

D7050

Direct Digital

Network Amplifier

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SERVICE MANUAL

NAD

D7050

TABLE OF CONTENTS

DESCRIPTION	P A G E
SERVICE CAUTION.....	3-4
SPECIFICATIONS.....	5
WIRING DIAGRAM.....	6-9
TROUBLE SHOOTING GUIDE.....	10
EXPLODED VIEW	11a & b
EXPLODED VIEW PARTS LIST.....	11a & b
CIRCUIT DIAGRAMS.....	12-25
PCB LAYOUT.....	26-32
ELECTRICAL VIEW PARTS LIST.....	33-47

PRODUCT SAFETY SERVICING GUIDELINES

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 AC LINE SHOCK.

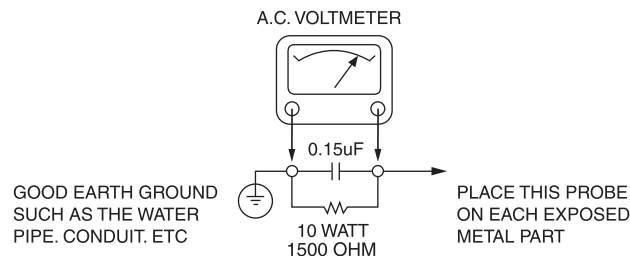
SAFETY CHECKS

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 AC CORD). AND REPLACE IF NECESSARY FOLLOW ORIGINAL LAYOUT, LEAD LENGTH AND DRESS.
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 AC 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 SAFET TO OPERATE WITHOUT DANGER OF ELECTRICAL SHOCK. DO NOT USE A LINE ISOLATION TRANSFORMER DURING THIS TEST USE AN AC 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, 150V AC TYPE CAPACITOR BETWEEN A KNOWN GOOD EARTH GROUND (WATER PIPE, CONDUIT, ETC.) AND THE EXPOSED METALLIC PARTS, ONE AT A TIME.
MEASURE THE AC VOLTAGE ACROSS THE COMBINATION OF 1500 OHM RESISTOR AND .15 MFD CAPACITOR.
REVERSE THE AC PLUG AND REPEAT AC VOLTAGE MEASUREMENTS FOR EACH EXPOSED METALLIC PART.

VOLTAGE MEASURE MUST NOT EXCEED 75 VOLTS R.M.S. THIS CORRESPONDS TO 0.5 MILLIAMP AC ANY VALUE EXCEEDING THIS LIMIT CONSTITUTES A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED IMMEDIATELY.



SUBJECT : GRAPHIC SYMBOLS



THE LIGHTNING FLASH WITH ARROWHEAD SYMBOL, WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE 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 USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE APPLIANCE.

SUBJECT : TIPS ON PROPER INSTALLATION

1. NEVER INSTALL ANY PRODUCT IN A CLOSED-IN RECESS, CUBBYHOLE OR CLOSELY FITTING SHELF SPACE. OVER OR CLOSE TO HEAT DUCT, OR IN THE PATH OF HEATED AIR FLOW.
2. AVOID CONDITIONS OF HIGH HUMIDITY SUCH AS: OUTDOOR PATIO INSTALLATIONS WHERE DEW IS A FACTOR, NEAR STEAM RADIATORS WHERE STEAM LEAKAGE IS A FACTOR, ETC.
3. AVOID PLACEMENT WHERE DRAPERIES MAY OBSTRUCT REAR VENTING. THE CUSTOMER SHOULD ALSO AVOID THE USE OF DECORATIVE SCARVES OR OTHER COVERINGS WHICH MIGHT OBSTRUCT VENTILATION.
4. WALL AND SHELF MOUNTED INSTALLATIONS USING A COMMERCIAL MOUNTING KIT MUST FOLLOW THE FACTORY APPROVED MOUNTING INSTRUCTIONS A PRODUCT MOUNTED TO A SHELF OR PLATFORM MUST RETAIN ITS ORIGINAL FEET (OR THE EQUIVALENT THICKNESS IN SPACERS) TO PROVIDE ADEQUATE AIR FLOW ACROSS THE BOTTOM, BOLTS OR SCREWS USED FOR FASTENERS MUST NOT TOUCH ANY PARTS OR WIRING. PERFORM LEAKAGE TEST ON CUSTOMIZED INSTALLATIONS.
5. CAUTION CUSTOMERS AGAINST THE MOUNTING OF A PRODUCT ON SLOPING SHELF OR A TILTED POSITION, UNLESS THE PRODUCT IS PROPERLY SECURED.
6. A PRODUCT ON A ROLL-ABOUT CART SHOULD BE STABLE ON ITS MOUNTING TO THE CART. CAUTION THE CUSTOMER ON THE HAZARDS OF TRYING TO ROLL A CART WITH SMALL CASTERS ACROSS THRESHOLDS OR DEEP PILE CARPETS.
7. CAUTION CUSTOMERS AGAINST THE USE OF A CART OR STAND WHICH HAS NOT BEEN LISTED BY UNDERWRITERS LABORATORIES, INC. FOR USE WITH THEIR SPECIFIC MODEL OF TELEVISION RECEIVER OR GENERICALLY APPROVED FOR USE WITH T.V.'S OF THE SAME OR LARGER SCREEN SIZE.
8. CAUTION CUSTOMERS AGAINST THE USE OF EXTENSION CORDS, EXPLAIN THAT A FOREST OF EXTENSIONS SPROUTING FROM A SINGLE OUTLET CAN LEAD TO DISASTROUS CONSEQUENCES TO HOME AND FAMILY.

SERVICING PRECAUTIONS

CAUTION : Before servicing the A/V Receiver 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 A/V Receiver 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 substitution or incorrect polarity installation of electrolytic capacitors may result in an explosion hazard.
2. Do not spray chemicals on or near this A/V Receiver 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 A/V Receiver 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 1M-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 reasons 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 handing 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

AUDIO SPECIFICATIONS

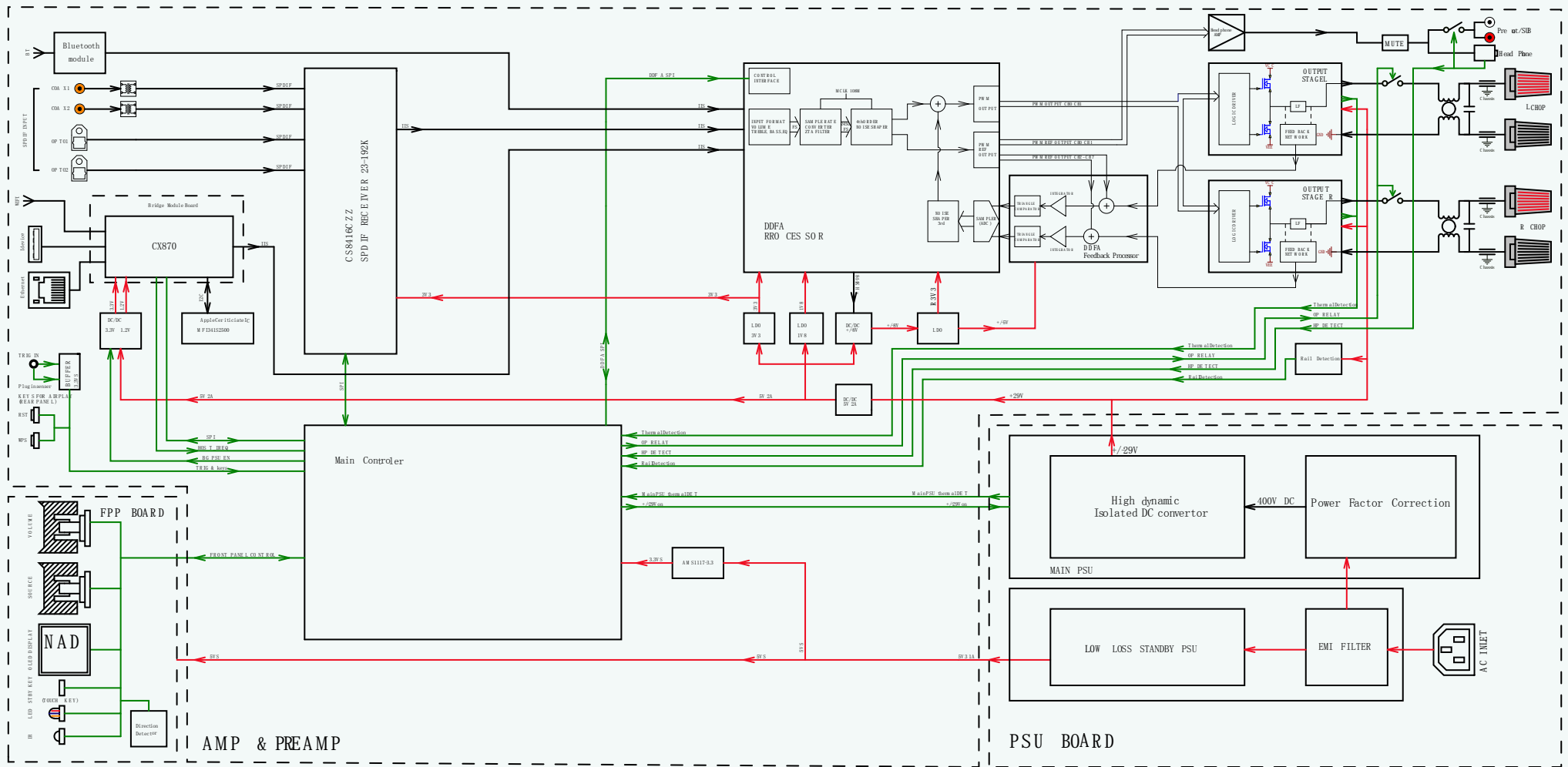
Rated power at 4 ohms	50W
Signal-to-Noise ratio (A-weighted)	≥ 90 dB
Crosstalk (1 kHz)	≥ 85dB
Crosstalk (10 kHz)	≥ 70 dB
Frequency response (20 Hz – 20 kHz)	0 dB to - 0.3 dB
Total Harmonic Distortion	≤ 0.004 %
IMD (SMPTE)	0.02 %
IMD (CCIF)	0.003 %

GENERAL SPECIFICATIONS

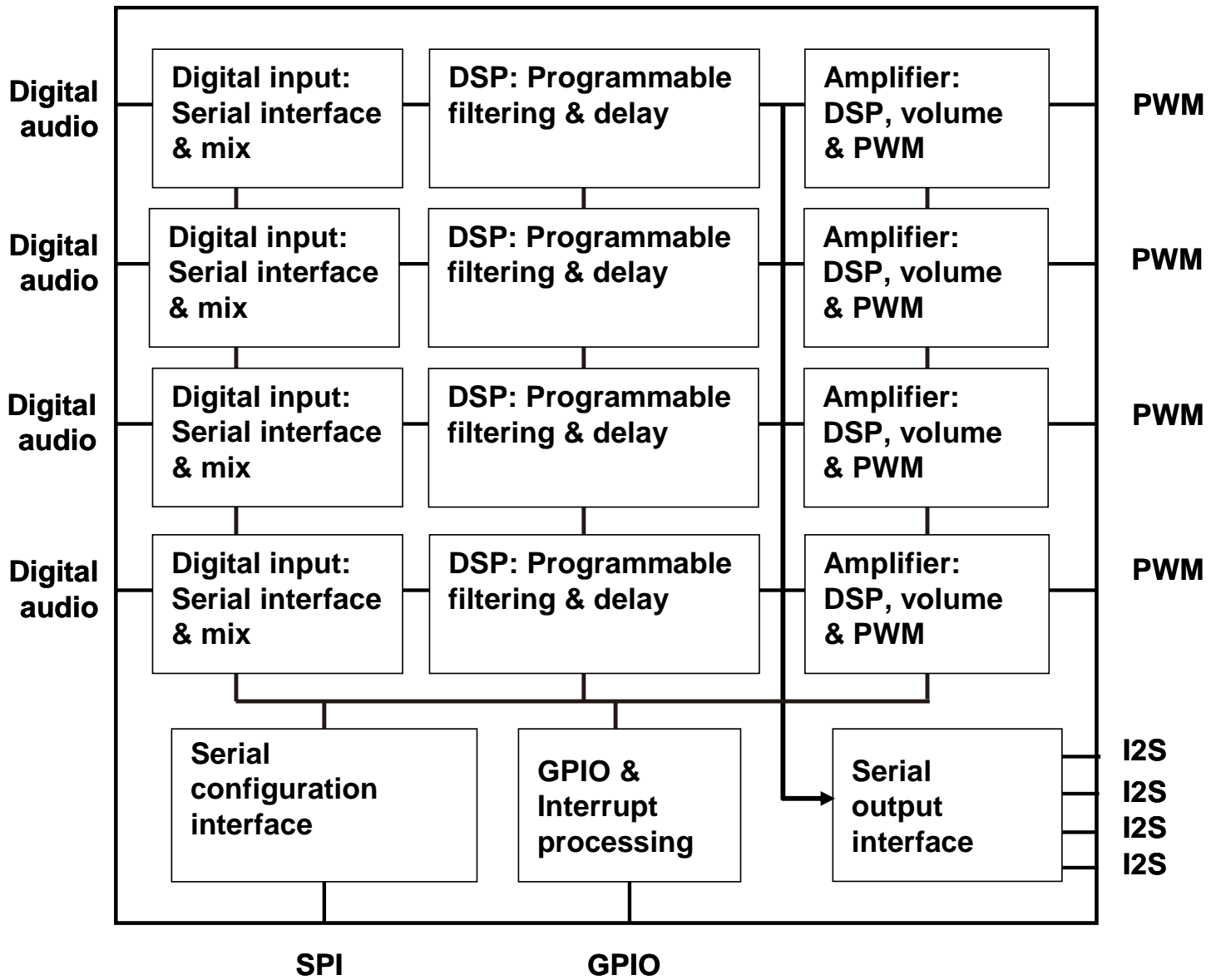
Standby power	≤ 0.5W
Supports bit rate/sample rate	up to 24/192 (via Digital Audio input) up to 24/96 (via Computer/Type B USB input)
Unit dimensions W x H x D (Gross)	70 x 235 x 275 mm 2 ¹³ / ₁₆ x 9 ⁵ / ₁₆ x 10 ⁷ / ₁₆ inches
Shipping weight	3.3 kg (7.3 lbs)

NAD SHALL NOT BE HELD LIABLE FOR ANY TECHNICAL OR USER INTERFACE DISCREPANCIES IN THIS MANUAL. THE D 7050 OWNER'S MANUAL MAY BE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE. CHECK OUT WWW.NADELECTRONICS.COM FOR THE LATEST VERSION OF THE D 7050 OWNER'S MANUAL.

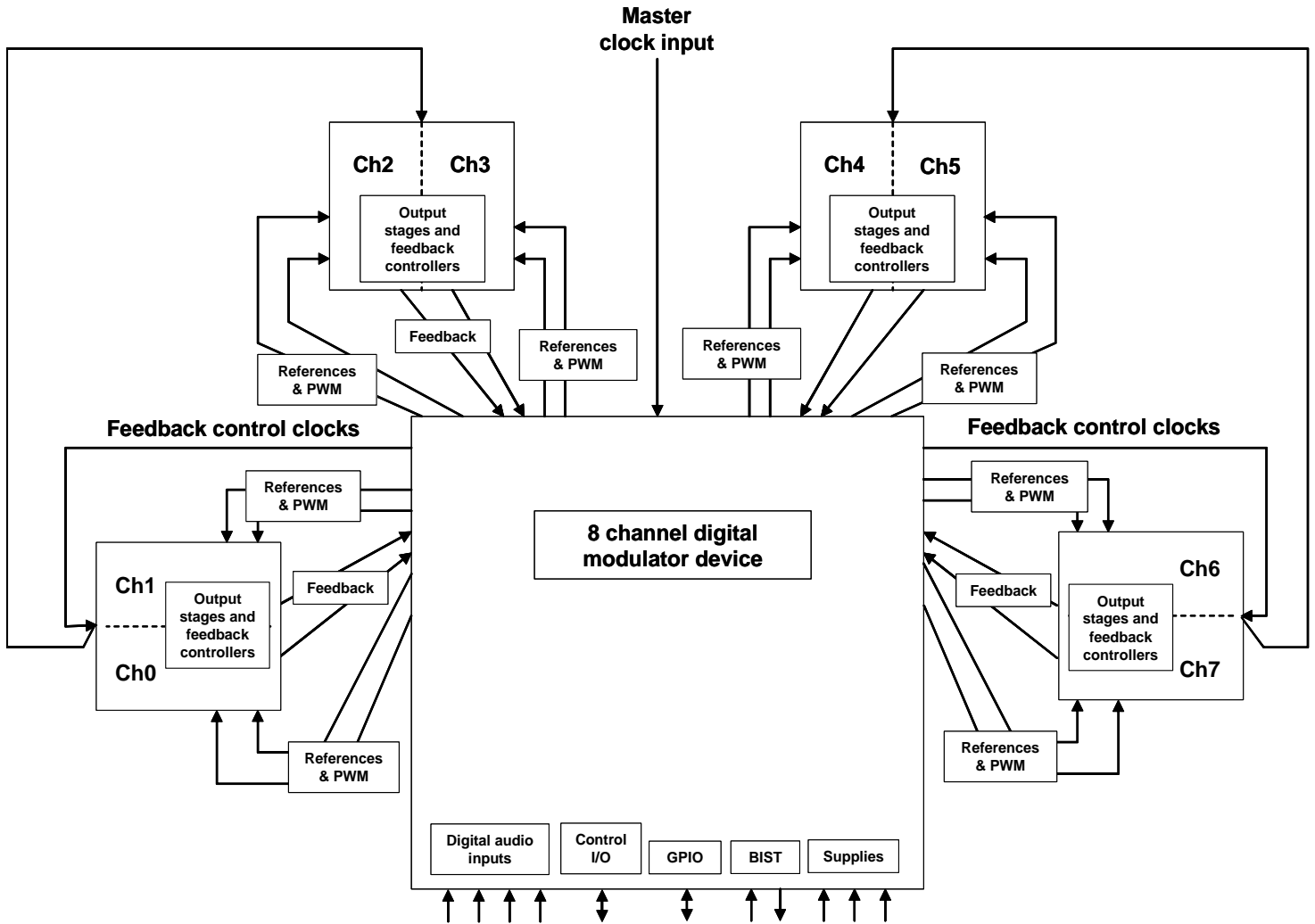
BLOCK DIAGRAM



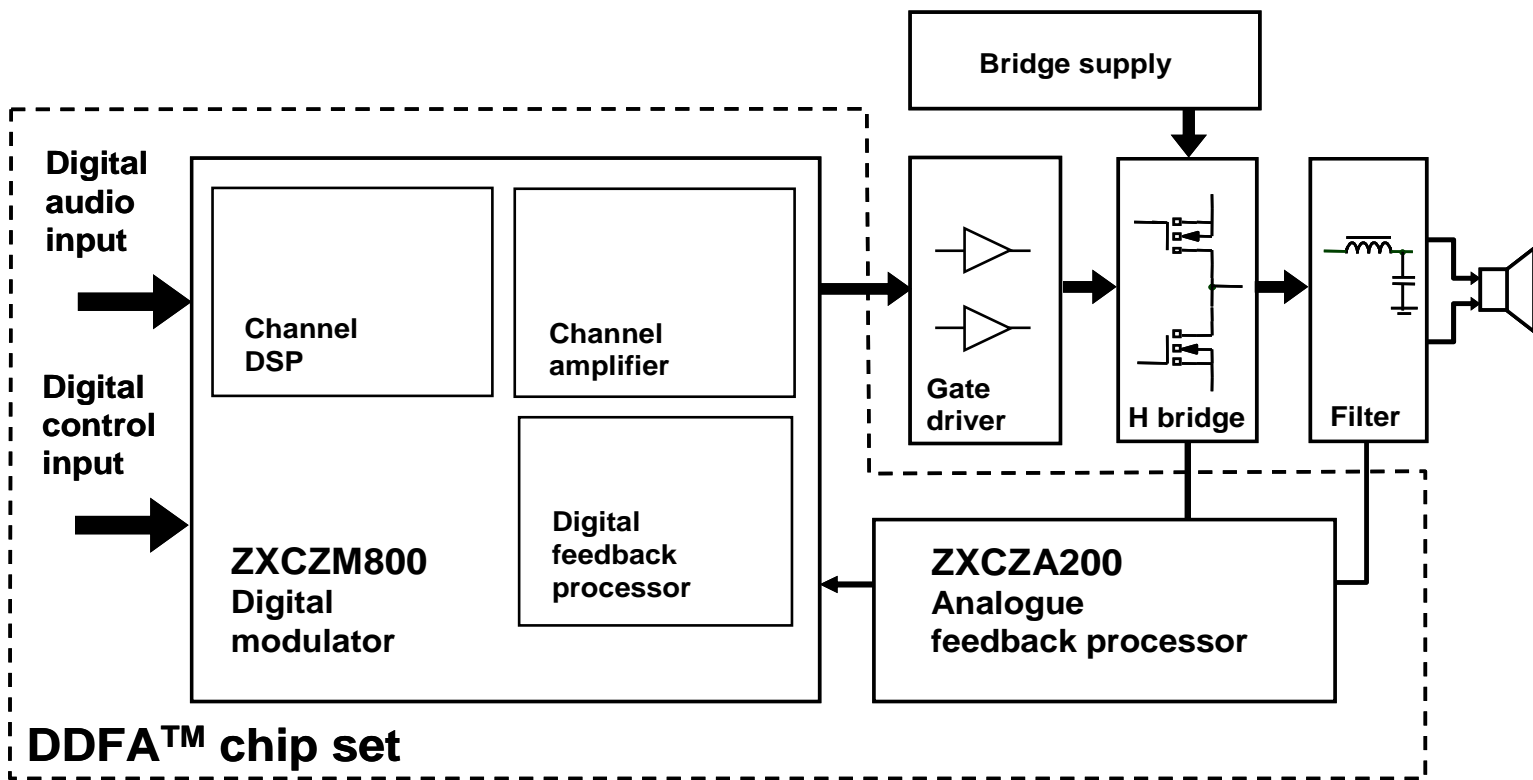
ZXCZM800
AMP BOARD



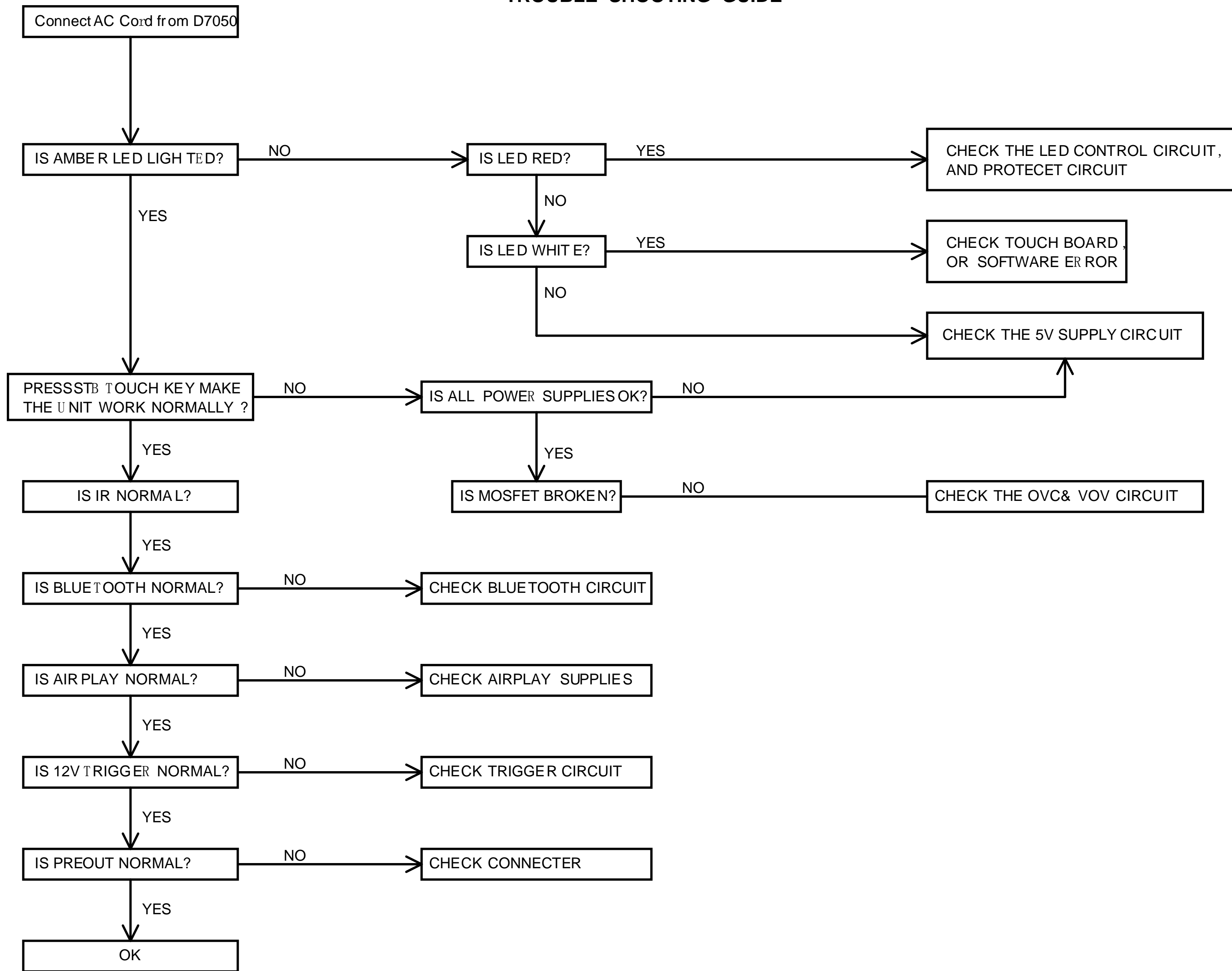
Connection outline diagram for 8 single ended channels
AMP BOARD



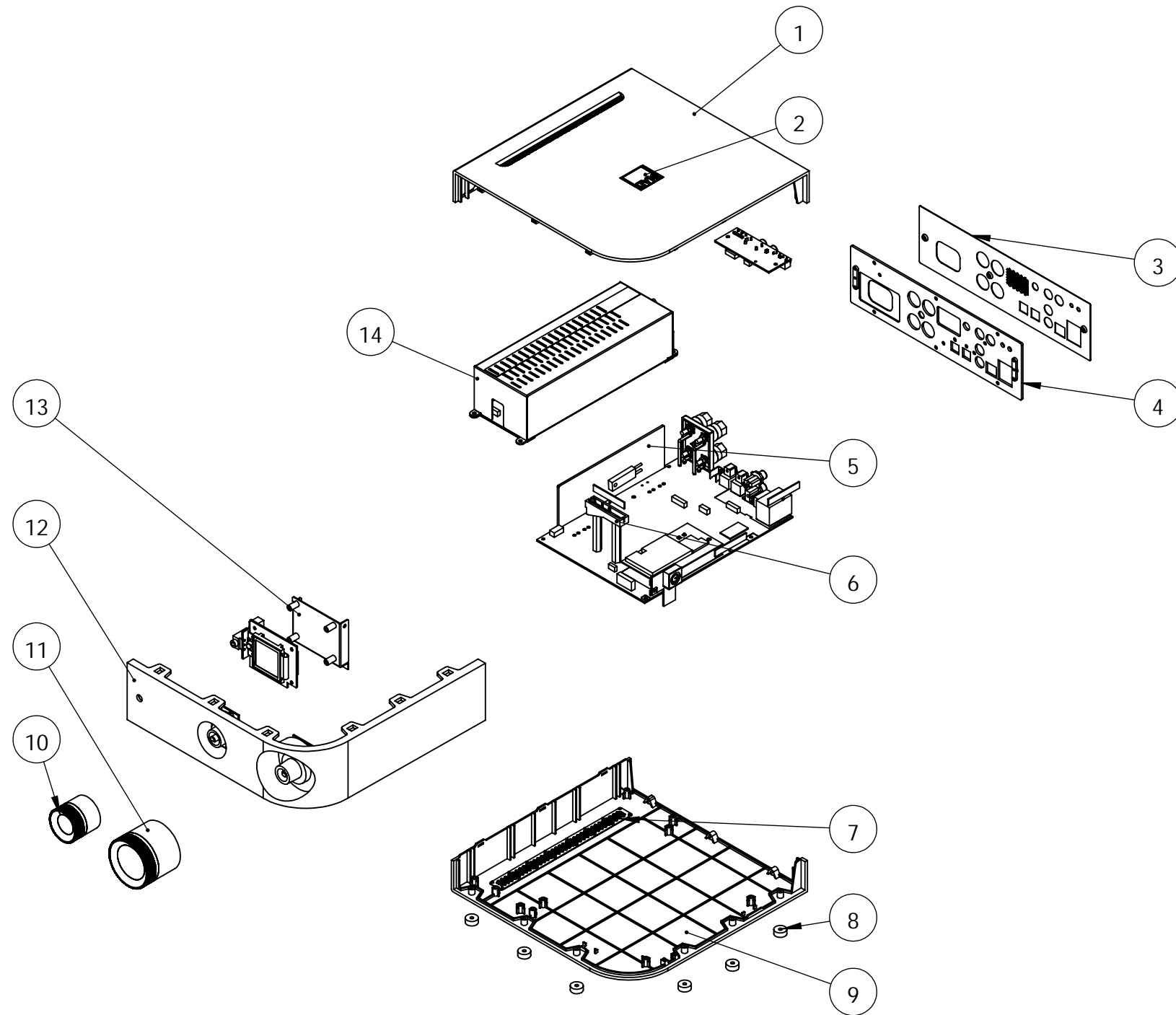
ZXCZM800&ZXCZA200 System architecture
AMP BOARD



TROUBLE SHOOTING GUIDE

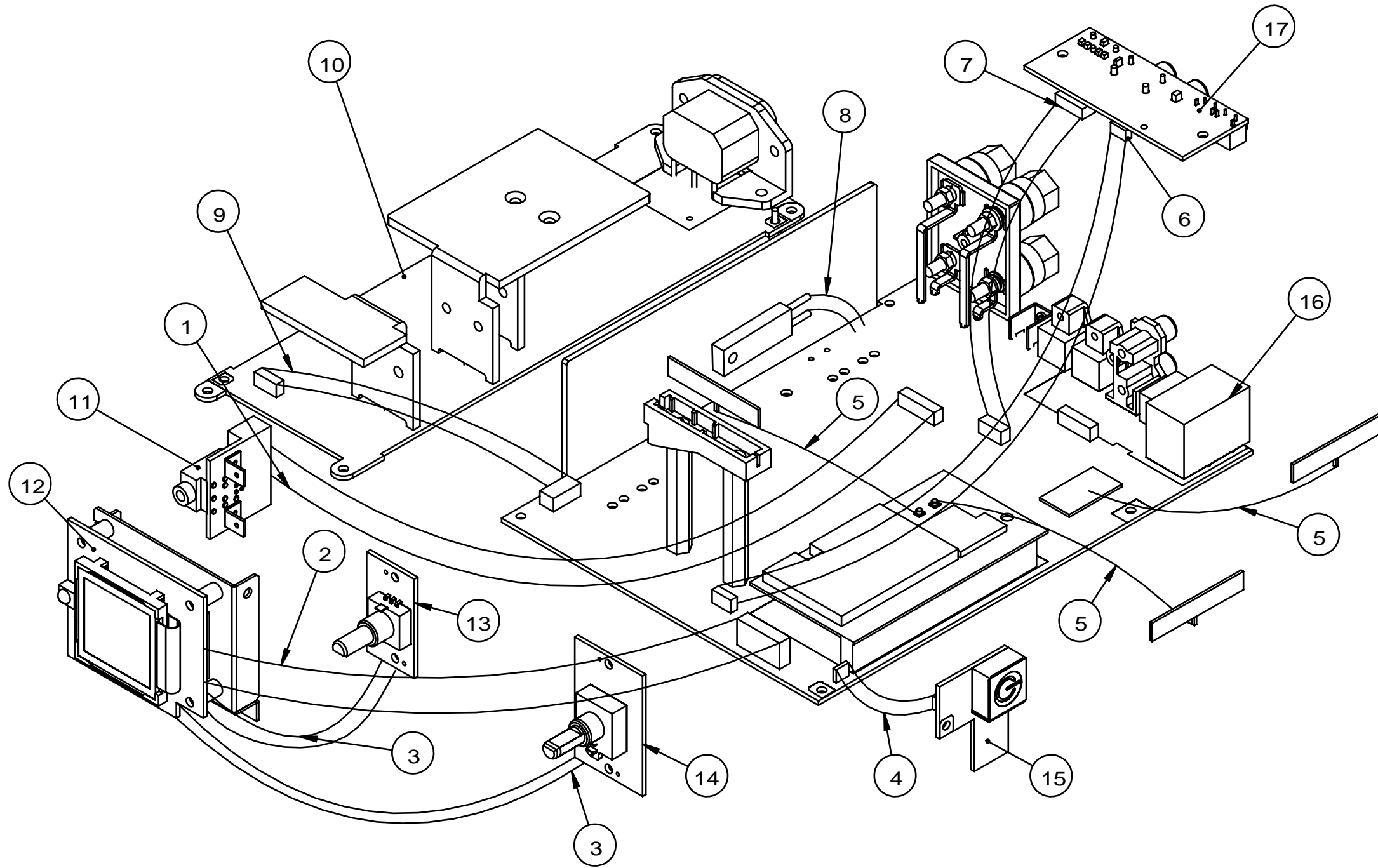


Exploded View D7050 A



D7050 PART LIST				
ITEM	PART NO.	PART NAME	QTY	REMARK
1	77-325001-2	TOP COVER	1	
2	70-325011-1	BADGE	1	
3	67-325001-2D	REAR PLATE	1	
4	70-325001-4	INNER PLATE	1	
5	70-325002-3	HEAT SINK A	1	
6	75-325003-0	ANTENNA BRACKET	1	
7	66-325004-0	VENT PLATE	2	
8	75-325002-0	ROUND COVER	6	
9	77-325002-1	BOTTOM COVER	1	
10	J71-325002-0	KNOB_SEC	1	
11	J71-325001-0	KNOB_VOL	1	
12	76-325001-2C	FROTN PANEL	1	
13	66-325001-2	DISPLAY BRACKET	1	
14	66-325002-2	SHIELD COVER	1	

Exploded View D7050 B

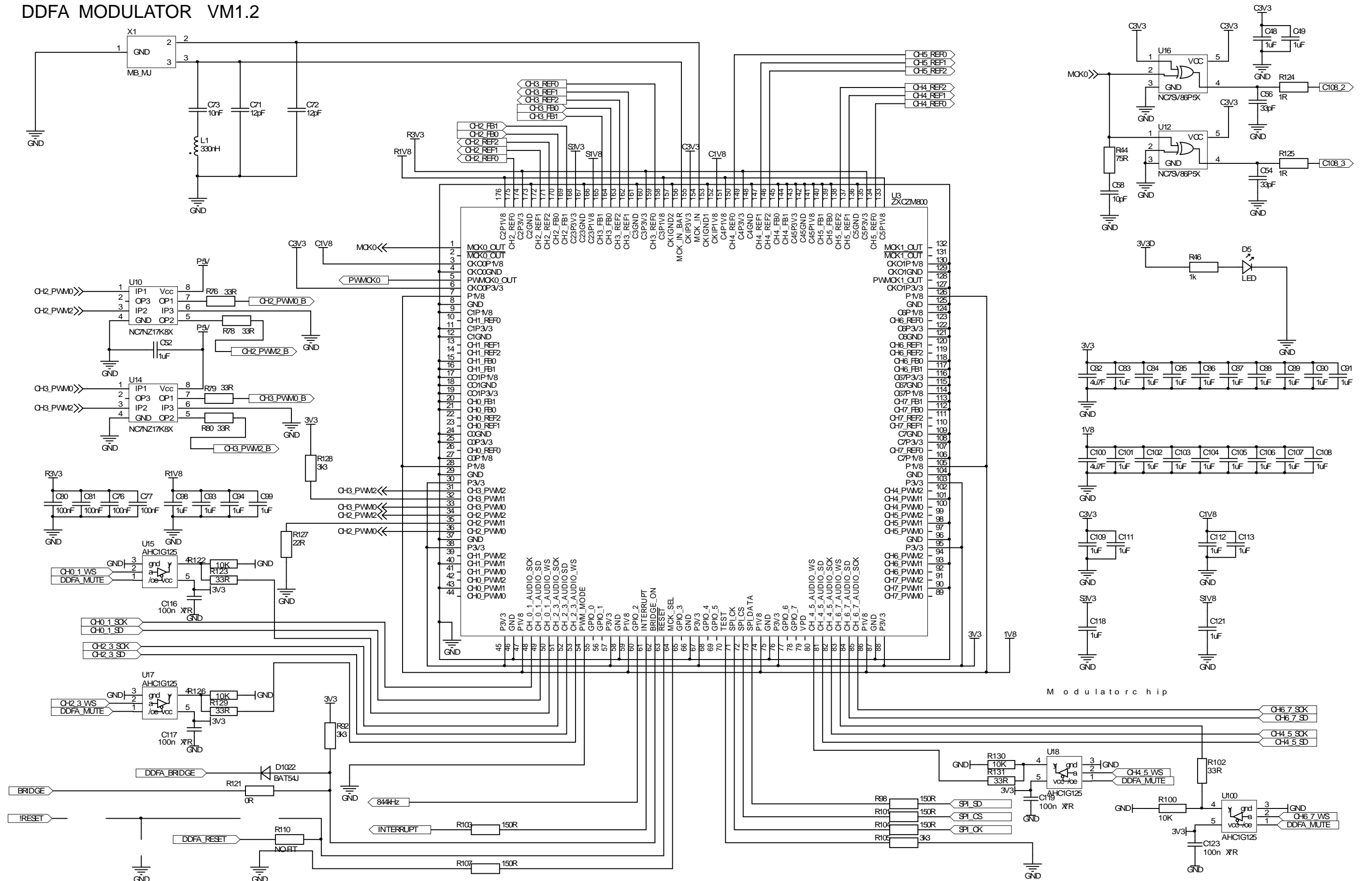


ITEM	PN.	NAME
1	14-22308-00	
2	14-23324-00	
3	14-23308-01	
4	14-04306-00	
5	29-04601-02	
6	14-233006-00	
7	14-23304-11	
8	A07-70022-18	
9	14-23310-00	
10	01-23308-00	PSU BOARD
11	01-23307-00	HEAD PHONE BOARD
12	01-23302-00	FPP BOARD
13	01-23304-00	SOURCE BOARD
14	01-23303-00	VOLUME BOARD
15	01-23306-00	TOUCH BOARD
16	01-23301-00	AMP BOARD
17	01-23305-00	TRIGGER BOARD

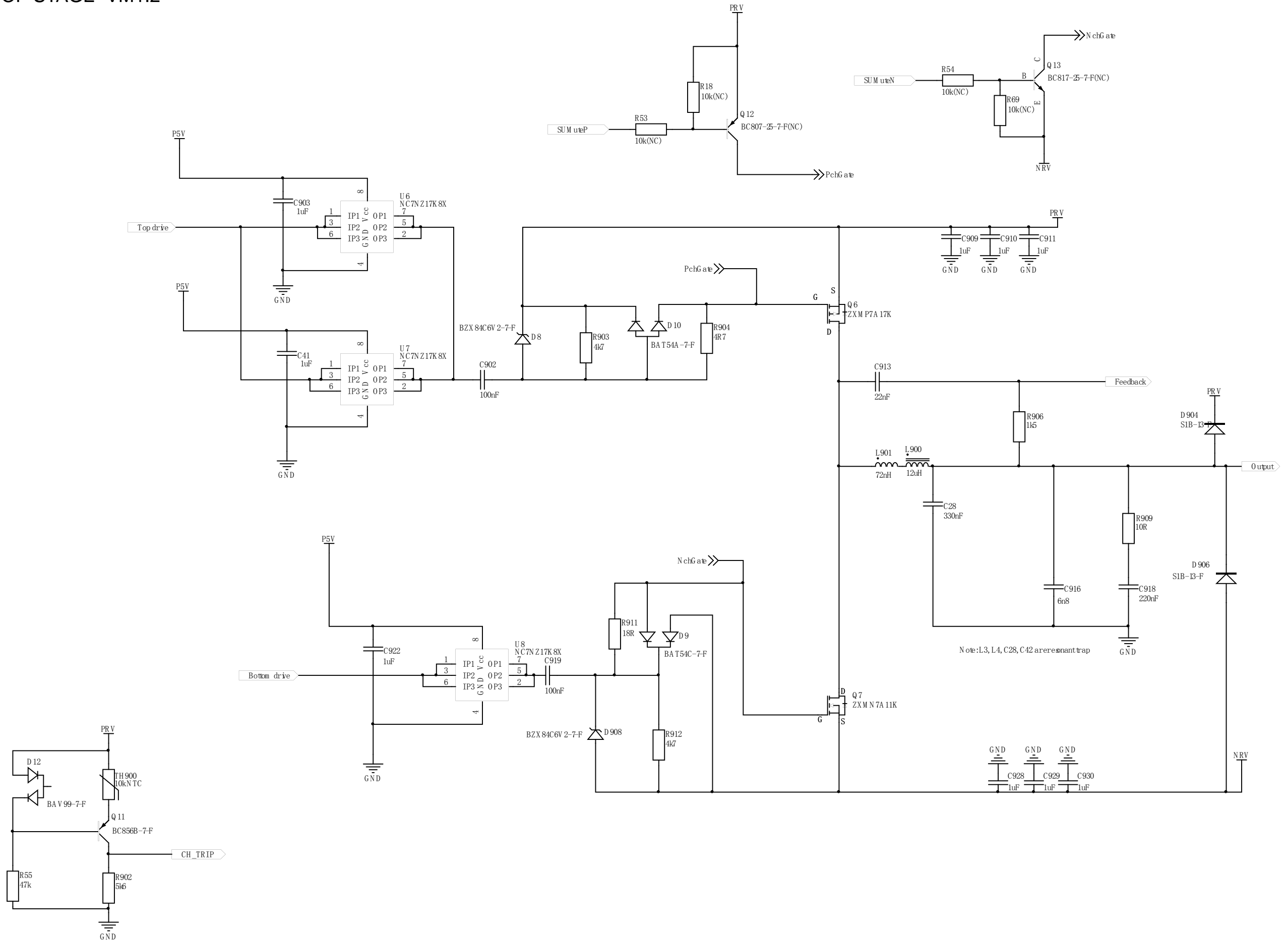
CIRCUIT DIAGRAMS

1.AMP BOARD VM2.1(1/8)

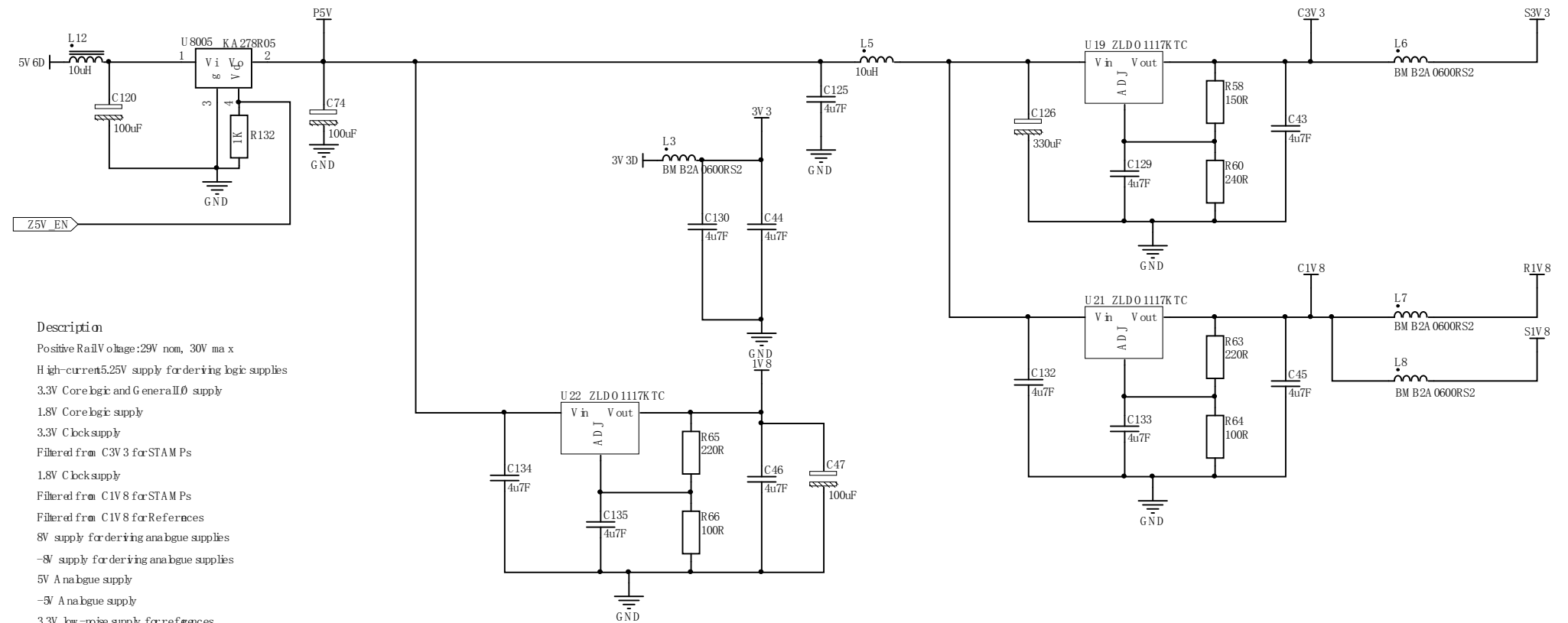
DDFA MODULATOR VM1.2



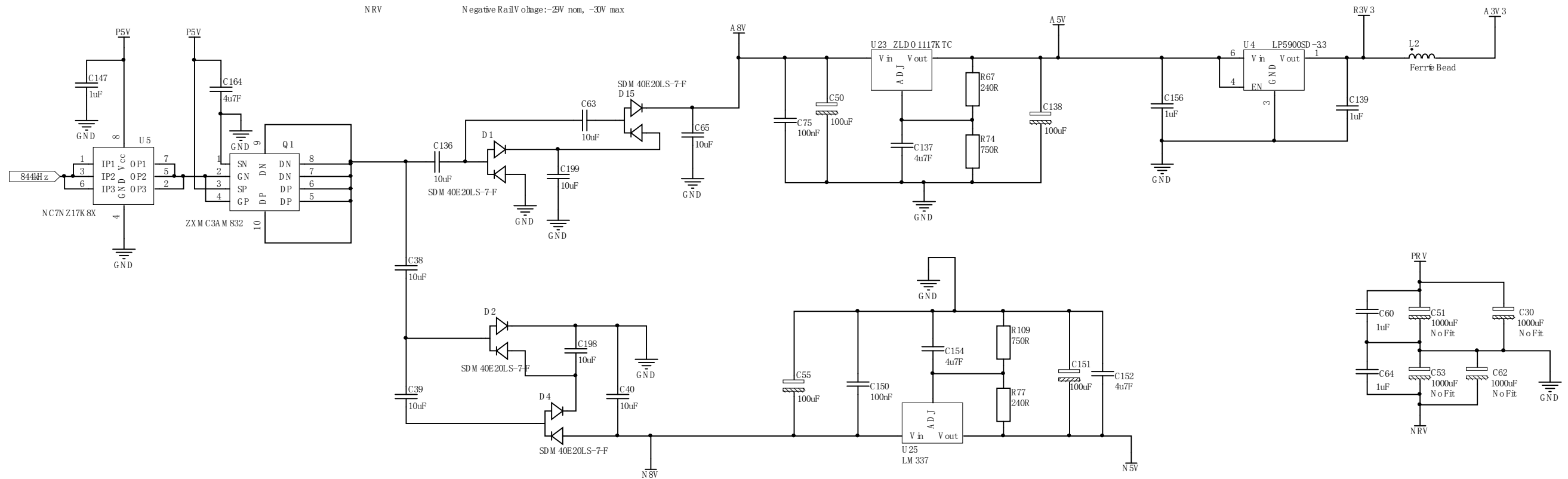
DDFA OP STAGE VM1.2



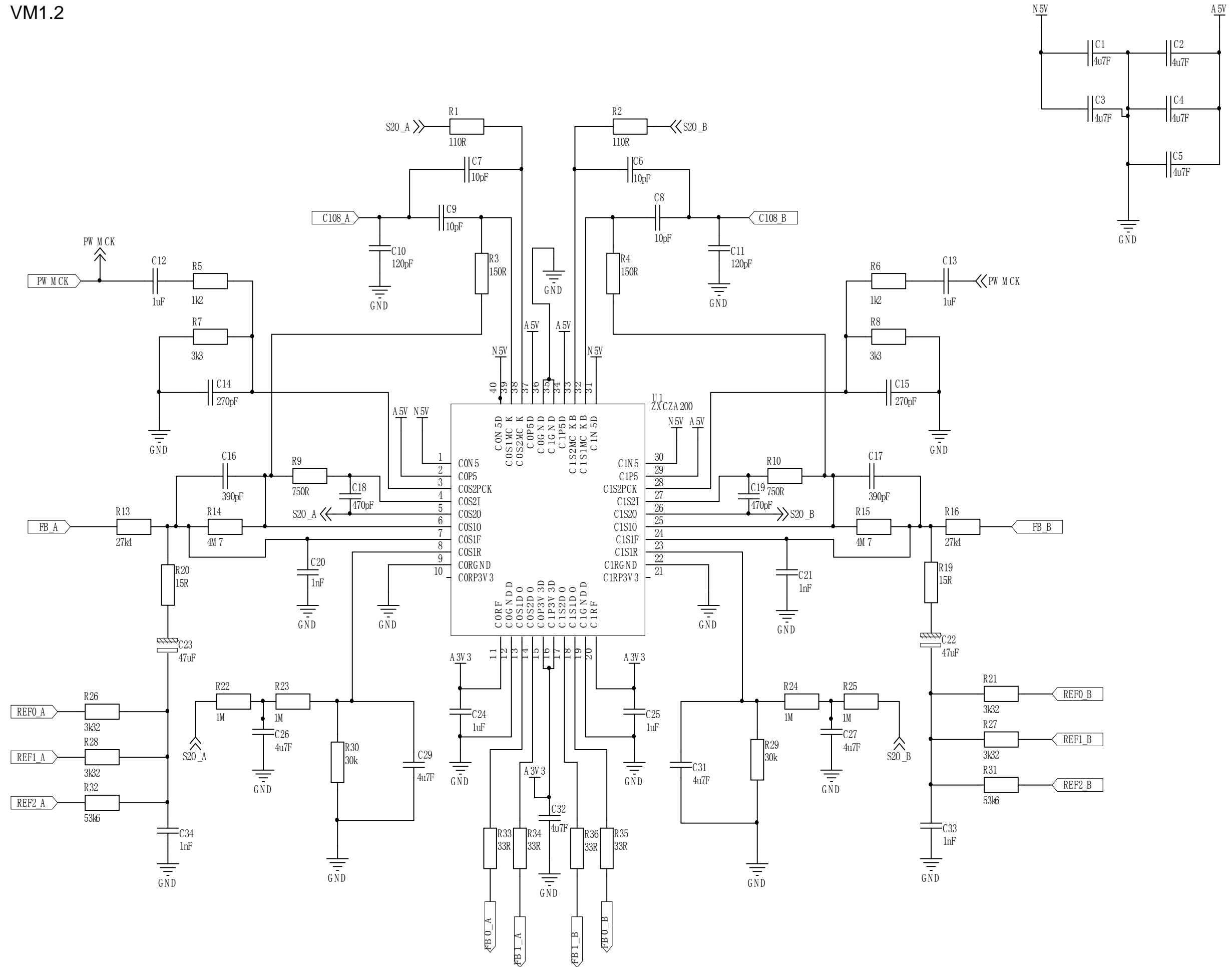
DDFA PSU VM1.2



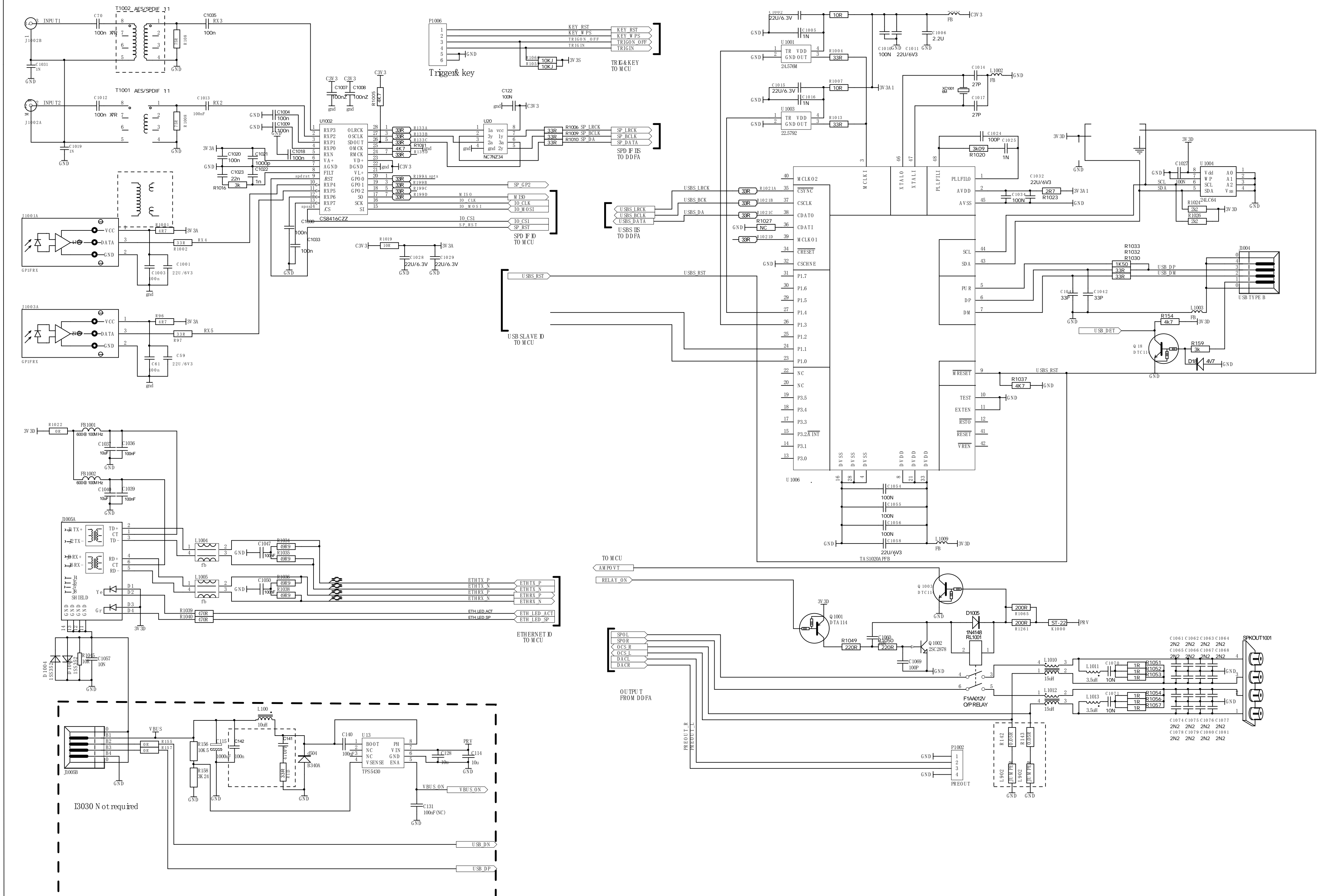
Supply	Description
PRV	Positive Rail Voltage: 29V nom, 30V max
5V 25	High-current 5.25V supply for deriving logic supplies
3V 3	3.3V Core logic and General I/O supply
1V 8	1.8V Core logic supply
C3V 3	3.3V Clock supply
S3V 3	Filtered from C3V 3 for STAM Ps
C1V 8	1.8V Clock supply
S1V 8	Filtered from C1V 8 for STAM Ps
R1V 8	Filtered from C1V 8 for References
A 8V	8V supply for deriving analogue supplies
N 8V	-8V supply for deriving analogue supplies
A 5V	5V Analogue supply
N 5V	-5V Analogue supply
R3V 3	3.3V low-noise supply for references
A 3V 3	3.3V Analogue supply for startup
NRV	Negative Rail Voltage: -29V nom, -30V max



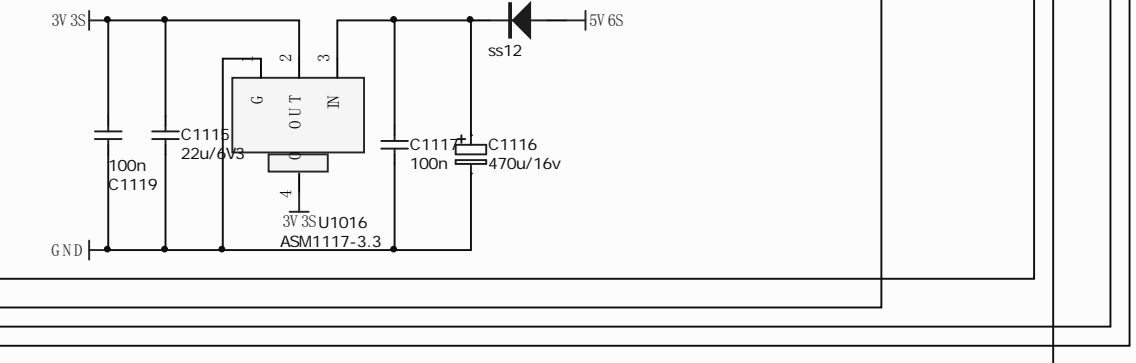
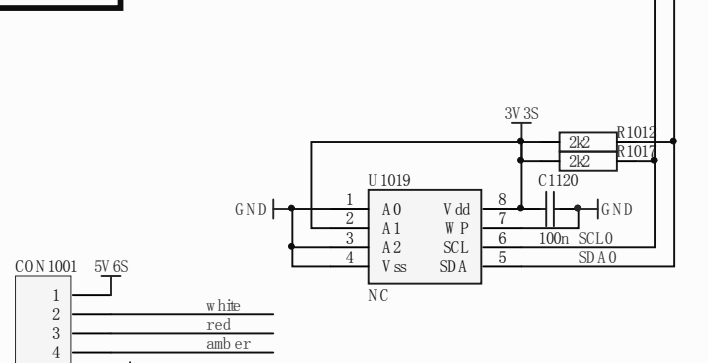
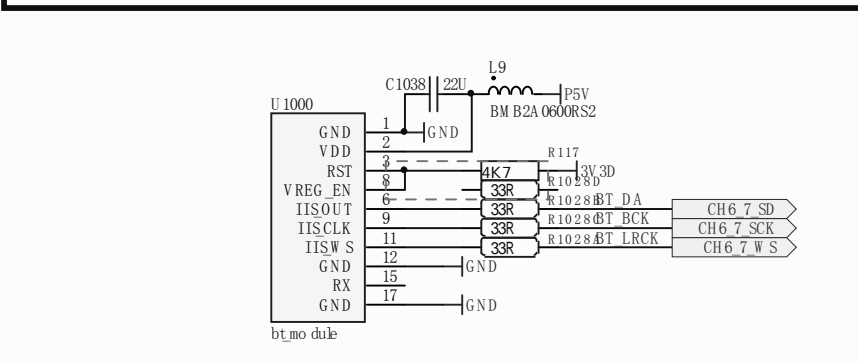
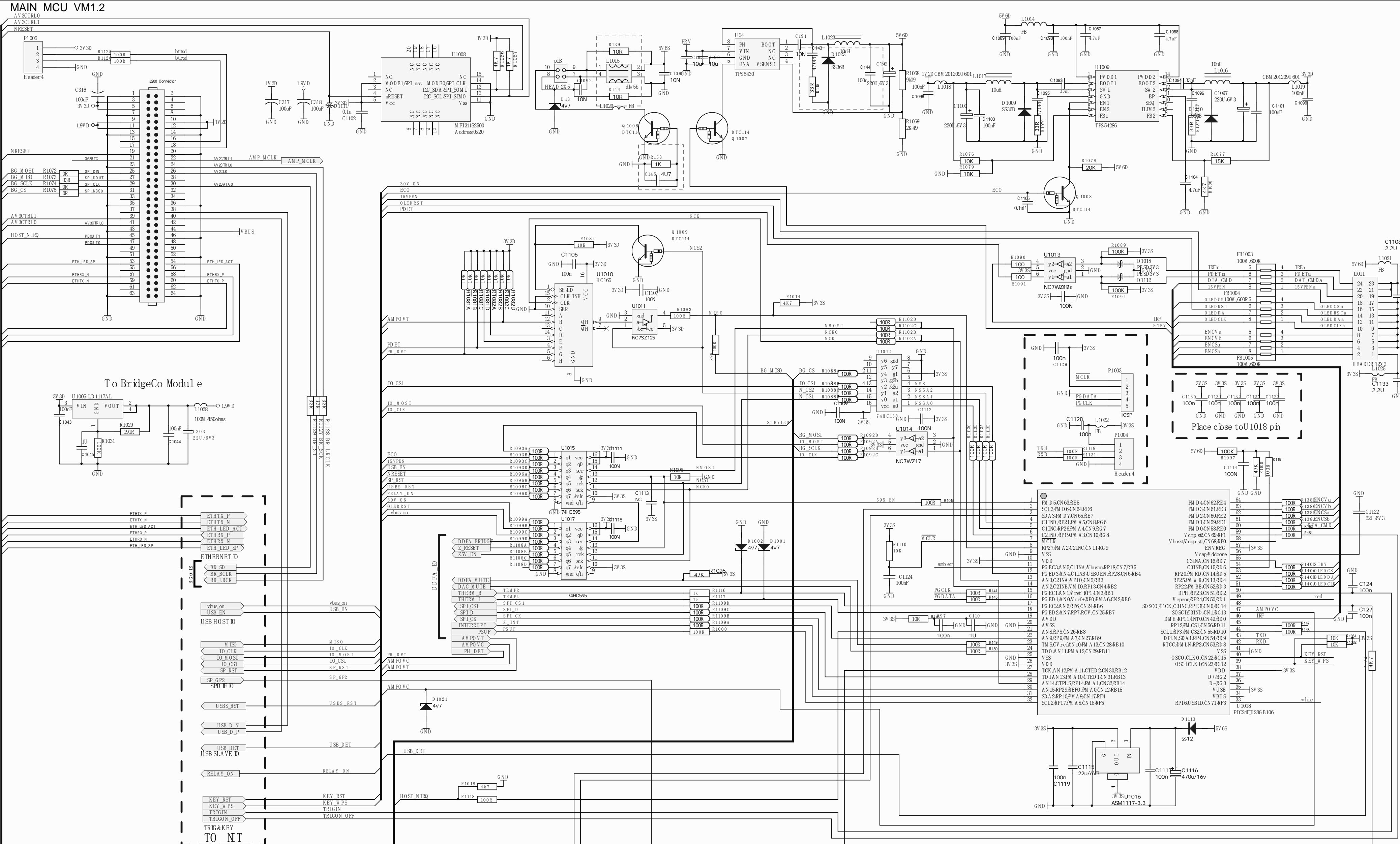
DDFA ATP VM1.2



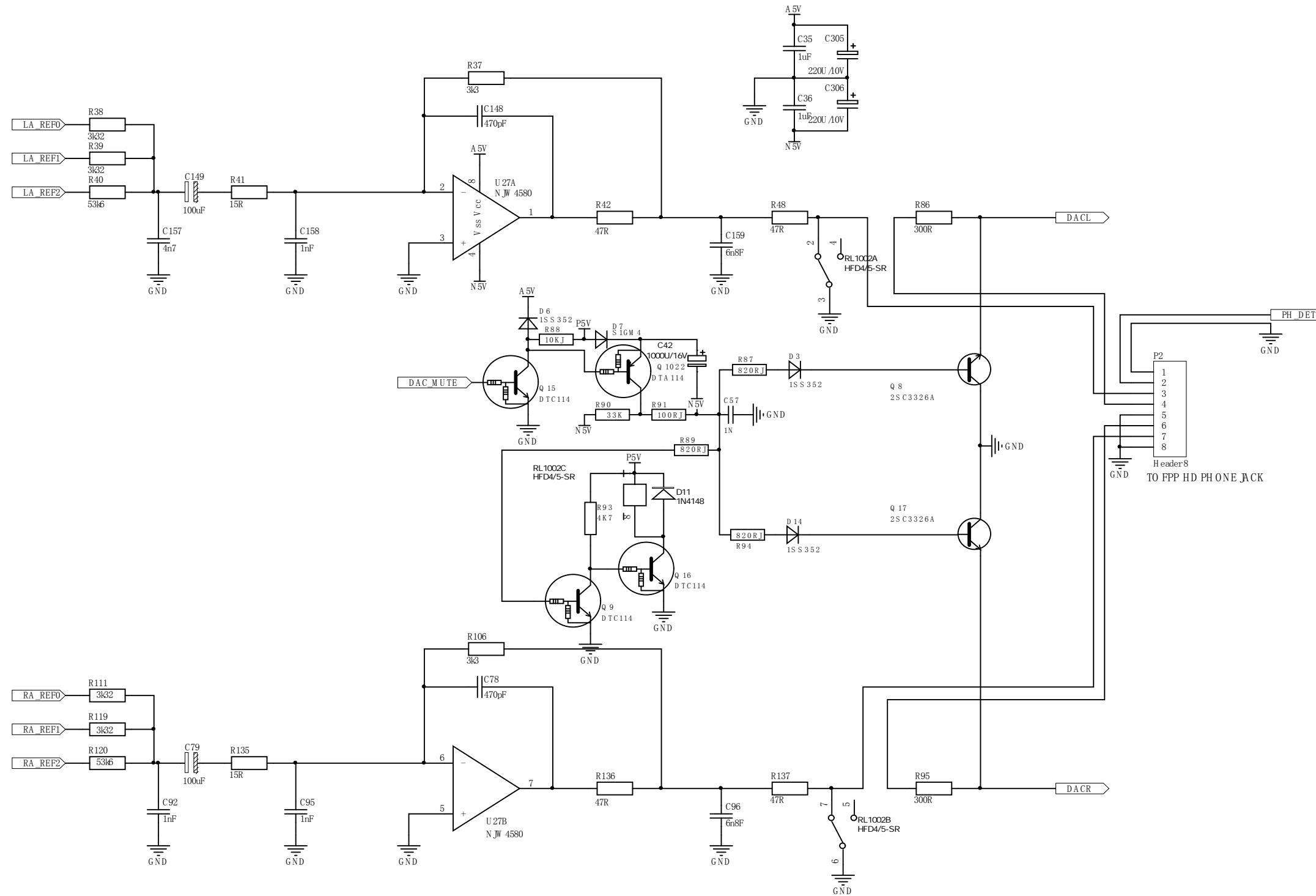
DDFA MAIN INTERFACE VM1.2



1.AMP BOARD VM2.1(i/8)

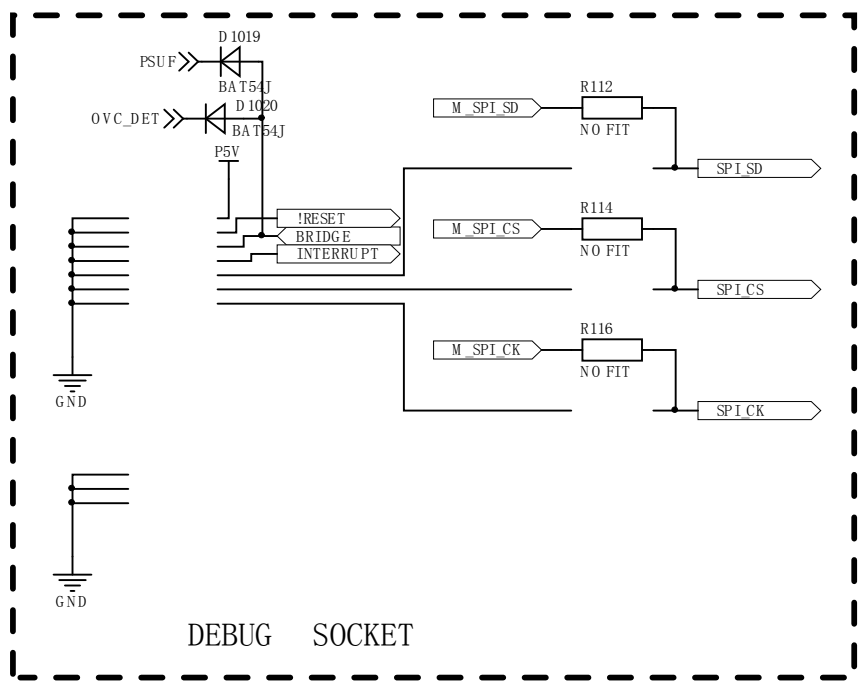
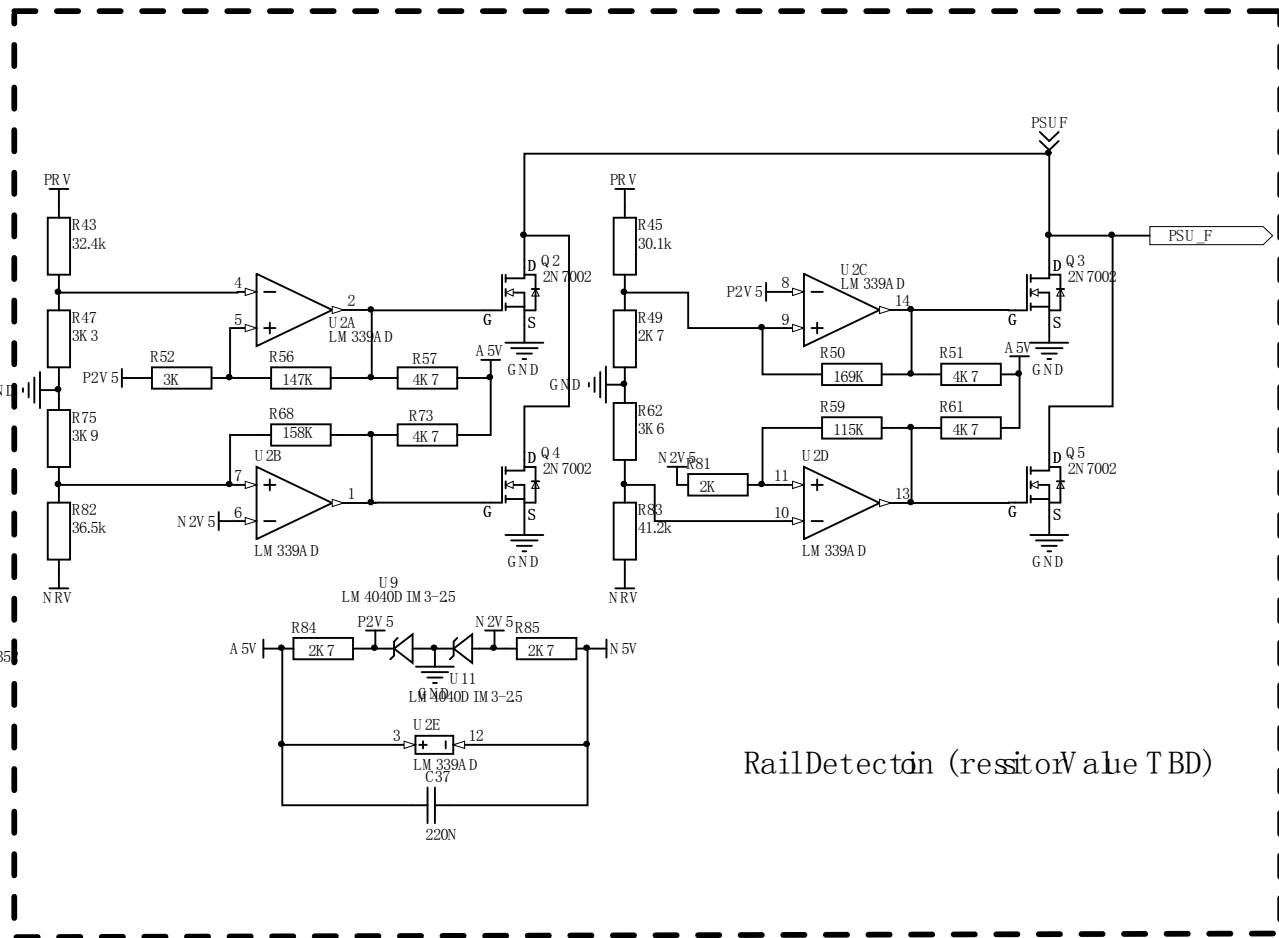
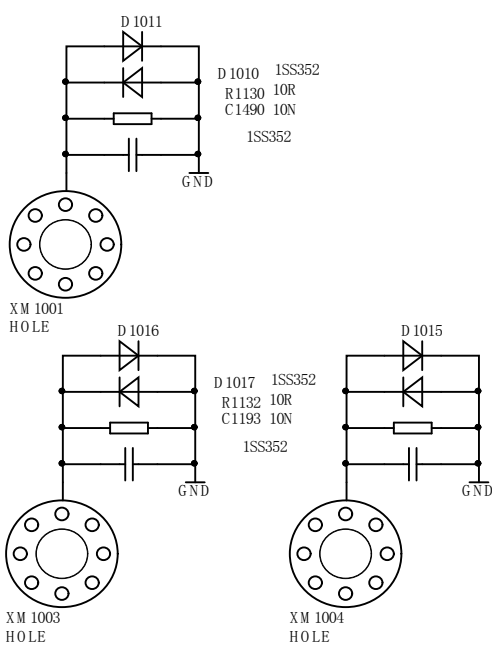
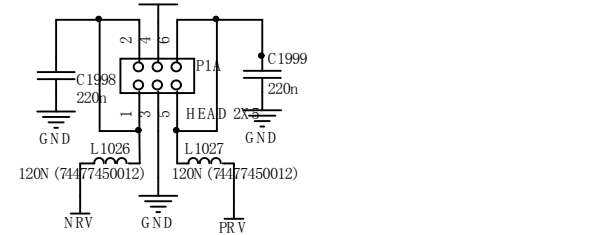
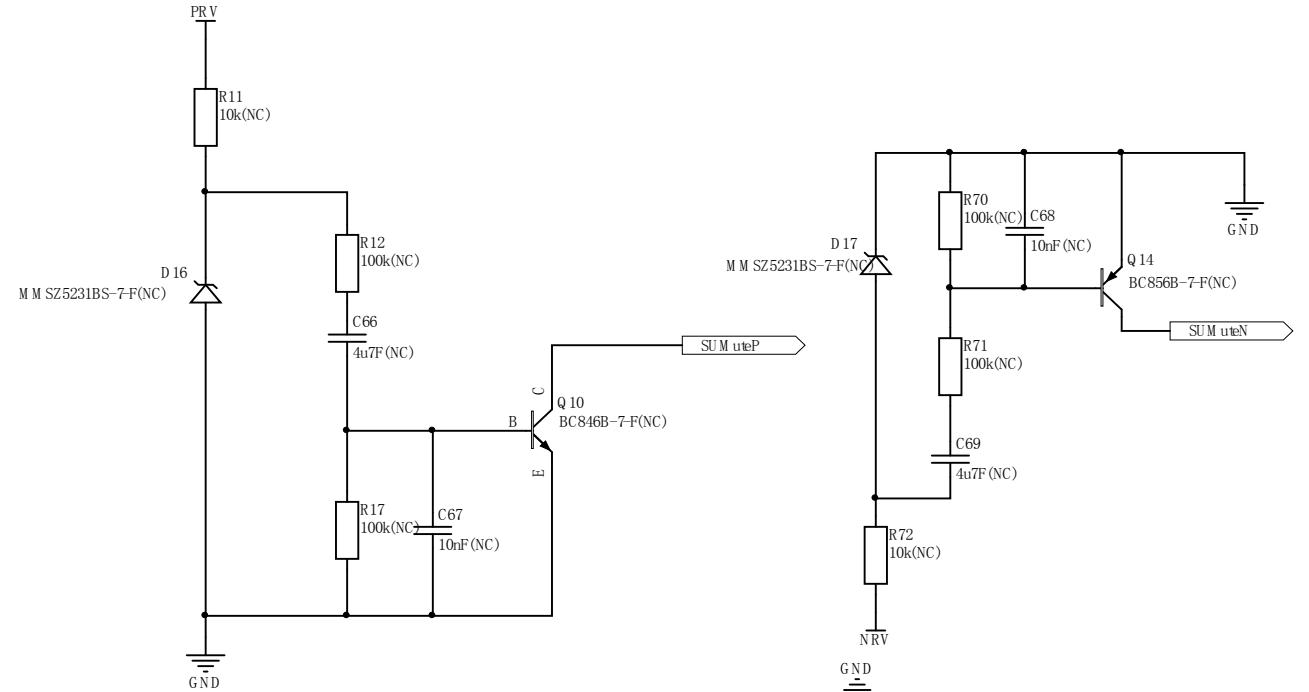
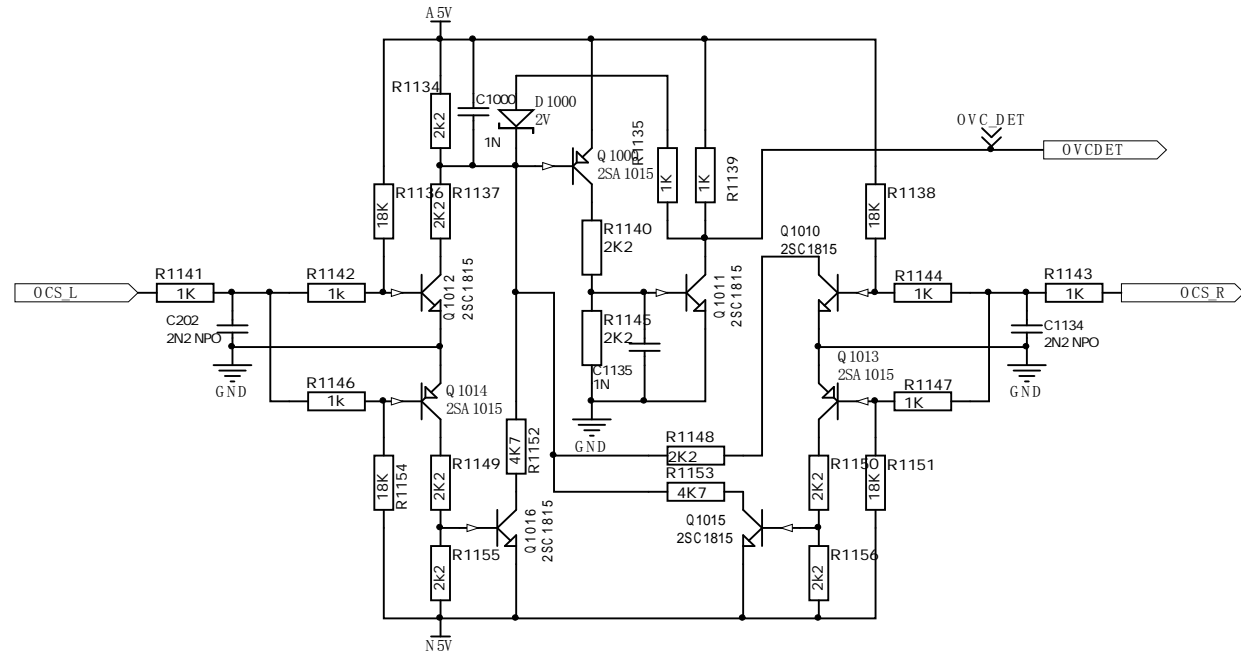


DDFA DAC VM1.2

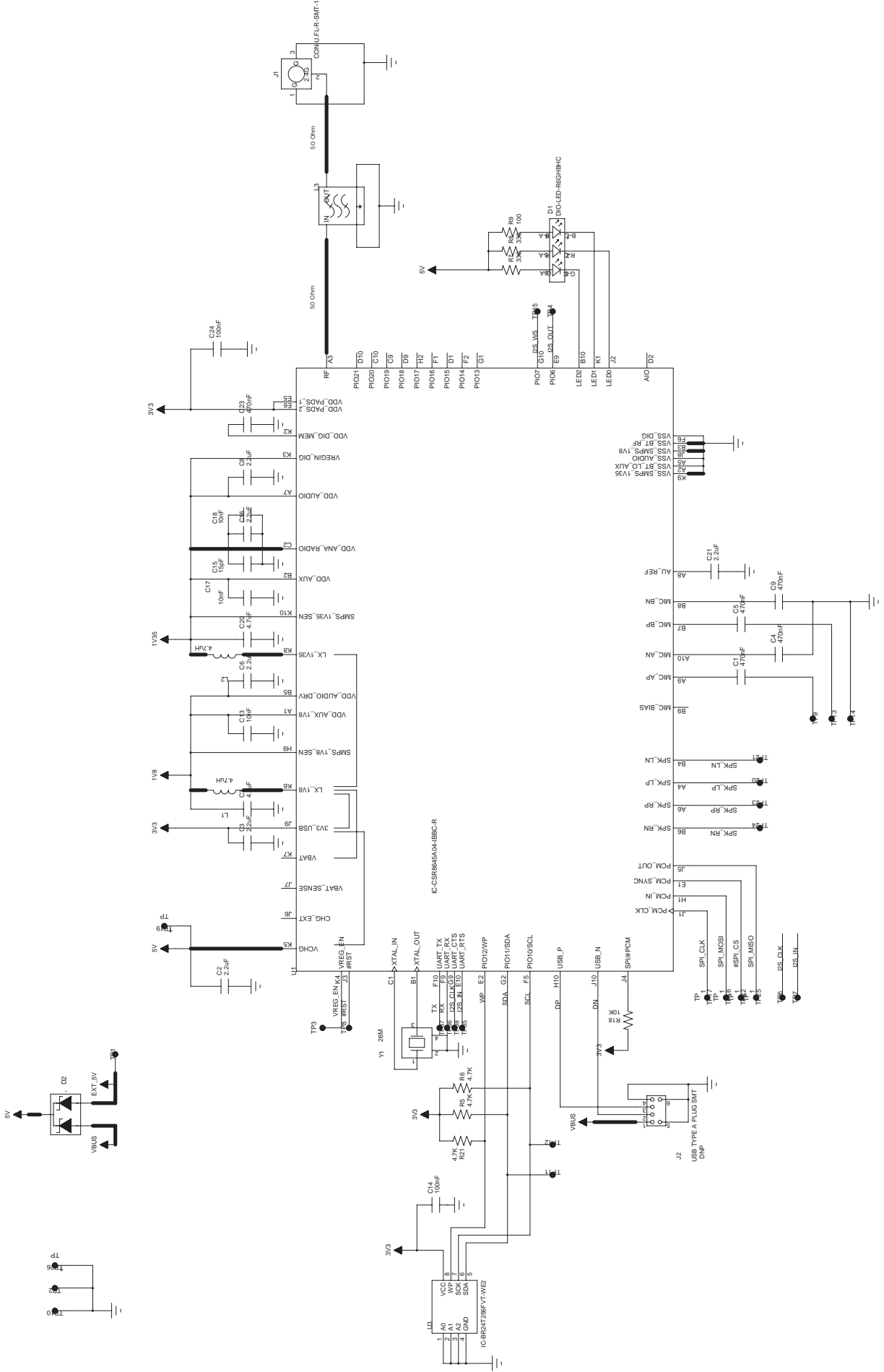


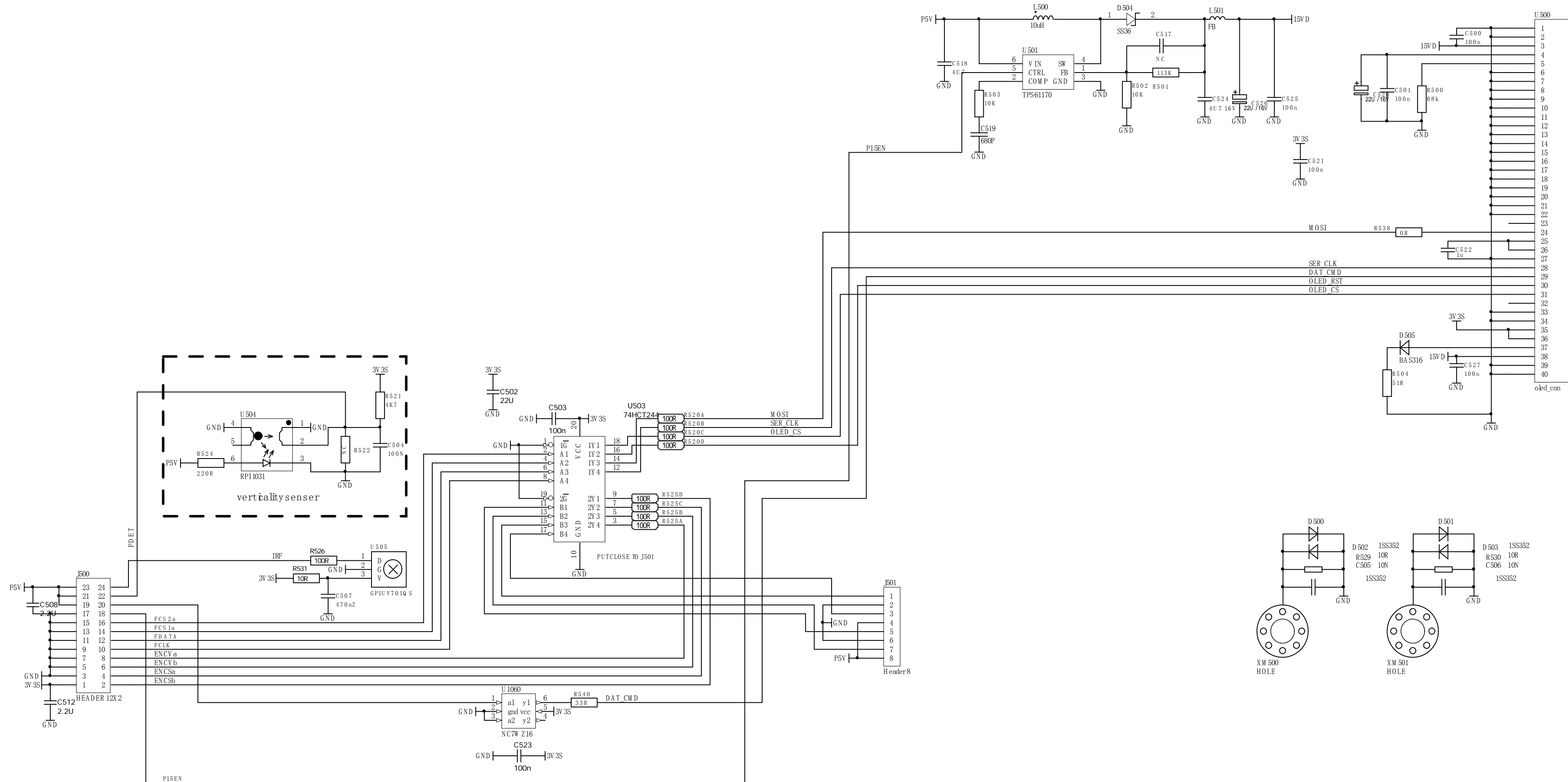
1.AMP BOARD VM2.1(8/8)

DDFA CONNECTOR VM1.2

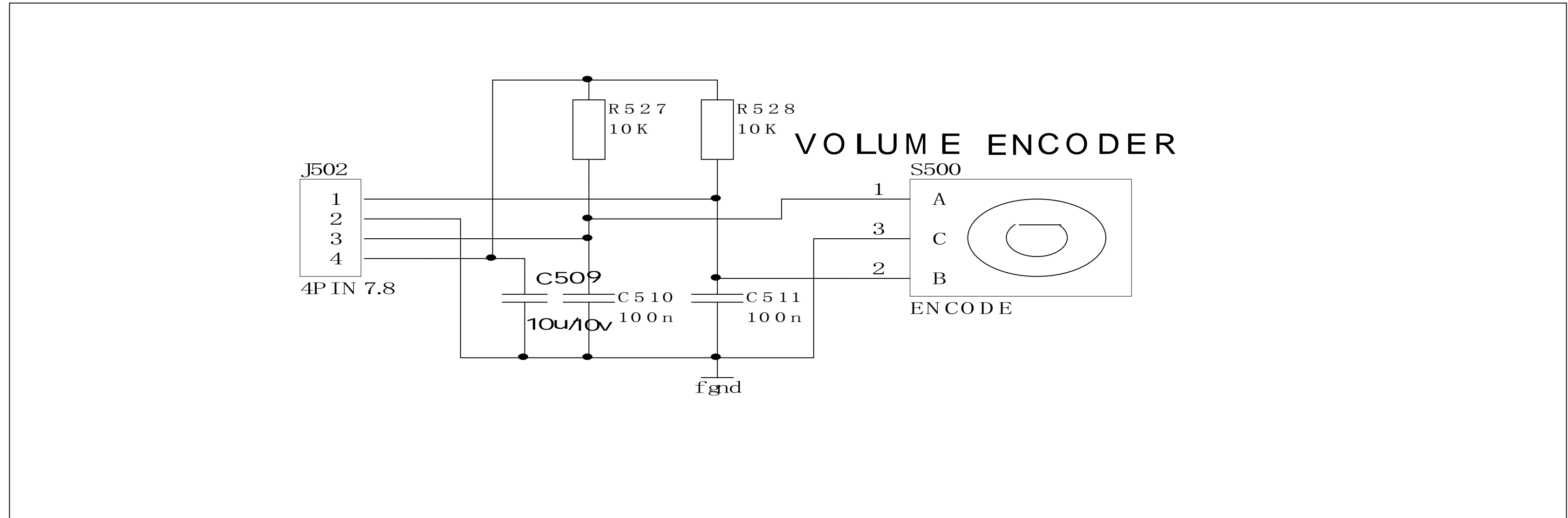


2. BLUETOOTH MODULE BOARD VM1.2

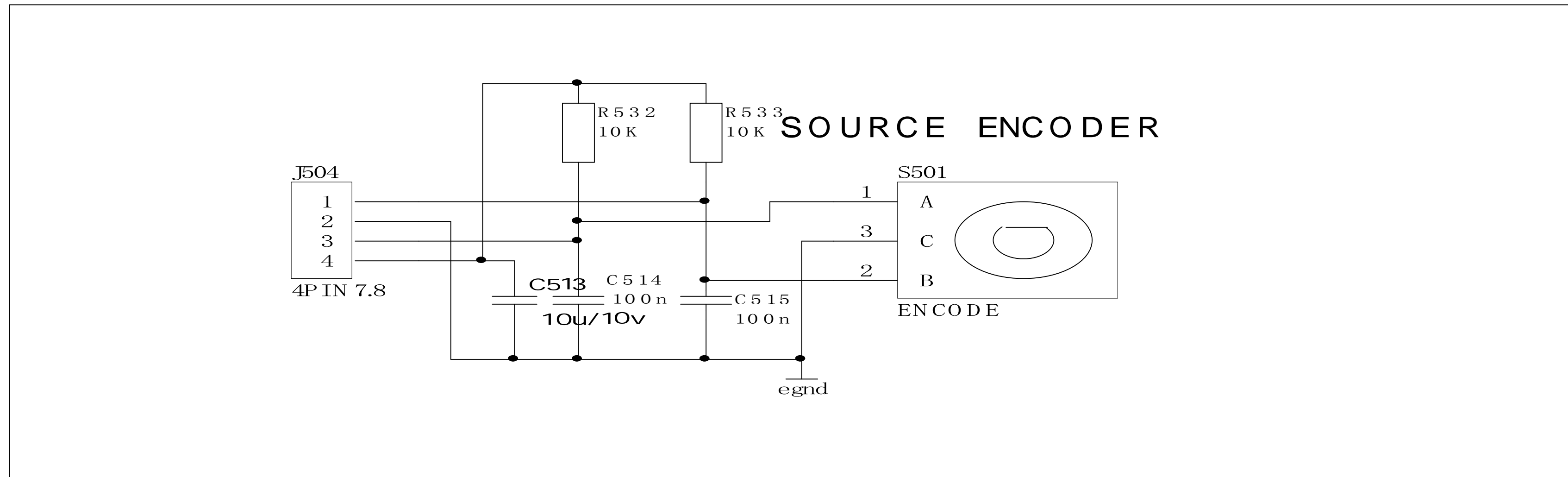




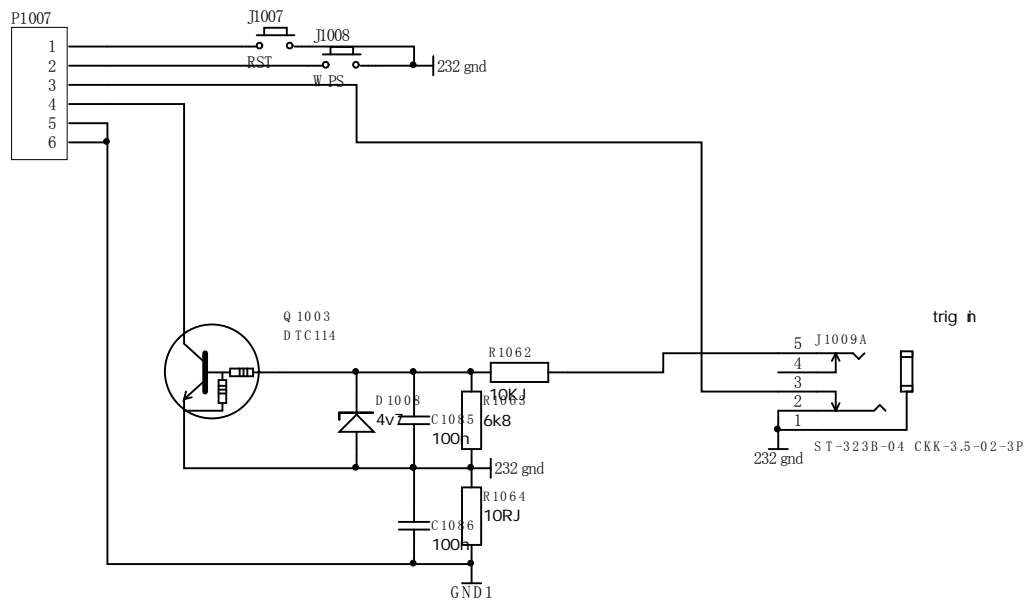
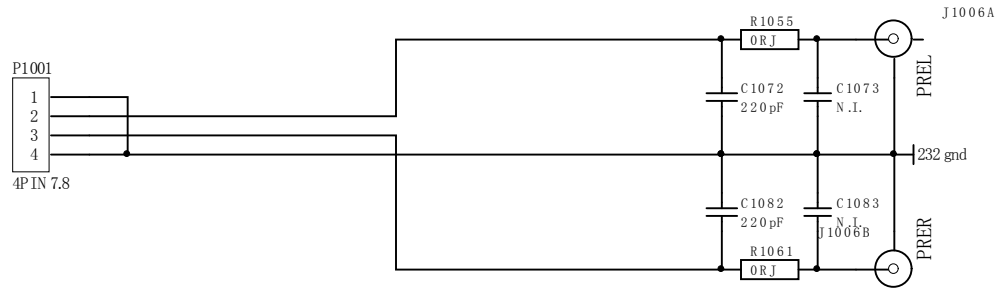
4.VOLUME ENCODE BOARD VM1.2



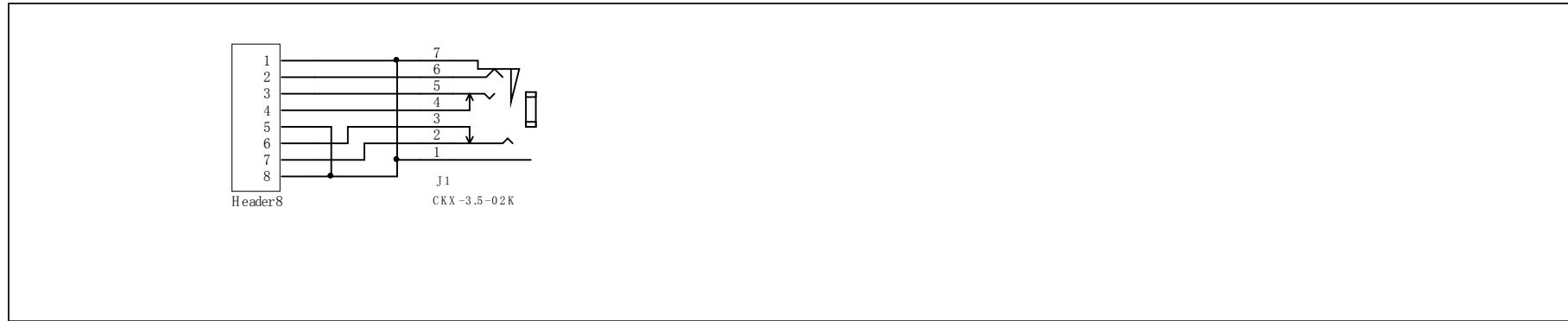
5.SOURCE ENCODE BOARD VM1.2



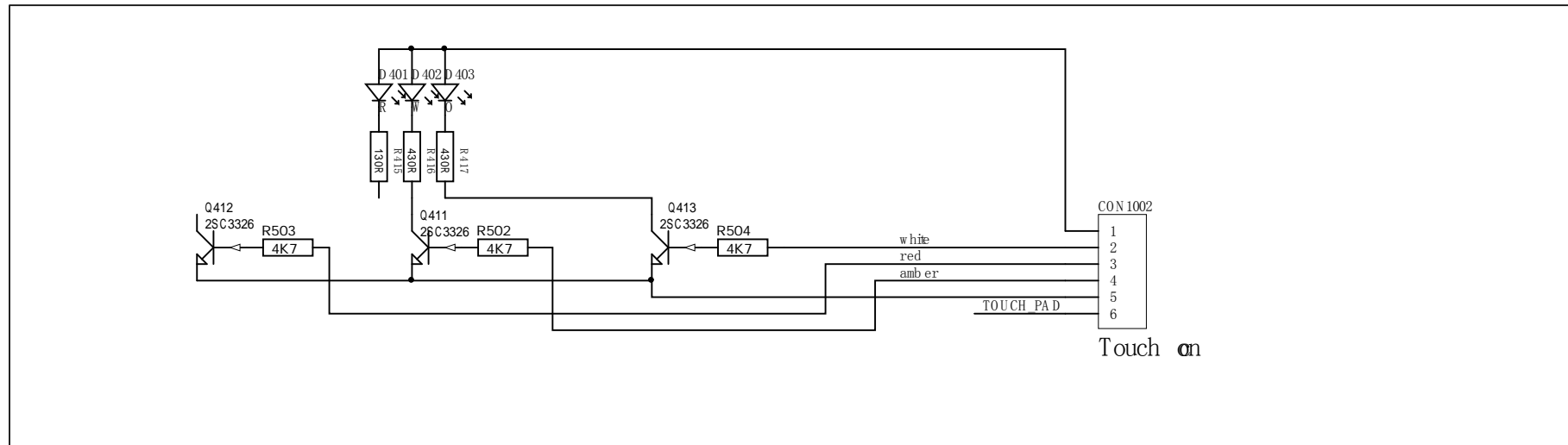
6.INT BOARD VM1.2

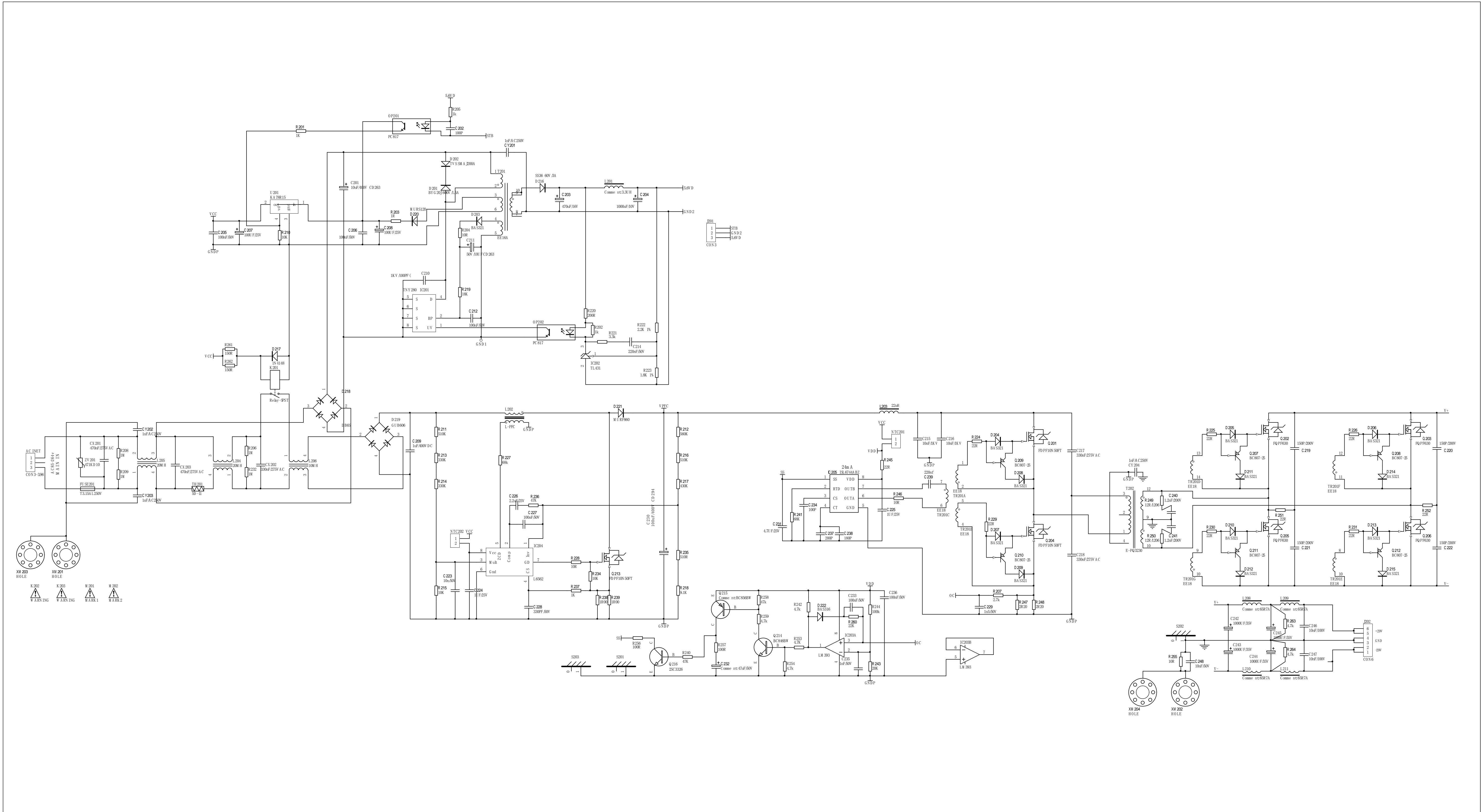


7. HEADPHONE BOARD VM2.1



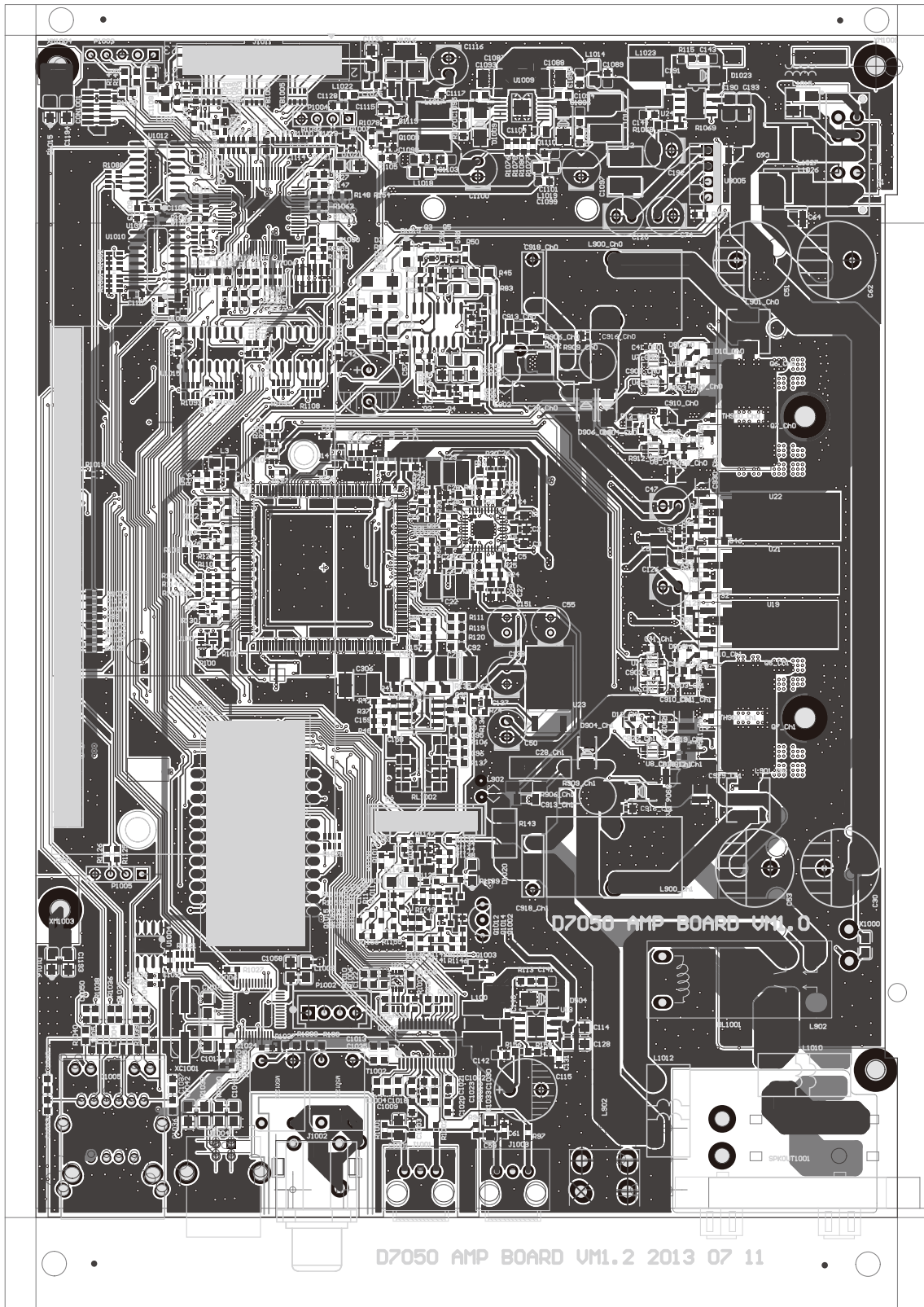
8. TOUCH BOARD VM2.1





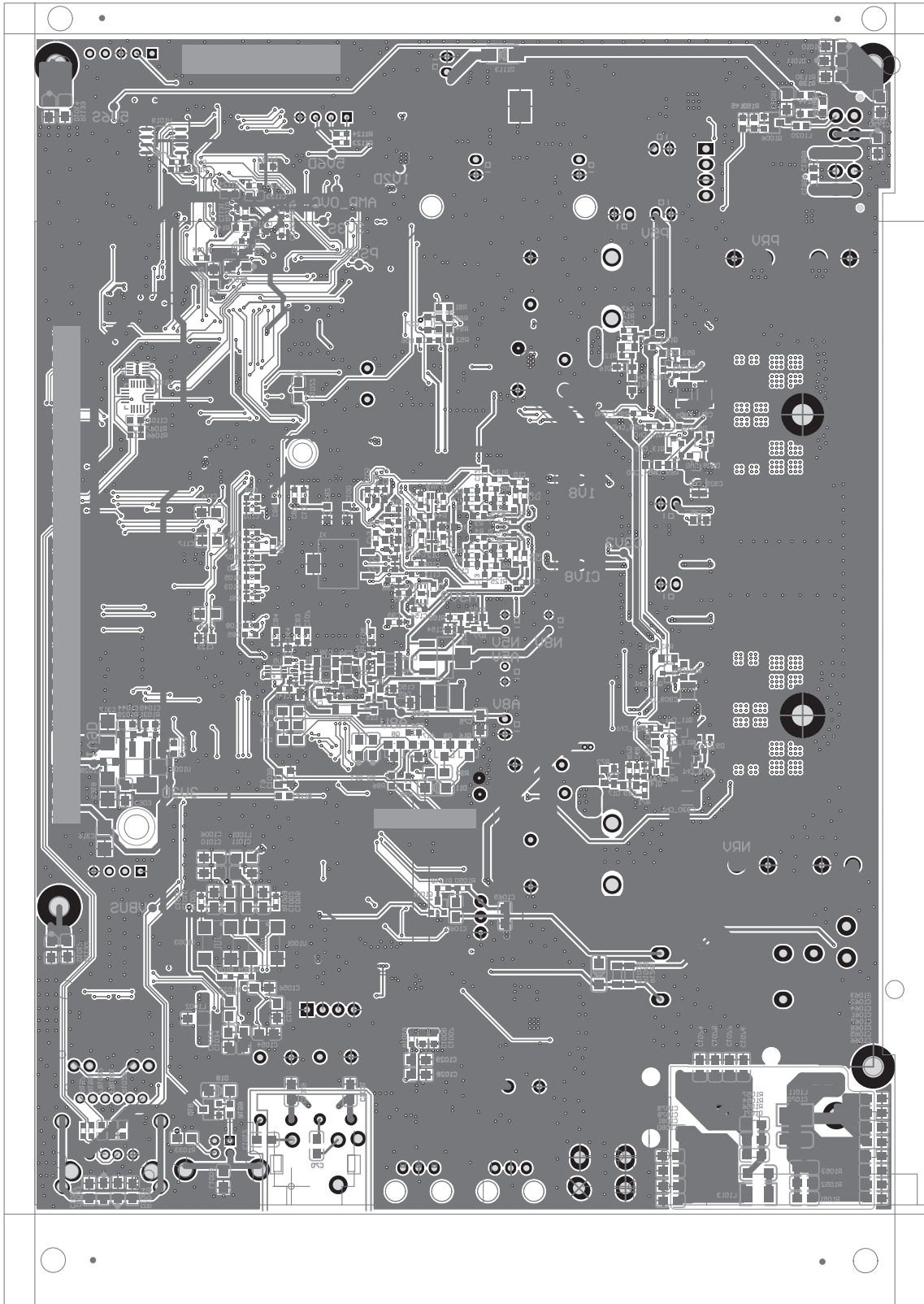
PCB LAYOUT

1.AMP BOARD VM1.2



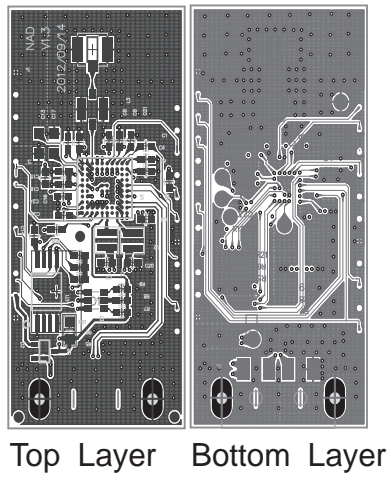
Top Layer

1.AMP BOARD VM1.2

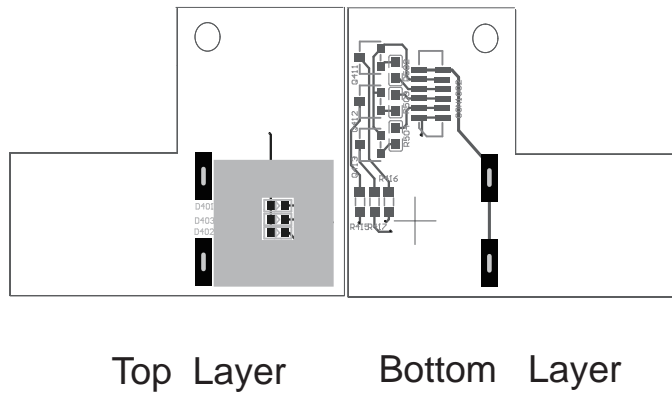


Bottom Layer

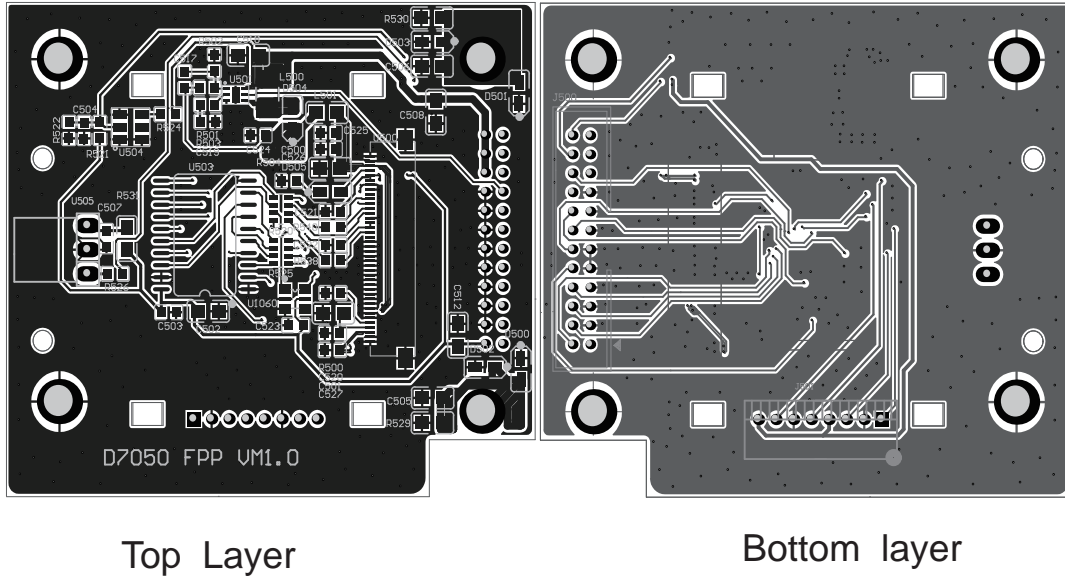
2. BLUETOOTH BOARD VM1.2



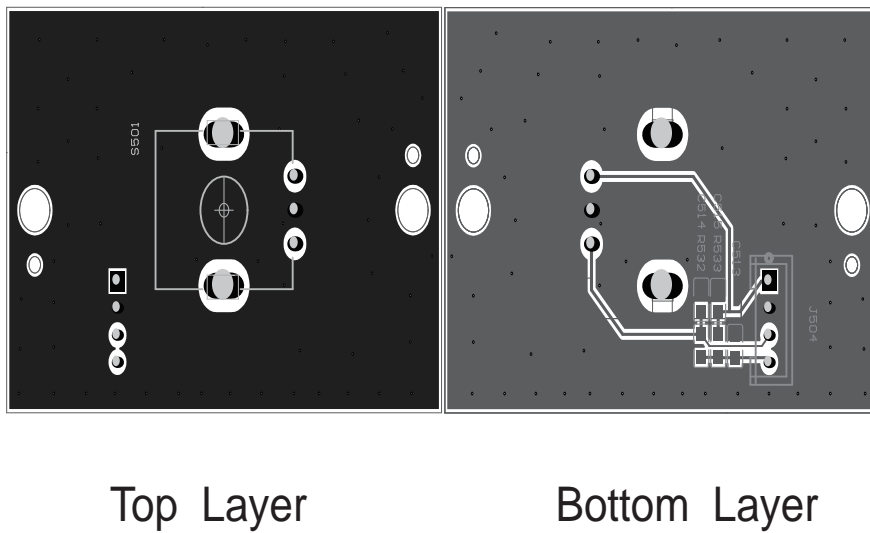
3. TOUCH BOARD VM1.2



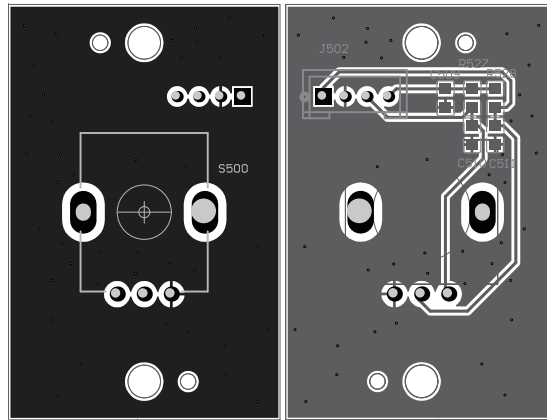
4.FPP BOARD VM1.2



5.VOLUME ENCODE BOARD VM1.2



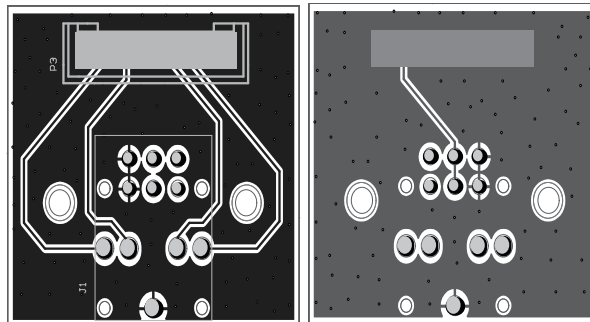
6.SOURCE ENCODE BOARD VM1.2



Top Layer

Bottom Layer

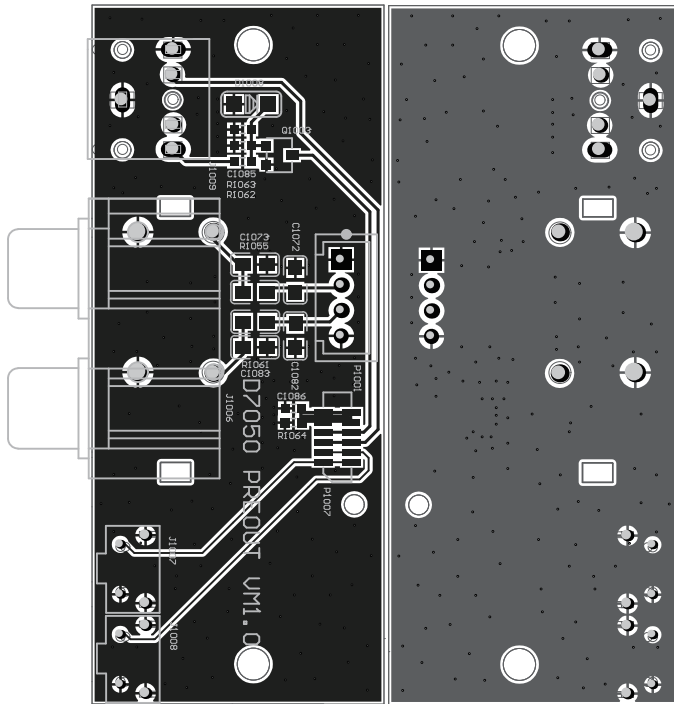
7.HEADPHONE BOARD VM1.2



Top Layer

Bottom Layer

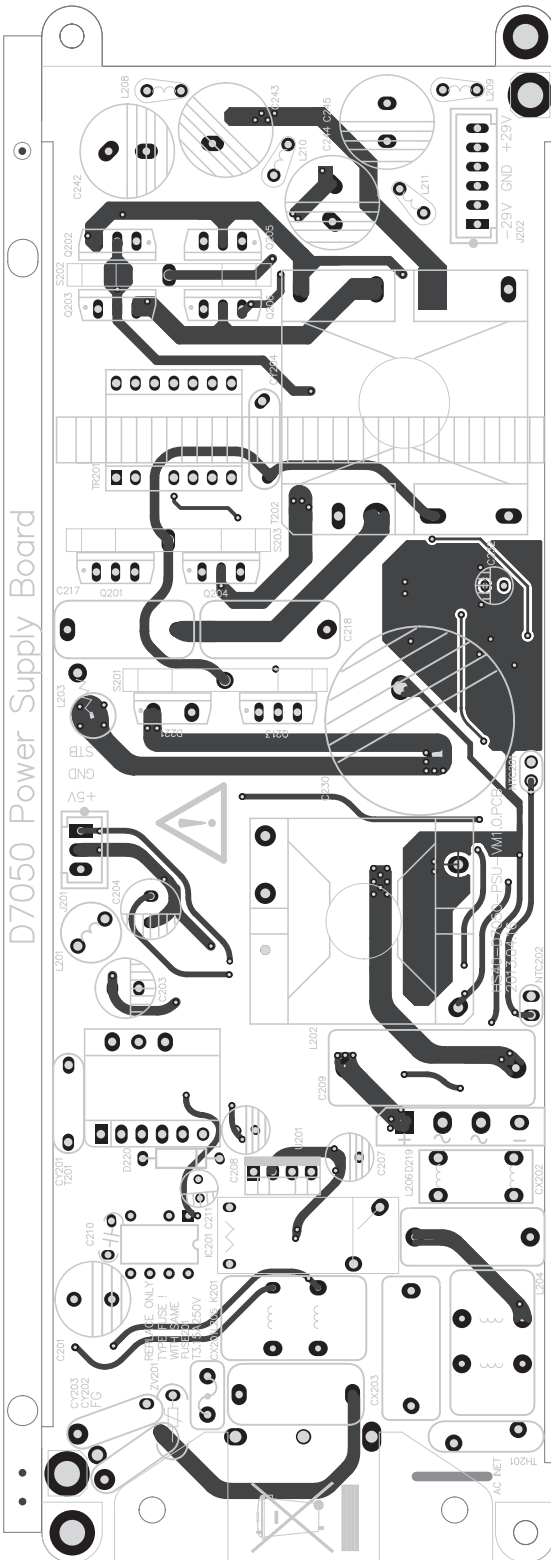
8.INT BOARD VM1.2



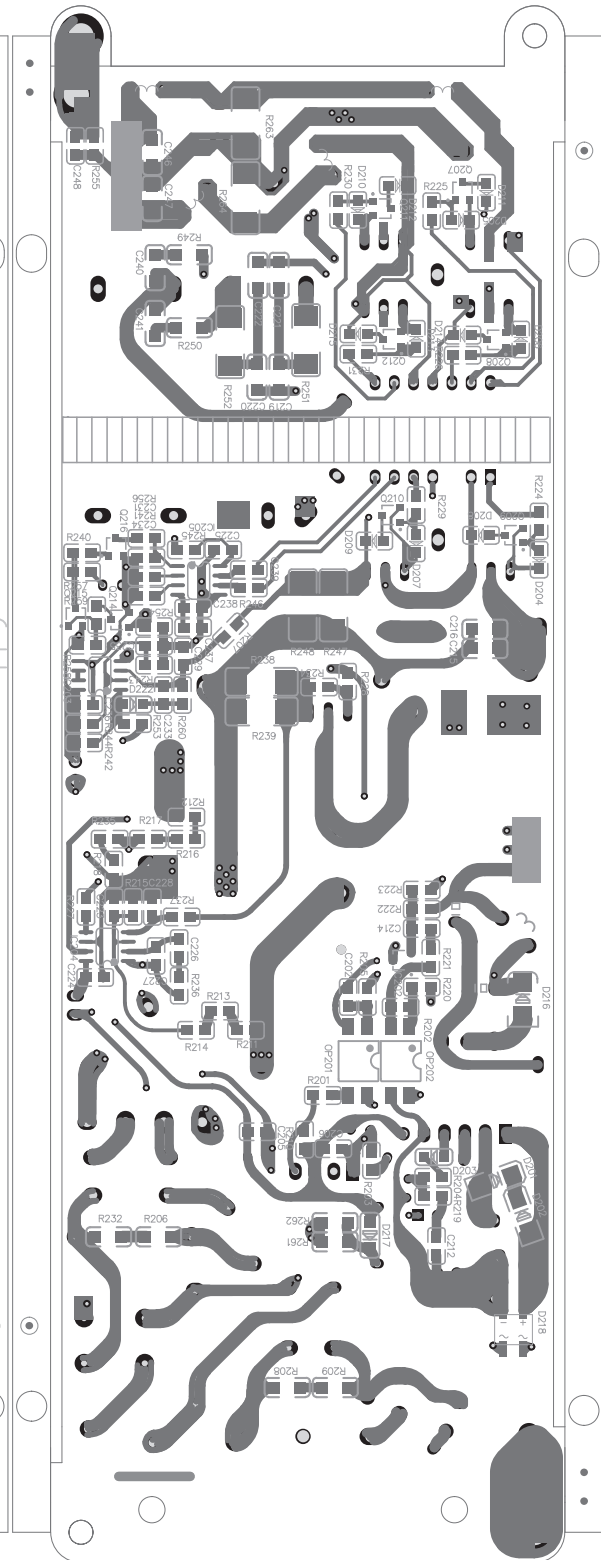
Top Layer

Bottom Layer

9.PSU BOARD VM1.2



Top Layer



Bottom Layer

ELECTRICAL PARTS LIST

PCB- 1: AMP BOARD			
CIRCUIT NO.	PART NO.		DESCRIPTION
	PCB INFO		
	A16-23301-23	AMP PCB	VM1.2,FR-4,Four Layers 1.6mm,,TG130,150mmX212mm,
	DIODES		
D1, D2, D4, D15	33-24020-01	DIODE	SDM40E20LS-7-F
D3, D6, D14, D1003, D1004, D1010, D1011, D1014, D1015, D1016, D1017	33-40352-01	Switch Diode	1SS352(TPH3,F),1SS355TE-17
D7	33-20004-01	DIODE	S1G
D8_Ch0, D8_Ch1, D908_Ch0, D908_Ch1	33-16209-15	Zener Diode	BZX84C6V2-7-F
D9_Ch0, D9_Ch1	33-20054-04	Schottky Rectifier Diode	BAT54C-7-F,SOT-23
D10_Ch0, D10_Ch1	33-20054-05	Schottky Rectifier Diode	BAT54A-7-F,SOT-23
D12_Ch0, D12_Ch1	33-40099-02	Switch Diode	BAV99-7-F
D904_Ch0, D904_Ch1, D906_Ch0, D906_Ch1	33-20001-08	Rectifier Diode	S1D,200V,1A
D13, D18, D1001, D1002, D1021	33-14709-10	Zener Diode	4V7,1/2W, LL34
D1009, D1110, D1023, D504	33-20036-00	Schottky Rectifier Diode	SS36B
D1018, D1112	33-00330-01	ESD DIODE	PESD3V3L1BA
D1019, D1020, D1022	33-40054-02	Schottky Rectifier Diode	BAT54J
D1113	33-20012-01	Surface Mount Schottky Barrier Rectifier	SS12 SMA
D11, D1005	33-44148-17	Switch Diode	1N4148W-NR,SOD123
	MOSFET		
Q1	31-00003-01	Dual FET	ZXMC3AMCTA
Q2, Q3, Q4, Q5	31-07002-01	JFET	2N7002
Q6_Ch0, Q6_Ch1	31-00717-02	Dual FET	ZXMP7A17KTC,DPAK2
Q7_Ch0, Q7_Ch1	31-00711-02	Dual FET	ZXMN7A11KTC,DPAK2
	TRANSISTOR		
Q8, Q17	31-02114-01	Transistor	2SD2114K-W,SOT23, Tape
Q11_Ch0, Q11_Ch1	31-00856-07	Transistor	BC856B-7-F
Q9, Q15, Q16, Q18, Q1003, Q1006, Q1008, Q1009, Q1007	31-00114-05	Digital transistor	DTC114EKA
Q1001, Q1022	31-00114-01	Digital transistor	DTA114EKA
Q1000, Q1013, Q1014	31-01015-03	I transistor	A1015 SOT23
Q1010, Q1011, Q1012, Q1015, Q1016	31-01815-03	I transistor	C1815 SOT23
	ICS		
U20	03-00734-01	Buffer	NC7NZ34K8X
U13, U24	03-05430-01	STEP-DOWN CONVERTER	TPS5430DDAR
U1	03-20040-01	DDFA Advanced Feedback Processor	ZXCZA200JC40TA(CSRA6600A01-IQQD-R)
U2	03-00339-04	Quad Differential Comparators	LM339ADR
U3	03-00800-02	DDFA Modulator	ZXCZM800QPATR(CSRA6601A01-CPSA-T)
U4	03-05900-01	Voltage regulator	LP5900SD-3.3/NOPB
U5, U6_Ch0, U6_Ch1, U7_Ch0, U7_Ch1, U8_Ch0, U8_Ch1, U10, U14	03-07178-01	Tinylogic Triple Buffer with Schmitt Trigger	NC7NZ17K8X
U9, U11	03-04040-25	Precision Micropower shunt voltage reference	LM4040DIM3-2.5 NOPB
U12, U16	03-07865-01	Logic Gate Circuit	NC7SV86P5X,SC-70
U19, U21, U22, U23	03-01117-35	Adjustable voltage regulator	ZLDO1117KTC
U25	03-00337-01	3-Terminal Regulator	LM337IMP, SOT223
U27	03-05532-03	Dual OPAMP	NE5532DR SOIC8
U1002	03-08416-02	Digital Audio Receiver	CS8416-CZZ
U1004	03-02464-16	BUS EEPROM	24LC64-I/SN
U1004	03-02464-02	BUS EEPROM	24LC64-I/SN
U1019	03-02464-02	BUS EEPROM	24LC64-I/SN
U1006	03-01020-01	USB Streaming Controller	TAS1020BPFB
U1008	03-02162-08	IPOD IC	MFI341S2162
U1009	03-54286-01	2A DUAL NON-SYNCHRONOUS CONVERTER	TPS54286PWP
U1010	03-00165-01	8-Bit Serial or Parallel-Input/Serial-Output Shift Register	HC165

U1011	03-07125-01	BUFFER	NC7SZ125P5X
U1012	03-00138-05	3 TO 8 LINE DECODER	74HC138D
U15, U17, U18, U100	03-00125-06	Buffer	SN74AHC1G125DCKR
U1013, U1014	03-00717-01	TinyLogic UHS Dual Buffer with Schmitt Trigger	NC7WZ17
U1015, U1017	03-00595-01	Shift Register	SN74HC595D/74HC595D/MM74HC595M
U1016	03-01117-06	1A(3.3v)	AMS1117-3.3
U1005	03-01117-12	Regulator	LM1117MPX-ADJ/NOPB
U1018	03-24128-15D	MCU	PIC24FJ128GB106T-I/PT
U1018	03-24128-01	MCU	PIC24FJ128GB106T-I/PT
RESISTORS			
R110, R112, R114, R116, R121, R155, R157, R1022	07-90000-00	Chip resistor	0Ω, 1/10W, ±5%
R124, R125	07-91008-00	Chip resistor	1Ω, 1/10W, ±1%
R96, R904_Ch0, R904_Ch1, R1001	07-94708-00	Chip resistor	4.7Ω, 1/10W, ±1%
R1019, R139, R144, R146	07-91009-00	Chip Resistor	10Ω, 1/10W, ±1%
R19, R20	07-91509-00	Chip Resistor	15Ω, 1/10W, ±1%
R911_Ch0, R911_Ch1	07-91809-00	Chip Resistor	18Ω, 1/10W, ±1%
R1072, R1073, R1074, R1075, R1127, R1128, R1129	07-90330-00	Chip resistor	33Ω, 0603, 1/10W, ±5%
R127	07-92209-00	Chip Resistor	22Ω, 1/10W, ±1%
R33, R34, R35, R36, R76, R78, R79, R80, R97, R1002, R1004, R1013, R1006, R1009, R1010, R1070, R1071, R102, R113, R115, R123, R129, R131	07-93309-00	Chip Resistor	33Ω, 1/10W, ±1%
R1034, R1035, R1036, R1038, R1039, R1040	07-94999-00	Chip Resistor	49.9Ω, 1/10W, 1%
R44, R134	07-97509-00	Chip Resistor	75Ω, 1/10W, 1%
R48, R64, R66, R99, R137, R1083, R1118, R1119, R1121, R1015, R1090, R1091, R1158, R141, R145, R149, R150, R151, R147, R148, R118, R1031, R152, R1125, R1126	07-91000-00	Chip Resistor	100Ω, 1/10W, 1%
R1000	07-90101-00	Chip Resistor	100Ω, 0603, 1/10W, ±5%
R1029	07-91910-01	Chip Resistor	191Ω, 0805, 1/8W, ±1%
R1, R2	07-91100-00	Chip Resistor	110Ω, 1/10W, ±1%
R3, R4, R58, R98, R101, R103, R104, R107	07-91500-00	Chip Resistor	150Ω, 1/10W, ±1%
R42, R63, R65, R136, R1049, R1050	07-92200-00	Chip resistor	220Ω, 1/10W, ±1%
R60, R67, R77	07-92400-00	Chip Resistor	240Ω, 1/10W, 1%
R86, R95	07-93000-00	Chip Resistor	300Ω, 0603, 1/10W, ±1%
R9, R10, R74, R109	07-97500-00	Chip Resistor	750Ω, 1/10W, ±1%
R46, R132, R153, R1116, R1117, R1135, R1139, R1141, R1142, R1143, R1144, R1146, R1147	07-91001-00	Chip Resistor	1KΩ, 1/10W, ±1%
R906_Ch0, R906_Ch1	07-91501-92	MELF Resistors	1.5KΩ, 0.4W, ±1%, MMA02040D1501DB300
R5, R6	07-91201-00	Chip Resistor	1.2KΩ, 1/10W, ±1%
R81	07-92001-00	Chip Resistor	2KΩ, 1/10W, ±1%
R1134, R1137, R1140, R1145, R1148, R1149, R1150, R1155, R1156, R1012, R1017, R1024, R1026	07-92201-00	Chip Resistor	2.2KΩ, 1/10W, ±1%
R84, R85	07-92701-00	Chip Resistor	2.7KΩ, 1/10W, ±1%
R1016	07-93001-00	Chip Resistor	3KΩ, 1/10W, 1%
R52, R159	07-90302-00	Chip Resistor	3KΩ, 0603, 1/10W, ±5%
R1020	07-93091-00	Chip Resistor	3.09KΩ, 1/10W, 1%
R21, R26, R27, R28, R38, R39, R111, R119	07-93321-10	Chip Resistor	3.32KΩ, 0603, 1/10W, ±0.1%, ±25PPM,
R7, R8, R37, R92, R105, R106, R128	07-93301-00	Chip Resistor	3K3Ω, 1/10W, 1%
R51, R57, R61, R73, R117, R154, R903_Ch0, R903_Ch1, R912_Ch0, R912_Ch1, R1152, R1153, R1011, R1037, R1080, R1014, R1018, R1025, R1066, R1067	07-94701-00	Chip Resistor	4K7Ω, 1/10W, 1%

R902_Ch0, R902_Ch1	07-95601-00	Chip Resistor	5K6Ω, 1/10W, 1%
R1076, R1095, R1059, R1060, R1061, R1062, R1084, R1110, R100, R122, R126, R130	07-91002-00	Chip Resistor	10KΩ, 1/10W, ±1%
R1069	07-92491-00	Chip Resistor	2.49KΩ,0603,1/10W,±1%
R158	07-93241-00	Chip Resistor	3.24KΩ,1/10W,±1%,0603,RC0603FR-073K24L
R1077	07-91502-00	Chip Resistor	15KΩ, 1/10W, ±1%
R1079, R1136, R1138, R1151, R1154	07-91802-00	Chip Resistor	18KΩ, 1/10W, ±1%
R1078	07-92002-00	Chip Resistor	20KΩ, 1/10W, ±1%
R29, R30	07-93002-00	Chip Resistor	30KΩ, 1/10W, ±1%
R82	07-93572-00	Chip Resistor	35.7KΩ,0603,1/10W,±1%
R55_Ch0, R55_Ch1, R1005, R1100	07-94702-00	Chip Resistor	47KΩ, 1/10W, ±1%
R31, R32, R40, R120	07-95362-10	Chip Resistor	53.6KΩ,0603,1/10W,±0.1%, ±25PPM,
R1089, R1094, R1097	07-91003-00	Chip Resistor	100KΩ,0603,1/10W,±1%
R59	07-91153-00	Chip Resistor	115KΩ,0603,1/10W,±1%
R56	07-91473-00	Chip Resistor	147KΩ,0603,1/10W,±1%
R68	07-91583-00	Chip Resistor	158KΩ,0603,1/10W,±1%
R50	07-91693-00	Chip Resistor	169KΩ,0603,1/10W,±1%
R22, R23, R24, R25	07-91004-00	Chip Resistor	1MΩ, 1/10W, ±1%
R14, R15	07-94704-00	Chip Resistor	4.7MΩ, 1/10W, ±1%
L1018, L1019, L1028, L1003	07-90000-01	Chip Resistor	0Ω,0805,1/8W,±5%
R1051, R1052, R1053, R1054, R1056, R1057	07-91008-01	Chip Resistor	1Ω,0805,1/8W,±1%
R1023	07-92708-01	Chip Resistor	2.7Ω,0805,1/8W,±1%
R1003, R1007, R1045, R1130, R1132, R1133	07-91009-01	Chip Resistor	10Ω,0805,1/8W,±1%
R41, R135	07-91509-01	Chip Resistor	15Ω,0805,1/8W,±1%
R1030, R1032	07-93309-01	Chip Resistor	33Ω,0805,1/8W,±1%,RC0805FR-0733RL
R108, R1008	07-97509-01	Chip Resistor	75Ω,0805,1/8W,±1%
R91	07-91000-01	Chip Resistor	100Ω,0805,1/8W,±1%
R87, R89, R94	07-98200-01	Chip Resistor	820Ω,0805,1/8W,±1%
R1033	07-91501-01	Chip Resistor	1.5KΩ,0805,1/8W,±1%,RC0805FR-071K5L
R49	07-92701-01	Chip Resistor	2.7KΩ,0805,1/8W,±1%
R47	07-90332-01	Chip Resistor	3.3KΩ,0805,1/8W,±5%
R62	07-90362-01	Chip Resistor	3K6Ω, ±5%, 0805
R75	07-90392-01	Chip Resistor	3.9KΩ,0805,1/8W,±5%
R93	07-90472-01	Chip Resistor	4.7KΩ,0805,1/8W,±5%
R1068	07-99091-01	Chip Resistor	9.09KΩ,0805,1/8W,±1%,RC0805FR-079K09L
R13, R16	07-92742-01	Chip Resistor	27.4KΩ,0805,1/8W,±0.1%,25PPM
R88	07-91002-01	Chip Resistor	10KΩ,0805,1/8W,±1%,RC0805FR-0710KL
R156	07-91052-01	Chip Resistor	10.5KΩ,0805,1/8W,±1%,RC0805FR-0710K5L
R45	07-93012-01	Chip Resistor	30.1KΩ,0805,1/8W,±1%
R43	07-93162-01	Chip Resistor	31.6KΩ,0805,1/8W,±1%,RC0805FR-0731K6L
R90	07-90333-01	Chip Resistor	33KΩ,0805,1/8W,±5%
R83	07-94122-01	Chip Resistor	41.2KΩ,0805,1/8W,±1%
R1065, R1261	07-90201-02	Chip Resistor	200Ω,1206,1/4W,±5%
R142, R143	07-95006-06	Chip Resistor	0.05R 1W SMD 2512, ±1%
TH900_Ch0, TH900_Ch1	07-70103-03	NTC	10KΩ, ±5%
R199, R1021, R133, R1028	07-90330-10	R Networks	33Ωx4, ±5%, 0603x4
R1088, R1092, R1093, R1096, R1099, R1102, R1108, R1109, R1113, R138, R140	07-90101-10	R Networks	100Ωx4, ±5%, 0603x4
R1081, R1082	07-90103-10	R Networks	10kΩx4, ±5%, 0603x4
CAPACITORS			
C76, C77, C80, C81	26-10411-08	Ceramic Chip Capacitor	100nF, 16V, X7R, ±10%
C6, C7, C8, C9, C58	26-10051-00	Ceramic Capacitor SMD	10pF, 5%, 50V, NPO
C71, C72	26-12051-10	Ceramic Capacitor SMD	12pJ, 50V, 0603, NPO
C54, C56	26-33051-00	Ceramic Capacitor SMD	33pF, 5%, 50V, NPO

C1024	26-10112-10	Ceramic Capacitor SMD	100pJ,100V,0603,NPO
C10, C11	26-12151-00	Ceramic Capacitor SMD	120pJ,50V,0603,NPO
C14, C15	26-27151-00	Ceramic Chip Capacitor	270pJ,50V,0603,NPO
C16, C17	26-39151-00	Ceramic Chip Capacitor	390PJ, 5%, 50V, NPO
C18, C19, C141, C143, C1095	26-47151-00	Ceramic Capacitor SMD	470pF, 5%, 50V, NPO
C78, C148	26-68151-00	Ceramic Chip Capacitor	680pJ,50V,0603,NPO
C20, C21, C95, C158, C1000, C1005, C1016, C1135, C1021, C1022, C1025, C33, C34	26-10251-10	Ceramic Chip Capacitor	1nJ,50V,0603,NPO
C92, C157, C202, C1134	26-22251-10	Ceramic Capacitor SMD	2.2nJ, 50V,0603,NPO
C96, C159	26-68251-10	Ceramic Capacitor SMD	6.8nJ, 50V,0603,NPO
C73, C1094, C1099, C1092, C1096	26-10321-00	Ceramic Chip Capacitor	10nJ,25V,0603,NPO
C1093	26-33351-00	Ceramic Chip Capacitor	33nK,50V,0603,X7R
C1089, C1090, C1098, C1101, C1103, C1105, C1124, C1003, C1027, C1106, C1107, C1109, C1110, C1111, C1112, C1113, C1114, C1117, C1118, C1119, C1127, C1129, C1130, C1131, C1132, C1004, C1009, C1013, C1018, C1020, C1030, C1033, C1035, C1128, C1007, C1008, C1036, C1039, C1047, C1050, C1123, C140, C142, C144, C191, C131, C1043, C1044, C1102, C1120, C122, C124, C127, C61, C97	26-10411-00	Ceramic Chip Capacitor	100nF,16V 0603, X7R
C1023	26-22411-10	Ceramic Chip Capacitor	220nF,16V, X7R, 0603
C12, C13, C24, C25, C35, C36, C41_Ch0, C41_Ch1, C48, C49, C52, C83, C84, C85, C86, C87, C88, C89, C90, C91, C93, C94, C98, C99, C101, C102, C103, C104, C105, C106, C107, C108, C109, C111, C112, C113, C118, C121, C139, C147, C156, C903_Ch0, C903_Ch1, C922_Ch0, C922_Ch1, C1045, C1110	26-10511-20	Ceramic Chip Capacitor	1uF, ±10%, 16V, X7R
C1122	26-22511-10	Ceramic Chip Capacitor	2.2uK, 0603, 10V, X5R,CC0603KRX5R6BB225
C145	26-47511-00	Chip Capacitor	4.7uK,10V,0603,X5R,C1608X5R1A475KT
C1037, C1040	26-10611-10	Ceramic Chip Capacitor	10uK,10V,0603,X7R
C1014, C1017	26-27051-01	Ceramic Chip Capacitor	27PJ,50V,0805,NPO
C1041, C1042	26-33051-01	Ceramic Chip Capacitor	33PJ,50V,0805,NPO
C1069	26-10112-11	Ceramic Chip Capacitor	100pF,100V,0805,NPO
C57, C1019, C1031	26-10212-01	Ceramic Chip Capacitor	1nJ,100V,0805,NPO
C1061, C1062, C1063, C1064, C1065, C1066, C1067, C1068, C1074, C1075, C1076, C1077, C1078, C1079, C1080, C1081	26-22251-21	Ceramic Chip Capacitor	2n2J,50V,0805,NPO
C916_Ch0, C916_Ch1	26-68251-11	Ceramic Chip Capacitor	6.8nJ,50V,0805,NPO,C2012C0G1H682JT00HN
C1057, C1060, C1091, C1193, C1194, C1490	26-10351-01	Ceramic Capacitor SMD	10nF, 10%, 50V, X7R
C70, C75, C123, C150, C1010, C1034, C1054, C1055, C1056, C1012, C116, C117, C119, C902_Ch0, C902_Ch1, C919_Ch0, C919_Ch1	26-10412-01	Ceramic Capacitor SMD	100nF, 10%, 100V, X7R
C37, C1998, C1999	26-22421-01	Ceramic Chip Capacitor	220nK,25V,0805,X7R
C1006, C1108, C1133	26-22511-01	Ceramic Capacitor SMD	2u2F,16V 0805, X7R
C1, C2, C3, C4, C5, C26, C27, C29, C31, C32, C43, C44, C45, C46, C66, C69, C82, C100, C125, C130, C132, C133, C134, C152, C154, C164, C137, C129	26-47521-11	Ceramic Capacitor SMD	4.7uK,25V,X5R,0805

C59, C1001, C1011, C1032, C1058, C1115, C1002, C1015, C1028, C1029, C303	26-22660-11	Ceramic Chip Capacitor	22uF, 6.3V, X5R, 0805
C1038	26-22611-01	Ceramic Chip Capacitor	22uM,10V,0805,X5R,LMK212BJ226M G-T
C1070, C1071	26-10351-12	Ceramic Chip Capacitor	10nJ,50V,1206,NPO
C913_Ch0, C913_Ch1	26-22351-12	Ceramic Chip Capacitor	22nF,50V 1206, NPO
C114, C128, C190, C193	26-47551-02	Ceramic Chip Capacitor	4.7uZ,50V,1206,Y5V,C3216Y5V1H475Z
C38, C39, C40, C63, C65, C136, C198, C199	26-10611-02	Ceramic Chip Capacitor	10uF, ±10%, 16V, X5R
C1104	26-47521-02	Ceramic Chip Capacitor	4.7uK, 25V, X7R, 1206,C3216X7R1E475KT
C60, C64, C909_Ch0, C909_Ch1, C910_Ch0, C910_Ch1, C911_Ch0, C911_Ch1, C928_Ch0, C928_Ch1, C929_Ch0, C929_Ch1, C930_Ch0, C930_Ch1	26-10512-13	Ceramic Capacitor SMD	1uK,100V,1210,X7R
C1087, C1088	26-47521-13	Ceramic Capacitor SMD	4.7uK,25V,1210,X7R
C22, C23	27-47060-02	Tan Capacitor	47uF, ±20%, 6.3V
C79, C149, C305, C306, C316, C317, C318	27-10160-03	Tan Capacitor	100uF, ±20%, 6.3V
	INDUCTOR		
L1	08-04338-00	INDUCTOR	LQM21NNR33K10D.0.33uH
L3, L6, L7, L8, L9	08-04601-16	Ferrite Bead SMD	742792042,600ohm@100MHz, ±25%, 0.2A
L5	08-04220-14	INDUCTOR	744032220,22uH,±10%,1210
FB1001, FB1002, L2	08-04601-15	Ferrite Bead SMD	742792651,600ohm@100MHz,1A
L1001, L1002, L1009, L1014, L1021	08-04609-01	BEAD	CBY201209A601T
L1020, L1022, L1025	08-04102-16	BEAD	1000Ω,±25%,100MHz,0603 742792664
L1016, L1017, L1023	08-04100-06	Inductor SMD	10uH,2A,GPSR0520-100M 5.2*4.7mm
L12	08-04100-24	Inductor SMD	74477410,10uH
L100	08-04100-08	Power Inductor	10uH,MSS7341-103ML
L1026, L1027	08-04128-00	chip inductor	120nH, 74477450012
FB1003, FB1004, FB1005	08-04601-10	Ferrite Bead SMD	CBA321609-4U-601
L1015	08-04102-04	Common Mode Choke	DLW5BTM102SQ2L
L1004, L1005	08-04161-00	CHOKE COM MODE	744232161, 160ohm@100MHz 340mA
L901_CH0, L901_CH1	08-04727-00	Inductor SMD	72nH 744302007
	CRYSTAL		
U1001	04-22452-09	Oscillator	SRTD3T-24.576MHZ TR
U1001	or 04-22452-06	VCXO	24.576MHz, C3391-24.576MHz,SMD 5*7
U1003	04-22252-05	Oscillator	SRTD3T-22.5792MHZ TR
U1003	or 04-22252-03	VCXO	22.5792MHz, C3398-22.579200MHz,SMD 5*7
X1	04-11083-01	Oscillator SMD	MXU510P20-3-B20-2L-MJT-108MHz
XC1001	04-16000-01	Oscillator SMD	6.000000 MHz HCM49,HCM49-6.000MABJT
	CONNECTORS		
P1006, CON1001	13-21006-05	FPC Connector SMD	1.0-9-6PB/ F10009Y-6-A013
RL1002	12-02202-17	Signal Relay	HFD4/5-SR
PCB-2: Bluetooth Module BOARD			
CIRCUIT NO.	PART NO.		DESCRIPTION
	PCB INFO		
	A16-23309-21	Bluetooth PCB	VM1.0,FR-4,1.0mm,Four Layers,TG130,;38.3mmX17.7mm
	A16-23390-21	Bluetooth PCB	18-1,VM1.0,FR-4,1.0mm,TG130,尺寸:116.84mmX125.18mm

DIODES			
D1	33-51616-00	three color LED	WE-SP195UBURUGW,RGB
D2	33-20054-10	Schottky Rectifier Diode	BAT54CW-7-F
ICS			
U3	03-02464-11	EEPROMS	AT24C64D-XHM-B(D7050 bt_V1.20)
U3	03-02464-05	EEPROMS	BR24T64FVT-WGE2
U3	OR 03-02464-04	EEPROMS	AT24C64D-XHM-B
U1	03-08645-04	Bluetooth IC	CSR8645A04-IBBC-R, 5.5 x 5.5 x 1.0mm
U8005	03-27805-00	Voltage Regulators	KA278R05CTU
RESISTORS			
R5, R6, R21	07-94701-08	Chip Resistor	4.7K Ω ,0402,1/16W, \pm 1%,RC0402FR-074K7L
R18	07-91002-08	Chip Resistor	10K Ω ,0402,1/16W, \pm 1%,RC0402FR-0710KL
R909_Ch0, R909_Ch1	07-30100-04	Metal Oxide Film Resistor	10 Ω , 3W, \pm 5%, Pitch=5mm
CRYSTAL			
Y1	04-12602-01	Crystal SMD	X32-26.000-9P-10/20Y, 26.000MHz,CL=9pF,FL=10PPM
INDUCTORS			
L1, L2	08-04479-00	Inductor SMD	4u7H, 10%, 0805, Tape
L900_Ch0, L900_Ch1	08-01120-01	Inductor	T80-2-47T
L900_Ch0, L900_Ch1	J19-00802-00	Ferrite Ring	T80-2
L1010, L1012	22-00150-04	Common Mode Choke	T13x7x5, Φ 0.6
T1001, T1002	22-22133-00	Transformer	PE-65612NL
L3	22-02080-00	Multilayer Chip Band Pass Filters For Bluetooth & 2.4GHz W-LAN	DEA252450BT-2080B2
CAPACITORS			
C2	26-22511-20	Ceramic Chip Capacitor	2.2uK,16V,0603,X7R
C3, C6, C7, C8, C16, C21, C20	26-47560-08	Ceramic Chip Capacitor	4.7uM,6.3V,0402,X5R
C13, C17, C18	26-10351-08	Ceramic Chip Capacitor	10nF,50V,0402,X7R, \pm 10%,CC0402KRX7R9BB103
C15	26-15051-08	Ceramic Chip Capacitor	15pF,50V,0402,NPO, \pm 5%,C1005C0G1H150JT
C14, C24	26-10411-08	Ceramic Chip Capacitor	100nF,16V,0402,X7R, \pm 10%,C1005X7R1C104KT
C1, C4, C5, C9, C23	26-47411-08	SMD Capacitor	470nF,10V,0402,X5R,C1005X5R1A474KT000E
C918_Ch0, C918_Ch1	25-22412-00	Metallized Polyester Film Capacitor	220nF, 100V, 10%
C28_Ch0, C28_Ch1F	25-33412-06	Polyester capacitor	330nF,100V, \pm 5%, ECQV1334JM
C47, C50, C55, C138, C151	06-10111-22	Alu Electrolytic Capacitor	CD289,100uF,16V, \pm 20%,105 $^{\circ}$ C,F2.5
C120, C74	06-22111-23	Alu Electrolytic Capacitor	RXW221M1CSA-6311,220uF,16V, \pm 20%,105 $^{\circ}$ C,F2.5
C126, C192, C1097, C1100, C1116	06-33160-07	Alu Electrolytic Capacitor	PLF0J331MDL4TD,330uF,6.3V, \pm 20%,105 $^{\circ}$ C,F2.5
C42, C115	06-10221-05	Alu Electrolytic Capacitor	UVY1E102MPDTD, 1000uF,25V, \pm 20%,105 $^{\circ}$ C
C30, C51, C53, C62	06-22231-03	Alu Electrolytic Capacitor	EEUFG1V222L,2200uF,35V, \pm 20%,105 $^{\circ}$ C
TEMPLATES FOR C			
	37-30870-20C	BridgeCO Module	CX870-3BD(D7050 S9575.144.1000)
J200	J37-40870-36	BridgeCO Module	CX870-3B-D(NAD)
	03-00870-02	Networked Media Processor	DM870A
	03-06201-01	RF Transceiver	T6201C-HN
	94-272010-0	230V Version Label	10x10mm
	86-000087-0	Copperplate Label	10mmx10mm
TEMPLATES FOR AH			
	37-30870-43C	BridgeCO Module	CX870-3BD(D7050 S9575.144.3700)

J200	J37-40870-36	BridgeoCO Module	CX870-3B-D(NAD)
	03-00870-02	Networked Media Processor	DM870A
	03-06201-01	RF Transceiver	T6201C-HN
	94-272011-0	120V Version Label	10x10mm
	86-000087-0	Copperplate Label	10mmx10mm
	CONNECTORS		
J200	13-22564-03	Board to Board Connector	2.54mm,2*32 Pin,GL37D01-64C-3.0
	29-04601-02	External Antenna	L=150mm
RL1001	A12-03102-05	RELAY POWER	JQX-115F/024-2HS4AF(144)
P1004, P1005	13-12504-21	Connector	2.54, 4Pin, CNT-M254-1*4-GS-7/3-N
P1002	13-22504-00	Connector	XHB 2.5A-4A
P1	13-23010-01	Connector	3.0mm,2*5pin,CNT-3001WV-2*5P
P1003	13-12505-11	Connector	2.54mm,5pin,CNT-M254-1*5-GS-5/3-N
P2	13-22008-02	Connector Socket	PH2.0A-8A
J1011	13-22024-00	Connector Socket	2.0mm, 2x12Pin, CNT-B200-2*12-GS-2.8-N
J1004	J17-08001-58	USB connector	292304-1
J1002	17-01002-13	2RCA	RCA2-W-R 2 heads,orange ,AV2-8.4-13PB1, (4u)
J1005	17-08001-50	RJ45 socket&USB	3500A11011
J1001, J1003	17-06001-07	Optical Receive	DLR2180/25M
	66-018005-0	Clamper	65Mn HRC48-52
	67-114001-0	PCB Terminal	HS40-360.1-B009V1-M002
	85-325001-0	Nylon Spacer	HP-45
	85-325002-0	Plastic Screw	M3-8F
	85-172001-0	Plastic Spacer-Screw	Nylon66,白色,H=11,TP-11
	62-110302-0	Plastic NUT	Nylon66,M-3
	61-023506-0	Machine Screw	MB3x6,zinc black
	61-373506-0	Machine Screw	M3x6
	61-023510-0	Machine Screw	MB3x10,zinc blue
	61-063512-1	Machine Screw	MF3x12,zinc blue
	62-010302-0	Nut	GB6170, M3, zinc blue
	75-325003-0	antenna holder	ABS Black
	75-279002-0	Antenna press block	PBT+30%GF
	70-325002-3	heatsink_A	AL 1050, T=2.0mm
	78-325005-2	Insulated cushion	HF300P,Green,92x28mm
	17-03001-25	bending post	HD-301-2 Red,Gold plating
	17-03001-26	bending post	HD-301-2 Black,Gold plating
	69-325002-0	Copper bar A	T1,T=1mm
	69-325003-0	Copper bar B	T1,T=1mm
	75-325008-0	Post Bracket	ABS 765B(Black)
PCB- 3:FPP BOARD			
CIRCUIT NO.	PART NO.		DESCRIPTION
	PCB INFO		
	A16-23302-25	FPP PCB	VM1.4,FR-4,1.6mm,Two Layers,1oz,TG130,60x52mm
	A16-23320-25	FPP PCB	VM1.4,FR-4,1.6mm,Two Layers,1oz,TG130,117.6x124.1mm
	DIODES		
D500, D501, D502, D503	33-40352-01	Switch Diode	1SS352(TPH3,F),1SS355TE-17
D504	33-30560-01	Schottky Power Rectifier	MBR0560-TP
D504	or 33-20540-01	Schottky Power Rectifier	40V, 0.5A, MBR0540T1G
D505	33-20316-01	High speed Diode	BAS316
	ICS		
U501	03-61170-01	1.2A High Voltage Boost Converter	TPS61170DRVR
U503	03-00244-05	Octal Buffer	SN74HCT244DWR
U504	03-01031-01	Surface Mount type 4 Direction Detector	RPI-1031
U1060	03-00716-01	TinyLogic UHS Dual Buffer(TinyLogic)	NC7WZ16

U505	03-34838-00	IR Receiver	TSOP34838
	RESISTORS		
R500	07-90683-00	Chip resistor	68K Ω ,0603,1/10W,±5%
R501	07-91153-00	Chip resistor	115K Ω ,0603,1/10W,±1%
R502, R503	07-91002-00	Chip resistor	10K Ω ,0603,1/10W,±1%
R504	07-90510-00	Chip resistor	51 Ω ,0603,1/10W,±5%
R520, R525	07-90101-10	Chip Resistor NET	100 Ω , ±5% R0603X4
R526	07-90101-00	Chip resistor	100 Ω ,0603,1/10W,±5%
R521	07-90472-00	Chip resistor	4.7K Ω ,0603,1/10W,±5%,RC0603JR-074K7L
R524	07-90221-00	Chip resistor	220 Ω ,0603,1/10W,±5%
R529, R530, R531	07-90100-01	Chip resistor	10 Ω ,0805,1/8W,±5%
R538	07-90000-00	Chip resistor	0 Ω , 0603, ±5%
R540	07-90330-00	Chip resistor	33 Ω ,0603,1/10W,±5%
	CAPACITORS		
C500, C501, C503, C504, C521, C523, C525, C527	26-10411-00	Ceramic Chip Capacitor	100nF,16V 0603, X7R,±10%
C507	26-47421-00	Ceramic Chip Capacitor	470nZ,25V,0603,Y5V
C505, C506	26-10312-01	Ceramic Chip Capacitor	10nK, 100V, X7R, 0805
C502	26-22611-01	Ceramic Chip Capacitor	22uM,10V,0805,X5R,LMK212BJ226M G-T
C508, C512	26-22511-01	Ceramic Chip Capacitor	2u2F,16V 0805, X7R
C518	26-47521-11	Ceramic Capacitor SMD	4.7uK,25V,X5R,0805
C519	26-68151-00	Ceramic Chip Capacitor	680pJ,50V,0603,NPO
C520, C526	26-22660-11	Ceramic Chip Capacitor	22U,6.3V,±10%,X5R, 0805
C522	26-10511-20	Ceramic Chip Capacitor	1uF, ±10%, 16V, X7R
C524	26-47511-00	Ceramic Chip Capacitor	4.7uK,10V,0603,X5R
	INDUCTOR		
L500	08-04100-14	INDUCTOR	SWPA4020S100MT,10uH, ±20%,1.60A
L501	08-04338-00	Inductor SMD	LQM21NNR33K10D,0.33uH
	CONNECTORS		
U500	13-20540-05	FPC Connector	40Pin,0.5mm,20477-040E
U500	J23-02828-00	OLED Display	UG-2828GDEDF06
J500	14-23324-00	Connector Wire	2.0mm,24Pin,FC+FD,L=150mm
	75-325001-0	OLED bracket	ABS Black
	66-325001-2	display bracket	SECC N5 T=1.0
	PACKING		
	61-023506-0	Machine Screw	MB3x6,zinc black
	ACCESSORIES		
	78-325009-1	OLED SHIELD	side of gum
	78-325011-0		side of gum
	86-051004-0	Adhesive Bonded Fabric	×50×0.5 The single side of gum
PCB-4:VOLUME ENCODE BOARD			
CIRCUIT NO.	PART NO.		DESCRIPTION
	PCB INFO		
	A16-23303-25	volume encode PCB	VM1.4,FR-4,1.6mm,Two Layers,1oz,TG130,46×30mm
	A16-23320-25	FPP PCB	VM1.4,FR-4,1.6mm,Two Layers,1oz,TG130,117.6×124.1mm
	RESISTORS		
R532, R533	07-91002-00	Chip resistor	10K Ω ,0603,1/10W,±1%
	CAPACITORS		
C514, C515	26-10411-00	Ceramic Chip Capacitor	100nF,16V 0603, X7R,±10%
C513	26-10660-00	Ceramic Chip Capacitor	10uF,0603,6.3V,X5R,±5%
	CONNECTORS		
S501	28-24308-03	ENCODE	EC12E2430803
J504	13-22004-00	Connector	PH2.0A-4A
PCB-5:SOURCE ENCODE BOARD			
CIRCUIT NO.	PART NO.		DESCRIPTION
	PCB INFO		

	A16-23304-25	source encode PCB	VM1.4,FR-4,1.6mm,Two Layers,1oz,TG130,25x38mm
	A16-23320-25	FPP PCB	VM1.4,FR-4,1.6mm,Two Layers,1oz,TG130,117.6x124.1mm
	RESISTORS		
R527, R528	07-91002-00	Chip resistor	10K Ω ,0603,1/10W, \pm 1%
	CAPACITOR		
C509	26-10660-00	Ceramic Chip Capacitor	10uF,0603,6.3V,X5R, \pm 5%
C510, C511	26-10411-00	Ceramic Chip Capacitor	100nF,16V 0603, X7R, \pm 10%
	CONNECTORS		
S500	28-12204-00	ENCODER	EC12E1220405
J502	13-22004-00	Connector	PH2.0A-4A
Connect ENCODE And FPP	14-23308-01	Cable	UL1007#24AWG*8C,L=175,L=100
PCB-6:INT BOARD			
CIRCUIT NO.	PART NO.		DESCRIPTION
	PCB INFO		
	A16-23305-25	INT board PCB	VM1.4,FR-4,1.6mm,Two Layers,1oz,TG130,29x70mm
	A16-23320-25	FPP PCB	VM1.4,FR-4,1.6mm,Two Layers,1oz,TG130,117.6x124.1mm
	DIODES		
D1008	33-14709-10	Zener Diode	4V7,1/2W, LL34
	TRANSISTORS		
Q1003	31-00114-05	Digital transistor	DTC114EKA
	RESISTORS		
R1055, R1061	07-90000-01	Chip Resistor	0 Ω ,0805,1/8W, \pm 5%
R1062	07-90103-00	Chip resistor	10K Ω ,0603,1/10W, \pm 5%
R1063	07-90682-00	Chip resistor	6.8K Ω ,0603,1/10W, \pm 5%
R1064	07-90100-00	Chip resistor	10 Ω ,0603,1/10W, \pm 5%
	CAPACITORS		
C1072, C1082	26-22151-01	Ceramic Chip Capacitor	220PJ,50V,0805,NPO
C1085, C1086	26-10411-00	Ceramic Chip Capacitor	100nF,16V 0603, X7R, \pm 10%
	CONNECTORS		
P1007	13-21006-05	FPC Connector SMD	1.0-9-6PB/ F10009Y-6-A013
P1001	13-22504-00	Connector	XHB 2.5A-4A
J1007, J1008	11-04101-13	Tact Switch	IT-1102VLD-1160
J1006	17-01002-05	2RCA	AV2-8.4-14
J1009	17-02001-55		CKX-3.5-36(5P)
PCB-7:HEADPHONE BOARD			
CIRCUIT NO.	PART NO.		DESCRIPTION
	PCB INFO		
	A16-23307-25	headphone board PCB	VM1.4,FR-4,1.6mm,Two Layers,1oz,TG130,30x26.8mm
	A16-23320-25	FPP PCB	VM1.4,FR-4,1.6mm,Two Layers,1oz,TG130,117.6x124.1mm
	CONNECTORS		
J1	17-02001-70	Phone Jack	CKX-3.5-02AF
P3	13-22008-02	Connector Socket	PH2.0A-8A
	66-229002-0	Pcb BRACKET	SECC N5 T=1mm
	61-022506-3	Machine Screw	MB2x6
PCB-8:TOUCH BOARD			
CIRCUIT NO.	PART NO.		DESCRIPTION
	PCB INFO		
	A16-23306-25	touch board PCB	VM1.4,FR-4,1.6mm,Two Layers,1oz,TG130,40x30.3mm
	A16-23320-25	FPP PCB	VM1.4,FR-4,1.6mm,Two Layers,1oz,TG130,117.6x124.1mm
	TRANSISTORS		
Q411, Q412, Q413	31-03326-01	Transistor	2SC3326-A(TE85L,F), SC-59
	DIODES		
D402	33-50603-04	SUPER BRIGHT ORANGE	SML-311YTT86
D403	33-50603-90	SMD LED (WHITE)	WR-PB1608UW-G-M23
D401	33-50603-20	LED (Red)	L-C191KRCT,0603
	RESISTORS		
R502, R503, R504	07-90472-01	Chip Resistor	4K7,0805,1/8W, \pm 5%
R415, R416	07-90431-00	Chip resistor	430 Ω ,0603,1/10W, \pm 5%
R417	07-90301-00	Chip resistor	300 Ω ,0603,1/10W, \pm 5%

	CONNECTORS		
CON1002	13-21006-05	FPC Connector SMD	1.0-9-6PB/ F10009Y-6-A013)
	ACCESSORIES		
	69-325001-2	button copper	QSn 6.5
	69-325901-2	button copper	QSn 6.5
	78-325007-1	Button EVA	EVA,16x16x7mm
	90-325003-0	diffusible film	MB-533,16x16x0.3mm
PCB-9:PSU BOARD			
CIRCUIT NO.	PART NO.		DESCRIPTION
	PCB INFO		
	A16-23308-22	SMPS PCB	VM1.1,FR-4,1.6mm,Two Layers,1oz, TG130,尺寸:206x78mm
	DIODES		
D203, D204, D205, D206, D207, D208, D209, D210, D211, D212, D213, D214, D215, D222	33-40321-00	General Purpose diode	BAS321
D217	33-44148-17	Switch Diode	1N4148W-NR
D216	33-20036-00	Schottky Rectifier Diode	SS36B
D218	33-30062-00	BRIDGE RECTIFIER	B6S, 0.8A 600V
D201	33-20020-00	Rectifier Diode	BYG20J-E3/TR3
D202	33-00200-01	Transient Voltage Suppressor	P4SMA200A
D219	33-30662-02	Rectifier Bridge	GBU606
D220	33-24006-00	Rectifier Diode	UF4006
D220	or 33-24006-02	Rectifier Diode	UF4006
D221	33-20860-00	Rectifier Diode	MURF860G,TO-220FP
	TRANSISTORS		
Q207, Q208, Q209, Q210, Q211, Q212	31-80725-00	transistor	BC807-25 45V 500mA
Q214	31-00846-02	Transistors	BC846BW 65V 100mA
Q215	31-00856-03	Transistor	BC856BW 65V 100mA
Q216	31-03326-01	Transistor	2SC3326-A(TE85L,F)
	ICS		
IC205	03-06477-02	IC DRIVER	ISL6744AABZ
IC204	03-06562-01	IC DRIVER	L6562DTR, SOIC-8
IC203	03-00393-03	Dual Differential Comparator	LM393DR
IC203	or 03-00393-01	Dual Differential Comparator	LM393D
IC202	03-00431-11	Regulator	TL431BCDBZR
OP201, OP202	A03-00817-03	Photo Coupler	PC817X2NIP
U201	03-07815-08	Voltage Regulators	KA78R15CTU
IC201	03-00274-00	Power controller IC	TNY274PN
	RESISTORS		
R203	07-91008-01	Chip resistor	1 Ω ,0805,1/10W, \pm 1%,RC0805FR-0710RL
R204, R228, R246, R255	07-91009-01	Chip resistor	10 Ω ,0805,1/10W, \pm 1%,RC0805FR-0710RL
R224, R225, R226, R229, R230, R231, R245	07-92209-01	Chip resistor	22 Ω ,0805,1/8W, \pm 1%,RC0805FR-0722RL
R256, R257	07-91000-01	Chip resistor	100 Ω ,0805,1/8W, \pm 1%,RC0805FR-07100RL
R220	07-92000-01	Chip resistor	200 Ω ,0805,1/8W, \pm 1%,RC0805FR-07220RL

R235	07-95100-01	Chip resistor	510Ω,0805,1/8W,±1%,RC0805FR-07510RL
R201, R202, R205, R237	07-91001-01	Chip resistor	1KΩ,0805,1/8W,±1%,RC0805FR-071K1L
R223	07-91801-01	Chip resistor	1.8KΩ,0805,1/8W,±1%,RC0805FR-071K8L
R222	07-92201-01	Chip resistor	2.2KΩ,0805,1/8W,±1%,RC0805FR-072K2L
R207	07-92701-01	Chip resistor	2.7KΩ,0805,1/8W,±1%,RC0805FR-072K7L
R221	07-93301-01	Chip resistor	3.3KΩ,0805,1/8W,±1%,RC0805FR-073K3L
R242,R253,R254,R259	07-94701-01	Chip resistor	4.7KΩ,0805,1/8W,±1%,RC0805FR-074K7L
R218	07-99101-01	Chip resistor	9.1KΩ,0805,1/8W,±1%,RC0805FR-079K1L
R210, R215, R234	07-91002-01	Chip resistor	10KΩ,0805,1/8W,±1%,RC0805FR-0710K1L
R219	07-91802-01	Chip resistor	18KΩ,0805,1/8W,±1%,RC0805FR-0718K1L
R243	07-92002-01	Chip resistor	20KΩ,0805,1/8W,±1%,RC0805FR-0720K1L
R260	07-92202-01	Chip resistor	22KΩ,0805,1/8W,±1%,RC0805FR-0722K1L
R236, R240, R258	07-94702-01	Chip resistor	47KΩ,0805,1/8W,±1%,RC0805FR-0747K1L
R227, R241	07-96802-01	Chip resistor	68KΩ,0805,1/8W,±1%,RC0805FR-0768K1L
R244	07-91003-01	Chip resistor	100KΩ,0805,1/8W,±1%,RC0805FR-07100K1L
R213, R214	07-93303-01	Chip Resistor	330KΩ,0805,1/8W,±5%,RC0805JR-07330K1L
R217	07-90434-01	Chip Resistor	430KΩ,0805,1/8W,±5%,RC0805JR-07430K1L
R211, R216	07-95103-01	Chip Resistor	510KΩ,0805,1/8W,±1%,RC0805FR-07510K1L
R212	07-95603-01	Chip Resistor	560KΩ,0805,1/8W,±1%,RC0805FR-07560K1L
R249, R250	07-91209-02	Chip Resistor	12Ω,1206,1/4W,±1%,RC1206FR-0712RL
R261, R262	07-91500-02	Chip Resistor	150Ω,1206,1/4W,±1%,RC1206FR-07150RL
R206, R208, R209, R232	07-91004-02	Chip Resistor	1MΩ,1206,1/4W,±1%,RC1206FR-071ML
R238, R239	07-91008-06	Chip resistor	1Ω,2512,1W,±1%
R247, R248	07-92208-06	Chip Resistor	2.2Ω,2512,1W, ±1%
R251, R252	07-90220-06	Chip Resistor	22Ω,2512,1W,±5%
R263, R264	07-90472-06	SMT Resistor	4.7KΩ,2512,1W,±5%
TH201	A07-70050-06	NTC	SCK13055LFY
CAPACITORS			
C202, C234	26-10151-01	Chip capacitor	100PJ,50V,0805,NPO
C238	26-18151-01	Chip capacitor	180PJ,50V,0805,NPO
C237	26-20151-01	Chip capacitor	200PJ,50V,0805,NPO
C228	26-33151-01	Chip capacitor	330PJ,50V,0805,NPO
C235	26-10251-01	Chip capacitor	1nK,50V,0805,X7R
C229	26-15251-11	Chip capacitor	1n5J,50V,0805,NPO
C223,C248	26-10351-11	Chip capacitor	10nJ,50V,0805,NPO

C205, C206, C212, C233, C227, C236	26-10451-11	Chip capacitor	100nK,50V,0805,X7R,C2012X7R1H104KT
C214	26-22421-01	Chip capacitor	220nK,25V,0805,X7R
C239	26-68421-01	Chip capacitor	680nK,25V,0805,X7R,C2012X7R1E684KT000N
C224,C225	26-10521-01	Chip capacitor	1uK,25V,0805,X7R
C226	26-22521-01	Ceramic Chip Capacitor	2.2uFK, 25V X5R, 0805,C2012X5R1E225KT
C231	26-47521-11	Ceramic Chip Capacitor	4.7uFK, 25V X5R, 0805,C2012X5R1E475KT
C240,C241	26-12222-12	Ceramic Chip Capacitor	1.2nF,200V,±5%,NPO, C1206N122J201T / MA1206CG-122J-201ERG /
C246,C247	26-10312-02	Ceramic Chip Capacitor	1206, 10nF, 100V, X7R,±10%
C215,C216	26-10362-12	Ceramic Chip Capacitor	10nK,630V,X7R,1206,1206CC103KAZ1A
C219, C220, C221, C222	26-15122-02	Ceramic Chip Capacitor	150p 200V NPO 1206
CY201,CY202, CY203, CY204	A05-10242-00	Hign Voltage Cermatic Capacitor	1nF, 400V(X1), 250V(Y1), ±20% CT81-400VAC-08b-2E4-102M-YA
C217, C218, CX202	A25-33422-08	Interfernece Suppression Cap	MKP62, 330nF,275VAC, ±20%
CX201, CX203	A25-47422-08	Interfernece Suppression Cap	MPX, 470nF, 275VAC, X2, ±20%,Pitch=15mm, 18mm*8.5mm
C209	25-10542-00	Metallize Polyester	MMK22.5, 105K400D15L4
C211	06-10051-02	Alu Electrolytic Capacitor	CD263(X), 10uF, 50V, ±20%
C232	06-47031-00	Alu Electrolytic Capacitor	CD263,47uF,35V,±20%,F2.5
C207,C208	06-10121-12	Alu Electrolytic Capacitor	CD263(X), 100uF, 25V, ±20%
C204	06-10211-13	Alu Electrolytic Capacitor	CD284, 1000uF, 10V, ±20%
C203	06-47111-03	Alu Electrolytic Capacitor	CD263(X), 470uF, 16V, ±20%
C242, C243, C244, C245	06-10231-10	Alu Electrolytic Capacitor	RXJ102M1VBK-1325P,1000uF,35V
C201	06-10042-00	Alu Electrolytic Capacitor	CD11H, 10uF, 400V, ±20%
C230	06-15142-04	Alu Electrolytic Capacitor	LSG151M2W-A2530,150uF,450V
	MOSFET		
Q201,Q204,Q213	31-01050-00	N-Channel MOSFET	FDPF10N50FT, 500V, 9A
Q202, Q203, Q205, Q206	31-00640-01	N-ch POWER MOSFET	IRF640NPbF, 200V
(Q202, Q203), (Q205, Q206)	78-307005-0	Insulated Cushion	Sil-Pad K-6, 26x20mm, T=0.154mm
(Q202, Q203), (Q205, Q206)	85-157001-0	Transistor Washer	TW-4
	INDUCTOR		
L201	08-02339-00	Inductor	3.3uH
L203	08-05220-00	INDUCTOR	22uH 3A, MESC-220M-01
L203	A78-000080-0	Heat Shrinking Tube	Φ8
L204, L205	22-00016-26	Common Mode Choke	HJ-7.0mH*2,T16x12x8C
L206	22-00127-00	Common Mode Choke	T12.7*7.9*6.3-1.2mH
L208, L209, L210, L211	08-02065-00	Ferriet bead	65R/100MHZ 7A,BL01RN1A1F1J

	TRANSFORMER		
T202	A22-03230-00	Transformer	HJ-D7050PQ3230
T201	A22-00016-23	Transformer	HJ-D7050EE16
TR201	J22-07316-00	Transformer	SC7316-145A
L202	A22-02625-02	Transformer	HJ-D7050PQ2625
	CONNECTORS		
J202	13-22506-00	Connector	XHB 2.54A-6A
J201	13-22503-00	Connector	XHB 2.54A-3A
NTC201,NTC202	13-22502-14	Jumper Cap	2.54mm, 2Pin CNT-MJ254-02-O
NTC201,NTC202	13-12502-19	Connector	2.54mm, 2Pin, CNT-M254-1*2-GS-5.6/3-N
	A78-000040-1	Heat Shrinking Tube	Φ4,CB-HFT
PSU FGTO AC innet	A14-23301-00	1PIN CBALE	UL1672#18WAG,
	19-22008-00	Ferrite Ring	HJ-2208,T22x14x8 10K
Connect Power Board And AMP Board	14-23310-00	Cable	UL1007#22AWG
	RELAY		
K201	12-01101-19	RELAY	HF36F/012-HST(555), TV-5
	FUSES		
FUSE201	A20-12312-06	FUSE	5ET-032HA,T3.15A/250V
	METAL PARTS		
AC Inlet	A17-07103-03	AC Inlet	SS-7B-1-V9
S201, S202, S203	62-010302-0	Nut	GB6170, M3
Q201, Q204, Q213, D221	61-023510-0	Machine Screw	MB3x10
Q202, Q203, Q205, Q206	61-023514-0	Machine Screw	MB3x14
	61-063508-1	Machine Screw	MF3x8
	63-020308-1	Spring Washer	φ3
	70-325003-1	heatsink_B	AL 1050
	70-325004-1	heatsink_C	AL 1050
	70-325005-0	heatsink_D	AL 1050
	66-325002-2	shield cover	SECC N5 T=1.0
	90-325005-0	Non-woven Cloth	:7x50mm
	78-325003-1	insulpad C	GK-17,186x16x0.4mm
	78-325004-1	insulpad D	GK-17,190x160.6x0.4mm
	61-022506-5	Machine Screw	MB2.5x6
	61-023508-0	Machine Screw	MB3x8
	62-010302-2	Nut	M3
	CONNECTORS		
Connect INTAnd AMP Board	14-23306-00	CABLE	1.0mm,6pin,coplanar,L=200mm
Connect TOUCH And AMP Board	14-04306-00	Cable	coplanar,6PIN, 1.0mm, 50±3mm 0.1X0.65
Connect headphoneAnd AMP Board	14-23308-00	Cable	UL2547#26AWG*2C,L=280
Connect PREOUT And AMP Board	14-23304-11	Cable	UL1691#24*1C,L=100
	29-04601-02	wifi antenna	L=150mm
	REMOTE		
	M30-12330-02	Remote	XHY 971F52-1
	(N66-325010-0)	weight R	SPCC,40.4x19.6x3mm
	PLASTIC PARTS		
	76-325001-3C	front pannle	PC
	(N76-325001-1B)	front pannle	PC
	77-325001-2	top cover	ABS
	77-325002-1	bottom cover	ABS
	75-325002-0	round cover	ABS
	78-325001-2	insulpad A	GK-17,84x57x0.4mm
	78-325006-1	insulpad E	GK-17,170.9x57.4x0.4mm
	78-325008-0	insulpad F	GK-17,30x5x0.4mm,
	79-351003-0	Feet	Black
	90-040002-0	Polybag	60x90mm
	78-325010-0	insulpad G	GK-17,57.4x50x0.4mm
	86-325001-0	Double sides stick	(YS247D),16x16mm

	79-325003-0	RUBBER Support	10*10mm T=1.5mm
	79-325004-0	Sharft Sleeve	PTFE , 12.9x15mm
	79-325002-0	Sharft Sleeve	PTFE
	78-325007-1	Button EVA	EVA,16x16x7mm,
	METAL PARTS		
	66-325003-0	bar bracket	SECC N5 T=2.0
	66-325004-0	vent plate	SUS 301
	M70-325001-5	inner plate	AL 6063 T2.0
	67-325001-2D	rear plate	SECC N5 T=0.6,
	80-325001-2	rear plate	SECC T0.5
	65-325001-2	rear plate	SECC T0.5
	J71-325001-0	knob_vol assy	
	J71-325102-0	knob_sec assy	
	or J71-325002-0	knob_sec assy	
	70-325011-1	Badge	AL,27x27mm,
	66-325007-0	weight A	SPCC,45.5x27x2.5mm
	66-325008-0	weight B	SPCC,27x25x2.5mm
	66-325009-1	weight C	SPCC,27x20x2mm
	FASTENERS		
	61-022206-6	Self Tapping Screw	BTB2.6x6,
	61-023208-0	Self Tapping Screw	BTB3x8,
	61-062506-5	Machine Screw	MF2.5X6mm
	61-063208-0	Tapite Screw	BTF3x8
	61-063106-0	Self Tapping Screw	STF3x6
	PACKING		
	88-325001-0B	gift box	
	88-325002-1A	shipping box	Inner diameter :512x332x410mm
	88-325003-2	egg_tray	
	90-325001-2	non clothes bag	430x320
	88-325005-0B	sleeve box	
	88-325006-0A	accessory box	
	88-325007-0	clap board A	350x300mm
	88-325008-1	clap board B	509x331mm
	88-325009-0	Remote box	Black card
	90-325004-1	shink film	,550x450mm
	30-42332-02	Quick Setup Guide	157g, 420X297mm, folded : 210X297mm,
	30-42333-00	Spotify Insert	148x210mm,128g
	94-325001-0	MAC ID label	20x8mm
	86-000148-0	Copperplate Label	20x8mm
	94-325002-0	bluetooth label	20X8mm
	86-000148-0	Copperplate Label	20x8mm
	94-325003-0	S/N Label	47x9mm
	86-004709-0	Copperplate Label	47x9mm
	94-325005-0	S/N Label	53x10mm
	86-000053-0	Copperplate Label	53x10mm
	N90-325006-0	Panel protective film	PET T=0.07mm 439.5x64mm
	90-001013-0	AC Cord Polybag	105x280mm
	79-334013-0	EVA Gasket	EVA,40x10
	94-325008-0	Label Model	20x5mm
	86-000106-0	Copperplate Label	20x5mm
	94-325009-0	Spotify Label	50.5x15mm
	94-000006-0	Sealed Label	PC, Φ65mm
	AC Cord AH		
	JA15-15120-00	AC Cord	LP30B & LS13 SVT 18AWG 105C Black 3C L=1800mm
	or A15-26121-10	AC Cord	3UTJ2/3GTJA
	30-51500-01	Guarantee Card	AH

Outside the carton(2)	94-325004-1	Version Label	115x85mm,R=1mm
	AC Cord C		
	JA15-16250-03	AC Cord	LP34&LS-60 H05VV-F 0.75mm ² 3C Black L=1800mm
	or JA15-16250-00	AC Cord	3PINS 16A 250V LF L=6'7" LP-34 H05VV-F 3C LS- 60
Outside the carton(2)	94-325014-0	Version Label	115x85mm,R=1mm
sleeve box(1)	94-325006-1	Version Label	46x25mm
sleeve box(1)	86-000169-0	Copperplate Label	46x25mm