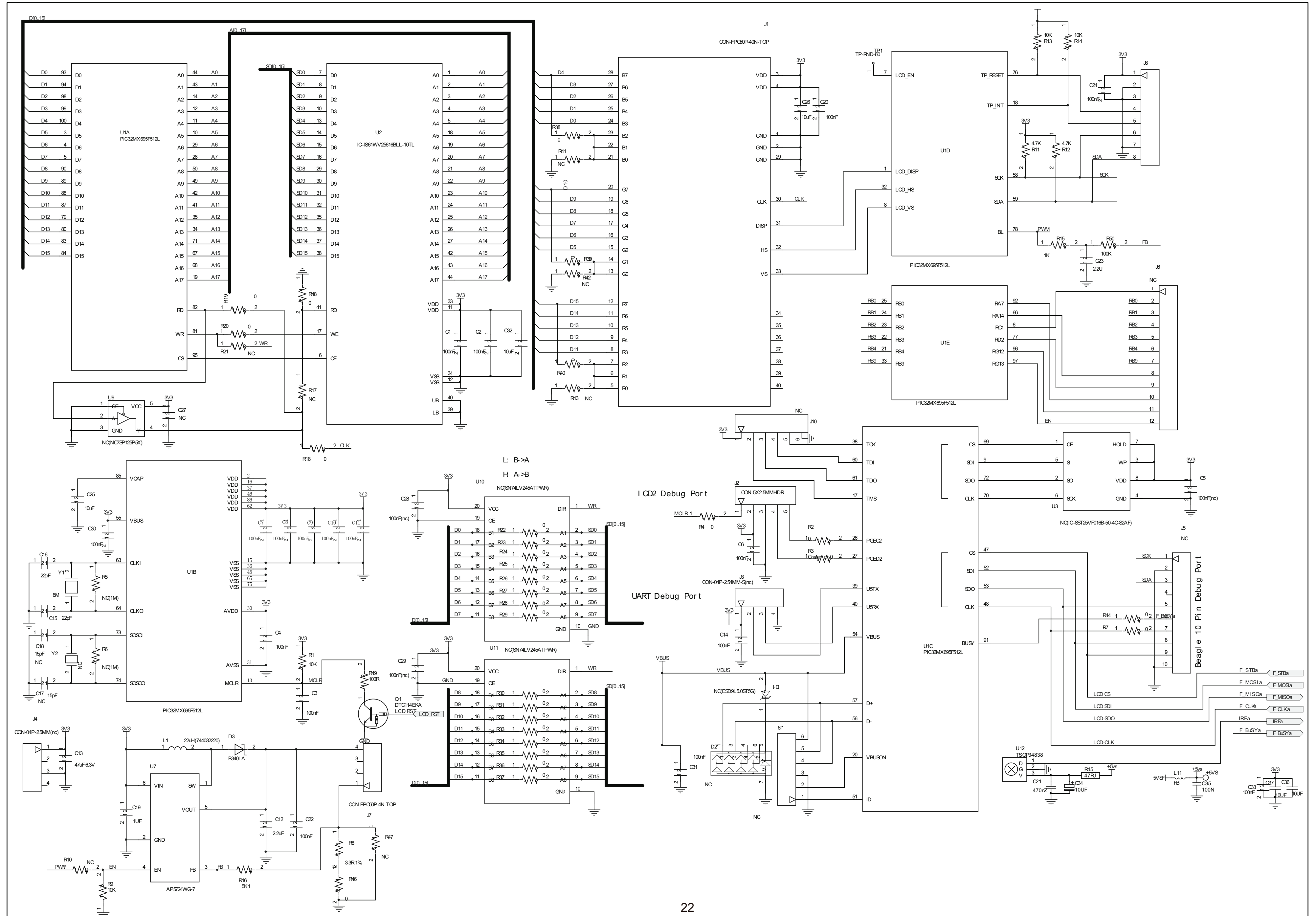
5. BOOTLOAD BOARD & ENCODER BOARD

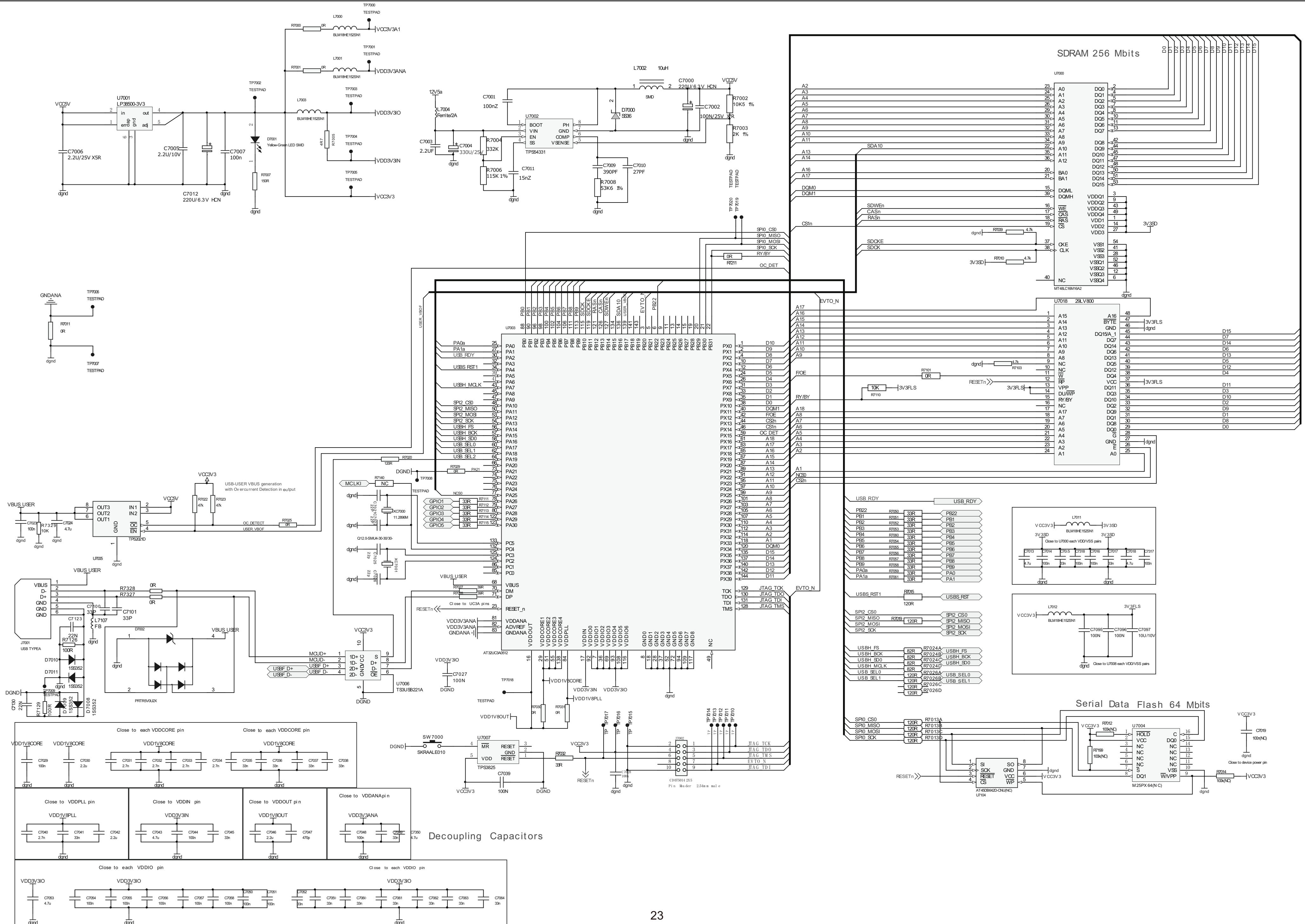


6. TOUCH KEY BOARD & LED BOARD

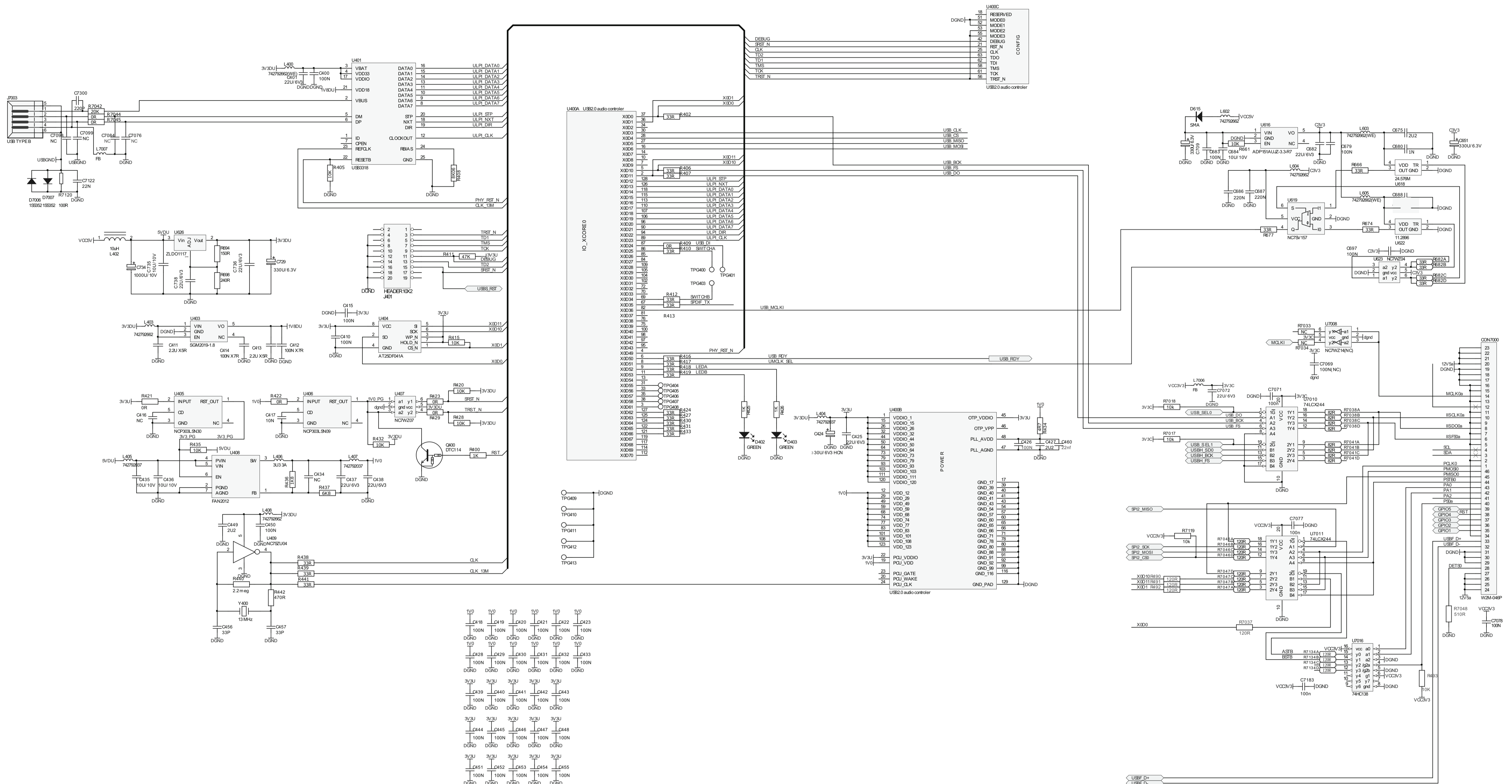




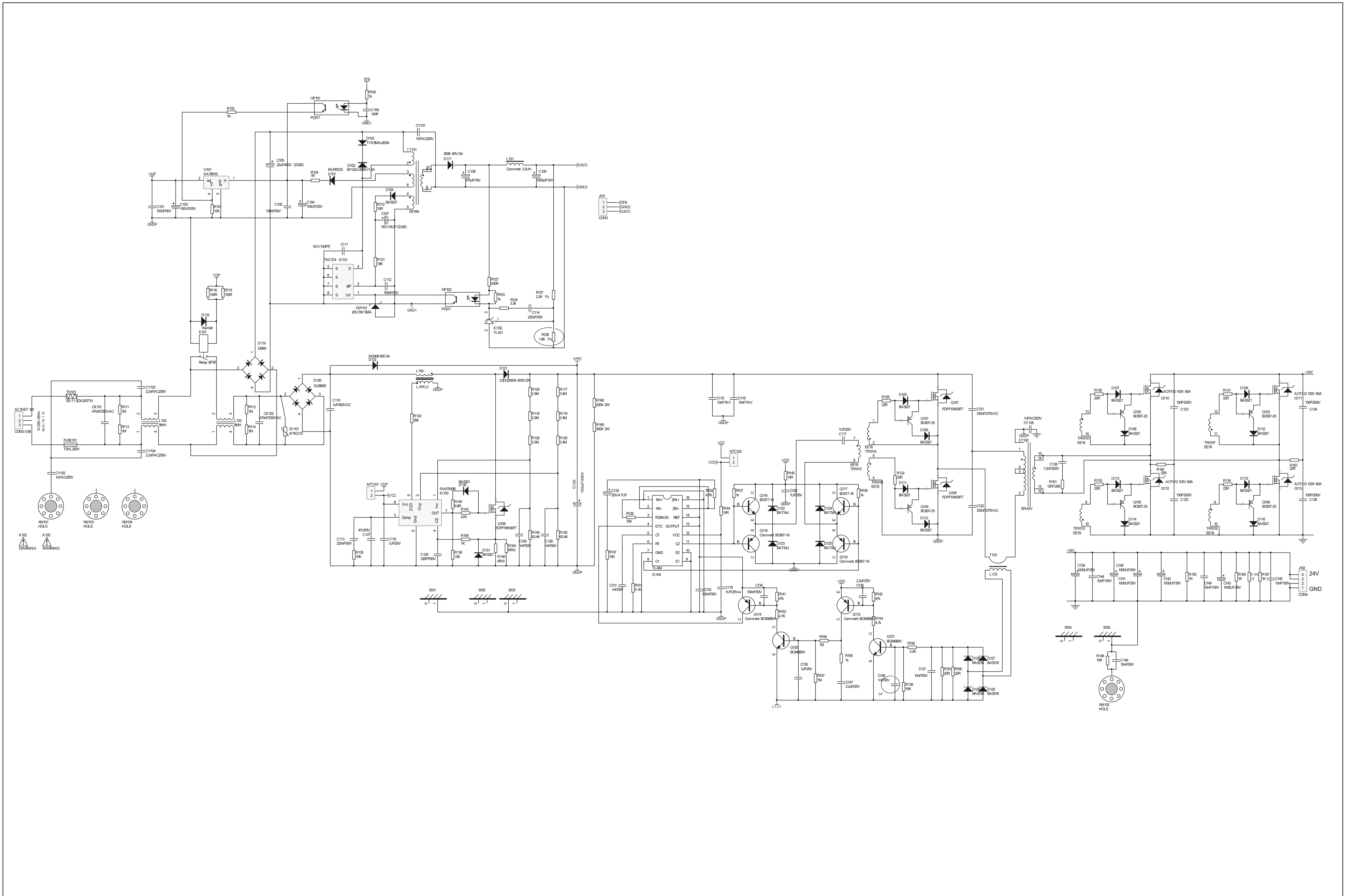


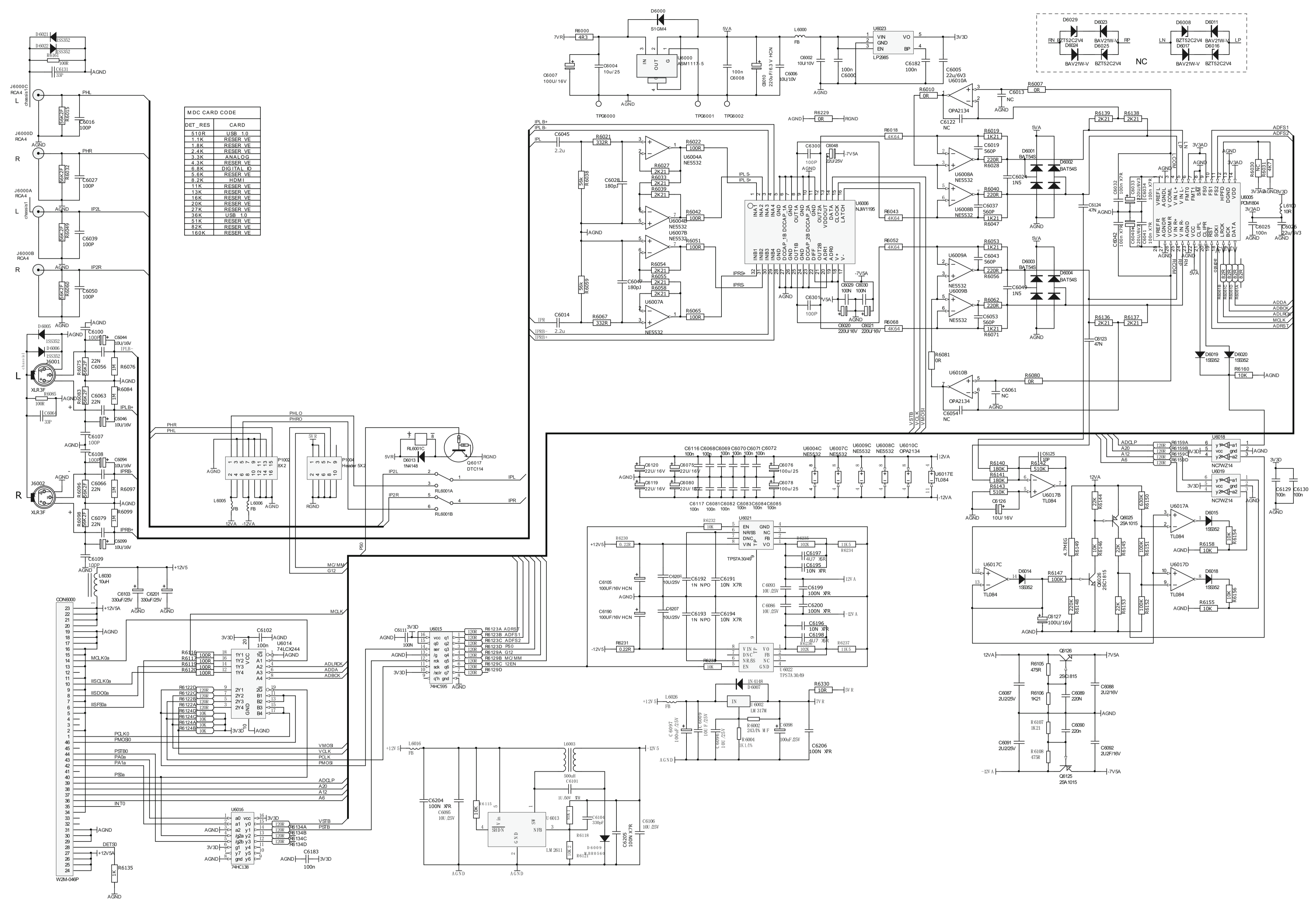


Decoupling Capacitors



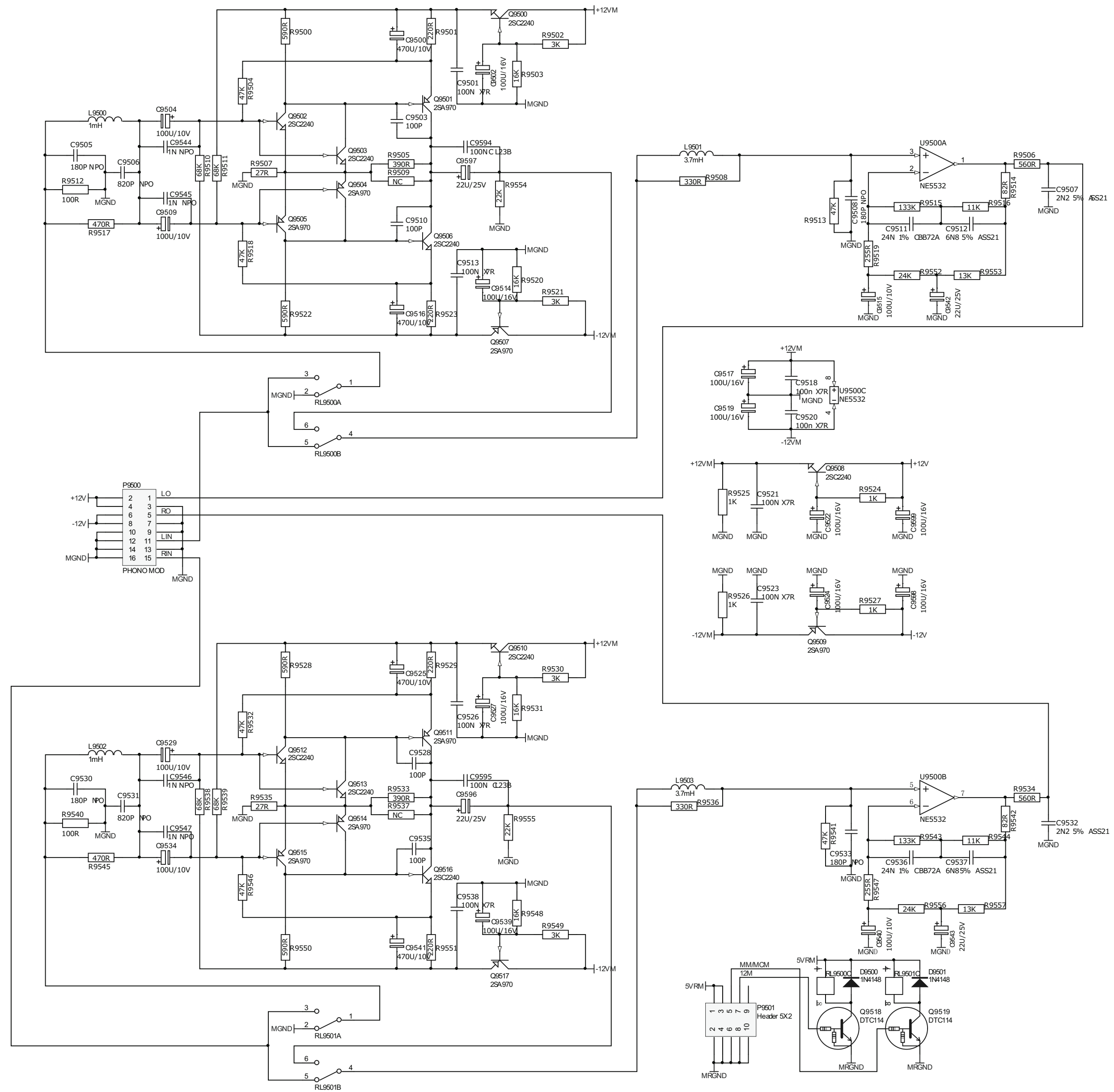


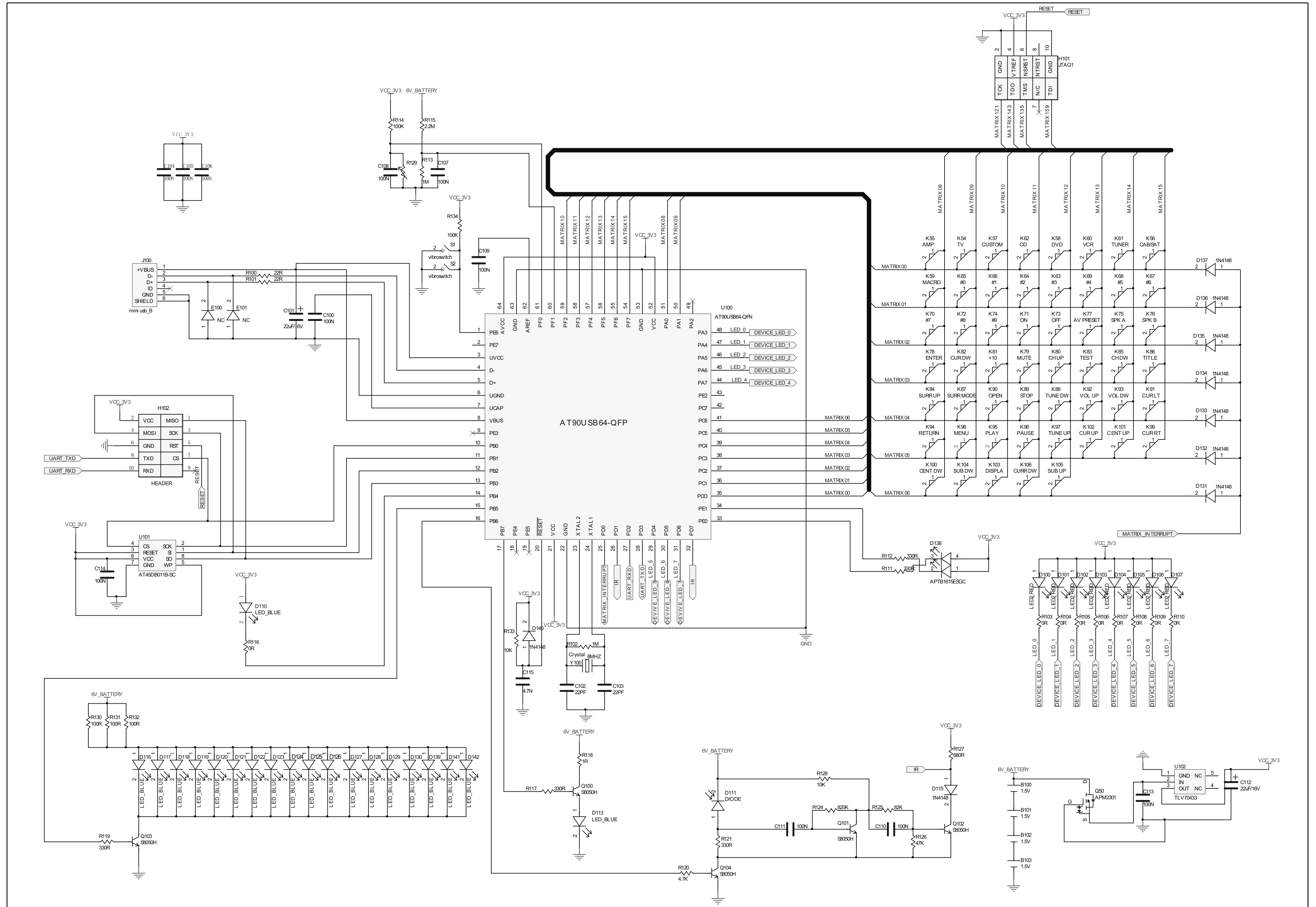




MDC CARD CODE

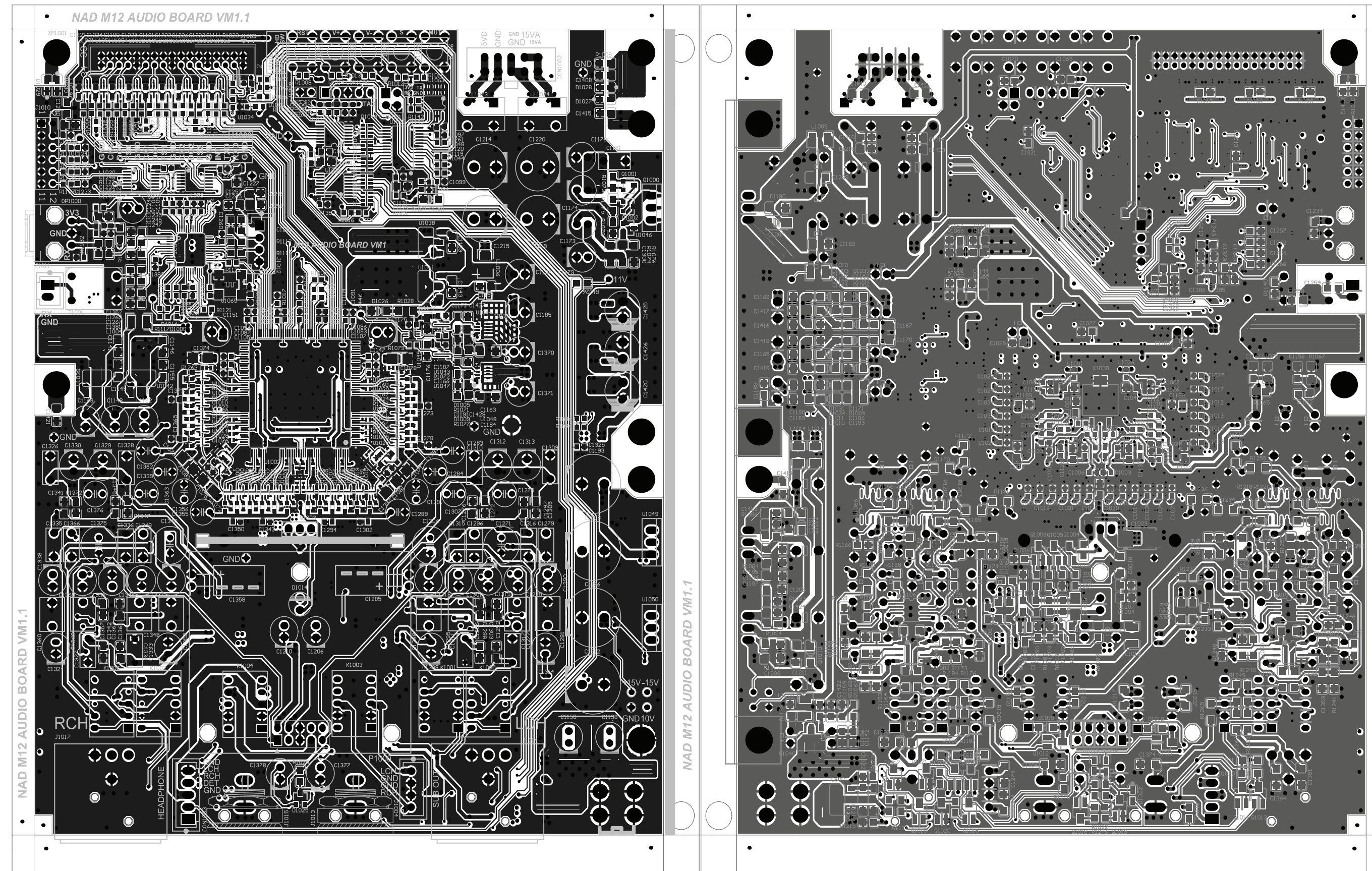
DET	RES	CARD
5.0K	USB 1.0	
1.0K	RESER VE	
2.4K	RESER VE	
3.3K	ANALOG	
4.3K	RESER VE	
6.8K	DIGITAL ID	
8.2K	RESER VE	
11K	HDMI	
13K	RESER VE	
16K	RESER VE	
20K	RESER VE	
27K	RESER VE	
36K	USB 1.0	
51K	RESER VE	
82K	RESER VE	
160K	RESER VE	





PCB LAYOUT

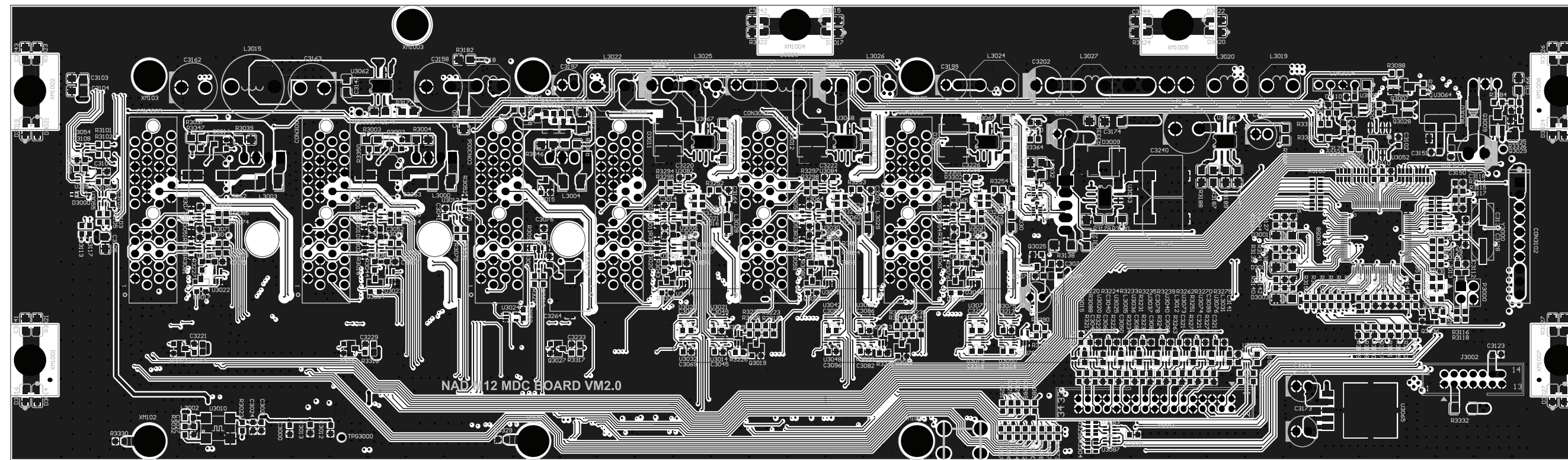
1.AUDIO BOARD



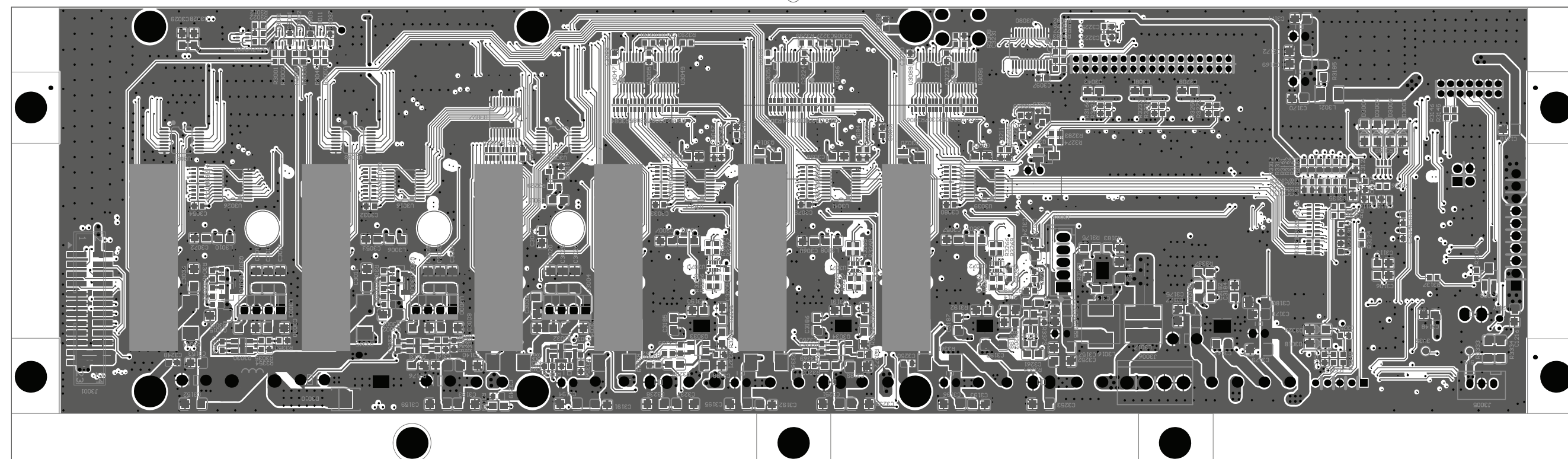
Top Layer

Bottom Layer

Top Layer

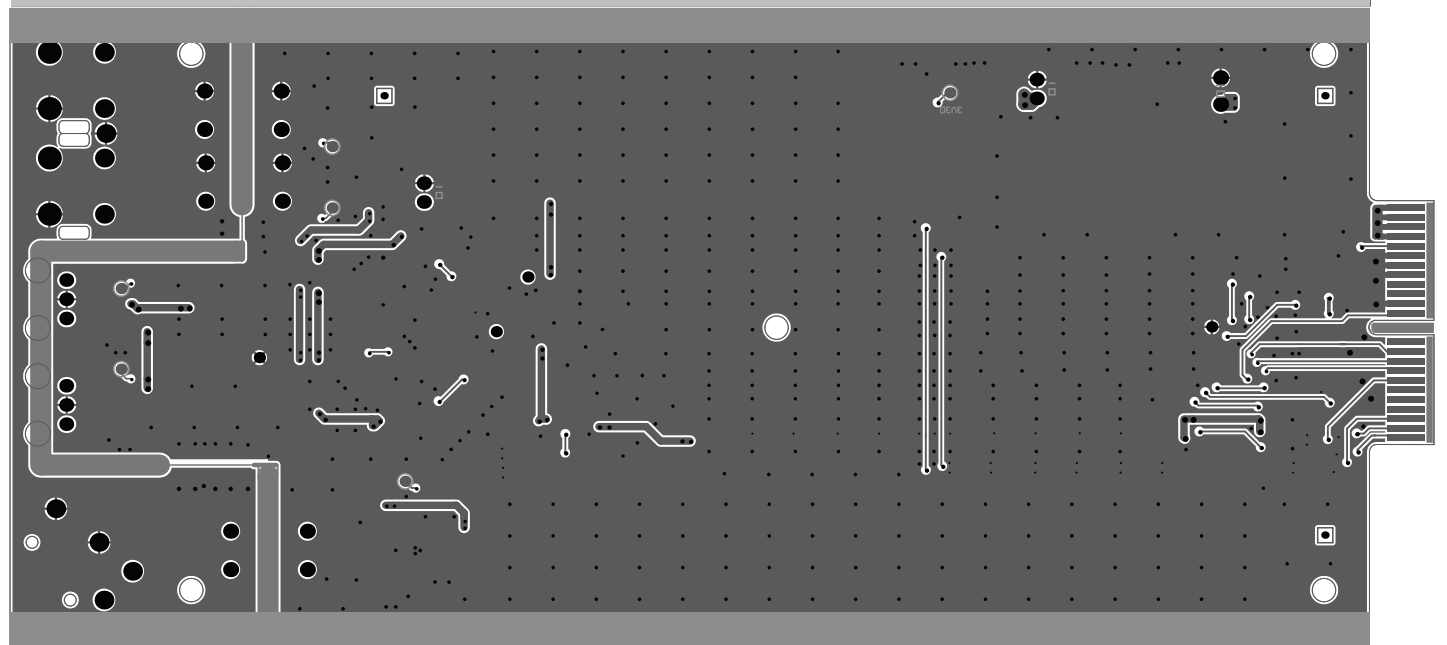
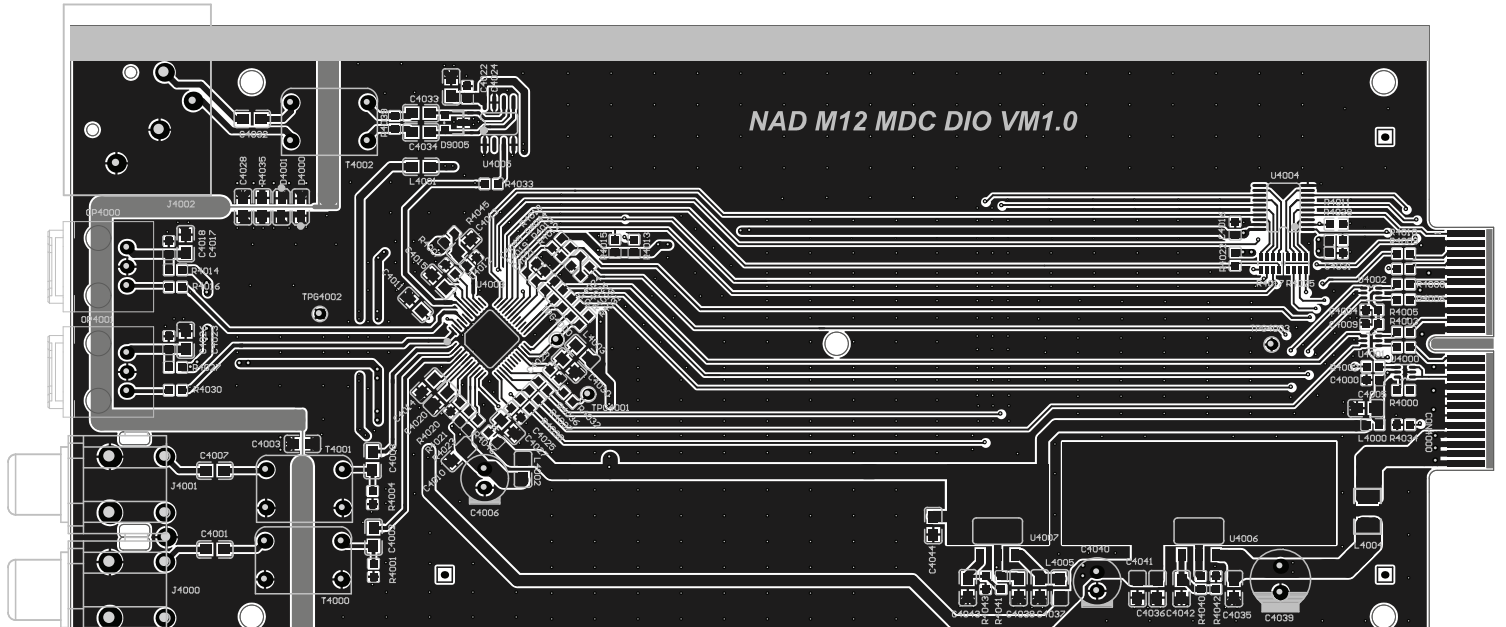


Bottom Layer



### 3. MDC DIGITAL IO BOARD

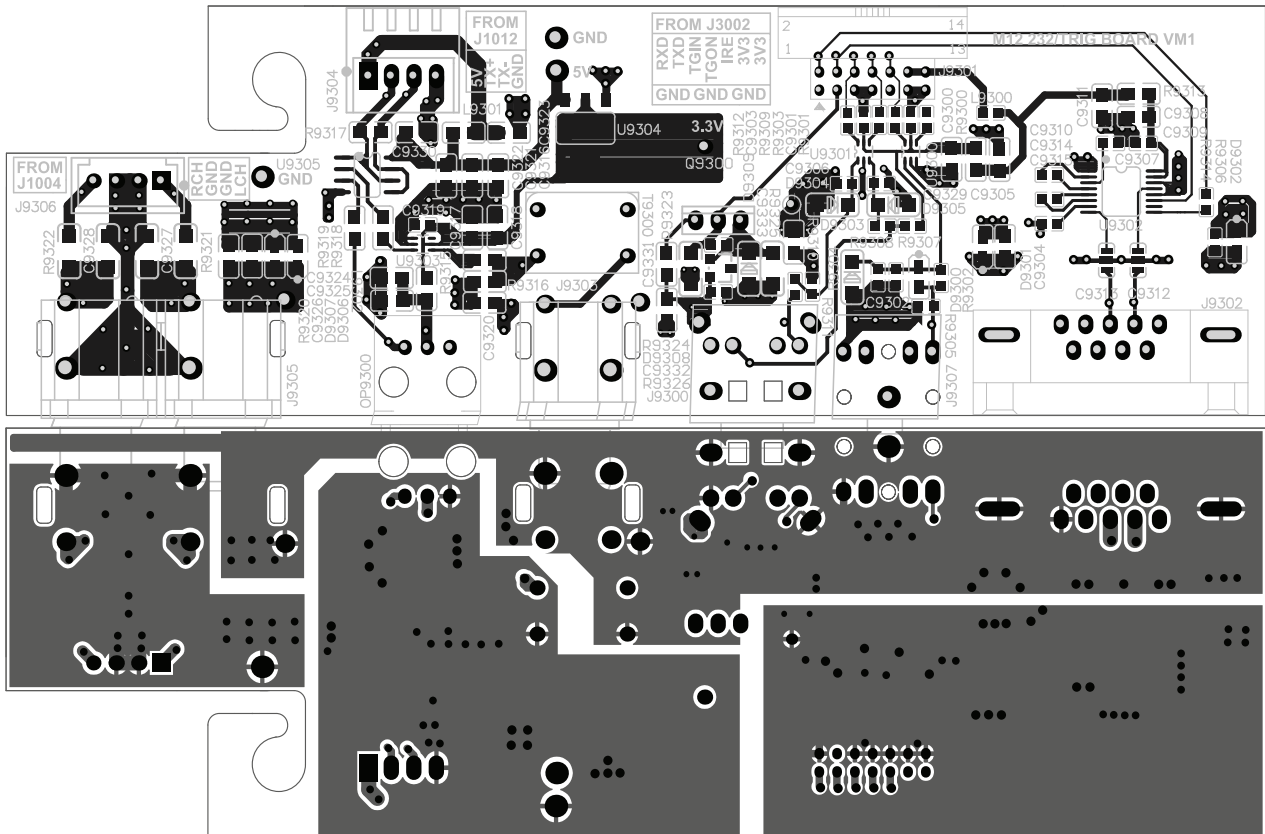
Top Layer



Bottom Layer

# 4. 232\_TRIG BOARD

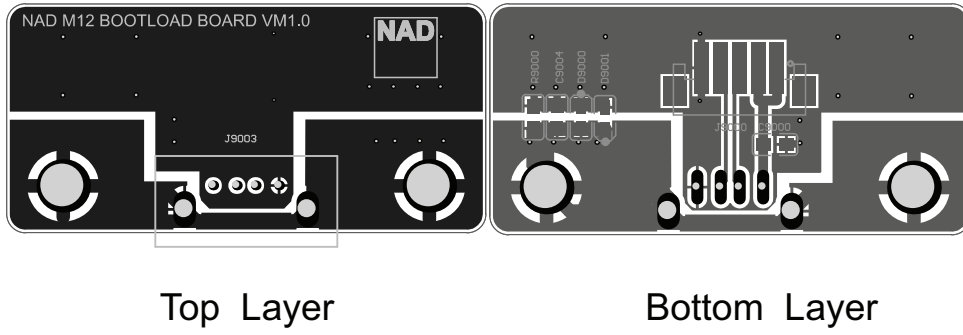
Top Layer



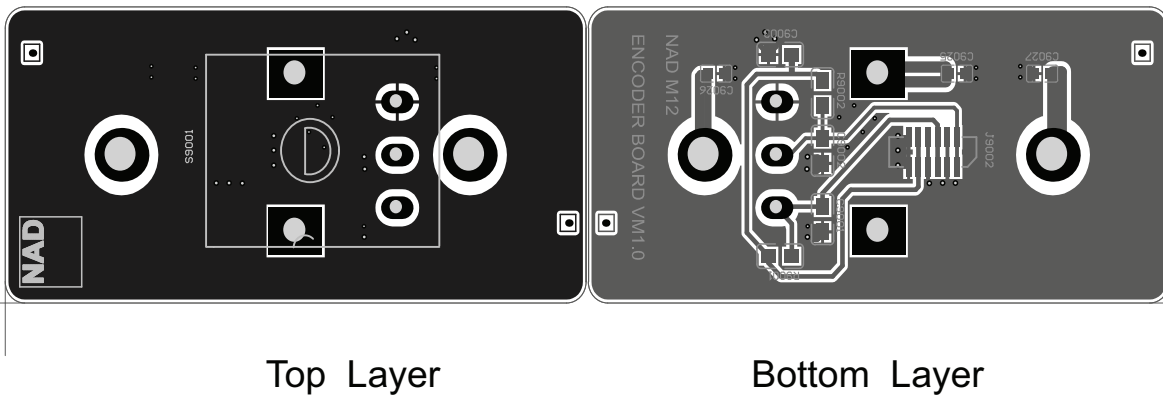
Bottom Layer



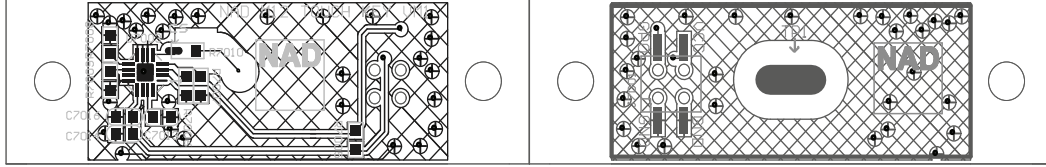
## 5. BOOTLOAD BOARD



## 6. ENCODER BOARD



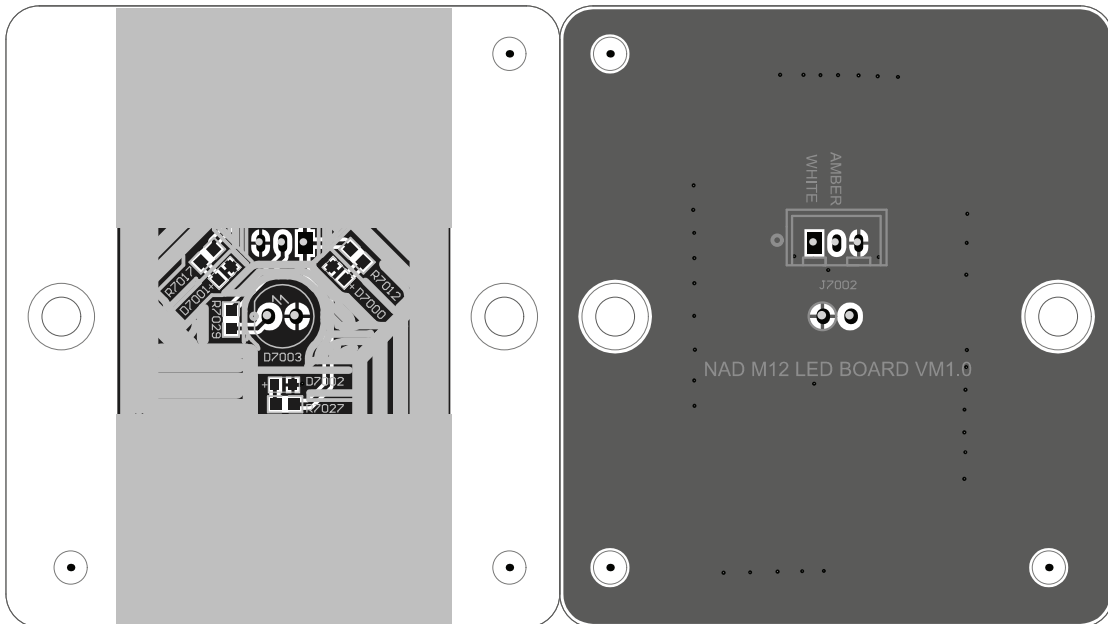
## 7. TOUCH KEY BOARD



Top Layer

Bottom Layer

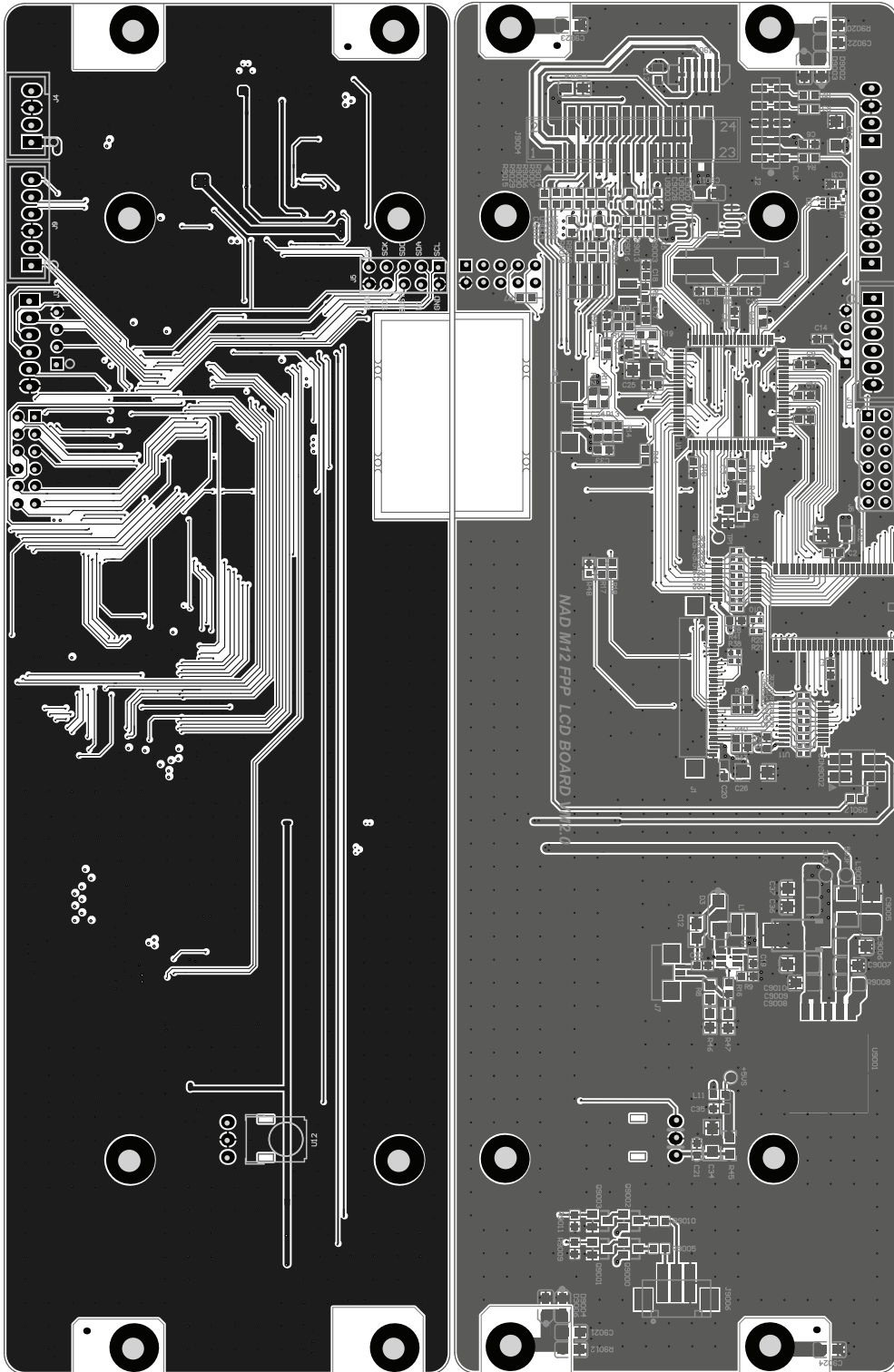
## 8. LED BOARD



Top Layer

Bottom Layer

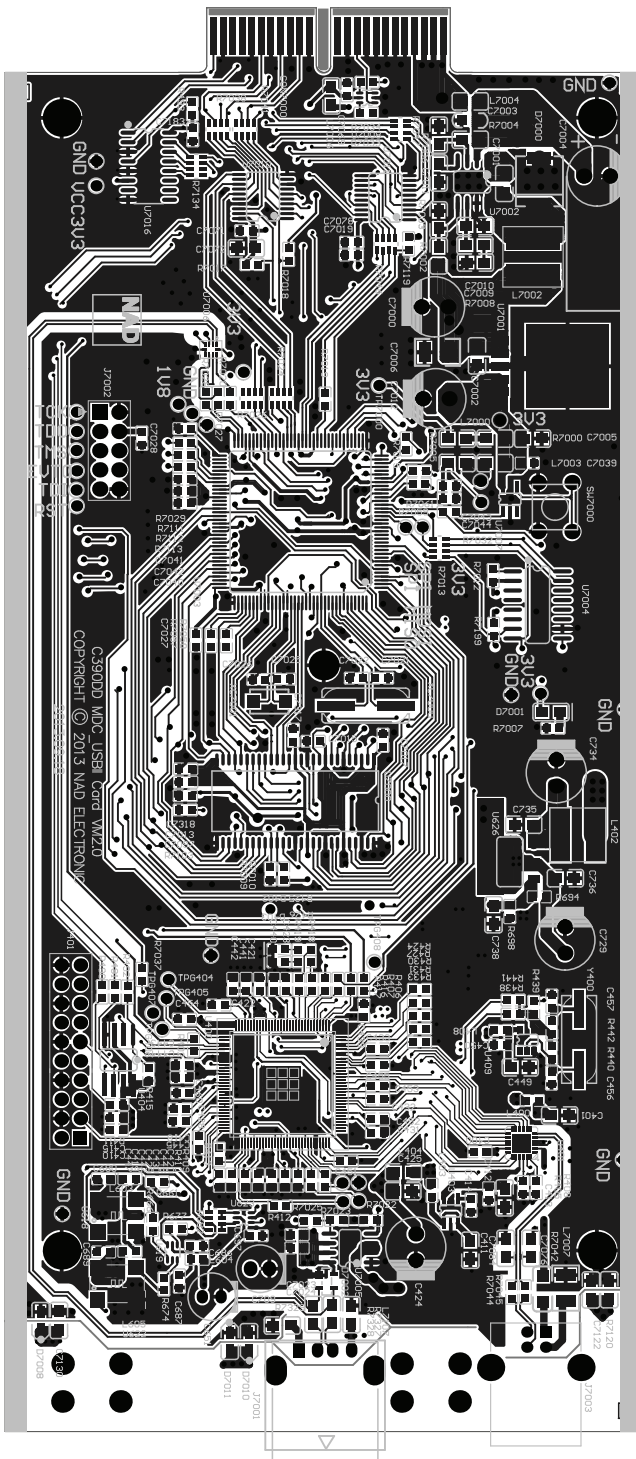
# 9. FPP BOARD



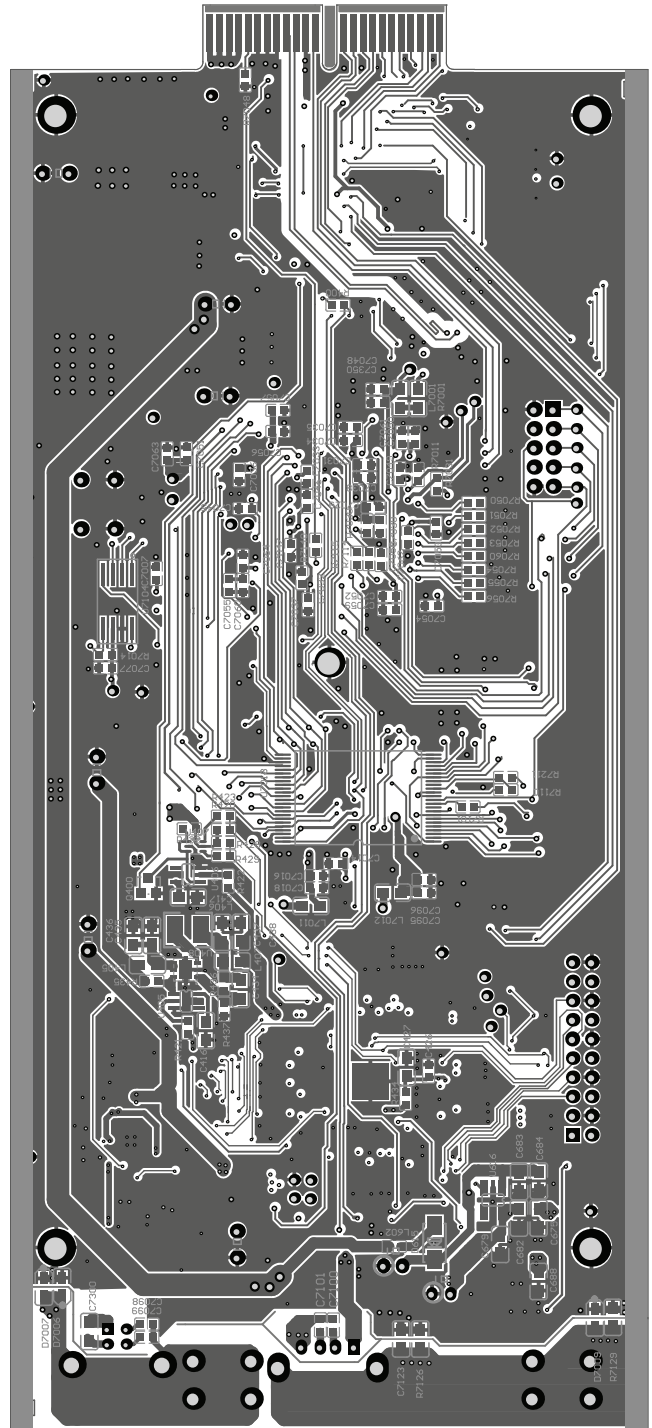
Top Layer

Bottom Layer

# 10. USB XMOS BOARD

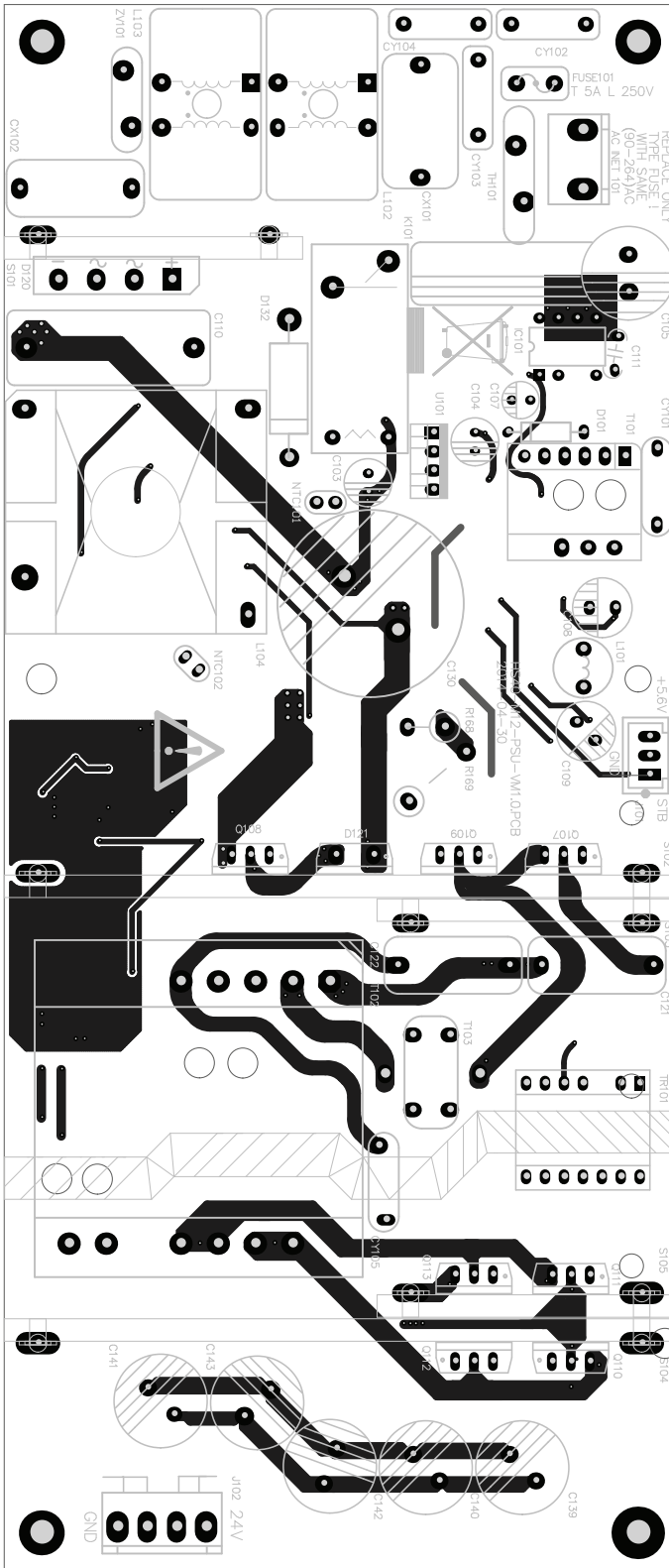


Top Layer

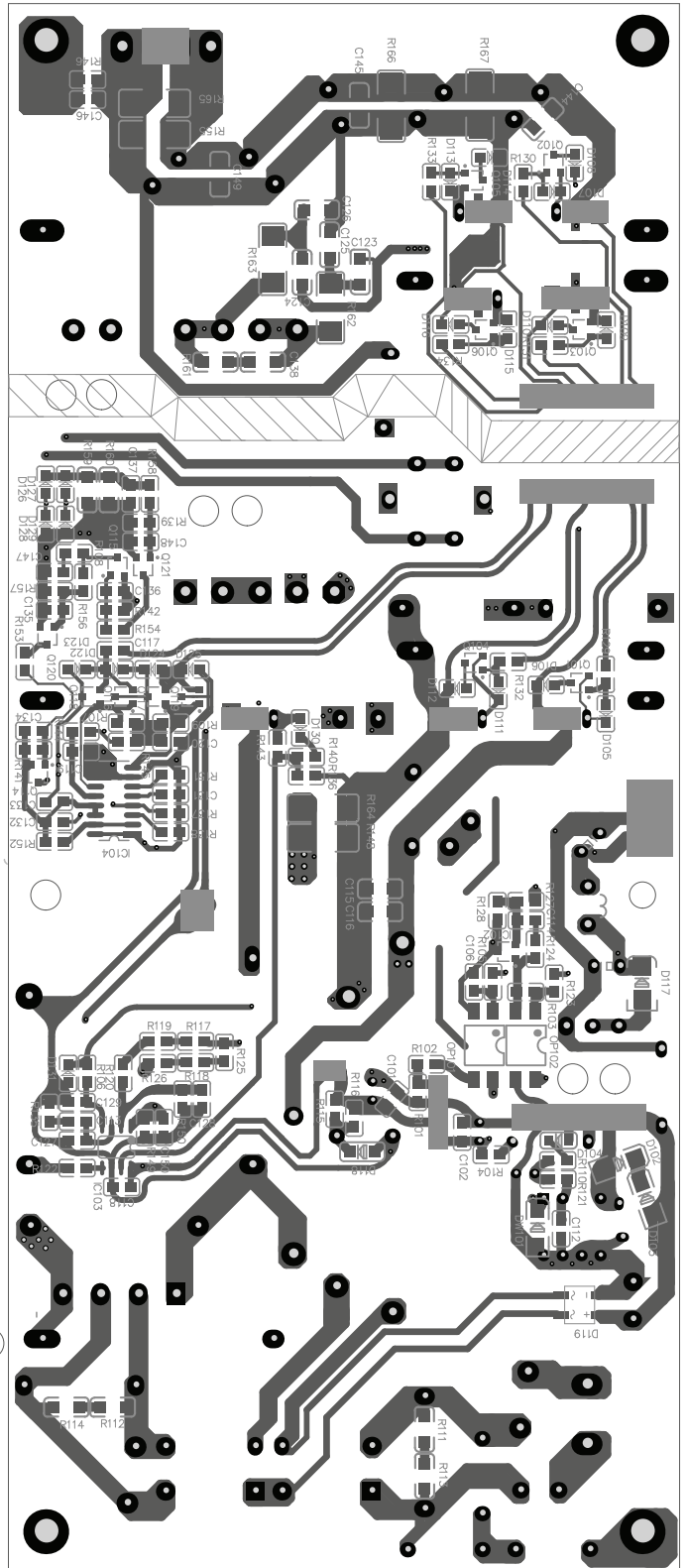


Bottom Layer

# 11. PSU BOARD

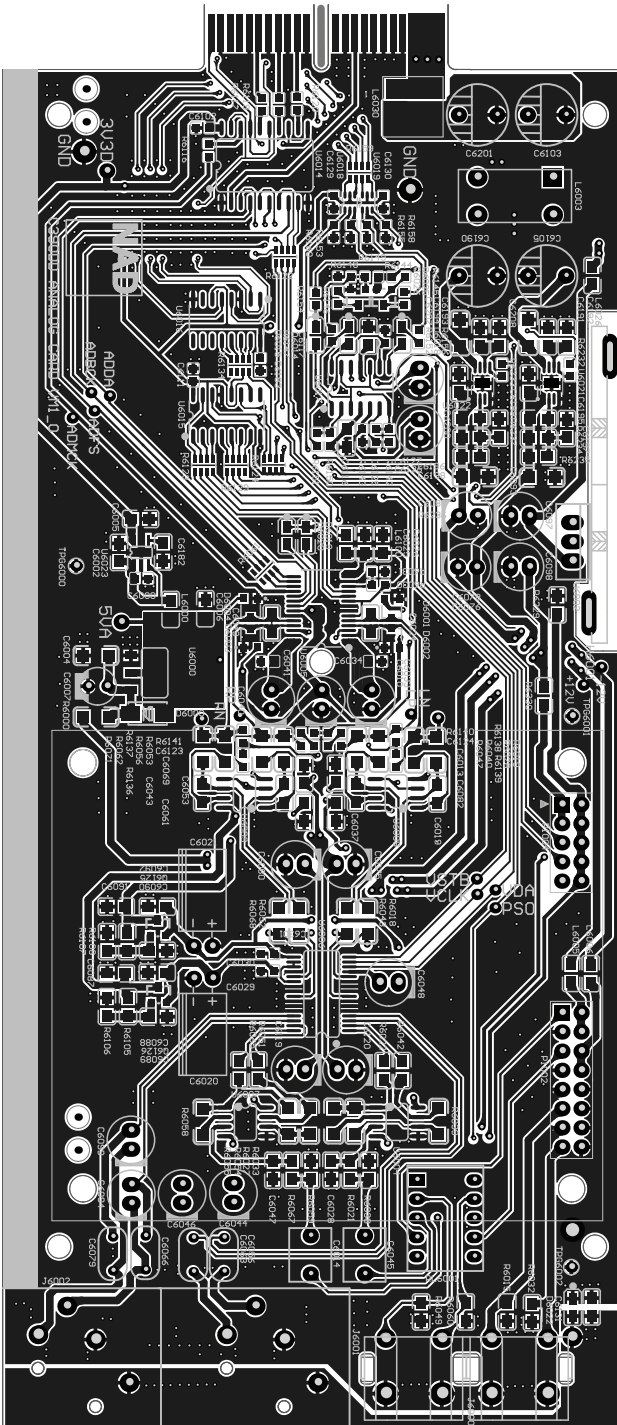


Top Layer

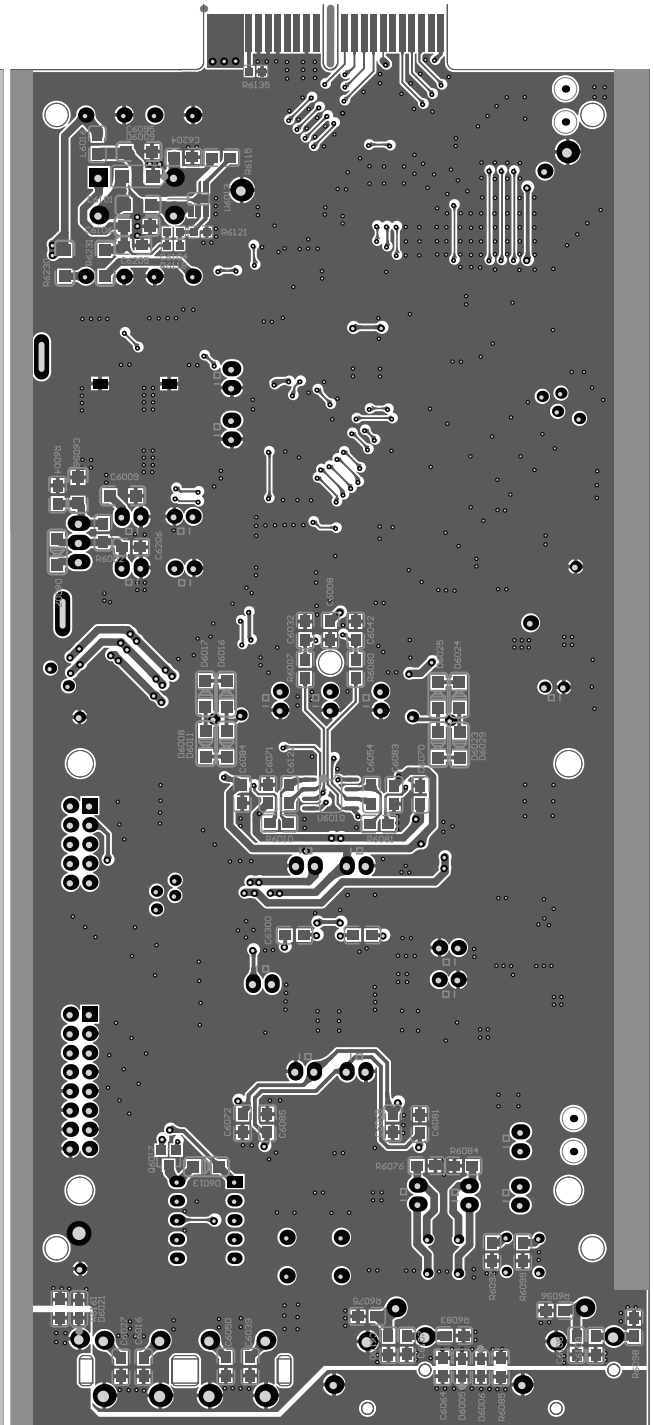


Bottom Layer

## 12. ANA BOARD

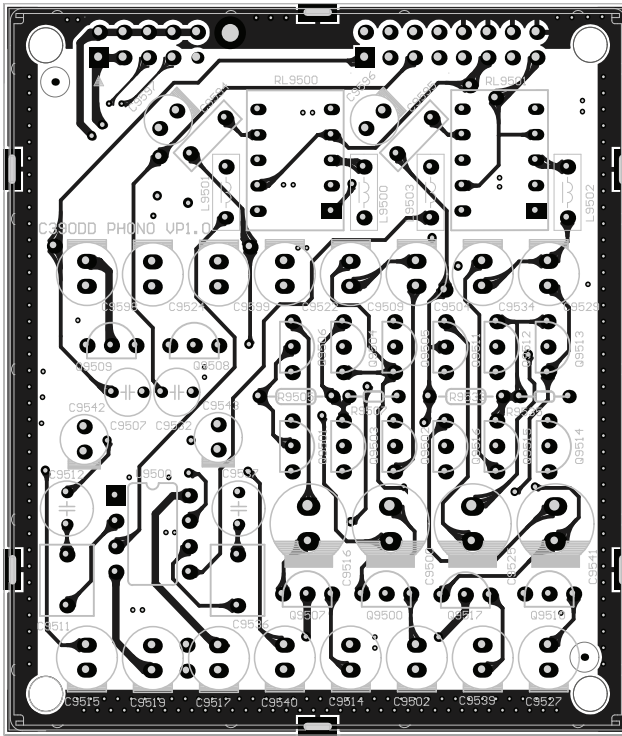


Top Layer

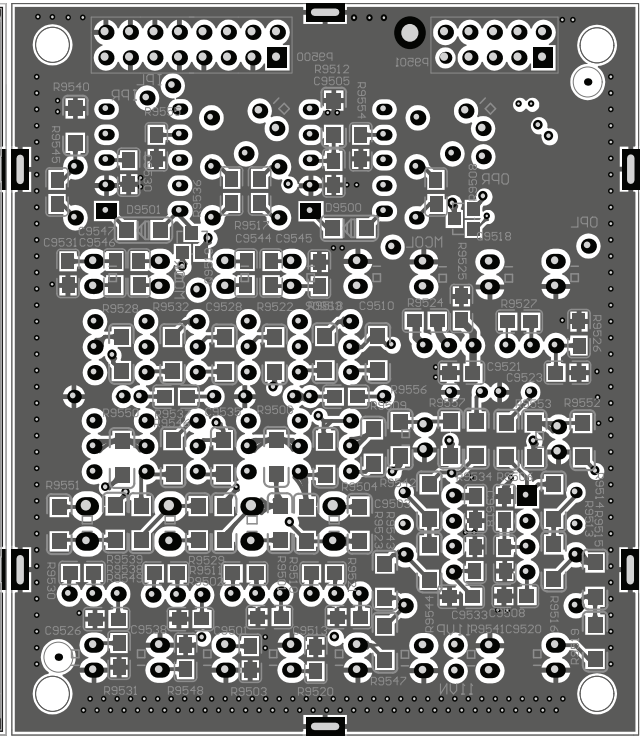


Bottom Layer

# 13. PHONO BOARD

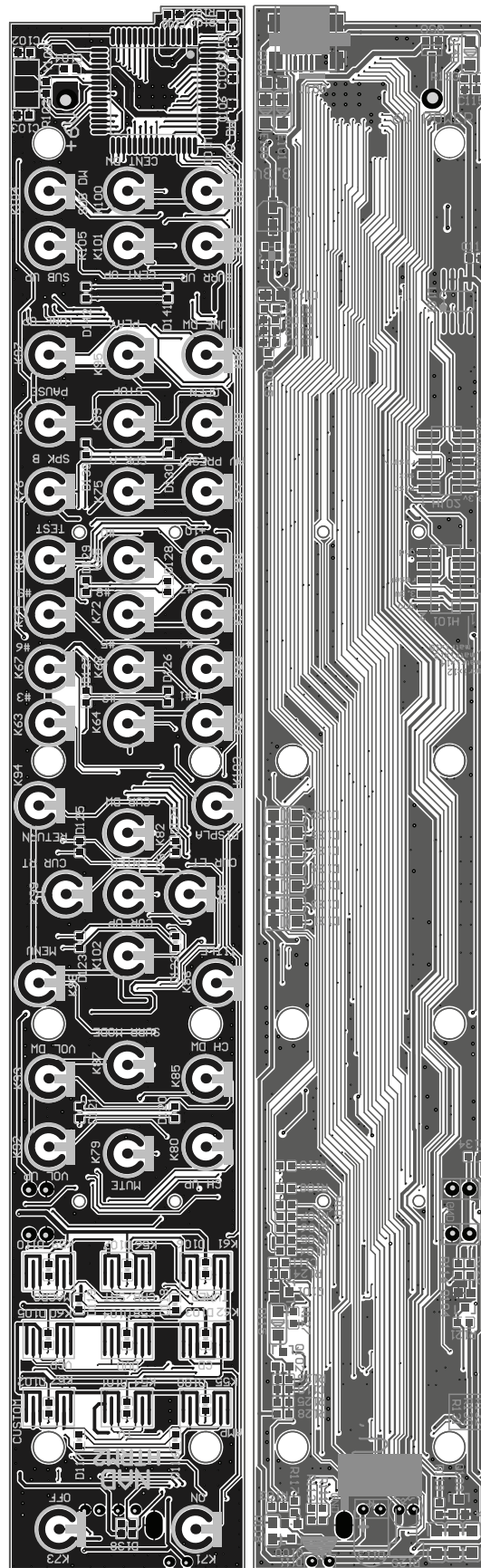


Top Layer



Bottom Layer

# 14. HTRM2 BOARD



Top Layer

Bottom Layer



# ELECTRICAL PARTS LIST

<b>PCB-1: AUDIO BOARD</b>			
<b>CIRCUIT NO.</b>	<b>PART NO.</b>		<b>DESCRIPTION</b>
	00-19200-10	M12 AH Version	
	00-19200-20	M12 C Version	
	A16-19201-22	Audio Board PCB	VM1.1,FR-4,1.6mm,4Layers,1oz.,TG130,155x183.1mm
	<b>DIODES</b>		
D1000, D1002	33-50603-51	LED SMD	L-C191KGCT,Green,0603
D1001	33-13609-10	Zener Diode SMD	3.6V, 0.5W LL34
D1025,	33-40054-00	Schottky Diode	BAT54S, SOT23
D1005, D1009, D1022, D1023, D1024,	33-40054-02	Schottky Rectifier Diode	BAT54J
D1007	33-24007-10	Standard Recovery Rectifier	1000V, 1A, MRA4007T3G
D1010, D1011, D1003, D1004, D1006, D1008, D1031, D1032, D1033, D1034	33-05819-01	DIODE SCHOTTKY	1N5819HW-7-F, 40V, 1A
D1012, D1015, D1016, D1017, D1018, D1019, D1020, D1021,	33-44148-19	Switch Diode	1N4148W-13-F
D1013, D1027, D1028, D1029, D1030	33-40352-01	Switch Diode	1SS355TE-17
D1026	33-16209-16	Zener Diode	ZMM6V2, 6.2V, 1/2W
D1014	33-50350-05	GREEN LED	3mm, WP424GDT
	<b>TRANSISTORS</b>		
Q1009, Q1010, Q1011, Q1012, Q1013, Q1014, Q1017, Q1019, Q1020, Q1021,	31-00114-05	Digital transistor	DTC114EKA
Q1015, Q1016	31-00114-01	Digital transistor	DTA114EKA
Q1018, Q1004, Q1001, Q1002	31-01312-00	Transistor	2SA1312GR(TE85L,F) TO-236MOD
Q1005, Q1006, Q1007	31-03324-00	Transistor	2SC3324-GR(TE85L,F) TO-236MOD
Q1003	31-02690-00	Transistor	KSC2690AYS TO-126
Q1000	31-02012-00	Transistor	KSD2012GTU
	<b>IC</b>		
U1000, U1001, U1003, U1004, U1005, U1006, U1007, U1008, U1009, U1010, U1011, U1012, U1013, U1014, U1015, U1016, U1017, U1018, U1019, U1020, U1021, U1022, U1023, U1024	03-03746-01	IC	NC7SZ374P6X,SC70-6
U1002	03-00800-02	DDFA Modulator	ZXCZM800QPATR(CSRA6601A01-CPSA-T)
U1025, U1026, U1027, U1028'	03-07865-01	IC	NC7SV86P5X,SC-70
U1029	03-00165-02	Shift Register	74HC165PW,118
U1029	or 03-00165-03	Shift Register	SN74HC165PWR
U1030	03-32150-00	MCU	PIC32MX150F128BT-I/SS
U1031, U1032, U1037, U1051, U1052, U1053, U1054, U1055, U1056	03-07017-01	dual schmitt, high z when power off	NC7WV17P6X
U1034	03-00734-01	Buffer	NC7NZ34K8X
U1043, U1047	03-07178-01	Buffer	NC7NZ17K8X,US-8
U1035	03-00595-05	Shift Register	74HC595PW,118
U1035	or 03-00595-06	Shift Register	SN74HC595PW
U1038, U1039, U1040, U1041, U1042	03-01117-09	Regulator	ZLDO1117GTA
U1044, U1048	31-00003-01	Dual FET	ZXMC3AMCTA
U1044, U1048	or 31-03832-01	Dual FET	ZXMC3AM832TA
U1045	03-00774-02	D-Type Flip-Flop	NC7SZ74K8X
U1046	03-00431-11	Regulator	TL431BCDBZR
U1057, U1058	03-03253-03	multiplexer	SN74CB3Q3253PWR
U506	03-04382-01	SRC	SRC4382IPFB
U1063	03-02416-02	EEPROM	24LC16A / 24LC16BT-I/SN, SO8
U1066, U1069, U1072, U1074	03-49990-01	OPAMP	LME49990MA/NOPB
U1067, U1073	03-01652-00	Dual OPAMP	OPA1652AID
U1068, U1071	03-49860-01	Dual OPAMP	LME49860MA/NOPB
U600	03-01117-01	Voltage Regulator	AMS1117-05
X1000	04-11083-01	Oscillator SMD	MXU510P20-3-B20-2L-MJT-108Mhz
U1049	03-00317-02	3-Terminal Adjustable Regulator	LM317KCS
U1050	03-00337-00	3-Terminal Regulator	LM337T
	<b>RESISTOR</b>		
R1053, R1055	07-90101-10	Chip Resistor NET	100Ω, ±5% R0603X4
R1039, R1042, R1049	07-90121-10	Chip Resistor NET	120Ω, ±5% R0603X4
R1000, R1001, R1002, R1003, R1027, R1029	07-90470-08	Chip Resistor	47Ω,0.402,1/16W,±5%, RC0402JR-0747RL
R1020, R1024, R1119, R1120, R1032, C1233, C1239, C1240, C1241	07-90000-00	Chip Resistor	0Ω, 0603, ±5%
R1051	07-90100-00	Chip Resistor	10Ω, 0603, ±5%

R1035, R1037, R1038, R1040, R1041, R1043, R1045, R1047, R1058, R1059, R1060, R1072, R1079, R1097, R1098, R1099, R1100, R1101, R1102, R1103, R1104, R1105, R1106, R1152	07-94709-00	Chip Resistor	47Ω,0603,1/10W,±1%,RC0603FR-0747RLT
R1107, R1108, R1109, R1110,	07-90750-00	Chip Resistor	75Ω,0603,1/10W,±5%,RC0603JR-0775RL
R1023, R1044, R1048, R1056, R1117, R1118, R1121, R1122, R1127	07-91000-00	Chip Resistor	100Ω,0603,1/10W,±1%,RC0603FR-07100RL
R1114, R1115	07-90121-00	Chip Resistor	120Ω,0603,1/10W,±5%,RC0603JR-07120RL
R1015, R1021,	07-91500-00	Chip Resistor	150Ω,0603,1/10W,±1%,RC0603FR-07150RL
R1030, R4014	07-91001-00	Chip Resistor	1KΩ,0603,1/10W,±1%,RC0603FR-071KL
R1007, R1017, R1018	07-92201-00	Chip Resistor	2.2KΩ,0603,1/10W,±1%,RC0603FR-072K2L
R1160, R1162, R1165, R1167, R1188, R1191, R1195, R1197, R1224, R1225, R1230, R1232, R1253, R1256, R1261, R1263	07-93321-10	Chip Resistor	3.32KΩ,0603,1/10W,±0.1%,±25PPM,RT0603BRD073K32L
R1033, R1142, R1143,	07-94701-00	Chip Resistor	4.7KΩ,0603,1/10W,±1%,RC0603FR-074K7L
R1004, R1005, R1006, R1008, R1011, R1012, R1013, R1014, R1016, R1046	07-91002-00	Chip Resistor	10KΩ,0603,1/10W,±1%,RC0603FR-0710KL
R1036	07-92702-00	Chip Resistor	27KΩ,0603,1/10W,±1%
R1163, R1171, R1185, R1194, R1227, R1235, R1250, R1259	07-95362-10	Chip Resistor Network	53.6KΩ,0603,1/10W,±0.1%,±25PPM,RT0603BRD0753K6L
R1034	07-96802-00	Chip resistor	68KΩ,0603,1/10W,±1%,RC0603FR-0768KL
R1215, R1140	07-90000-01	Chip Resistor	0Ω,0805,1/8W,±5%
R1208	07-90339-01	Chip Resistor	3.3Ω,0805,1/8W,±5%
R1019, R1116	07-90100-01	Chip Resistor	10Ω,0805,1/8W,±5%,RC0805JR-0710RL
R1174, R1186, R1237, R1247	07-90220-11	Chip Resistor	22Ω,0805,1/8W,±5%,RC0805JR-0722RL
R1112, R1113	07-95499-01	Chip Resistor	54.9Ω,0805,1/8W,±1%,
R1073	07-94539-01	Chip Resistor	45.3Ω,0805,1/8W,±1%,RC0805FR-0745R3L
R1009, R1010, R1092, R1026	07-91000-01	Chip Resistor	100Ω,0805,1/8W,±1%,RC0805FR-07100RL
R1069, R1070	07-99539-01	Chip Resistor	95.3Ω,0805,1/8W,±1%,RC0805FR-0795R3L
R1063	07-91020-01	Chip Resistor	102Ω,0805,1/8W,±1%,
R1061, R1062	07-91500-01	Chip Resistor	150Ω,0805,1/8W,±1%,RC0805FR-07150RL
R1095	07-93000-01	Chip Resistor	300Ω,0805,1/8W,±1%,RC0805FR-07300RL
R1064,R1065	07-92200-01	Chip Resistor	220Ω,0805,1/8W,±1%,RC0805FR-07220RL
R1066, R1067, R1084, R1094	07-92430-01	Chip Resistor	243Ω,0805,1/8W,±1%,RC0805FR-07243RL
R1068	07-95490-01	Chip Resistor	549Ω,1/8W,±1%,0805,RC0805FR-07549RL
R1081, R1085, R1087, R1166, R1192, R1229, R1254, R1269, R1271, R1273	07-91001-01	Chip Resistor	1KΩ,0805,1/8W,±1%,RC0805FR-071KL
R1090,	07-91801-01	Chip Resistor	1.8KΩ,0805,1/8W,±1%,RC0805FR-071K8L
R1091	07-93300-01	Chip Resistor	330Ω,0805,1/8W,±1%,RC0805FR-07330RL
R1088, R1096	07-91501-01	Chip Resistor	1.5KΩ,0805,1/8W,±1%,RC0805FR-071K5L
R1075, R1078, R1089, R1168, R1190, R1231, R1251	07-92211-01	Chip Resistor	2.21KΩ,0805,1/8W,±1%,RC0805FR-072K21L
R1086,	07-92611-01	Chip Resistor	2.61KΩ,0805,1/10W,±1%,RC0805FR-072K61L
R1093	07-92551-01	Chip Resistor	2.55KΩ,0805,1/8W,±1%,RC0805FR-072K55L
R1082, R1083	07-93301-01	Chip Resistor	3.3KΩ,0805,1/8W,±1%,RC0805FR-073K3L
R1050, R1071, R1077,R1270	07-94701-01	Chip Resistor	4.7KΩ,0805,1/8W,±1%,RC0805FR-074K7L
R1212,R1276	07-91002-01	Chip Resistor	10KΩ,0805,1/8W,±1%,RC0805FR-0710KL
R1022, R1175, R1183, R1239, R1248, R1272,	07-92202-01	Chip Resistor	22KΩ,0805,1/8W,±1%,RC0805FR-0722KL
R1155, R1220	07-91003-01	Chip Resistor	100KΩ,0805,1/8W,±1%,RC0805FR-07100KL
R1274	07-93602-01	Chip Resistor	36KΩ,0805,1/8W,±1%,RC0805FR-0736KL
R1176, R1184,R1240, R1249,	07-92202-92	MELF Resistors	MMF204FRE22K,22KΩ,1/4W,±1%

R1161, R1169, R1182, R1199, R1226, R1233, R1246, R1260	07-91004-01	Chip Resistor	1M $\Omega$ ,0805,1/8W, $\pm$ 1%,RC0805FR-071ML
R1180, R1244	07-90000-92	Chip Resistor	MMF204FRE0R,0 $\Omega$ ,0.4W, $\pm$ 1%,MMF204FRE0R
R1170, R1189, R1234, R1255	07-93307-92	Chip Resistor	MMF204FRE0R33,0.33 $\Omega$ ,0.4W, $\pm$ 1%,MMF204FRE0R33
R1080	07-91008-92	MELF Resistors	MMF204FRE1R/MMA02040C1008FB300,1 $\Omega$ ,1/4W, $\pm$ 1%
R1172, R1181, R1236, R1245	07-97508-92	Chip Resistor	MMF204FRE7R5,7.5 $\Omega$ ,0.4W, $\pm$ 1%
R1111,R1028	07-91009-92	MELF Resistors	MMF204FRE10R,10 $\Omega$ ,1/4W, $\pm$ 1%
R1206, R1211, R1213, R1216	07-90000-92	Chip Resistor	MMF204FRE0R,0 $\Omega$ ,0.4W, $\pm$ 1%
R1157, R1164, R1187, R1193, R1196, R1200, R1203, R1222, R1223, R1228, R1258, R1262, R1265, R1267	07-94709-92	MELF Resistors	MMF204FRE47R, 47 $\Omega$ , $\pm$ 1%
R1156, R1202, R1221, R1266,	07-93000-92	MELF Resistors	MMF204FRE300R,300 $\Omega$ ,0.4W, $\pm$ 1%
R1154, R1219,	07-92200-92	MELF Resistors	MMF204FRE220R, 220 $\Omega$ , $\pm$ 1%
R1198, R1264	07-94700-92	MELF Resistors	MMF204FRE470R,470 $\Omega$ ,1/4W, $\pm$ 1%
R1173, R1179, R1238, R1243	07-91961-92	Chip Resistor	MELF0204,1.96K $\Omega$ ,1/4W, $\pm$ 1%
R1076	07-92051-82	Chip Resistor	MMF204FRE2K05,2.05K $\Omega$ ,0.4W, $\pm$ 1%
R1076	or 07-92051-92	Chip Resistor	MELF02042K05FC2,2.05K $\Omega$ ,1/4W, $\pm$ 1%
R1153, R1205, R1218, R1268	07-93321-92	Chip Resistor	MMF204FRE3K32,3.32K $\Omega$ ,0.4W, $\pm$ 1%
R1074	07-96651-82	Chip Resistor	MMF204FRE6K65,6.65K $\Omega$ ,0.4W, $\pm$ 1%
R1074	or 07-96651-92	Chip Resistor	MELF02046K65FC2,6.65K $\Omega$ ,1/4W, $\pm$ 1%
R1159, R1177, R1201, R1241	07-95602-92	Chip Resistor	MMF204FRE56K, 56K, $\pm$ 1%
	<b>CAPACITOR</b>		
C1036, C1037, C1041, C1042, C1080, C1083	26-10051-18	Ceramic Chip Capacitor	10pF 50V $\pm$ 2% 0402 C0G,GRM1555C1H100GA01
C1038, C1039, C1044, C1045, C1047, C1048, C1049, C1050, C1051, C1052, C1053, C1054, C1055, C1056, C1057, C1058, C1059, C1060, C1061, C1062, C1063, C1064, C1065, C1066, C1067, C1068, C1076, C1079, C1117, C1118, C1119, C1388, C1389, C1390, C1391, C1392, C1393, C1394, C1395, C1396, C1397, C1398, C1399, C1400, C1401, C1402, C1403, C1404, C1405, C1406	26-22321-08	Ceramic Chip Capacitor	22nK,25V,0402,X7R,C1005X7R1E223K
C1009, C1010	26-12051-10	Ceramic Chip Capacitor	12pJ,50V,0603,NPO,CC0603JRNPO9BN120
C1071, C1075, C1081, C1082	26-33051-00	Ceramic Chip Capacitor	33pJ,50V,0603,NPO,C1608C0G1H330JT
C1273, C1278, C1294, C1302, C1343, C1350, C1365, C1373	26-10151-00	Ceramic Chip Capacitor	100pJ,50V,0603,NPO,C1608C0G1H101JT
C1269	26-10251-10	Ceramic Chip Capacitor	1nJ,50V,0603,NPO,C1608C0G1H102JT
C1000, C1325	26-10321-00	Ceramic Chip Capacitor	10nJ,25V,0603,NPO,C1608C0G1E103JT00N
C1100, C1101, C1111, C1221, C1222, C1223, C1224, C1225, C1226, C1228, C1237	26-22351-00	Ceramic Chip Capacitor	22nK,50V,0603,X7R
C1095, C1096, C1097, C1122, C1123, C1135, C1166, C1175, C1187, C1231, C1242, C1260, C1382, C1384, C1261, C1099, C1121	26-10451-10	Ceramic Chip Capacitor	100nK,50V,0603,X7R
C1001, C1002, C1003, C1004, C1005, C1006, C1007, C1008, C1011, C1012, C1013, C1014, C1015, C1016, C1017, C1018, C1019, C1020, C1021, C1022, C1024, C1025, C1026, C1027, C1028, C1029, C1030, C1031, C1032, C1033, C1034, C1035, C1086, C1087, C1088, C1089, C1090, C1091, C1092, C1093, C1094, C1103, C1104, C1105, C1106, C1107, C1108, C1109, C1110, C1114, C1115, C1116, C1125, C1126, C1127, C1128, C1129, C1130, C1131, C1132, C1133, C1134, C1323	26-10511-20	Ceramic Capacitor SMD	1uK,16V,0603,X7R,C1608X7R1C105K

C1001, C1002, C1003, C1004, C1005, C1006, C1007, C1008, C1011, C1012, C1013, C1014, C1015, C1016, C1017, C1018, C1019, C1020, C1021, C1022, C1024, C1025, C1026, C1027, C1028, C1029, C1030, C1031, C1032, C1033, C1034, C1035, C1086, C1087, C1088, C1089, C1090, C1091, C1092, C1093, C1094, C1103, C1104, C1105, C1106, C1107, C1108, C1109, C1110, C1114, C1115, C1116, C1125, C1126, C1127, C1128, C1129, C1130, C1131, C1132, C1133, C1134, C1323	OR 26-10511-10	Ceramic Capacitor SMD	0603, 1uF, 16V, X5R, ±10%
C1235	26-30051-01	Ceramic Chip Capacitor	30PJ,50V,0805,NPO
C1188, C1216, C1218, C1408, C1409, C1410, C1411, C1412, C1413, C1414, C1415, C1421	26-10351-01	Ceramic Chip Capacitor	10nK,50V,0805,X7R
C1200, C1204, C1247, C1256, C1267, C1272, C1276, C1297, C1298, C1303, C1305, C1341, C1342, C1345, C1347, C1367, C1372	26-10351-11	Ceramic Chip Capacitor	10nJ,50V,0805,NPO
C1069, C1070, C1142, C1155, C1172, C1191, C1245, C1253, C1254, C1257, C1262, C1263, C1264, C1265, C1266, C1286, C1292, C1357, C1361' C1381	26-10451-11	Ceramic Chip Capacitor	100nK,50V,0805,X7R,C2012X7R1H104KT
C1422, C1423, C1424	26-22421-01	Ceramic Chip Capacitor	220nK,25V,0805,X7R
C1427, C1428	26-22521-21	Ceramic Chip Capacitor	2.2uF,±10%,25V,X7R,0805,GRM21BR71E225KA
C1040, C1043, C1046, C1139, C1140, C1141, C1143, C1144, C1145, C1146, C1153, C1154, C1156, C1157, C1158, C1160, C1161, C1192, C1202, C1203, C1207, C1407, C1077, C1085, C1102, C1112, C1113, C1120, C1136, C1217, C1227, C1236, C1268	26-47521-11	Ceramic Capacitor SMD	4.7uK,25V,X5R,0805,C2012X5R1E475KTJ00E
C1159, C1320, C1322, C1124, C1321, C1098, C1176, C1177, C1243, C1249, C1250, C1255, C1379, C1380, C1385, C1386, C1198, C1199, C1429	26-10611-21	Ceramic Chip Capacitor	10uK,16V,0805,X5R,C2012X5R1C106KT / CC0805KKX5R7BB106
C1274, C1280, C1282, C1287, C1293, C1304, C1344, C1351, C1354, C1359, C1364, C1374	26-10151-02	Ceramic Chip Capacitor	100pF,50V,1206,NPO
C1194, C1213	26-10412-02	Ceramic Chip Capacitor	100nK,100V,1206,X7R
C1162, C1163, C1164, C1165, C1167, C1168, C1169, C1170, C1171, C1180, C1182, C1183, C1184, C1186, C1189, C1190, C1195, C1197, C1205, C1209, C1211, C1299, C1300, C1416, C1417, C1418 ,C1419, C1201,	26-10621-12	Ceramic Chip Capacitor	10uF, 25V, X5R, 1206, C3216X5R1E106KT
C1072, C1073, C1074, C1078, C1383, C1387, C1430	27-10160-03	Tan Capacitor	100uF, ±20%, 6.3V,T520B107M006ATE040
C1023	06-22160-09	Polymer Aluminum cap	220uF,6.3V,10%,105C, EEFCX0J221YR
C1023	or N26-18760-00	Polymer Aluminum cap	180UF,6.3V ,HPA
C1023	or N26-22760-01	Polymer Aluminum cap	220U/6V3 MPL227M0JG42TRX1
C1270, C1307, C1339, C1376	25-10222-01	Polypropylene Film Capacitor	ASS21,1nF,250V,±5%,Pitch=3.2mm
C1271, C1306, C1340, C1375	25-68212-04	Polypropylene Film Capacitor	ASS21,6.8nF,100V,±5%,Pitch=3.2mm
C1283, C1284, C1289, C1291, C1355, C1356, C1362, C1363	25-22212-03	Polypropylene Film Capacitor	ASS21,2.2nF,100V,±5%
	76-000001-0	Teflon	18AWG-L
C1279, C1296, C1309, C1310, C1311, C1315, C1316, C1317, C1326, C1327, C1328, C1334, C1335, C1336, C1349, C1366, C1181	25-22451-00	Polypropylene Film Capacitor	CL23B-50V-224K R5
C1277, C1281, C1288, C1295, C1348, C1352, C1360, C1368	25-10561-03	Polypropylene Film Capacitor	MKS2,1uF,63V,±10%
C1275, C1301, C1346, C1369	06-33011-10	Bi-polarized ALU Electrolytic Capacitor	33uF 16V 20%,1000Hrs @ 85C UES1C330MEM
C1420	06-18111-00	Alu Electrolytic Capacitor	180uF,16V, ±20%,105 °C,F3.5,U LR187M1CF1ARRX0CR
C1425, C1426	06-10121-25	Alu Electrolytic Capacitor	100uF,25V, ±20%,105 °C,F3.5,ULG107M1EF1ARRX0CR
C1138, C1150, C1173, C1179, C1185, C1370, C1371	06-10111-48	Alu Electrolytic Capacitor	ULR107M1CE08RR,100uF,16V, ±20%,105 °C,F2.5
C1206, C1210,	06-10111-53	Alu Electrolytic Capacitor	100uF,16V, ±20%,105 °C,F2.5,UER107M1CE05RRX0CR
C1147, C1149, C1151, C1152, C1137, C1148, C1246	06-33160-10	Alu Electrolytic Capacitor	ULR337M0JE08TU, 330uF,6.3V,±20%,105 °C,F2.5

C1378, C1174, C1285, C1290, C1308, C1312, C1313, C1314, C1318, C1319, C1324, C1329, C1330, C1333, C1337, C1338, C1353, C1358, C1377, C1178	06-10121-14	Alu Electrolytic Capacitor	EEUFC1E101SH,100uF,25V,±20%,105 °C
C1193, C1208	06-10221-10	Electrolytic Capacitor	CD282L,1000uF,25V,±20%,105 °C
C1196, C1212	06-10221-06	Electrolytic Capacitor	1000uF,25V,±20%,105 °C,EEUFC1E102(B)
C1214, C1215	06-10211-20	Electrolytic Capacitor	CD282L,1000uF,10V,±20%,105 °C
C1219, C1220	06-47121-10	ALU Electrolytic Capacitor	CD282L,470uF,25V,±20%,105 °C
	<b>INDUCTOR</b>		
L1000	08-04338-00	Inductor SMD	LQM21NNR33K10D
L1001, L1002, L1007, L1003, L1018, L1021, L1025, L1026, L1017, L1011	08-04102-31	Chip Ferrite Bead	742792662, 1000ohm@100MHz,I <sub>max</sub> =600mA
L1004, L1006	08-05100-01	Inductor	LQH32CN100K33L,10uH,1210
L1005, L1009, L1010, L1013, L1014, L1016	08-04181-03	Ferriet Bead	180R/100MHz,3A,1210,CBW322513U181T
	<b>CRYSTAL</b>		
U1065	04-22452-09	Oscillator	SRTD3T-24.576MHZ TR
U1065	or 04-22452-06	VCXO	24.576MHz, C3391-24.576MHz,SMD 5*7
	<b>INDUCTANCE</b>		
L1023, L1024	08-05550-00	Resonance Inductor	T9*5*3-55uH
	<b>CONNECTORS</b>		
CON1000	13-12505-19	Connector Socket	Pitch=2.54mm,5Pin, CNT-M254-1*5-GS-4/3-1.5-N
J1004, J1012	13-22504-00	Connector	XHB 2.5A-4A
CON1003	13-22505-03	Housing	XH 2.5A-5A
CON1002	13-23010-01	Connector	Pitch=3.0mm,2*5pin,CNT-3001WV-2*5P
P1000	13-22510-09	Connector	CNT-F254-2*5-GS-850-N, Pitch=2.54, 2×5Pin
J1009	13-22034-00	Connector Socket	Pitch=2.0mm, 2x17Pin, CNT-B200-2*17-GS-2.8-N
J1008	13-12502-09	Connector	Pitch=2.54mm, 2pin CNT-M254-1*2-GS-4/2.8-N
J1013	17-01001-15	RCA	HANSONG RCA,WHITE
J1015	17-01001-16	RCA	HANSONG RCA,RED
J1014, J1017	J17-09103-13	Mic Connector	NC3MAAH
K1001, K1002, K1003, K1004, K1005, K1006	12-02202-15	Relay	HFD31/5 5VDC
	<b>Mechanical Parts</b>		
Q1003 用	70-382011-0	Heatsink	1050 T=1.5mm Black oxide
U1049 U1050 Q1000 用	70-382009-0	Heatsink for Audio Board	1015 T=2mm Black oxide
U1049 U1050 Q1000用	78-090004-0	Insulated Cushion	19×14mm*1.5mm
U1049 U1050 Q1000 用	66-359002-0	Clamper	TRK-2
U1049 U1050 Q1000 Q1003用 散热器(3)	61-023506-0	Machine Screw	MB3×6,zinc black
	67-114001-0	PCB Terminal	HS40-360.1-B009V1-M002
<b>PCB-2: MDC BOARD</b>			
<b>CIRCUIT NO.</b>	<b>PART NO.</b>		<b>DESCRIPTION</b>
	01-19202-00	MDC BOARD	
	02-19202-00	MDC BOARD SMT	
	A16-19202-22	M12 MDC BOARD PCB	VM2.0,FR-4,1.6mm,6Layers,1oz,TG150
	<b>ICS</b>		
U3047, U3049, U3051, U3086, U3089, U3091	03-00595-05	Shift Register	SN74HC595PW
U3014, U3021, U3028, U3032, U3033, U3038, U3042, U3048, U3050, U3075, U3077, U3079	03-33305-00	DUAL BUS SWITCH	SN74CB3Q3305DCUR
U3016, U3017, U3026, U3027, U3039, U3041	03-00541-17	Octal Buffer	SN74LV541APWR
U3016, U3017, U3026, U3027, U3039, U3041	or N03-00541-18	Octal Buffer	SN74LVC541APWR
U3064	03-01117-06	1A	AMS1117-3.3
U3001, U3002, U3005, U3006, U3007, U3008, U3009, U3011, U3012, U3013, U3018, U3019, U3030, U3031, U3034, U3035	03-07017-01	dual schmitt, high z when power off	NC7WV17P6X
U3052	03-02464-02	BUS EEPROM	24LC64-I/SN
U3066	03-54327-01	STEP DOWN SWITCHER	TPS54327DDAR
U3063, U3067, U3068, U3069	03-05430-01	STEP-DOWN CONVERTER	TPS5430DDAR
U3062	03-05450-00	STEP-DOWN CONVERTER	TPS5450DDAR
U3057	03-03825-33	Processor Supervisory Circuits	TPS3825-33DBVT
U3053, U3054, U3055, U3083, U3087	03-00717-01	TinyLogic UHS Dual Buffer with Schmitt Trigger	NC7WZ17

U3058	03-32460-02	PIC32 MCUs (Microcontrollers) 512KB	PIC32MX460F512L-80I/PT
U3065	03-01963-33	Linear Regulator	TL1963A-33KTTR
U3081, U3088, U3090	03-33257-01	IC 4-BIT FET MUX/DEMUX	SN74CB3Q3257DBQR
U3056, U3060, U3070, U3071, U3072	03-03000-00	USB SWITCH	TS3USB3000RSER
U3022, U3023, U3024, U3044, U3045, U3046	03-07125-01	BUFFER	NC7SZ125P5X
U3019, U3020, U3023, U3030, U3037, U3040, U3073, U3074, U3076	03-07157-02	2:1 multiplexer	NC7SV157P6X
U3029, U3043, U3078	03-07865-02	OR GATE	NC7SZ86P5X
U3082, U3084, U3085	03-03157-00	SINGLE-POLE, DOUBLE- THROW ANALOG SWITCH	SN74LVC1G3157DCKR
U3080	03-09548-00	LOW VOLTAGE 8- CHANNEL I2C SWITCH WITH RESET	TCA9548APWR
U3059	03-00734-01	Buffer	NC7NZ34K8X
	<b>DIODE</b>		
D3008	33-20012-01	SCHOTTKY DIODE SMD	SS12 SMA
D3001, D3002, D3003, D3004, D3005, D3006, D3007, D3018, D3029	33-13609-10	Zener Diode	3.6V, 0.5W LL34
D3009, D3011, D3012, D3013	33-20056-00	Schottky Rectifier Diodes	SK56C, DO-214AB
D3010,	33-21045-00	BARRIER RECTIFIER	SBR10U45SP5
D3000	33-00330-01	ESD DIODE	PESD3V3
D3014, D3015, D3016, D3017, D3019, D3020, D3021, D3022, D3024, D3026, D3027, D3028	33-40352-01	Switch Diode	1SS352(TPH3,F), 1SS355TE-17
	<b>TRANSISTORS</b>		
Q3000, Q3001, Q3010, Q3011, Q3012, Q3013	31-02301-01	P-Channel Enhancement Mode MOSFET	APM2301
Q3008, Q3009, Q3016, Q3020, Q3022, Q3028	31-00114-01	Digital transistor	DTA114EKA
Q3002, Q3003, Q3004, Q3005, Q3006, Q3007, Q3014, Q3015, Q3017, Q3018, Q3019, Q3021, Q3023, Q3024, Q3025, Q3026, Q3027, Q3036	31-00114-05	Digital Transistor	DTC114EKA
Q3029	31-00817-40	Transistor	BC817-40, SOT23
Q3030, Q3031, Q3032, Q3033, Q3034, Q3035	31-00062-00	Transistor	BCV62B SOT143B
	<b>CRYSTAL</b>		
U3010	04-22452-09	Oscillator	SRTD3T-24.576MHZ TR
U3010	or 04-22452-06	VCXO	24.576MHz, C3391-24.576MHz, SMD 5*7
Y3000	04-18001-01	Crystal	8.000MHZ, HC-49/SMD 8.0000MHZ 18pF/ECS-80-18-5PX-TR
	<b>INDUCTOR</b>		
L3021, L3000, L3003, L3004	08-04181-03	Ferrite Bead SMD	180R/100MHz, 3A, 1210, CBW322513U181T
L3002, L3005, L3009, L3012, L3013, L3031,	08-04102-31	Chip Ferrite Bead	742792662, 1000ohm@100MHz, I <sub>max</sub> =600mA
L3001, L3006, L3007, L3008, L3010, L3011, L3014, L3028, L3029, L3030, L3032	08-04102-33	Chip Ferrite Bead	742792096, 1000ohm@100MHz, I <sub>max</sub> =1000mA
L3017	08-04100-08	Power Inductor	10uH, MSS7341-103ML
L3016	08-04220-18	Power Inductor	GPSR0850-220K
L3016	or N08-04220-17	Power Inductor	22uH, CER8065B-220, 2.6A
	<b>CAPACTIOR</b>		
C3128, C3132	26-20051-00	Ceramic Chip Capacitor	20pF, 50V, ±5%, NP0, 0603
C3001, C3009, C3021, C3027, C3037, C3040, C3073, C3078, C3099, C3124, C3205, C3206, C3207, C3248, C3249, C3250, C3254, C3255, C3265	26-10251-10	Ceramic Chip Capacitor	1nJ, 50V, 0603, NPO
C3127, C3130, C3131, C3142, C3143, C3144, C3145	26-22251-00	Ceramic Chip Capacitor	2.2nF, 50V, ±5%, NP0, 0603
C3045, C3046, C3047, C3049, C3063, C3069, C3082, C3083, C3084, C3086, C3090, C3096, C3117, C3118, C3136, C3137, C3138, C3139, C3209, C3210, C3211, C3213, C3216, C3218, C3234, C3235	26-10351-00	Ceramic Chip Capacitor	10nK, 50V, 0603, X7R

C3048, C3050, C3062, C3085, C3087, C3089, C3123, C3212, C3214, C3215, C3256, C3257, C3258, C3259, C3260, C3261	26-22351-00	Ceramic Chip Capacitor	22nK,50V,0603,X7R
C3006, C3032, C3033, C3051, C3052, C3054, C3055, C3056, C3058, C3059,C3061, C3068, C3071, C3076, C3079, C3080, C3091, C3092, C3093, C3094, C3102, C3107, C3108, C3109, C3110, C3111, C3112, C3114, C3115, C3116, C3119, C3120, C3121, C3122, C3129,C3134, C3141, C3217, C3088, C3095, C3101, C3149, C3151, C3223, C3224, C3225, C3230, C3232	26-10411-00	Ceramic Chip Capacitor	100nF,16V 0603, X7R,±10%
C3182	26-10051-01	Ceramic Chip Capacitor	10pJ,50V,0805,NPO,C2012C0G1H100JT
C3184	26-33251-01	Ceramic Chip Capacitor	3n3K,50V,0805,NPO
C1216, C1218, C3146, C3147, C3185, C3186, C3187, C3166	26-10351-11	Ceramic Chip Capacitor	10nJ,50V,0805,NPO
C3103, C3104	26-10611-01	Ceramic Chip Capacitor	10uF,10V,0805,X5R,±5%
C3105	26-22521-01	Ceramic Chip Capacitor	2.2uF,±10%,25V,X5R,0805
C3106, C3113, C3135, C3148	26-22660-11	Ceramic Chip Capacitor	22U,6.3V,±10%,X5R, 0805
C3000, C3012, C3013, C3014, C3022,C3023, C3024, C3039, C3041, C3042, C3044, C3064, C3065, C3066, C3067, C3074, C3097, C3164, C3203, C3204, C3220, C3221, C3222, C3226, C3229, C3233, C3236	26-22411-10	Ceramic Chip Capacitor	220nF,16V, X7R, 0603
C3126, C3167, C3170, C3171, C3175, C3178	26-10451-11	Ceramic Chip Capacitor	100nK,50V,0805,X7R,±10%
C3100, C3227, C3228, C3231	26-10151-00	Ceramic Chip Capacitor	100pJ,50V,0603,NPO
C3153, C3155, C3161, C3191, C3192, C3193, C3241, C3242, C3243, C3244, C3246, C3247	26-22351-01	Ceramic Chip Capacitor	22nK,50V,0805,X7R
C3028, C3029, C3125, C3043, C3081, C3208, C3245	26-47521-11	Ceramic Capacitor SMD	4.7uK,25V,X5R,0805
C3002, C3015, C3016, C3154, C3159, C3160, C3188, C3189, C3190, C3133, C3140, C3237 C3238 C3239 C3251 C3252 C3253	26-47551-12	Ceramic Chip Capacitor	4.7uZ,50V,1206,X5R,±10%, GRM319R61H475KA12D
C3003, C3018, C3025	26-22451-02	Ceramic Capacitor SMD	220nF,10%,50V,X7R,1206,C3216X7R1H224KT
C3007, C3053, C3057, C3060, C3070, C3072, C3077, C3098, C3219	26-10611-01	Ceramic Capacitor SMD	10uF,0805,10V, X5R
C3157	26-10611-02	Ceramic Chip Capacitor	1206, 10uF, 16V, X5R, ±10%
C3004, C3005, C3008, C3011, C3017, C3019, C3020, C3026, C3030, C3034, C3036, C3038, C3152, C3194, C3195, C3196, C3169, C3172, C3177, C3179, C3180	26-10621-12	Ceramic Chip Capacitor	10uF, 25V, X5R, 1206, C3216X5R1E106KT
C3183	26-10521-01	Chip capacitor	0805, 1UF, 25V, X7R
C3174	26-10351-12	Ceramic Chip Capacitor	10nJ,50V,1206,NPO
C3156,C3240	06-22131-11	Chip capacitor	220uF, 35V, LZ1V221M-CRF10
C3262, C3263, C3264	06-10131-04	Chip capacitor	VZH 100uF,35V,20%,105 °C,VZH101M1VTR-0810
	<b>RESISTOR</b>		
R3010, R3011, R3013, R3015, R3018, R3020, R3024, R3026, R3051, R3052, R3053, R3054, R3055, R3057, R3059, R3061, R3063, R3065, R3073, R3075, R3081, R3090, R3208, R3210	07-70500-00	Multilayer Varistor for ESD Pulse	3pF, 5V, 0402, EZJZ0V500AA

R3023, R3124, R3129, R3130, R3145, R3146, R3222, R3237, R3245, R3246, R3247, R3248, R3249, R3250, R3256, R3257, R3258, R3259, R3260, R3261, R3264, R3265, R3266, R3267, R3268, R3269, R3272, R3294, R3295, R3297, R3298, R3301, R3302, R3328, R3329, R3330, R3077, R3078, R3273, R3277, R3278, R3280, R3282, R3284, R3286, R3287, R3288, R3289, R3291, R3292, R3160, R3165, R3167, R3168, R3338, R3339	07-90000-00	Chip Resistor	0R
R3144	07-91009-00	Chip Resistor	10Ω,0603,1/10W,±1%
R3014, R3016, R3019, R3021, R3025, R3027, R3028, R3029, R3056, R3058, R3060, R3062, R3064, R3066, R3067, R3068, R3074, R3079, R3086, R3091, R3209, R3211, R3212, R3213, R3001, R3002, R3005, R3009, R3012, R3017, R3022, R3045, R3050	07-90330-00	Chip Resistor	33Ω,0603,1/10W,±5%,RC0603JR-0733RL
R3131, R3132	07-93909-00	Chip Resistor	39Ω,0603,1/10W,±1%,RC0603FR-0739RL
R3099, R3100, R3101, R3102, R3103, R3105, R3114, R3115, R3116, R3118, R3136, R3137, R3148, R3152, R3159, R3217, R3221, R3223, R3225, R3234, R3236, R3238, R3240, R3263, R3271, R3274, R3276, R3281, R3293, R3299, R3305, R3308, R3347, R3350, R3352, R3362, R3363, R3364	07-91000-00	Chip Resistor	100Ω,0603,1/10W,±1%
R3109, R3110, R3125, R3126, R3149, R3151, R3314	07-90121-00	Chip Resistor	120Ω,0603,1/10W,±5%
R3082, R3083	07-94700-00	Chip Resistor	470Ω,0603,1/10W,±1%,RC0603FR-07470RL
R3104, R3184, R3230, R3244, R3290, R3320, R3335, R3340, R3343, R3147 R3349	07-91001-00	Chip Resistor	1KΩ,0603,1/10W,±1%
R3353, R3355, R3356, R3368, R3369, R3370	07-92611-00	Chip Resistor	2.61KΩ,0603,1/10W,±1%,RC0603FR-072K61L
R3283, R3285, R3242, R3243, R3319, R3228,	07-93301-00	Chip Resistor	3.3KΩ,0603,1/10W,±1%,RC0603FR-073K3L
R3095, R3096, R3098, R3133, R3134, R3140, R3141, R3142,	07-94701-00	Chip Resistor	4.7KΩ,0603,1/10W,±1%
R3000, R3035, R3036,	07-94751-00	Chip Resistor	4.75KΩ,0603,1/10W,±1%,RC0603FR-074K75L
R3006, R3007, R3008, R3032, R3040, R3041, R3042, R3043, R3044, R3047, R3048, R3049, R3076, R3080, R3097, R3113, R3135, R3150, R3153, R3154, R3155, R3157, R3161, R3162, R3163, R3164, R3227, R3229, R3311, R3312, R3313, R3315, R3316, R3317, R3336, R3348 R3325, R3117,	07-90103-00	Chip Resistor	10KΩ,0603,1/10W,±5%,RC0603JR-0710KL
R3088, R3231, R3251	07-92202-00	Chip resistor	22KΩ,0603,1/10W,±1%,RC0603FR-0722KL
R3139,	07-90273-00	Chip Resistor	27KΩ,0603,1/10W,±5%
R3089, R3216, R3220, R3224, R3226, R3233, R3235, R3239, R3241, R3262, R3270, R3275, R3279, R3252, R3253, R3254, R3318	07-94702-00	Chip Resistor	47KΩ,0603,1/10W,±1%,RC0603FR-0747KL
R3003, R3037, R3038	07-91801-01	Chip Resistor	1.8KΩ,0805,1/8W,±1%,RC0805FR-071K8L
R3169, R3170, R3171, R3172 ,R3341, R3342	07-91003-00	Chip resistor	100KΩ,0603,1/10W,±1%,RC0603FR-07100KL
R3354, R3357, R3358, R3371, R3372, R3373	07-91053-00	Chip resistor	105KΩ,0603,1/10W,±1%,RC0603FR-07105KL
R3143	07-90105-00	Chip Resistor	1M,0603,±5%,1/10W
R3004 R3039, R3046	07-91210-01	Chip Resistor	121Ω,0805,1/8W,±1%,RC0805FR-07121RL
R3176, R3178, R3196, R3197, R3198	07-99530-01	Chip Resistor	953Ω,0805,1/8W,±1%,RC0805FR-07953RL
R3175	07-93001-01	Chip Resistor	3KΩ,0805,1/8W,±1%,RC0805FR-073KL
R3193, R3194, R3195	07-98871-01	Chip Resistor	8.87KΩ,0805,1/8W,±1%,RC0805FR-078K87L
R3189	07-92212-01	Chip Resistor	22.1KΩ,0805,1/8W,±1%,RC0805FR-0722K1L
R3187	07-91243-01	Chip Resistor	124KΩ,0805,1/8W,±1%,RC0805FR-07124KL
R3138	07-90000-02	Chip Resistor	0Ω,1206,1/4W,±5%



R3084, R3085, R3087, R3092, R3093, R3094, R3296, R3300, R3303, R3304, R3306, R3307, R3309, R3310	07-90101-10	Chip Resistor NET	100Ω, ±5% R0603X4
R3321, R3322, R3323, R3324, R3326, R3327	07-91000-01	Chip Resistor	100Ω,0805,1/8W,±1%,RC0805FR-07100RL
R3127, R3181,	07-90102-01	Chip Resistor	1KΩ,0805,1/8W,±5%,RC0805JR-071KL
R3202, R3203, R3204	07-94751-01	Chip Resistor	4.75KΩ,0805,1/8W,±1%,RC0805FR-074K75L
R3179, R3180, R3185, R3186, R3199, R3200, R3201	07-90103-01	Chip Resistor	10KΩ,0805,1/8W,±5%,RC0805JR-0710KL
R3177	07-99531-01	Chip Resistor	9.53KΩ,0805,1/8W,±1%,RC0805FR-079K53L
R3182, R3183, R3188, R3205, R3206, R3207	07-94702-01	Chip Resistor	47KΩ,0805,1/8W,±1%,RC0805FR-0747KL
R3030, R3031, R3033, R3034, R3069, R3070, R3071, R3072, R3106, R3107, R3108, R3111, R3112, R3119, R3120, R3121, R3122, R3128, R3158, R3214, R3215, R3218, R3219	07-90121-10	R Networks	120R,0603X4,1/10W,±1%
R3123	07-90470-10	R Networks	47Ω×4, ±5% 0603×4
R3331	07-90201-02	Chip Resistor	200Ω,1206,1/4W,±5%,RC1206JR-07200RL
R3333,R3334	07-94020-02	Chip Resistor	402Ω,1206,1/4W,±1%,RC1206FR-07402RL
R3332	07-91009-92	MELF Resistors	MMF204FRE10R,10Ω,0.4W,±1%
R3344, R3345, R3346, R3359, R3360, R3361	07-91806-06	Chip Resistor	0.018Ω,2512,1W,±1%,RL2512FK-070R018L
	<b>ICS</b>		
U3000, U3003, U3004	03-27805-02	Low Dropout Voltage Regulator	KA278RA05CTU
	<b>CONNECTORS</b>		
J3003	13-22505-20	Connector Socket	XHB2.5A-5A, Gold plated SIP5A
CON3004	13-12505-14	Connector	Pitch=2.54mm, 5Pin, CNT-M254-1*5-GS-5.9/3-N
CON3000, CON3001, CON3002, CON3003, CON3005, CON3006	13-21246-00	AMR-46pins	EH02311-DCB-DF
J3002	13-22014-02	Connector	Pitch=2.0mm,2*7Pin,CNT-B200-2*7-GS-2.8-N
P3000	13-12504-32	Connector	Pitch=2.54mm, 2x2Pin,CNT-M254-2*2-GS-9.5/3-N
J3005	13-22503-00	Connector	XHB 2.54A-3A
J3006	13-23904-30	Connector Socket	B4P-VH, Pitch=3.96mm, 4pin
J3004	13-22034-00	Connector Socket	Pitch=2.0mm, 2x17Pin, CNT-B200-2*17-GS-2.8-N
J3001	13-22024-03	Connector Socket	Pitch=2.0mm, 2x12Pin, CNT-B200-2*12-GM-7.5
Connect CON3102 and audio con1002	14-19210-00	Cable	UL1007#20AWG,
	<b>CAPACITOR</b>		
C3200 C3201 C3202	06-18031-00	Alu Electrolytic Capacitor	HCN,18uF,35V, ±20%, 85℃,F3.5,D=8mm
C3162, C3163	06-47111-32	Alu Electrolytic Capacitor	470uF,16V,±20%,105℃,F5.0,ULR477M1CG1BTCXACR
C3197, C3198, C3199	06-22111-38	Alu Electrolytic Capacitor	220uF,16V,±20%,105℃,F2.5,ULR227M1CE11RRX0CR
C3168, C3075	06-22111-39	Alu Electrolytic Capacitor	220uF,10V,±20%,105℃,F2.5,ULR227M1AE08RRX0CR
C3173, C3181、C3165	06-33160-10	Alu Electrolytic Capacitor	330uF,6.3V,±20%,105℃,F2.5,ULR337M0JE08TU
C3150	06-47111-03	Alu Electrolytic Capacitor	CD263X,470uF,16V,±20%,F3.5
C3176	06-47121-10	ALU Electrolytic Capacitor	CD282L,470uF,25V,±20%,105℃
C3158	06-33131-05	ALU Electrolytic Capacitor	CD282L,330uF,35V,±20%,105℃
	<b>INDUCTOR</b>		
L3018, L3020, L3025, L3026, L3027	08-02220-09	Inductance	GPDC0808-220K
L3019	08-02100-09	Inductance	GPDC0808-100K
L3015	08-02150-02	Inductance	GPDE1313-150K
L3022, L3023, L3024	08-02220-10	Inductance	GPDC1010-220K01
	<b>METAL PARTS</b>		
	70-382010-0	Heatsink for Audio Board	1015 T=2mm
	61-373506-0	Machine Screw	M3×6
	61-023506-0	Machine Screw	MB3×6
	67-114001-0	PCB Terminal	HS40-360.1-B009V1-M002
<b>PCB-3: MDC-DIO BOARD</b>			
<b>CIRCUIT NO.</b>	<b>PART NO.</b>		<b>DESCRIPTION</b>
	01-19203-00	MDC-DIO BOARD	
	02-19203-00	MDC-DIO BOARD SMT	

	A16-19203-21	DIO BOARD PCB	VM1.0,FR-4,1.6mm,2Layers,1oz, TG130
	<b>DIODES</b>		
D4000, D4001	33-40352-01	Switch Diode SMD	1SS355TE-17
D9005	03-02009-01	ESD protect	TPD2E009DBZR
	<b>ICS</b>		
U4003	03-04118-01	Receiver	AK4118AEQ
U4005	03-75157-01	Dual Differential Line Receiver	SN75157D
U4004	03-00244-07	LOW VOLTAGE CMOS OCTAL BUS BUFFER (3-STATE) WITH 5V TOLERANT INPUTS AND OUTPUTS	SN74AHC244PW
U4004	or N03-00244-10	Octal Buffer	74LCX244WMX
U4001, U4002	03-07017-01	dual schmitt, high z when power off	NC7WV17P6X
U4006, U4007	03-01117-09	Ragulator	ZLDO1117GTA
	<b>RESISTORS</b>		
R4014, R4027	07-90479-00	Chip Resistor	4.7Ω,0603,1/10W,±5%,RC0603JR-074R7L
R4045,R4046	07-91009-00	Chip resistor	10Ω,0603,1/10W,±1%,RC0603FR-0710RL
R4024, R4026, R4029, R4032, R4036, R4037, R4038	07-90330-00	Chip Resistor	33Ω,0603,1/10W,±5%,RC0603JR-0733RL
R4001, R4004	07-90750-00	Chip Resistor	75Ω,0603,1/10W,±5%,RC0603JR-0775RL
R4003, R4005, R4006, R4008	07-98209-00	Chip Resistor	82Ω,0603,1/10W,±1%,RC0603FR-0782RL
R4016, R4030, R4033, R4044	07-90101-00	Chip Resistor	100Ω,0603,1/10W,±5%,RC0603JR-07100RL
R4039	07-91100-00	Chip Resistor	110Ω,0603,1/10W,±1%,RC0603FR-07110RL
R4040, R4041	07-91500-00	Chip Resistor	150Ω,0603,1/10W,±1%,RC0603FR-07150RL
R4043	07-92490-00	Chip Resistor	249Ω,0603,1/10W,±1%,RC0603FR-07249RL
R4035	07-91000-01	Chip Resistor	100Ω,0805,1/8W,±1%,RC0805FR-07100RL
R4042	07-94530-00	Chip Resistor	453Ω,0603,1/10W,±1%,RC0603FR-07453RL
R4019	07-91001-00	Chip Resistor	1KΩ,0603,1/10W,±1%,RC0603FR-071KL
R4034	07-96801-00	Chip Resistor	6.8KΩ,0603,1/10W,±1%,RC0603FR-076K8L
R4018, R4020, R4021, R4022, R4023, R4028	07-90103-00	Chip Resistor	10KΩ,0603,1/10W,±5%,RC0603JR-0710KL
R4007	07-91002-00	Chip Resistor	10KΩ,0603,1/10W,±1%,RC0603FR-0710KL
R4017, R4025	07-90121-10	R Networks	120R,0603X4,1/10W,±1%
	<b>CAPACTIORS</b>		
C4004, C4009	26-22351-00	Ceramic Chip Capacitor	22nK,50V,0603,X7R
C4016, C4018, C4026, C4031, C4012, C4019, C4021, C4024, C4025, C4029, C4045	26-10411-00	Ceramic Chip Capacitor	100nF,16V 0603, X7R
C4033, C4034	07-90000-01	Chip Resistor	0Ω,0805,1/8W,±5%
C4003, C4028	26-10212-01	Ceramic Chip Capacitor	1nJ,100V,0805,NPO
C4002, C4008	26-10351-11	Ceramic Chip Capacitor	10nJ,50V,0805,NPO
C4036, C4011, C4014, C4020	26-10411-01	Ceramic Chip Capacitor	100nK,16V,0805,X7R
C4015	26-47411-01	Ceramic Chip Capacitor	470nK,16V,0805,X7R
C4010	26-22521-01	Ceramic Chip Capacitor	2.2uF,±10%,25V,X5R,0805
C4041, C4042, C4043, C4005, C4017, C4023	26-47511-01	Ceramic Chip Capacitor	4.7uF, 16V, X5R,0805
C4035	26-47521-11	Ceramic Chip Capacitor	4.7uK,25V,X5R,0805,C2012X5R1E475KTJ 00E
C4037, C4038, C4013, C4022, C4027, C4030, C4044	26-10611-01	Ceramic Chip Capacitor	10uF,0805,10V,C0805C106M8PACTU/C20 12X5R1A106M
C4001, C4007, C4032	26-22421-01	Ceramic Chip Capacitor	220nK,25V,0805,X7R
C4040	06-22111-39	Alu Electrolytic Capacitor	220uF,10V,±20%,105 °C,F2.5,UJR227M1AE08RRX0CR
C4039	06-22121-12	Alu Electrolytic Capacitor	220uF,25V,±20%,105 °C,EEUFC1E221
C4006	06-33160-10	Alu Electrolytic Capacitor	ULR337M0JE08RR,330uF,6.3V,±20%,105 °C,F2.5
	<b>INDUCTANCE</b>		
L4000,	08-04102-31	Chip Ferrite Bead	742792662, 1000ohm@100MHz,I <sub>max</sub> =600mA
L4002, L4003, L4005	08-04102-33	Chip Ferrite Bead	742792096 1000ohm@100MHz,I <sub>max</sub> =1000mA

L4001	08-04601-05	Ferrite Chip	600ohm@100MHz 2A MPZ2012S601A
L4004	08-04181-03	Ferrite Bead SMD	180R/100MHz,3A,1210,CBW322513U181T
	<b>TRANSFORMER</b>		
T4000, T4001, T4002	22-22133-00	Transformer	PE-65612NL
	<b>CONNECTORS</b>		
(J4000, J4001)	17-01002-31	RCA JACK	RCA-214EA
OP4000, OP4001(GP1FRX)	17-06001-07	Optical Receive	DLR2180/25M
J4002	J17-09003-28	Mic Connector	NC3FAAH2
	76-230002-0	Insulation Pad	PC UL94V-0, 168x80.5mm, T=0.4mm
	85-127002-0	RIVET-PLAST	RIVET PLASTIC SNAP ITW #254
	61-023208-0	Self Taping Screw	BTB3X8
	67-382003-0B	Digital Audio Cover	SECC-N5 T=1.2mm
	80-382003-0	Digital Audio Cover	SECC-N5 T=1.2mm
	65-382003-0	Digital Audio Cover	SECC-N5 T=1.2mm
<b>PCB-4: 232&amp;TRIG BOARD</b>			
<b>CIRCUIT NO.</b>	<b>PART NO.</b>		<b>DESCRIPTION</b>
	01-19204-00	232&TRIG BOARD	
	02-19204-00	232&TRIG BOARD SMT	
	A16-19204-22	232&TRIG BOARD	VM1.1,FR-4,1.6mm,2Layers,1oz,TG130
	<b>ICS</b>		
U9300, U9301	03-00717-01	TinyLogic UHS Dual Buffer with Schmitt Trigger	NC7WZ17
U9302	03-03221-02	RS232 Interface	MAX3221CAE+/MAX3221CDBR/MAX3221EEAE
U9305	03-75157-01	Dual Differential Line Receiver	SN75157D
U9303	03-07017-01	dual schmitt, high z when power off	NC7WV17P6X
U9304	03-01117-17	Low Dropout Linear Regulator	TLV1117LV33DCY
	<b>DIODE</b>		
D9300, D9301, D9302, D9306, D9307	33-40352-01	Switch Diode	1SS352(TPH3,F),1SS355TE-17
D9303, D9304, D9305	33-14709-10	Zener Diode	4V7,1/2W, LL34
D9309	33-11200-11	Zener Diode SMD	12V,1/2W, LL34
D9308	33-40099-01	Switch Diode	BAV99,SOT23
	<b>CAPACITOR</b>		
C9304, C9323	26-22351-01	Ceramic Chip Capacitor	22nK,50V,0805,X7R
C9302	26-47351-00	Ceramic Capacitor SMD	47nK,50V,0603,X7R
C9319	26-22351-00	Ceramic Chip Capacitor	22nK,50V,0603,X7R
C9301, C9303, C9306, C9309, C9310,C9329	26-10411-00	Ceramic Chip Capacitor	100nF,16V 0603, X7R,±10%
C9332	26-10421-10	Ceramic Chip Capacitor	100nK,25V 0603,X7R
C9307, C9314, C9315	26-47421-20	Ceramic Chip Capacitor	470nK,25V,0603,X5R,C1608X5R1E474KT
C9320	26-22051-01	Ceramic Chip Capacitor	22PJ,50V,0805,NPO
C9330, C9325	26-10411-01	Ceramic Chip Capacitor	100nK,16V,0805,X7R
C9326	26-10251-11	Ceramic Chip Capacitor	1nJ,50V,0805,NPO,C2012C0G1H102JT
C9300, C9308, C9324	26-22660-11	Ceramic Chip Capacitor	22U,6.3V,±10%,X5R, 0805
C9312, C9313	26-10151-11	Low ESL Feed Through	CKD510X5R1H101ST/NFM21CC101U1H30805,X5R,100p,50V
C9305, C9311, C9316, C9317, C9318, C9321, C9322	26-10611-01	Ceramic Capacitor SMD	10uF,0805,10V, X5R
C9327, C9328	26-22122-02	Ceramic Chip Capacitor	220PJ,200V,1206,NPO
C9331,C9333	26-10621-12	Ceramic Chip Capacitor	10uF, 25V, X5R, 1206, C3216X5R1E106KT
	<b>RESISTOR</b>		
R9306	07-91009-00	Chip Resistor	10Ω,0603,1/10W,±1%
R9320	07-91000-01	Chip Resistor	100Ω,0805,1/8W,±1%,RC0805FR-07100RL
R9325	07-93908-01	Chip resistor	3.9Ω,0805,1/8W,±1%,RC0805FR-073R9L
R9318, R9319	07-93309-01	Chip Resistor	33Ω,0805,1/8W,±1%,RC0805FR-0733RL
R9317	07-91100-01	Chip Resistor	110Ω, 0805,1/8W,±1%,RC0805FR-07110RL
R9316	07-91150-01	Chip Resistor	115Ω,0805,1/8W,±1%,RC0805FR-07115RL
R9315	07-92260-01	Chip Resistor	226Ω,0805,1/8W,±1%,RC0805FR-07226RL
R9324	07-90101-00	Chip Resistor	100Ω,0603,1/10W,±5%,RC0603JR-07100RL
R9303, R9309, R9312, R9314	07-90121-00	Chip Resistor	120Ω,0603,1/10W,±5%,RC0603JR-07120RL
R9302	07-92201-00	Chip Resistor	2.2KΩ,0603,1/10W,±1%
R9304, R9310	07-90103-00	Chip Resistor	10KΩ,0603,1/10W,±5%,RC0603JR-0710KL
R9307, R9308	07-90473-00	Chip Resistor	47KΩ,0603,1/10W,±5%,

R9300, R9313	07-90100-01	Chip Resistor	10Ω,0805,1/8W,±5%
R9323	07-91509-01	Chip Resistor	15Ω,0805,1/8W,±1%,RC0805FR-0715RL
R9326	07-94701-01	Chip Resistor	4.7KΩ,0805,1/8W,±1%,RC0805FR-074K7L
R9305	07-90102-00	Chip Resistor	1KΩ,0603,1/10W,±5%,RC0603JR-071K1L
R9311	07-96801-00	Chip Resistor	6.8KΩ,0603,1/10W,±1%,RC0603FR-076K8L
R9321, R9322	07-90000-02	Chip Resistor	0Ω,1206,1/4W,±5%
	<b>INDUCTOR</b>		
L9300	08-04102-31	Ferrite Bead SMD	742792662, 1000ohm@100MHz, I <sub>max</sub> =600mA
L9301, L9302	08-04102-33	Ferrite Bead SMD	742792096,1000ohm@100MHz, ±25%, I <sub>max</sub> =1000mA
	<b>TRANSFORMER</b>		
T9300	22-22133-00	Transformer	PE-65612NL
	<b>TRANSISTORS</b>		
Q9300	31-02690-00	Transistor	KSC2690AYS TO-126
	<b>CONNECTORS</b>		
J9302	17-08009-00	RS232 Socket	RS232/F,7906-09FHA
J9300	17-02002-09	Phone Jack	SCJ351P00WS0BP6G
J9301	13-22014-05	Connector Socket	Pitch=2.0mm,2×7Pin,CNT-B200-2*7-GD-3/8.6-N
OP9300	03-01180-01	Light Transmitting/Receiving Units	DLT2180A-2(25M)
J9303	17-01001-23	RCA	AV-8.4-8
J9304	13-22504-05	Connector Socket	XHB 2 .5A-4AW
J9305	17-01002-42	RCA	AV2-8.4-14PB2
J9306	13-22504-00	Connector	XHB 2.5A-4A
J9307	17-02001-04	Phone Jack	CKX-3.5-02-3P
<b>PCB-5: BOOTLOAD BOARD</b>			
<b>CIRCUIT NO.</b>	<b>PART NO.</b>		<b>DESCRIPTION</b>
	01-19205-00	Bootload Board	
	02-19205-00	Bootload Board SMT	
	A16-19205-21	Bootload Board PCB	VM1.0,FR-4,1.6mm,2Layers,1oz,TG130,51×24.5mm
	<b>CAPACITOR</b>		
C9000	26-10611-01	Ceramic Chip Capacitor	10uF,0805,10V,C0805C106M8PACTU/C2012X5R1A106M
C9004	26-10351-01	Ceramic Chip Capacitor	10nK,50V,0805,X7R
	<b>RESISTORS</b>		
R9000	07-91009-01	Chip Resistor	10Ω,0805,1/10W,±1%,RC0805FR-0710RL
	<b>DIODE</b>		
D9000, D9001	33-40352-01	Switch Diode	1SS355TE-17
	<b>CONNECTORS</b>		
J9000	13-22005-05	Connector Socket	PH2.0,CNT-W200-1*5-TSM
J9003	17-08001-14	USB Socket	GL56S04-04A
	70-382015-0	Spacer	AI 1050
<b>PCB-6: ENCODE BOARD</b>			
<b>CIRCUIT NO.</b>	<b>PART NO.</b>		<b>DESCRIPTION</b>
	01-19206-00	Encode Board	
	02-19206-00	Encode Board SMT	
	A16-19206-21	Encode Board PCB	VM1.0,FR-4,1.6mm,2Layers,1oz,TG130
	<b>RESISTOR</b>		
R9001, R9002,	07-90103-01	Chip Resistor	10KΩ,0805,1/8W,±5%,RC0805JR-0710KL
	<b>CAPACITOR</b>		
C9025, C9026, C9027	26-22351-00	Ceramic Chip Capacitor	22nK,50V,0603,X7R
C9001, C9002	26-10411-01	Ceramic Chip Capacitor	100nF,16V 0805, X7R,±10%
C9003	26-10611-01	Ceramic Chip Capacitor	10uF,0805,10V,C0805C106M8PACTU
	<b>CONNECTORS</b>		
J9002	13-21006-05	FFC Connector	1.0-9-6PB/ F10009Y-6-A013
S9001	28-00160-02	Encoder	RE160F-40E3-20A-24P-N
<b>PCB-7: TOUCH KEY BOARD</b>			
<b>CIRCUIT NO.</b>	<b>PART NO.</b>		<b>DESCRIPTION</b>
	01-19207-00	TOUCH KEY Board	
	02-19207-00	TOUCH KEY Board SMT	

	A16-19207-21	TOUCH KEY Board PCB	VM1.0,FR-4,1.6mm,2Layers,1oz,TG130,51 x15mm
	<b>ICS</b>		
U7003	03-02044-02	four button capsense controller	CY8CMBR2044-24LKXI
	<b>RESISTOR</b>		
R7006, R7007, R7008, R7009	07-90000-00	Chip Resistor	0Ω, 0603, ±5%
R7010	07-90561-00	Chip Resistor	560Ω,0603,1/10W,±5%,RC0603JR- 07560RL
R7005	07-90103-00	Chip resistor	10KΩ,0603,1/10W,±5%,RC0603JR-0710KL
	<b>CAPACITOR</b>		
C7016	26-10451-10	Ceramic Chip Capacitor	100nK,50V,0603,X7R
C7014	26-10611-20	Ceramic Chip Capacitor	10uF,10V,0603,X5R,±20%
C7013	26-22251-00	Ceramic Chip Capacitor	2n2K,50V,0603,X7R
	<b>CONNECTORS</b>		
J7001	13-22504-30	Connector	PH2.54, 2*2Pin, CNT-F254-2*2-GM-500-7.5
	14-32701-00	FFC Cable	UL1007#24AWG, RED, L=40mm
<b>PCB-8: LED BOARD</b>			
<b>CIRCUIT NO.</b>	<b>PART NO.</b>		<b>DESCRIPTION</b>
	01-19211-00	LED Board	
	02-19211-00	LED Board SMT	
	A16-19211-21	LED BOARD PCB	VP1.0,FR-4,1.6mm,2Layers,1oz,TG130,
	<b>DIODE</b>		
D7000, D7001, D7002	33-50603-90	white ChipLED	WR-PB1608UW-G-M23,White
D7003	33-50565-01	LED	φ5, Blue orange, BL-BB5JC274
	<b>RESISTOR</b>		
R7012, R7017, R7027	07-97500-00	Chip Resistor	0603, 750Ω, ±1%
R7029	07-92000-00	Chip Resistor	200Ω,0603,1/10W,±1%,RC0603FR- 07200RL
	<b>CONNECTORS</b>		
J7002	13-22003-00	Socket	PH 2.0A-3A
<b>PCB-9: FPP BOARD</b>			
<b>CIRCUIT NO.</b>	<b>PART NO.</b>		<b>DESCRIPTION</b>
	01-19209-00	FPP BOARD	
	02-19209-00	FPP BOARD SMT	
	A16-19209-22	FPP BOARD PCB	VM2.0,FR-4,1.6mm,4Layers,1oz,TG130
	<b>ICS</b>		
U9001	03-01963-33	Regulator	TL1963A-33KTTR
U9002, U9003, U9004, U9006	03-00717-01	TinyLogic UHS Dual Buffer with Schmitt Trigger	NC7WZ17
U1	03-00695-01	MCU	PIC32MX695F512L-80/PF
U2	03-25616-01	SRAM	IS61WV25616BLL-10TL
U7	03-05724-01	WHITE LED STEP-UP CONVERTER	AP5724WG-7
	<b>DIODE</b>		
D3	33-34013-01	Diode Schottky	B340LA-13-F
D9002,D9003,D9004,D9006	33-40352-01	Switch Diode	1SS355TE-17
	<b>TRANSISTORS</b>		
Q9000, Q9002	31-00114-01	Digital transistor	DTA114EKA
Q9001, Q9003, Q1	31-00114-05	Digital Transistor	DTC114EKA
	<b>INDUCTOR</b>		
L9001	08-04181-03	Ferrite Bead SMD	180R/100MHz,3A,1210,CBW322513U181T
L1	08-04220-14	Inductor SMD	744032220,22uH,±10%,1210
L11,L12	08-04102-31	Ferrite Bead SMD	742792662, 1000ohm@100MHz, Imax=600mA
	<b>CRYSTAL</b>		
Y1	04-18001-04	Crystal SMD	8MHz,CL=18PF,FL=20PPM
	<b>CAPACITOR</b>		
C9021, C9022, C9023, C9024	26-22351-01	Ceramic Chip Capacitor	22nK,50V,0805,X7R
C9007, C9008,	26-10411-01	Ceramic Chip Capacitor	100nF,16V 0805, X7R,±10%
C9014	26-22521-01	Ceramic Chip Capacitor	2.2uF,±10%,25V,X5R,0805
C9011	26-10611-01	Ceramic Chip Capacitor	10uF,0805,10V,C0805C106M8PACTU
C9006, C9009,	26-10621-12	Ceramic Chip Capacitor	10uF, 25V, X5R, 1206, C3216X5R1E106KT

C22	26-10451-10	Ceramic Chip Capacitor	100nK,50V,0603,X7R
C1, C2, C3, C4, C6, C7, C8, C9, C10, C11, C14, C20, C24, C30, C31, C33, C35, C9018, C9019, C9020, C9028	26-10411-00	Ceramic Chip Capacitor	100nF, 16V 0603, X7R,±10%
C15, C16	26-22051-00	Ceramic Chip Capacitor	22pJ,50V,0603,NPO
C21	26-47411-10	Ceramic Chip Capacitor	470nK, 16V,0603,X7R
C19	26-10511-10	Ceramic Chip Capacitor	0603, 1uF, 16V, X5R, ±10%
C23	26-22560-10	Ceramic Chip Capacitor	2.2uF,0603,6.3V,X5R,CC0603KRX5R5BB225
C12	26-22521-21	Ceramic Chip Capacitor	2.2uF,±10%,25V,X7R,0805,GRM21BR71E225KA
C13	26-47611-02	Ceramic Chip Capacitor	47uK,10V,1206,X5R,GRM31CR61A476ME15L
C25, C26, C32, C34, C36, C37	26-10611-02	Ceramic Chip Capacitor	1206, 10uF, 16V, X5R, ±10%
C9005	06-10111-13	chip Alu Electrolytic Capacitor	TAJC107M010RNJ,100uF,10V,±20%
C9010	27-33160-03	Electrolytic Capacitor	330uF 6.3V ±10%, 293D337X96R3D2TE3 / T491D337K006AT
	<b>RESISTOR</b>		
R9003, R9013, R9014, R9016, R49	07-91000-00	Chip Resistor	100Ω,0603,1/10W,±1%
R9005, R9006, R9010	07-91009-00	Chip Resistor	10Ω,0603,1/10W,±1%
R9030	07-91001-00	Chip Resistor	1KΩ,0603,1/10W,±1%,RC0603FR-071KL
R9009, R9011	07-94701-00	Chip Resistor	4.7KΩ,0603,1/10W,±1%
R9012, R9020	07-91000-01	Chip Resistor	100Ω,0805,1/8W,±1%,RC0805FR-07100RL
R9008	07-90103-01	Chip Resistor	10KΩ,0805,1/8W,±5%,RC0805JR-0710KL
R20, R22, R23, R24, R25, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R36, R37, R38	07-90000-08	Chip Resistor	0R 0402
R2, R3, R4, R7, R18, R19, R39, R40, R44, R48, R9004, R9007, R9015, R9017, R9018, R9019, R9029	07-90000-00	Chip Resistor	0Ω,0603,1/10W,±5%
R15	07-91001-00	Chip Resistor	1KΩ,0603,1/10W,±1%,RC0603FR-071KL
R16	07-95101-00	Chip Resistor	5.1KΩ,0603,1/10W,±1%,RC0603FR-075K1L
R50	07-91003-00	Chip Resistor	100KΩ,0603,1/10W,±1%,RC0603FR-07100KL
R11, R12	07-90472-00	Chip Resistor	4.7KΩ,0603,1/10W,±5%,RC0603JR-074K7L
R1, R9, R13, R14	07-90103-00	Chip Resistor	10KΩ,0603,1/10W,±5%
R46	07-90000-01	Chip Resistor	0Ω,0805,1/8W,±5%
R8	07-93308-01	chip resisitor	3.3Ω,0805,1/8W,±1%, RC0805FR-073R3L
R45	07-90470-01	Chip Resistor	47Ω,0805,1/8W,±5%,RC0805JR-0747RL
	<b>CONNECTORS</b>		
J9001	13-21006-05	FFC Connector	1.0-9-6PB/ F10009Y-6-A013
J9004	13-22024-03	Connector Socket	Pitch=2.0mm, 2x12Pin, CNT-B200-2*12-GM-7.5
J1	13-20540-01	FPC Connector	40Pin,0.5mm,0.5S-1S-40PWB
J7	13-20519-00	FPC Connector	FH19C-4S-0.5SH, 0.2FPC
J8	13-20508-01	FPC Connector	FPC PH0.5 8P SMT, GL75S01-08T
CON9002	13-12504-42	Connector	PH2.54,CNT-M254-2*2-GM-7/7.5/7/1
J2	13-22505-21	Connector	PH2.54, 1*5Pin, CNT-F254-1*5-GM1-710/4.5
J9006	13-22003-07	Socket	CNT-W200-1*3-TSM
U12	03-34838-00	IR Receiver	TSOP34838
U12	66-017004-0	IR Bracket	
	79-382001-0	Gasket	Single conductive adhesive , 14×9×8mm
<b>PCB-10: USB XMOS BOARD</b>			
<b>CIRCUIT NO.</b>	<b>PART NO.</b>		<b>DESCRIPTION</b>
	01-39017-00	USB XMOS BOARD	
	02-39017-00	SMT	
	A16-39017-22	C390DD XMOS USB PCB	VM2.0,FR-4,1.6mm,4Layers,1oz,TG130,
	<b>ICS</b>		
U7005	03-02021-01	POWER-DISTRIBUTION SWITCHES	TPS2021D
U7000	03-48162-06	256MB SDRAM	MT48LC16M16A2P-6A:G
U7007	03-03825-33	RESET	TPS3825-33DBVT
U7001	03-01963-33	Linear Regulator	TL1963A-33KTTR
U7001	orN03-38500-33	Linear Regulator	LP38500-3v3
U7002	03-54331-01	DC/DC CONVERTER	TPS54331D
U7003	03-00032-03	MCU	AT32UC3A0512-ALUT

U7006	03-00221-02	High-Speed USB 2.0 (480 Mbps) 1:2 Multiplexer/Demultiplexer Switch With Single Enable	TS3USB221ARSER
U7010, U7011	03-00244-07	Octal Buffer	SN74AHC244PW
U7018	03-29800-01	CMOS SINGLE VOLTAGE 3V ONLY FLASH MEMORY	MX29LV800CBTI-70G
U400	03-01128-01	MCU	XS1-L01A-TQ128-C5
U401	03-03318-01	Reference Clock	USB3318C-CP-TR
U403	03-02019-18	Low Power, Low Dropout, RF - Linear Regulators	SGM2019-1.8YN5G/TR
U404	03-25041-14	Flash	AT25DF041A-SH-T
U404	03-25041-01	Flash	AT25DF041A-SH-T
U405	03-00303-30	voltage detector	NCP303LSN30T1G
U406	03-00303-09	voltage detector	NCP303LSN09T1G
U407	03-00707-02	Buffer	NC7WZ07P6X
U408	03-02012-01	Ragulator	FAN2012MPX
U409	03-00704-03	Inverter	NC7SZU04M5X
U616	03-00151-33	Ragulator	ADP151AUJZ-3.3-R7
U619	03-07157-02	2:1 multiplexer	NC7SV157P6X
U623	03-00704-02	TinyLogic UHS Dual Inverter	NC7WZ04P6X
U626	03-01117-09	Ragulator	ZLDO1117GTA
U7016	03-00138-05	3 TO 8 LINE DECODER	74HC138D
		<b>DIODE</b>	
D7000	33-20336-01	SCHOTTKY DIODE SMD	SS36, SCHOTTKY,60V
D7002	33-00502-01	ESD Protection diode	PRTR5V0U2X,215
D7006, D7007, D7008, D7009, D7010, D7011	33-40352-01	Switch Diode	1SS355TE-17
D615	33-20014-02	Surface Mount Schottky Barrier Rectifier	SS14, 1A 40V
D402, D403	33-50603-01	GREEN LED	SML-310MTT86
		<b>CRYSTAL</b>	
XC7001	04-11202-05	CRYSTAL	12MHz, CL=20pF, ±30ppm, IB-F-12.000M-20-3050-2070
XC7000	04-11122-01	CRYSTAL	HC-49/SMD, 11.2896MHz,CL=20pF,FL=20PP
U622	04-22252-05	Oscillator	SRTD3T-22.5792MHZ TR
U622	or 04-22252-03	VCXO	22.5792MHz, C3398-22.579200MHz,SMD 5*7
U618	04-22452-09	Oscillator	SRTD3T-24.576MHZ TR
U618	or 04-22452-06	VCXO	24.576MHz, C3391-24.576MHz,SMD 5*7
Y400	04-11302-01	Crystal SMD	HC-49/SMD,13MHz,CL=20pF,FL=20PPM
		<b>INDUCTOR</b>	
L7002, L402	08-04100-08	Power Inductor	10uH,MSS7341-103ML
L7004	08-04601-05	Ferrite Chip	600ohm@100MHz 2A MPZ2012S601A
L7000, L7001, L7003, L7011, L7012, L400, L403, L408, L602, L603, L604, L605	08-04102-31	Ferrite Bead SMD	742792662, 1000ohm@100MHz
L7007	08-05100-01	Inductor	LQH32CN100K33L,10uH,1210
L7006, L7107, L404, L405, L407	08-04331-06	Ferrite Bead SMD	742792037, 330ohm@100MHz, ±25%, 2A
L406	08-04100-13	Inductor SMD	10uH 0.85A, VLFCF4020T-100MR85
		<b>CAPACITOR</b>	
C7021, C7022, C7025, C7026	26-22051-00	Ceramic Chip Capacitor	22pJ,50V,0603,NPO
C7100, C7101, C456, C457	26-33051-00	Ceramic Capacitor SMD	33pF, 5%, 50V, NPO
C7300	26-22151-01	Ceramic Chip Capacitor	220PJ,50V,0805,NPO,C2012C0G1H221JT
C7047	26-47151-00	Ceramic Chip Capacitor	470pJ,50V,0603,NPO
C680, C689	26-10251-10	Ceramic Chip Capacitor	1N,50V,NPO,0603
C7031, C7032, C7033, C7034, C7040	26-27251-10	Ceramic Chip Capacitor	2n7J,50V,0603,NPO
C460	26-22351-00	Ceramic Chip Capacitor	22nK,50V,0603,X7R
C7122, C7130	26-22351-01	Ceramic Chip Capacitor	22nK,50V,0805,X7R
C7015, C7017, C7035, C7036, C7037, C7038, C7041, C7045, C7049, C7052, C7059, C7060, C7061, C7062, C7063, C7064	26-33351-00	Ceramic Chip Capacitor	33nK,50V,0603,X7R
C7317, C7318, C400, C410, C412, C414, C415, C418, C419, C420, C421, C422, C423, C428, C429, C430, C431, C432, C433, C439, C440, C441, C442, C443, C444, C445, C446, C447, C448, C450, C451, C452, C453, C454, C455, C697	26-10411-00	Ceramic Chip Capacitor	100nF,16V 0603, X7R
C7014, C7016, C7023, C7027, C7028, C7029, C7039, C7044, C7048, C7050, C7051, C7054, C7055, C7056, C7057, C7058, C7071, C7077, C7078, C7007, C7095, C7096, C7183	26-10421-10	Ceramic Chip Capacitor	100nK,25V 0603,X7R

C426, C686, C687	26-22411-10	Ceramic Chip Capacitor	220nF, 16V, X7R, 0603
C7030, C7042, C7046	26-22560-10	Ceramic Chip Capacitor	2.2uF, 0603, 6.3V, X5R, CC0603KRX5R5BB225
C7030, C7042, C7046	or 26-22560-00	Ceramic Chip Capacitor	2.2uF, 0603, 6.3V, X5R, 06036D225KAT2A
C7013, C7018, C7024, C7043, C7053	26-47560-00	Ceramic Chip Capacitor	4.7UF 6.3V X5R 0603
C7350	26-47511-00	Ceramic Chip Capacitor	4.7uK, 10V, 0603, X5R
C7097	26-10611-10	Ceramic Chip Capacitor	10uK, 10V, 0603, X7R
C7010	26-27051-01	Ceramic Chip Capacitor	27PJ, 50V, 0805, NPO
C7009	26-39151-01	Ceramic Chip Capacitor	390pJ, 50V, 0805, NPO
C417	26-10351-01	Ceramic Chip Capacitor	10nK, 50V, 0805, X7R
C7011	26-15351-01	Ceramic Chip Capacitor	15nK, 50V, 0805, X7R
C7123	26-22351-01	Ceramic Chip Capacitor	22nK, 50V, 0805, X7R
C7001, C7002	26-10421-01	Ceramic Chip Capacitor	100nK, 25V, 0805, X7R
C679, C683	26-10411-01	Ceramic Chip Capacitor	100nK, 16V, 0805, X7R
C7003, C7005, C411, C413, C427, C449, C675, C688	26-22521-01	Ceramic Chip Capacitor	2.2uFK, 25V X5R, 0805, C2012X5R1E225KT
C435, C436, C684, C735	26-10611-01	Ceramic Chip Capacitor	10uF, 0805, 10V, C0805C106M8PACTU/C2012X5R1A106M
C7072, C401, C425, C437, C438, C682, C736, C738	26-22660-11	Ceramic Chip Capacitor	22uF, 6.3V, X5R, 0805
C7006	26-22521-03	Ceramic Capacitor SMD	2.2uF, 25V, 1210, 10%, X5R
	<b>RESISTOR</b>		
R7025, R7029, R7030, R7031, R7011, R7044, R7045, R7101, R7211, R409, R421, R422, R423, R429	07-90000-00	Chip Resistor	0Ω, 0603, ±5%
R434	07-94708-00	Chip Resistor	4.7Ω, 0603, 1/10W, ±1%, RC0603FR-074R7L
R402, R406, R407, R410, R412, R413, R416, R417, R418, R419, R424, R427, R430, R431, R433, R438, R439, R441, R666, R674, R677	07-90330-00	Chip Resistor	33Ω, 0603, 1/10W, ±5%, RC0603JR-0733RL
R7032, R7050, R7051, R7052, R7053, R7054, R7055, R7056, R7057, R7058, R7059, R7060, R7061, R7111, R7112, R7113, R7114, R7115	07-93309-00	Chip Resistor	33Ω, 0603, 1/10W, ±1%, RC0603FR-0733RL
R7027, R7028	07-93909-00	Chip Resistor	39Ω, 0603, 1/10W, ±1%, RC0603FR-0739RL
R7015, R7019, R7020	07-90121-00	Chip Resistor	120Ω, 0603, 1/10W, ±5%, RC0603JR-07120RL
R694	07-91500-00	Chip Resistor	150Ω, 0603, 1/10W, ±1%, RC0603FR-07150RL
R698	07-90241-00	Chip Resistor	240Ω, 0603, 1/10W, ±5%, RC0603JR-07240RL
R442	07-94700-00	Chip Resistor	470Ω, 0603, 1/10W, ±1%, RC0603FR-07470RL
R425, R426	07-91001-00	Chip Resistor	1KΩ, 0603, 1/10W, ±1%, RC0603FR-071K1L
R436	07-91801-00	Chip resistor	1.8KΩ, 0603, 1/10W, ±1%, RC0603FR-071K8L
R7009, R7010, R7103	07-90472-00	Chip Resistor	4.7KΩ, 0603, 1/10W, ±5%, RC0603JR-074K7L
R437	07-96801-00	Chip Resistor	6.8KΩ, 0603, 1/10W, ±1%, RC0603FR-076K8L
R408	07-98061-00	Chip Resistor	8K06, 0603, 1/10W, ±1%, RC0603FR-078K06L
R7110, R7119, R493	07-91002-00	Chip Resistor	10KΩ, 0603, 1/10W, ±1%, RC0603FR-0710K1L
R405, R415, R420, R428, R432, R435, R661, R7017, R7018	07-90103-00	Chip Resistor	10KΩ, 0603, 1/10W, ±5%, RC0603JR-0710K1L
R7048	07-95100-00	Chip Resistor	510Ω, 0603, 1/10W, ±1%, RC0603FR-07510RL
R7022, R7023, R411	07-94702-00	Chip Resistor	47KΩ, 0603, 1/10W, ±1%, RC0603FR-0747K1L
R440	07-92204-00	Chip resistor	2.2MΩ, 0603, 1/10W, ±1%, RC0603FR-072M2L
R7000, R7001, R7327, R7328	07-90000-01	Chip Resistor	0Ω, 0805, ±5%
R7005	07-94708-01	Chip Resistor	4.7Ω, 0805, 1/8W, ±1%, RC0805FR-074R7L
R7120, R7126, R7129	07-91000-01	Chip Resistor	100Ω, 0805, 1/8W, ±1%, RC0805FR-07100RL
R7003	07-92001-01	Chip Resistor	2KΩ, 0805, 1/8W, ±1%, RC0805FR-072K1L
R7329	07-91002-01	Chip Resistor	10KΩ, 0805, 1/8W, ±1%, RC0805FR-0710K1L
R7002	07-91052-01	Chip Resistor	10.5KΩ, 0805, 1/8W, ±1%, RC0805FR-0710K5L
R7008	07-95362-01	Chip Resistor	53.6KΩ, 0805, 1/8W, ±1%, RC0805FR-0753K6L
R7006	07-91153-01	Chip Resistor	115KΩ, 0805, 1/8W, ±1%, RC0805FR-07115K1L
R7004	07-93323-01	Chip Resistor	332KΩ, 0805, 1/8W, ±1%, RC0805FR-07332K1L



R7042	07-92002-02	Chip Resistor	20K $\Omega$ , 1206, 1/4W, $\pm$ 1%, RC1206FR-0720KL
R682	07-90330-10	Chip Resistor Network	33 $\Omega$ $\times$ 4, $\pm$ 5%, 0603 $\times$ 4
R7024, R7038, R7041	07-90820-10	Chip Resistor NET	82 $\Omega$ , 0603 $\times$ 4, $\pm$ 5%, YC164-JR-0782RL
R7013, R7026, R7046, R7134	07-90121-10	R Networks	120R, 0603 $\times$ 4, 1/10W, $\pm$ 1%
	<b>CAPACITOR</b>		
C7000, C7012	06-22160-05	Alu Electrolytic Capacitor	HCN, 6V3, 220uF, $\pm$ 20%, F3.5
C7004	06-33121-06	Alu Electrolytic Capacitor	CD289, 330uF, 25V, $\pm$ 20%,
C424, C729, C734	06-33160-13	Alu Electrolytic Capacitor	ULR337M0JF08RR, 330uF, 6V3, $\pm$ 20%
C651, C709	06-33160-14	Alu Electrolytic Capacitor	330uF, 6.3V, $\pm$ 20%, 105 °C, RS80J331MDN1JT/FP-6R3RE331M-S8JT
	<b>CONNECTORS</b>		
SW7000	11-04101-05	TACT SW	IT-1102A-1160
J7002	13-12510-22	Connector Socket	Pitch=2.54mm, 2x5Pin, CNT-M254-2*5-GS-5.8/3-N
J7003	J17-08001-58	USB connector	292304-1
J7001	17-08001-07	USB Socket	UAR20-4W2100/GL56S05
J401	13-12520-01	Header	CNT-M254-2*10-GS-6/3-N, Pitch=2.54mm, 2*10Pin
	<b>MECHANICAL PARTS</b>		
	67-230007-0A	USB Fascia	SECC-N5, T=1.2mm
	80-230007-0	USB Fascia	SECC-N5, T=1.2mm
	65-230007-0	USB Fascia	SECC-N5, T=1.2mm

	67-114001-0	PCB Terminal	SECC-N5 T=1
USB Fascia(2)	61-023106-0	Self Taping Screws	STB3 $\times$ 6
	76-230002-0	Insulation Pad	PC UL94V-0, 168 $\times$ 80.5mm, T=0.4mm
	85-127002-0	RIVET-PLAST	RIVET PLASTIC SNAP ITW #254
<b>PCB-11: PSU BOARD</b>			
<b>CIRCUIT NO.</b>	<b>PART NO.</b>		<b>DESCRIPTION</b>
	01-19208-00		
	02-19208-00		
	A16-19208-22	SMPS-PCB	VM1.1, FR-4, 1.6mm, 2Layers, 2oz, TG130, 219 $\times$ 106mm
	<b>DIODES</b>		
D102	33-20020-00	Super Fast Rectifier Diode	BYG20J-E3/TR3
D103	33-00200-01	Transient Voltage Suppressor	P4SMA200A
D104, D105, D106, D107 D108, D109, D110, D111 D112, D113, D114, D115 D116	33-40321-00	Switch Diode	BAS321
D117	33-20036-00	DIODE SMD	SS36B
D118	33-44148-17	Switch Diode	1N4148W-NR, SOD123
D119	33-30062-00	Rectifier Bridge SMD	B6S, 0.8A 600V
D122, D123, D124, D125	33-40054-02	Schottky Rectifier Diode	BAT54J
D126, D127, D128, D129 D130, D131	33-20316-01	High speed Diode	BAS316
DW101	33-11800-30	Zener Diode	18V, 3W, $\pm$ 5%, SMA
D101	33-20107-00	Fast-Recovery Rectifier Diode	FR107, DO-41
D120	33-30662-02	Rectifier Bridge	GBU606, 6A 600V
D121	33-20206-00	SIC DIODE	C3D02060A 600V/2A
D132	33-25406-00	Diode	1N5406RL 3A 600V
	<b>TRANSISTORS</b>		
Q101, Q2102, Q103 Q104, Q105, Q106	31-80725-00	Transistors	BC807-25
Q114, Q115	31-00856-03	Transistor	BC856BW SOT323
Q116, Q117	31-00817-16	Transistor	BC817-16, SOT23
Q118, Q119	31-80716-00	Transistor	BC807-16
Q120, Q121	31-00846-02	Transistor	BC846BW SOT323
Q107, Q109	31-01050-00	N-Channel MOSFET	FDPF10N50FT, 500V, 9A
Q108	31-01850-02	N-ch MOSFET	FDPF18N50, 500V, 18A
Q110, Q111, Q112, Q113	31-00266-00	N-ch MOSFET	AOT266L 60V 78A
	<b>IC</b>		
OP101, OP102	A03-00817-07	Photo Coupler	EL817S(B)(TA)-F
IC102	03-00431-05	Shunt Regulator	TL431CDBZR
IC103	03-07930-00	PFC-IC	FAN7930BMX_G
IC104	03-00494-02	Power controller IC	TL494CDR
U101	03-07815-08	Voltage Regulators	KA78R15CTU
IC101	03-00274-00	Power controller IC	TNY274PN
	<b>RESISTOR</b>		

R135	07-94702-01	Chip Resistor	47K $\Omega$ ,0805,1/8W, $\pm$ 1%,RC0805FR-0747KL
R101, R124, R136, R137, R138, R139	07-90103-01	Chip Resistor	10K $\Omega$ ,0805,1/8W, $\pm$ 5%,RC0805JR-0710KL
R102,R103,R105,R106 R107,R108, R109	07-90102-01	Chip Resistor	1K $\Omega$ ,0805,1/8W, $\pm$ 5%,RC0805JR-0711KL
R104, R110	07-90000-01	Chip Resistor	0 $\Omega$ ,0805,1/8W, $\pm$ 5%
R111, R112, R113, R114	07-90205-02	Chip Resistor	2M $\Omega$ ,1206,1/4W, $\pm$ 5%,RC1206JR-072ML
R115,R116	07-90301-01	Chip Resistor	300 $\Omega$ ,0805,1/8W, $\pm$ 5%,RC0805JR-07300RL
R117, R118, R119, R120, R125, R126	07-93304-01	Chip Resistor	3.3M $\Omega$ ,0805,1/8W, $\pm$ 1%,RC0805FR-073M3L
R121	07-90183-01	Chip Resistor	18K $\Omega$ ,0805,1/8W, $\pm$ 5%,RC0805JR-0718KL
R122	07-90303-01	Chip Resistor	30K $\Omega$ ,0805,1/8W, $\pm$ 5%,RC0805JR-0730KL
R123	07-90151-01	Chip Resistor	150 $\Omega$ ,0805,1/8W, $\pm$ 5%,RC0805JR-07150RL
R128	07-91801-01	Chip Resistor	1.8K $\Omega$ ,0805,1/8W, $\pm$ 1%,RC0805FR-071K8L
R127	07-92201-01	Chip Resistor	2.2K $\Omega$ ,0805,1/8W, $\pm$ 1%,RC0805FR-072K2L
R152, R153, R154	07-94701-01	Chip Resistor	4.7K $\Omega$ ,0805,1/8W, $\pm$ 1%,RC0805FR-074K7L
R129, R130, R131, R132, R133, R134	07-90220-11	Chip Resistor	22 $\Omega$ ,0805,1/8W, $\pm$ 5%,RC0805JR-0722RL
R140	07-90479-01	Chip Resistor	4.7 $\Omega$ ,0805,1/8W, $\pm$ 5%,RC0805JR-074R7L
R141, R142	07-90473-01	Chip Resistor	47K $\Omega$ ,0805,1/8W, $\pm$ 5%,RC0805JR-0747KL
R143	07-90470-01	Chip Resistor	47 $\Omega$ ,0805,1/8W, $\pm$ 5%,RC0805JR-0747RL
R144,R145, R146	07-90100-01	Chip Resistor	10 $\Omega$ ,0805,1/8W, $\pm$ 5%,RC0805JR-0710RL
R149, R150	07-96342-01	Chip Resistor	63.4K $\Omega$ ,0805,1/8W, $\pm$ 1%,RC0805FR-0763K4L
R151	07-95101-01	Chip Resistor	5.1K $\Omega$ ,0805,1/8W, $\pm$ 1%,RC0805FR-075K1L
R156, R157	07-90105-01	Chip Resistor	1M $\Omega$ ,0805,1/8W, $\pm$ 5%,RC0805JR-071ML
R158	07-90222-01	Chip Resistor	2.2K $\Omega$ ,0805,1/8W, $\pm$ 5%,RC0805JR-072K2L
R159,R160	07-92209-02	Chip Resistor	22 $\Omega$ ,1206,1/4W, $\pm$ 1%,RC1206FR-0722RL
R161	07-90100-02	Chip Resistor	10 $\Omega$ ,1206,1/4W, $\pm$ 5%,RC1206JR-0710RL
R162,R163	07-90220-06	Chip Resistor	22 $\Omega$ ,2512,1W, $\pm$ 5%
R148,R164	07-91007-16	Chip Resistor	0.1 $\Omega$ ,2512,1W, $\pm$ 1%,WSL2512R1000FEA
R155 R165 R166 R167	07-90102-06	Chip Resistor	1K $\Omega$ ,2512,1W, $\pm$ 5%
TH101	A07-72381-00	NTC	SCK200710LSY
	07-30204-02	Metal Oxide Film Resistor	200K $\Omega$ , 2W, $\pm$ 5%
	<b>CAPACTIOR</b>		
C101,C102,C112,C133 C134,C137	26-10451-11	Ceramic Chip Capacitor	100nK,50V,0805,X7R,C2012X7R1H104KT
C106	26-10151-01	Ceramic Chip Capacitor	100pJ,50V,0805,NPO,C2012C0G1H101JT
C148	26-10251-01	Ceramic Chip Capacitor	1nK,50V,0805,X7R
C113, C114	26-22451-11	Ceramic Chip Capacitor	220nK,50V,0805,X7R C2012X7R1H224KT
C115,C116	26-10313-02	Ceramic Chip Capacitor	10nF, 1000V, $\pm$ 10%, 1206
C117,C118,C119,C120 C135,C136	26-10521-01	Ceramic Chip Capacitor	1uK,25V,0805,X7R
C123,C124,C125,C126	26-15112-01	Ceramic Chip Capacitor	150pJ,100V,NPO,0805
C132	26-47521-11	Ceramic Capacitor SMD	4.7uK,25V,X5R,0805,C2012X5R1E475KTJ00E
C127	26-47351-01	Ceramic Chip Capacitor	47nK,50V,0805,X7R
C128,C131,C150	26-10251-01	Ceramic Chip Capacitor	1nK,50V,0805,X7R
C129	26-47151-01	Ceramic Chip Capacitor	470pJ,50V,0805,NPO,C2012C0G1H471JT
C146	26-10351-01	Ceramic Chip Capacitor	10nK,50V,0805,X7R
C144,C145,C149	26-10312-02	Chip Capacitor	1206, 10nF, 100V, X7R, $\pm$ 10%
C138	26-12222-12	Ceramic Chip Capacitor	1.2nF,200V, $\pm$ 5%,NPO, C1206N122J201T / MA1206CG-122J-201ERG / CL31C122JDFNNE
C147	26-22521-21	Ceramic Chip Capacitor	2.2uF, $\pm$ 10%,25V,X7R,0805,GRM21BR71E225KA
C103,C104	06-10121-04	Alu Electrolytic Capacitor	CD263(X),100uF,25V, $\pm$ 20%,105 $^{\circ}$ C,F2.5
C105	06-22042-04	Alu Electrolytic Capacitor	CD263,22uF,400V, $\pm$ 20%,105 $^{\circ}$ C,F5.0,10mm*30
C107	06-10051-24	Alu Electrolytic Capacitor	CD281L,10uF,50V,105 $^{\circ}$ C,F2.5
C108,C109	06-47111-03	Alu Electrolytic Capacitor	CD263X,470uF,16V, $\pm$ 20%,F3.5
C110	25-10542-02	Metallize Polyester	CL23,1uF,400V, $\pm$ 10%,C232G105K9SC000

C130	06-15142-04	Alu Electrolytic Capacitor	150uF,450V,±20%,105 °C,LSG151M2W-A2530
C139,C140, C141, C142,C143	06-10231-10	Alu Electrolytic Capacitor	1000uF,35V,±20%,105 °C,RXJ102M1VBK-1325P
C121, C122	A25-33422-08	Interfernece Suppression Cap	MKP62,330nF,275VAC,±20% 17.5*13.5*7.5mm
CX101,CX102	A25-47422-08	Interfernece Suppression Cap	MPX,470nF,275VAC,X2,±20%,Pitch=15mm,W18*H17*T8.5mm
CY101, CY105	A05-10242-00	Hign Voltage Cermatic Capacitor	CT81-400VAC-08b-2E4-102M-YA
CY103,CY104	A25-22222-01	Interference Suppression Capacitor	MKP63-300VAC-222K
CY102	A25-10222-00	Metallized polystyrene Film Capacitor	MKP63, 1nF, 300V, ±20%
	<b>INDUCTOR</b>		
L101	08-02339-00	Inductor	3.3uH,LGB0810-3.3uH
L102, L103	08-02809-02	Common Mode Choke	T22×14×10-8mH
L104	A22-03230-02	Transformer	HJ-M12PSU-PFC-PQ3230
L104	A07-70022-19	Thermal Circuit Brake	ST-22 90 °C W TYPE
T101	A22-00016-39	Transformer	HJ-M12EE16
T102	A22-00042-09	Transformer	HJ-M12PSU-Main-ER42
T103	22-00150-01	Current	T12.7*7*6-3.5mH
TR101	J22-07316-00	Transformer	SC7316-145A
	<b>RELAYS</b>		
K101	A12-02101-04	Power Relay	DH1U12D1-O(M) TV-8
	<b>CONNECTORS</b>		
NTC102	13-12502-19	Test Pin	Pitch=2.54mm, 2Pin, CNT-M254-1*2-GS-5.6/3-N
NTC102	13-22502-14	Jumper Cap	Pitch=2.54mm, 2Pin,CNT-MJ254-02-O
AC INET 101	13-23903-01	Connector	VH 3.96A-3A
J101	13-22503-00	Connector Socket	XHB 2.5A-3A/TJC3-3A
J102	13-23904-30	Connector Socket	B4P-VH, Pitch=3.96mm, 4pin
	<b>FUSES</b>		
FUSE101	A20-12502-03	Fuse	5ET-050HA,T5A/250V
	<b>MECHANICAL PARTS</b>		
S101	70-382014-0	HEATSINK	6063-T5 Black oxide
S102	70-382012-0	HEATSINK	6063-T5 Black oxide
S103	70-382013-0	HEATSINK	6063-T5 Black oxide
S104	70-382007-1	HEATSINK	6063-T5 Black oxide
S105	70-382008-1	HEATSINK	6063-T5 Black oxide
Use for Q110, Q111, Q112, Q113	78-013008-0	Insulated Cushion	SQ9418
Use for D121	78-090004-0	Insulated Cushion	19×14mm*1.5mm
Use for Q110, Q111, Q112,Q113,D121	85-157001-0	Transistor Washer	TW-4, White
	<b>SCREW</b>		
Fixed HS102,HS103,HS104,HS105	61-063506-0	Machine Screw	MF3×6,zinc black
Fixed Q108	61-023506-0	Machine Screw	MB3×6,zinc black
Fixed Q107, Q109,D120	61-023508-0	Machine Screw	MB3×8,zinc black
Fixed D121	61-023510-0	Machine Screw	MB3×10,zinc black
Fixed Q110, Q111, Q112, Q113	61-023518-0	Machine Screw	MB3×18, zinc black
Use for Q110, Q111, Q112, Q113	63-010308-1	Plain Washer	φ3,0.8mm
Use for Q110, Q111, Q112, Q113	63-020309-0	Washer Spring	GB/T 93 Φ3 zinc blue
Fixed Q110, Q111, Q112, Q113	62-010302-2	Nut	M3,zinc black
	61-023206-0	Self Tapping Screw	BTB3×6,zinc black
	<b>WRIE</b>		
T103*	14-24001-15	Wire	UL1672#20AWG
<b>PCB-12: ANA BOARD</b>			
<b>CIRCUIT NO.</b>	<b>PART NO.</b>		<b>DESCRIPTION</b>
	01-19220-00	Analog KIT	
	01-39006-00	ANA BOARD	
	A16-39006-21	C390DD Analog PCB	VM1.0, FR-4, 1.6mm, 2Layers, 1oz, TG130
	<b>ICS</b>		
U6023	03-02985-33	Ragulator	LP2985-33DBVR
U6000	03-01117-01	Linear Regulator	LM1117MPX-5.0/NOPB/ AMS1117-5.0
U6004, U6007, U6008, U6009	03-05532-03	Dual OPAMP	NE5532DR SOIC8

U6005	03-01804-01	A/D Converter	PCM1804DBR
U6010	03-02134-00	Dual OPAMP	OPA2134UA/2K5E4 SO-8
U6013	03-02611-01	Power converter	LM2611BMF,SOT23-5
U6015	03-00595-01	Shift Register	SN74HC595D/74HC595D/MM74HC595M
U6016	03-00138-05	3 TO 8 LINE DECODER	74HC138D
U6016	or 03-00138-02	Line Decoder	MM74HC138M
U6017	03-00084-02	Quad OPAMP	TL084BCD
U6006	03-01195-01	Audio Attenuator	NJW1195V
U6014	03-00244-01	Octal Buffer	74LCX244
U6018, U6019	03-00714-01	UHS Dual Inverter with Schmitt Trigger Inputs	NC7WZ14P6X
U6021	03-74901-01	Regulator	TPS7A4901DGNR
U6022	03-73001-01	Regulator	TPS7A3001DGNR
	<b>DIODE</b>		
D6000	33-20004-01	Zener Diode	S1GM4 SMA
D6001, D6002, D6003, D6004	33-40054-00	Schottky Diode	BAT54S, SOT23
D6005, D6006, D6014, D6015, D6018, D6019, D6020, D6021, D6022	33-40352-01	Switch Diode	1SS352(TPH3,F),1SS355TE-17
D6007, D6013	33-44148-17	Switch Diode	1N4148W-NR
D6009	33-30560-01	DIODE SCHOTTKY	MBR0560-TP
	<b>TRANSISTORS</b>		
Q6026, Q6126	31-01815-03	Transistor	C1815, SOT23
Q6025, Q6125	31-01015-03	Transistor	A1015, SOT23
Q6017	31-00114-05	Digital transistor	DTC114EKA
	<b>INDUCTOR</b>		
L6030	08-04100-08	Power Inductor	10uH,MSS7341-103ML
L6000, L6005, L6006, L6016, L6026	08-04331-06	Ferrite Bead SMD	742792037, 330ohm@100MHz, ±25%, 2A
L6100	08-04301-04	Ferrite Bead SMD	742792035, 300ohm@100MHz, ±25%, 0.3A
	<b>CAPACTIOR</b>		
C6125	26-10051-00	Ceramic Chip Capacitor	10pJ,50V,0603,NPO
C6104	26-33151-00	Ceramic Chip Capacitor	330pJ,50V,0603,NPO
C6123, C6124	26-47351-00	Ceramic Chip Capacitor	47nK,50V,0603,X7R
C6000, C6029, C6030, C6034, C6041,C6102, C6111, C6129, C6130, C6183	26-10421-10	Cermatic Chip Capacitor	100nK,25V 0603,X7R
C6064, C6131, C6122, C6054	26-33051-01	Ceramic Chip Capacitor	33PJ,50V,0805,NPO
C6016, C6027, C6039, C6050, C6300, C6301, C6100, C6107, C6108, C6109	26-10151-01	Ceramic Chip Capacitor	100pJ,50V,0805,NPO
C6028, C6047	26-18151-01	Ceramic Chip Capacitor	180pJ,50V,0805,NPO
C6019, C6037, C6043, C6053	26-56151-01	Multilayer Ceramic CAP	560pJ,50V,0805,NPO
C6192, C6193,	26-10212-01	ceramic capacitor	1nJ,100V,0805,NPO
C6024, C6049	26-15251-11	Ceramic Chip Capacitor	1n5J,50V,0805,NPO
C6191, C6194, C6195, C6196	26-10351-01	Cermatic Chip Capacito	10nK,50V,0805,X7R
C6008, C6025, C6032, C6042, C6199, C6200, C6204, C6205, C6206,C6068, C6069, C6070, C6071, C6072, C6081, C6082, C6083, C6084, C6085, C6116, C6117, C6182	26-10421-01	Ceramic Chip Capacitor	100nK,25V,0805,X7R
C6089, C6090	26-22451-11	Cermatic Chip Capacito	220nK,50V,0805,X7R C2012X7R1H224KT
C6088,C6087, C6091,C6092	26-22511-01	Ceramic Chip Capacitor	2u2F,16V 0805, X7R
C6197, C6198	26-47521-11	Ceramic Chip Capacitor	4.7uK,25V,X5R,0805,C2012X5R1E475KTJ 00E
C6002, C6006	26-10611-11	Ceramic Chip Capacitor	10uFK,10V,X5R,0805,C2012X5R1A106KT
C6005, C6026	26-22660-11	Ceramic Chip Capacitor	22uF, 6.3V, X5R, 0805
C6101	26-10521-22	Ceramic Chip Capacitor	1uF, 10%, 25V,X7R,1206
C6009	26-10621-12	Ceramic Capacitor SMD	10uF, 25V, X5R, 1206, C3216X5R1E106KT
C6004, C6086, C6093, C6095, C6096, C6106, C6207, C6208	26-10621-12	Ceramic Chip Capacitor	10uF, 25V, X5R, 1206, C3216X5R1E106KT
C6044, C6046, C6094, C6099, C6075, C6080, C6119, C6120, C6048	06-22011-18	Alu Electrolytic Capacitor	22uF,16V,±20%,85 °C,ECEA1CKS220(i)
C6007, C6076, C6078, C6097, C6098, C6127	06-10121-04	Alu Electrolytic Capacitor	CD263(X),100uF,25V,±20%,105 °C,F2.5
C6105, C6190	06-10111-36	Alu Electrolytic Capacitor	HCN 100uF,16V,±20%,105 °C,F2.5
C6010	06-22160-07	Alu Electrolytic Capacitor	HCN,220uF,6.3V,±20%,105 °C,F2.5

C6033, C6040	06-22160-04	Alu Electrolytic Capacitor	CD281L,220uF,6.3V,20%,Pitch=2.5mm,D=6.3mm
C6020, C6021	06-22111-12	Alu Electrolytic Capacitor	CD263X,220uF,16V,±20%,F2.5 D=6.3
C6103, C6201	06-33121-09	Alu Electrolytic Capacitor	CD284,330uF,25V,±20%,F5.0,D=8
C6126	06-10011-03	Alu Electrolytic Capacitor	CD263(X),10uF,16V,±20%,105 °C ,F2.5
C6056, C6063, C6066, C6079	25-22312-09	Polypropylene Film Capacitor	CBB11-100V-223J R5
C6014, C6045	25-22561-00	Metallized Polyester Film Capacitor	CL23B,2.2uF,63V,±10%,C241J225K2S1000
	<b>RESISTOR</b>		
R6031	07-94701-00	Chip Resistor	4.7KΩ,0603,1/10W,±1%,RC0603FR-074K7L
R6116, R6117, R6119, R6120	07-91000-00	Chip Resistor	100Ω,0603,1/10W,±1%,RC0603FR-07100RL
R6135	07-93301-00	Chip resistor	3.3KΩ,0603,1/10W,±1%,RC0603FR-073K3L
R6136, R6137, R6138, R6139	07-92211-00	Chip Resistor	2.21KΩ,0603,1/10W,±1%,RC0603FR-072K21L
R6146, R6154, R6155, R6156, R6158, R6160, R6232, R6233	07-91002-00	Chip Resistor	10KΩ,0603,1/10W,±1%,RC0603FR-0710KL
R6121	07-91022-00	Chip Resistor	10.2KΩ,0603,1/10W,±1%,RC0603FR-0710K2L
R6144, R6145, R6153	07-92202-00	Chip resistor	22KΩ,0603,1/10W,±1%,RC0603FR-0722KL
R6118	07-99312-00	Chip Resistor Network	93.1kΩ,0603,1/10w,±5%
R6147, R6151, R6152	07-91003-00	Chip Resistor	100KΩ,0603,1/10W,±1%,RC0603FR-07100KL
R6140, R6141	07-91803-00	Chip Resistor	180KΩ,0603,1/10W,±1%,RC0603FR-07180KL
R6148	07-92203-00	Chip resistor	220KΩ,0603,1/10W,±1%,RC0603FR-07220KL
R6142, R6143	07-95103-00	Chip Resistor	510KΩ,0603,1/10W,±1%,RC0603FR-07510KL
R6150	07-96343-00	Chip Resistor	634KΩ,0603,1/10W,±1%,RC0603FR-07634KL
R6149	07-90475-00	Chip Resistor	4.7MΩ,0603,1/10W,±5%,RC0603JR-074M7L
R6007, R6010, R6080, R6081, R6229	07-90000-01	Chip resistor	0Ω,0805,1/8W,±5%
R6022, R6042, R6051, R6065, R6085, R6161	07-91000-01	Chip Resistor	100Ω,0805,1/8W,±1%,RC0805FR-07100RL
R6002	07-92430-01	Chip Resistor	243Ω,0805,1/8W,±1%,RC0805FR-07243RL
R6021, R6067	07-93320-01	Chip Resistor	332Ω,0805,1/8W,±1%,RC0805FR-07332RL
R6105, R6108	07-94750-01	Chip resistor	475Ω,0805,1/8W,±1%,RC0805FR-07475RL
R6004	07-91051-01	Chip Resistor	1.05KΩ,0805,1/8W,±1%,RC0805FR-071K05L
R6106, R6107	07-91211-01	Chip resistor	1K21Ω, 1/8W, ±1%,0805
R6018, R6043, R6052, R6068	07-94641-02	Chip Resistor	4.64KΩ, 1206, 1/4W,±1% RC1206FR-074K64L
R6115	07-91002-01	Chip Resistor	10KΩ,0805,1/8W,±1%,RC0805FR-0710KL
R6234, R6237	07-91152-01	Chip resistor	11.5KΩ,0805,1/8W,±1%,RC0805FR-0711K5L
R6038, R6059	07-95602-01	Chip Resistor	56KΩ,0805,1/8W,±1%,RC0805FR-0756KL
R6015, R6032, R6049, R6060, R6075, R6083, R6096, R6098	07-95622-01	Chip Resistor	56.2KΩ,0805,1/8W,±1%,RC0805FR-0756K2L
R6235, R6236	07-91023-01	Chip resistor	102KΩ,0805,1/8W,±1%,RC0805FR-07102KL
R6076, R6084, R6097, R6099	07-91004-01	Chip resistor	1MΩ,0805,1/8W,±1%,RC0805FR-071ML
R6230, R6231	07-90338-02	Chip resistor	0.33Ω, 1206, 1/4W,±5%,RL1206JR-07R33L
R6000	07-90439-02	Chip resistor	4.3Ω, 1206, 1/4W,±5%,RC1206JR-074R3L
R6330	07-91009-02	Chip Resistor	10Ω,1206,1/4W,±1%,RC1206FR-0710RL
R6028, R6040, R6056, R6062	07-92200-02	Chip Resistor	220Ω,1206,1/4W,±1%,RC1206FR-07220RL

R6019, R6047, R6053, R6071	07-91211-02	Chip resistor	1.21K $\Omega$ , 1206, 1/4W, $\pm$ 1%, RC1206FR-071K21L
R6027, R6033, R6039, R6054, R6058, R6055	07-92211-02	Chip Resistor	2.21K $\Omega$ , 1206, 1/4W, $\pm$ 1%, RC1206FR-072K21L
R6061	07-90820-10	Chip Resistor NET	82 $\Omega$ , 0603X4, $\pm$ 5%, YC164-JR-0782RL
R6122, R6123, R6129, R6134, R6159	07-90121-10	Chip Resistor Network	120 $\Omega$ , 0603x4, 1/10W, $\pm$ 1%
R6124	07-90103-10	Chip Resistor Network	10K $\Omega$ x4, $\pm$ 5% 0603x4
	<b>ICS</b>		
U6002	03-00317-00	3-Terminal Adjustable Regulator	LM317T
	<b>INDUCTOR</b>		
L6003	08-05201-00	Common Mode Choke	T9*5*3-200uH
	<b>RELAY</b>		
RL6001	12-02202-15	Signal Relay	HFD31/5 5VDC
	<b>CONNECTORS</b>		
J6000	17-01004-23	4POL RCA	AV4-8.4-13/PB1
J6001, J6002	J17-09003-28	Mic Connector	NC3FAAH2
P1002	13-22516-06	Connector	CNT-F254-2*8-GS-850-N, Pitch=2.54mm, 2x8Pin
P1004	13-22510-09	Connector	CNT-F254-2*5-GS-850-N, Pitch=2.54mm, 2x5Pin
	<b>MECHANICAL PARTS</b>		
H6001	70-230008-0	Analog Heatsink	Al, T=2mm
	61-023506-1	Machine Screw	MB3x6
	78-015002-0	Transistor Washer	TW-5
	78-013008-1	Insulated Cushion	SQ9418, SPK-4
<b>PCB-13:PHONO BOARD</b>			
<b>CIRCUIT NO.</b>	<b>PART NO.</b>		<b>DESCRIPTION</b>
	01-39008-00		
	02-39008-00	SMT	SMT
	A16-39008-21	C390DD Phono PCB	VM1.0, FR-4, 1.6mm, 4Layers, 1oz, TG130
	<b>TRANSISTOR</b>		
Q9518, Q9519	31-00114-05	Digital transistor	DTC114EKA
	<b>DIODE</b>		
D9500, D9501	33-44148-17	Switch Diode	1N4148W-NR
	<b>CAPACIOR</b>		
C9503, C9510, C9528, C9535	26-10151-02	ceramic capacitor	100pJ, 50V, 1206, NPO
C9505, C9508, C9530, C9533	26-18151-01	ceramic capacitor	180pJ, 50V, 0805, NPO
C9506, C9531	26-82151-01	ceramic capacitor	820pJ, 50V, 0805, NPO
C9544, C9545, C9546, C9547	26-10212-01	ceramic capacitor	1nJ, 100V, 0805, NPO
C9501, C9513, C9518, C9520, C9521, C9523, C9526, C9538	26-10421-01	ceramic capacitor	100nK, 25V, 0805, X7R
C9502, C9514, C9517, C9519, C9522, C9524, C9527, C9539, C9598, C9599	06-10111-25	Alu Electrolytic Capacitor	EEUFC1C101H, 100uF, 16V, $\pm$ 20%, 105 $^{\circ}$ C
C9515, C9540	06-10111-42	Alu Electrolytic Capacitor	EEUFC1C101H, 100uF, 16V, $\pm$ 5%, 105 $^{\circ}$ C
C9515, C9540	06-10111-25	Alu Electrolytic Capacitor	EEUFC1C101H, 100uF, 16V, $\pm$ 20%, 105 $^{\circ}$ C
C9504, C9509, C9529, C9534	06-10111-28	ALU Electrolytic CAP	UKW1A101MDDTA, 100uF, 10V, $\pm$ 20%, 85 $^{\circ}$ C
C9596, C9597	06-22021-08	ALU Electrolytic CAP	UKW1H220MDDTD, 22uF, 25V, $\pm$ 20%, 85 $^{\circ}$ C, F2.5
C9542, C9543	06-22021-09	ALU Electrolytic CAP	UKW1H220MDDTD, 22uF, 25V, $\pm$ 5%, 85 $^{\circ}$ C, F2.5
C9542, C9543	06-22021-08	ALU Electrolytic CAP	UKW1H220MDDTD, 22uF, 25V, $\pm$ 20%, 85 $^{\circ}$ C, F2.5
C9500, C9516, C9525, C9541	06-47111-15	ALU Electrolytic CAP	UPW1A471MPDTD, 470uF, 10V, $\pm$ 20%, 105 $^{\circ}$ C
C9594, C9595	25-10412-02	ceramic capacitor	CL23B-100V-104K RA
C9507, C9532	25-22212-03	Multilayer Ceramic CAP	ASS21, 2.2nF, 100V, $\pm$ 5%, Pitch=3.2mm
C9511, C9536	25-24361-03	Multilayer Ceramic CAP	CBB72A-63V-243F, C7.5
C9512, C9537	25-68212-05	Multilayer Ceramic CAP	ASS21, 6.8nF, 100V, $\pm$ 1%
	<b>RESISTOR</b>		

R9514, R9542	07-98209-92	MELF Resistors	MMF204FRE82R,82Ω,1/4W,±1%
R9512, R9540	07-91000-92	MELF Resistors	MMF204FRE100R,100Ω,1/4W,±1%
R9501, R9523, R9529, R9551	07-92200-92	MELF Resistors	MMF204FRE220R,220Ω,1/4W,±1%
R9519, R9547	07-92550-82	MELF Resistors	MELF0204255RFC2,255Ω,±1%
R9519, R9547	or 07-92550-92	MELF Resistors	MMF204FRE255R,255Ω,±1%
R9506, R9534	07-95600-92	MELF Resistors	MMF204FRE560R,560Ω,1/4W,±1%
R9500, R9522, R9528, R9550	07-95900-92	MELF Resistors	MMF204FRE590R,590Ω,1/4W,±1%
R9516, R9544	07-91102-92	MELF Resistors	MMF204FRE11K,11KΩ,1/4W,±1%
R9553, R9557	07-91302-92	MELF Resistors	MMF204FRE13K,13KΩ,1/4W,±1%
R9552, R9556	07-92402-92	MELF Resistors	MMF204FRE24K,24KΩ,1/4W,±1%
R9504, R9518, R9532, R9546	07-94702-92	MELF Resistors	MMF204FRE47K,47KΩ,1/4W,±1%
R9510, R9511, R9538, R9539	07-96802-92	MELF Resistors	MMF204FRE68KR, 68K,±1%,1/4W
R9515, R9543	07-91333-92	MELF Resistors	MMF204FRE133K,133KΩ,1/4W,±1%
R9508, R9536	07-93300-01	Chip Resistor	330Ω,0805,1/8W,±1%,RC0805FR-07330RL
R9517, R9545	07-94700-01	Chip Resistor	470Ω,0805,1/8W,±1%,RC0805FR-07470RL
R9524, R9525, R9526, R9527	07-91001-01	Chip Resistor	1KΩ,0805,1/8W,±1%,RC0805FR-071KL
R9502, R9521, R9530, R9549	07-93001-01	Chip Resistor	3KΩ,0805,1/8W,±1%,RC0805FR-073KL
R9503, R9520, R9531, R9548	07-91602-01	Chip Resistor	16KΩ,0805,1/8W,±1%,RC0805FR-0716KL
R9554, R9555	07-92202-01	Chip Resistor	22KΩ,0805,1/8W,±1%,RC0805FR-0722KL
R9513, R9541	07-94702-01	Chip Resistor	47KΩ,0805,1/8W,±1%,RC0805FR-0747KL
R9507, R9535	07-22709-50	Metal Film Resistor	27Ω,1/6W,±1%
R9505, R9533	07-23900-50	Metal Film Resistor	390Ω,1/6W,±1%
	<b>IC</b>		
U9500	03-05532-00	Dual Op Amp	NE5532P DIP8
	<b>INDUCTOR</b>		
L9500, L9502	A08-01101-01	Inductor(Coil)	100uH,±20%, EMC421-121NS, Pitch=5mm
L9501, L9503	08-01372-00	Inductor(Coil)	TL-372,3.7mH, ±10%
	<b>RELAY</b>		
RL9500, RL9501	12-02202-15	Signal Relay	HFD31/5 5VDC
	<b>TRANSISTOR</b>		
Q9500, Q9502, Q9503, Q9506, Q9508, Q9510, Q9512, Q9513, Q9516	31-02240-00	Transistor	2SC2240-GR(TPE2,F) TO-92
Q9501, Q9504, Q9505, Q9507, Q9509, Q9511, Q9514, Q9515, Q9517	31-00970-00	Transistor	2SA970-GR(TPE2,F) TO-92
	<b>CONNECTORS</b>		
P9500	13-12516-08	Connector	Pitch=2.54mm, 2*8Pin,CNT-M254-2*8-GS-5/3-N
P9501	13-12510-14	Connector	Pitch=2.54mm,2*5Pin,CNT-M254-2*5_GS-6/3-N
	66-230002-0	Cabinet Shielding	Tin Plate, T=0.4mm
	67-230013-0A	Top Shielding	Tin Plate, T=0.4mm
	66-230003-0	Top Shielding	Tin Plate, T=0.4mm
	<b>MECHANICAL PARTS</b>		
	67-230005-0B	Audio Fascia	SECC-N5,T=1.2mm
	80-230005-0	Audio Fascia	SECC-N5,T=1.2mm
	65-230005-0	Audio Fascia	SECC-N5,T=1.2mm
Audio Fascia(5),	61-023208-0	Self Taping Screws	BTB3×8
	62-010402-0	Nut	M4
	63-040408-0	Spring Washer	M4 GB862.2 4
	71-003002-0	Grd.Post Cap	
160 HPB59-1	71-003001-1	Grd.Post Bolt	
	63-010408-3	Plain Washer	GB/T97.1, Ø4, L3
	76-230002-0		PC UL94V-0, 168x80.5mm, T=0.4mm
	85-127002-0	RIVET-PLAST	RIVET PLASTIC SNAP ITW #254
	85-048001-0	PCB Spacer	LCI-11

	<b>OTHERS</b>		
	JA17-07103-04	AC Inlet	0717-1-P-Q
	A11-01201-03	Rocker Switch	1552.3112
	A20-12312-02	FUSE	06183.15MXP, T3.15AL/250V
	<b>LCD</b>		
	J23-08868-00	LCD Display	UMSH-8868MD-3T
	90-267001-0	Lens Film	3M 3K04,0.03mm,W=74mm ,L=200m
	<b>AC CORD</b>		
	JA15-16250-00	AC Cord	3PINS 16A 250V LF L=6'7" LP-34 H05VV-F 3C LS- 60
	or A15-86251-20	AC Cord	3VTJ1&3VTJA, H05VV-F 3G 0.75mm2, L=2000mm, Black
	JA15-15120-00	AC Cord	LP30B & LS13 SVT 18AWG 105C Black 3C L=1800mm
	or A15-26121-10	AC Cord	3UTJ2/3GTJA
	<b>WIRE</b>		
Connect J9001 and ENCODER J9002	14-19206-00	6Pin Cable	Pitch=1.0mm,6pin,L=75mm,0.1x0.65
Connect J9006 and LED J7002	14-19203-00	Wire	UL1007#26AWG ,L=70mm
	A14-33201-01	Wire	UL1672#16AWG ,L=70mm
	A14-32201-04	Wire	UL1672#16AWG, L=70mm
	14-19201-00	Ground Wire	UL1015#18AWG ,L=110mm
	19-25010-00	Ferrite Ring	T25*15*10C(A10)
AC INNET TO SMPS Board	A14-38202-00	CABLE	UL1672#16AWG,L=260mm
Connect power and J3005	14-19203-01	Connector Wire	UL1007#22AWG
Connect power and J3006	14-19204-02	Connector Wire	UL1569#16AWG
Connect J3002 and RS232 J9301	14-19214-00	Connector Wire	L=180mm
Connect 3001 and FPP J9004	14-19224-00	Connector Wire	L=260mm, CNT-C200-24-260
Connect J3004 and DDFA J1009	14-19234-00	Connector Wire	L=50mm, CNT-C200-34-50
Connect J3003 and BOOTLOAD J9000	14-19205-00	Connector Wire	UL2547#24*3C,UL1007#24AWG,L=270mm
Connect J1012and RS232 J9304	14-19204-00	Connector Wire	UL2547#24*3C,L=130mm
Connect J1004 and RS232 J9306	14-19204-01	Connector Wire	UL1691#24AWG*1C*2,L=140mm
	<b>METAL PARTS</b>		
	70-267007-1	Main Top Cover	6063 T5
	70-267008-0	Second Top Cover	Al1050 T=3.0mm
	67-267004-0	SS Perf Sheet	SPCC, T=0.5mm,Black Painting
	67-382001-1	Bottom	SECC-N5 T=1.2mm
	65-382001-1	Bottom	SECC-N5 T=1.2mm
	67-382002-1B	Rear Panel	SECC-N5 T=1mm
	80-382002-1	Rear Panel	SECC-N5 T=1mm
	65-382002-1	Rear Panel	SECC-N5 T=1mm
	67-230010-0A	Blank Cover(L)	SECC-N5 T=1.2mm
	80-230010-0	Blank Cover(L)	SECC-N5 T=1.2mm
	65-230010-0	Blank Cover(L)	SECC-N5 T=1.2mm
	67-230009-0A	Blank Cover(S)	SECC-N5 T=1.2mm
	80-230009-0	Blank Cover(S)	SECC-N5 T=1.2mm
	65-230009-0	Blank Cover(S)	SECC-N5 T=1.2mm
	67-382009-1	Connector Bracket	SECC-N5 T=1mm
	65-382009-1	Connector Bracket	SECC-N5 T=1mm
	70-382901-0	Fascia Assy	
	(70-382004-0A)	Center Front Fascia	AL 6063 T5
	(70-382005-0A)	Left Front Fascia	AL 6063 T5
	(70-382006-0A)	Right Front Fascia	AL 6063 T5
	(70-382003-0)	Rear Fascia	AL 6063 T5
Left Front Fascia (4) Right Front Fascia (4)	61-224510-1	Hex Screws	GB/T70.1, HM4×10
Center Front Fascia	61-063506-0	Machine Screw	MF3×6,zinc black
	66-382001-0	Fascia Connect Bracket R	SECC-N5 T=1.2mm
	66-382002-0	Fascia Connect Bracket L	SECC-N5 T=1.2mm
	70-382001-0	Left Side Panel	AL 6063 T5
	70-382002-1	Right Side Panel	AL 6063 T5
	67-267005-0	Vent sheet	Stainless Steel, T=0.5mm,Black Painting
	J71-267001-1	Vol. Knob Assy	
	J71-267002-0	Masters II Feet	
	71-267003-0	Feet Shoe Assy	
	J71-267903-0	Masters II Feet Shoe	
	78-267001-0	Feet PAD	Poron MX-48HF BLACK

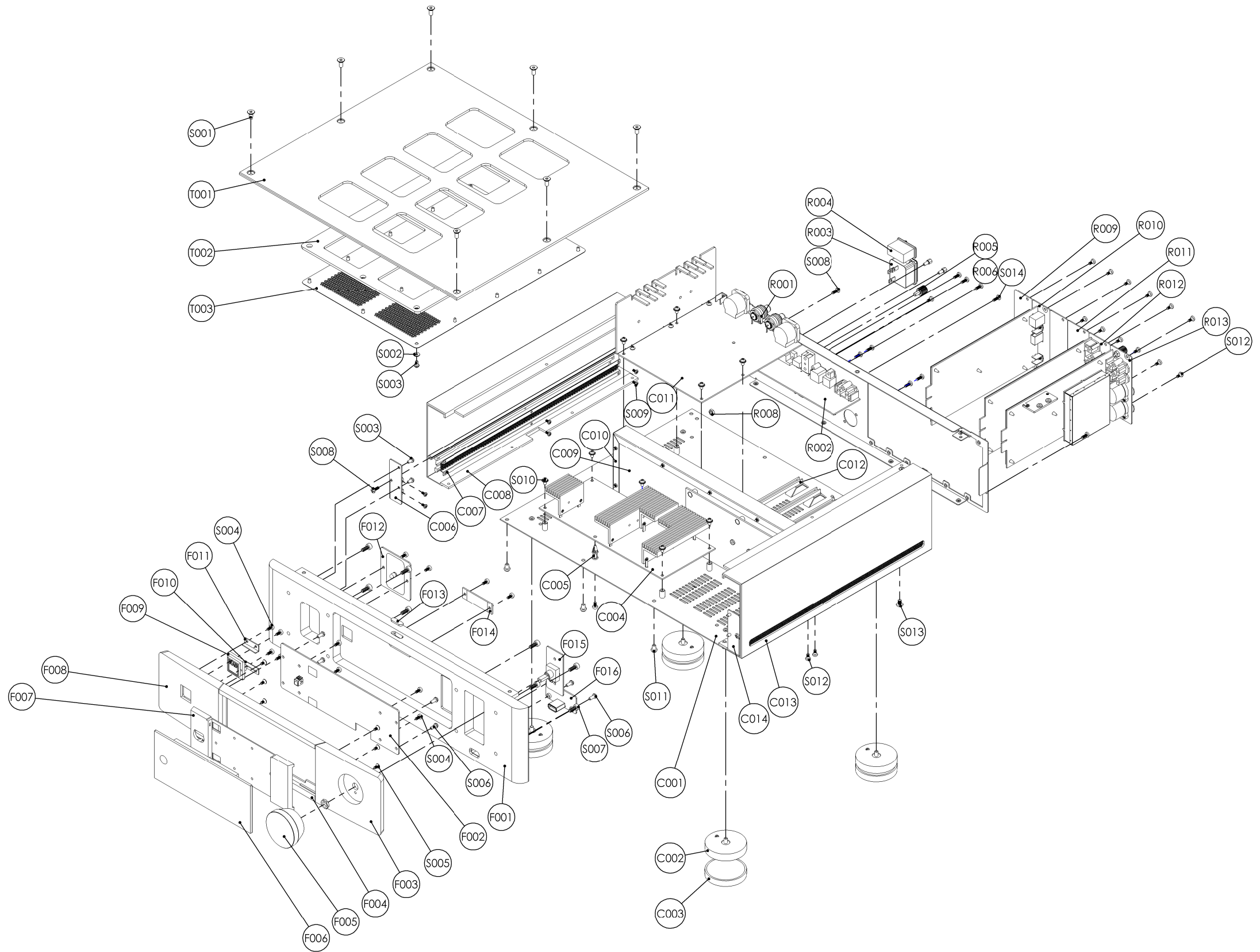


	67-355011-0	Logo Clamp	SECC N5 T=1mm,Painting Black
	65-355011-0	Logo Clamp	SECC N5 T=1mm
	67-355012-0	Logo Clamp Mirror	SECC N5 T=1mm,Painting Black
	65-355012-0	Logo Clamp Mirror	SECC N5 T=1mm
	69-355002-0	Touch Key Copper plate	T2Y2 T=0.2mm
	71-003002-0	GRD.Post Cap	C160 HS4-C160-B009V1-M010
	71-003001-1	GRD.Post Bolt	
	62-010402-0	Nut	GB6170-86, M4,zinc blue
	63-030410-0	Serrated Lock Washer	φ4
	<b>PLASTIC</b>		
	J71-355001-0A	NAD Logo	Chromeplate, NAD logoS, silk-screen color:Pantone cool 6C
	96-355001-0A	Touch Key Cap	Black glass, 18*6*2, silk-screen
	85-151002-0	PCB Guide	CG-500
	B75-267001-0	LCD Bracket	ABS,Black
	75-049001-0	PCB Spacer	TCBS-10
	79-355001-0	Expanded Rubber	IEPE Foam,Black,318mmx12mmx0.5mm
	<b>FASTENERS</b>		
	J61-234510-1	Machine Screws	M4X10
Touch Key Board (2) , Logo Clamp (4) , FPP(4),Logo PCB (2)	61-023206-0	Self Tapping Screw	BTB3×6,zinc black
	61-033208-0	Self Tapping Screw	BTP3×8 zinc black
	61-022205-6	Self Tapping Screw	BTB2.6×5,zinc black
Rear Panel (2)	61-063208-0	Taplitle Screw	BTF3×8 zinc black
Rear Panel(9)	61-023208-0	Self Taping Screw	BTB3X8, zinc black
Bottom (4)	61-024506-0	Machine Screw	MB4×6,zinc black
Bottom (10)	61-024106-0	Self Tapping Screw	STB4×6,zinc black
Rear Fascia(15), shielding case (5) , Connector Bracket (7)	61-023106-0	Self Taping Screw	STB3X6, zinc black
	61-023506-0	Machine Screw	MB3×6,zinc black
FPP(4), USB(2)	61-023508-0	Machine Screw	MB3×8,zinc black
SMPS Board(6),Audio Board(5)	61-373506-0	Machine Screws	M3x6, Nickelage
	63-010408-3	Plain Washer	GB/T97.1, Ø4, Nickelage, L3
	63-010309-5	Plain Washer	Φ3×Φ9.5mm,0.8mm
	63-110305-0	Washer	φ3×φ7×0.5
<b>PCB-14:HTRM2 BOARD</b>			
<b>CIRCUIT NO.</b>	<b>PART NO.</b>		<b>DESCRIPTION</b>
	A16-28101-21	HTRM2 Board PCB	VM1.0,FR-4,1.6mm,2Layers,1oz, TG130
	<b>DIODES</b>		
D100, D101, D102, D103, D104, D105, D106, D107,D110,	33-50603-21	Red LED	Red,WR-PB1608UE-L08
D116, D117, D118, D119, D120, D121, D122, D123, D124, D125, D126, D127, D128, D129, D130, D139, D141, D142	33-50603-10	BLUE LED	Blue,WR-PB1608UBC-M23
D115, D131, D132, D133, D134, D135, D136, D137, D140	33-44148-17	Switch Diode	IN4148
D138	33-51616-25	LED	APTB1615ESGC-F01
D111	33-05842-00	LIGHT DEPENDENT DIODE	SPI5842-H
D113	33-00513-00	Red Emitting Diode	BIR-BM13E4G-2, φ5
	<b>IC</b>		
U100	03-90647-02	64K MCU	AT90USB647-AUR
U100	or 03-90647-01	MCU	AT90USB647-16AU,TQFP64
U101	03-45041-00	4M FLASH	AT45DB041D-SU(EOL)
U102	03-70433-01	Linear Regulator	TLV70433DBVR
	<b>RESISTOR</b>		
R103, R104, R105, R106, R107, R108, R109, R110,R116,	07-90000-00	Chip resistor	0Ω, 0603, ±5%
R100, R101	07-92209-00	Chip resistor	22Ω,0603,1/10W,±1%,RC0603FR-0722RL
R102, R113	07-90105-00	Chip resistor	1MΩ,0603,1/10W,±5%,RC0603JR-071ML
R111	07-92200-00	Chip resistor	220Ω,0603,1/10W,±1%,RC0603FR-07220RL
R117, R119, R121	07-90331-00	Chip resistor	330Ω,0603,1/10W,±5%,RC0603JR-07330RL
R112	07-91008-00	Chip resistor	1Ω,0603,1/10W,±1%,RC0603FR-071RL
R134	07-91003-00	Chip resistor	100KΩ,0603,1/10W,±1%,RC0603FR-07100KL
R114	07-90335-00	Chip resistor	3.3MΩ,0603,1/10W,±5%,RC0603JR-073M3L
R115	07-90225-00	Chip resistor	2.2MΩ,0603,1/10W,±5%,RC0603JR-072M2L
R118	07-90109-00	Chip resistor	1Ω,0603,1/10W,±1%,RC0603FR-071RL
R120	07-94701-00	Chip resistor	4.7KΩ,0603,1/10W,±1%,RC0603FR-074K7L

R124	07-90824-00	Chip resistor	820KΩ,0603,1/10W,±5%,RC0603JR-07820KL
R125	07-90823-00	Chip resistor	82KΩ,0603,1/10W,±5%,RC0603JR-0782KL
R126	07-94702-00	Chip resistor	47KΩ,0603,1/10W,±1%,RC0603FR-0747KL
R127	07-96800-00	Chip resistor	680Ω,0603,1/10W,±1%,RC0603FR-07680RL
R128, R133	07-90103-00	Chip resistor	10KΩ,0603,1/10W,±5%,RC0603JR-0710KL
R130, R131, R132	07-91000-02	Chip resistor	100Ω,1206,1/4W,±1%,RC1206FR-07100RL
	<b>CAPACITOR</b>		
C100, C104, C105, C106, C107, C108, C109, C110, C111, C114	26-10411-00	Ceramic Chip Capacitor	100nF,16V 0603, X7R
C112	06-22011-08	Ceramic Chip Capacitor	22uF,16V,±20%,85C
C102, C103	26-22051-00	Ceramic Chip Capacitor	22pJ,50V,0603,NPO
C113	26-10411-01	Ceramic Chip Capacitor	100nK,16V,0805,X7R
C115	26-47251-10	Ceramic Chip Capacitor	4.7nK,50V X7R,0603
C101	26-10611-01	Ceramic Chip Capacitor	10uF,0805,10V,C0805C106M8PACTU/C2012X5R1A106M
	<b>TRANSISTOR</b>		
Q100, Q101, Q102, Q103, Q104	31-08050-03	Transistor	S8050H,SOT-23
Q50	31-02301-01	P-CH MOSFET	APM2301CAC, SOT23, Tape
R129	31-00307-00	Transistor	LS07-A F3
	<b>SOCKET</b>		
J100	17-08001-59	USB Interface	GL54S02-05-T
	<b>CRYSTAL</b>		
Y100	04-18001-03	Crystal	8.000MHz,20pF,30PPM,MJ2-8.000-20P-30/30Y
Y100	or N04-18001-08	Crystal	IB-F-8.0000M-20-30-50-1060
	<b>SWITCH</b>		
S1, S2	11-06101-16	vibroswitch	SW-1815P-12
	69-423001-0	shaft	H62
	92-423001-0	negative spring	65Mn, Nickelage
	<b>MECHANICAL PARTS</b>		
	74-423003-0	metal dome	SUS301+PET
	74-423004-0	metal dome	SUS301+PET
<b>MISC AND MECHANICAL PARTS</b>			
	<b>PLASTIC PARTS</b>		
	Z75-423002-1	rear frame	ABS+PC
	Z75-423004-2	battery cover A	ABS+PC
	B75-423005-1	battery cover B	ABS, Black
	B75-423006-1	battery tunnel A	ABS 757
	B75-423007-0	battery tunnel A	ABS 757
	B75-423008-1	clear plate A	ABS 758
	MB75-423009-1	clear plate B	ABS 758
	MB75-423010-2	key frame	ABS 757 Black
	Z75-423011-0	foot	ABS 757
	74-423001-1A	key assy A	ABS 758
	M74-423002-2A	key assy B	ABS 758
	79-423001-0	EVA A	EVA,12*2*1mm
	79-423002-0	EVA B	EVA, 38*3*1mm
	79-423003-0	Rear Foam	PORON,5x1.5x2.5mm
	90-423002-0	Film	T=0.05mm
	<b>SCREW</b>		
	61-022206-0	Self Taping Screw	BTB2×6, zinc black
	<b>METAL PARTS</b>		
	70-423001-3	bottom cover	AL 6063
	70-423002-1B	top cover	AL 1050
	66-423001-0	positive plate	65Mn,Nickelage
	92-423002-0	slide spring	65Mn,Nickelage
	30-22100-10	AA Batteries	2006/66/EC
	<b>LABEL</b>		
	94-423001-0	12x5mm(自制)	
	86-000074-0	12x5mm	
	<b>ACCESSARIES</b>		
	86-423001-0	Double-side Tape	3M 300LSE, 128.9*36.8mm
	86-423002-0	Double-side Tape	3M 300LSE, 118.1*36.8mm

	84-005001-0	Nilon Cable Tie	YJ-100
	86-355001-0	Adhesive tape	3M 9448,T=0.1mm
	86-051004-0	Adhesive Bonded Fabric	8×50×0.5
	N79-382002-0	LED Board Foam	EVA, 56x50mm, T=1mm
	79-158012-0	EVA Foam	EVA Foam, 162X15mm, T=1mm
	<b>PACKING</b>		
	90-423001-2	Non-woven bag	300×70mm
	88-382011-0A	Shipping Box	ID=565x515x264mm
	88-382001-1A	Carton Box	ID=547×495 ×249mm
	88-382002-1	Paper Corner	50*50*5mm,L=227mm
	89-355901-0	Cushions Assy	
	88-355005-0A	Paper Formed Box	
	88-355006-0	Cushion First Layers	525*480*7mm
	88-355007-0	Cushion Second Layers	525*480*7mm
	88-355008-0	Cushion Third Layers	525*480*7mm
	88-355009-0	Cushion Forth Layers	525*480*7mm
	88-355010-0	Cushion Last Layers	525*480*7mm
	89-355001-0	Main Pulp	Black, 523mmX478mmX92.5mm
	89-355003-0	Accessory Pulp	Black,286mmX180mmX47mm
	89-355004-0	Shoe Cover Pulp	Black,118mmX111mmX14mm
	88-355003-0A	Cables Box	OD=306mmX187mmX52mm
	90-355002-1	woven bag	L658×W555
	88-351006-0A	accessory box	
	M88-267002-0	Accessory Box Sheet	
	88-355004-0A	Cleaning Cloth bag	L160×W110
	90-355001-0	Cleaning Cloth	150mmx150mm
	30-41920-01	USB Manual	Eight kinds of language
	37-00200-01	USB Disk	L-008
	30-41921-01	Quick Setup Guide	
	30-05000-00	Desiccant	50g 90×110,2009/251/EC
	94-382013-1	Barcode Label	40×30mm
	86-004030-0	Copperplate Label	40×30mm,Pantone cool gray 6C
	94-382023-0	Barcode Label	40×30mm
	86-004030-0	Copperplate Label	40×30mm,Pantone cool gray 6C
	94-382005-0	Master Carton Label	95x67.5mm
	94-382015-0	Master Carton Label	95x67.5mm
	30-51500-01	Guarantee Card	210X148mm
	94-382004-0	Serial No. Label	53×10mm
	86-005310-0	Copperplate Label	53×10mm,Pantone cool gray 6C

# M12 EXPLODED VIEWS



# M12 EXPLODED VIEW PARTS LIST

REF.NO.	PART NO.	DESCRIPTION	Qty.	REF.NO.	PART NO.	DESCRIPTION	Qty.
C001	67-382001-1	Bottom	1	R011	67-230010-0A	Blank Cover(L)	1
C002	J71-267002-0	Masters II Feet	4	R012	01-19203-00	MDC-DIO Board	1
C003	71-267003-0	Feet Shoe Assy	4	R013	01-19220-00	Analog KIT	1
C004	01-19208-00	PSU BOARD	1				
C005	75-049001-0	PCB Spacer	1				
C006	66-382002-0	Fascia Connect Bracket L	1	T001	70-267007-1	Main Top Cover	1
C007	67-267005-0	Vent Sheet	2	T002	70-267008-0	Second Top Cover	1
C008	70-382001-0	Left Side Panel	1	T003	67-267004-0	Perf Sheet	1
C009	01-19202-00	MDC Board	1				
C010	67-382009-1	Connector Bracket	1				
C011	01-19201-00	Audio Board	1				
C012	85-151002-0	PCB Guide	6	S001	J61-234510-1	Machine Screw (M4X10)	7
C013	70-382002-1	Right Side Panel	1	S002	63-010309-5	Plain Washer(Φ3×Φ9.5x0.8)	15
C014	66-382001-0	Fascia Connect Bracket R	1	S003	61-023506-0	Machine Screw (MB3X6)	19
				S004	61-023206-0	Self Taping Screw (BTB3X6)	12
				S005	61-063506-0	Machine Screw (MF3X6)	6
F001	70-382003-0	Rear Fascia	1	S006	61-023508-0	Machine Screw (MB3X8)	6
F002	01-19209-00	FPP Board	1	S007	61-224510-1	Hex Head Screw (M4X10)	8
F003	70-382006-0A	Right Front Fascia	1	S008	61-033208-0	Self Taping Screw (BTP3×8)	4
F004	70-382004-0A	Center Front Fascia	1	S009	61-022205-6	Self Taping Screw (BTB2.6×5)	12
F005	J71-267001-1	Vol. Knob Assy	1	S010	61-373506-0	Machine Screw(M3x6)	10
F006	J23-08868-00	LCD Display	1	S011	61-024506-0	Machine Screw(M4x6)	10
F007	B75-267001-0	LCD Bracket	1	S012	61-023106-2	Self Taping Screw (STB3X6)	27
F008	70-382005-0A	Left Front Fascia	1	S013	61-024106-0	Self Taping Screw (STB3X6)	4
F009	J71-355001-0A	NAD Logo	1	S014	61-023208-0	Self Taping Screw (BTB3X8)	9
F010	67-355011-0	Logo Clamp	1				
F011	67-355012-0	Logo Clamp Mirror	1				
F012	01-19211-00	LED Board	1				
F013	96-355001-0A	Touch Key Cap	1				
F014	01-19207-00	Touch Key Board	1				
F015	01-19206-00	Encode Board	1				
F016	01-19205-00	Bootload Board	1				
R001	67-382002-1B	Rear Panel	1				
R002	01-19204-00	232&Tric Board	1				
R003	JA17-07103-04	AC Inlet	1				
R004	A11-01201-03	Rocker Switch	1				
R005	71-003002-0	GRD.Post Cap	1				
R006	71-003001-1	GRD.Post Bolt	1				
R007	63-030410-0	Serrated Lock Washer	1				
R008	62-010402-0	Nut	1				
R009	67-230009-0A	Blank Cover(S)	2				
R010	01-39017-00	USB XMOS Board	1				

# M12 Packing Accessory Section

