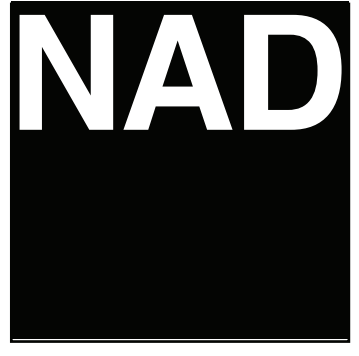


SERVICE MANUAL





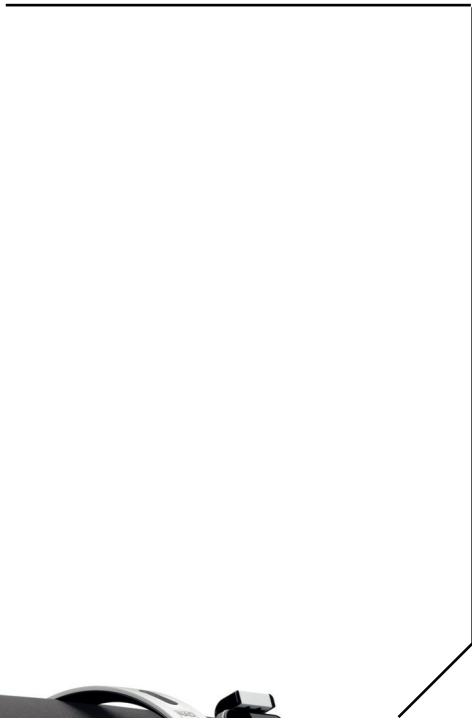
VISO 1 & BT

Wireless Digital Music System

VISO 1 & BT
Wireless Digital
Music System

SAFETY INFORMATION

<p>NAD ELECTRONICS INTERNATIONAL 633 GRANITE COURT, PICKERING, ON CANADA L1W 3K1 MODEL: VISO 1 Music System POWER RATING 100-240V ~ 50/60Hz 35W DESIGN & ENGINEERED IN CANADA, CUSTOM MANUFACTURED TO NAD SPECIFICATIONS IN CHINA</p>
<p>NAD IS A TRADEMARK OF NAD ELECTRONICS INTERNATIONAL A DIVISION OF LENBROOK INDUSTRIES LIMITED COPYRIGHT NAD ALL RIGHTS RESERVED</p>
<p>CONFORMS TO ANSUL STD.69065</p>  <p>CERTIFIED TO CAN/CSA STD. C22.2 No. 60965</p> <p>Intertek 4001278</p>
<p>RoHS  compliant    Bluetooth</p> <p>THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE. (2) THIS DEVICE MUST ACCEPT INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRABLE OPERATION.</p> <p>THIS CLASS B DIGITAL APPARATUS COMPLIES WITH CANADIAN ICES-003. CET APPAREIL NUMERIQUE DE LA CLASSE B EST CONFORME A LA NORME NMB-003 DU CANADA.</p> <p>Contains Contains transmitter module FCC ID: BTM511-LB-01 IC:1931B-BTM511</p>
<p> CAUTION  RISK OF ELECTRIC SHOCK DO NOT OPEN</p> <p>WARNING : SHOCK HAZARD - DO NOT OPEN AVIS : RISQUE DE CHOC ELECTRIQUE - NE PAS OUVRIR</p>



SERVICE SAFETY PRECAUTIONS

1. Replacing the fuses

CAUTION:

FOR CONTINUED PROTECTION AGAINST THE RISK OF FIRE REPLACE ONLY WITH SAME TYPE OF FUSE.

<u>Reference Designator</u>	<u>Database Part Number</u>	<u>Description</u>
F1 ⚠	1601100014-902000	FUSE 5*20MM TIME-LAG 2A 250V "ROHS" "WALTER" TSD2A250V

Parts marked with the symbol ⚠ are critical with regard to the risk of fire and electric shock.

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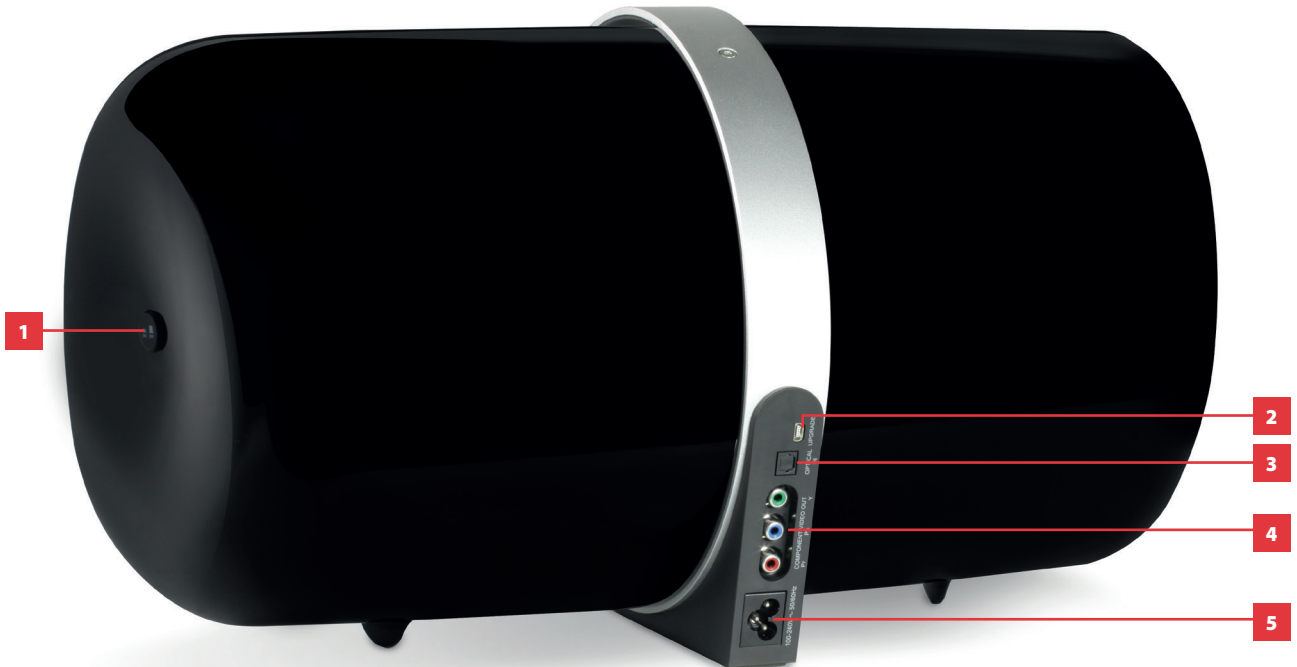
FEATURES AND SPECIFICATIONS

Power Rating Total	80W (Sub - 50W, Left – 15W, Right – 15W)
Frequency Response	33Hz – 28kHz (-6dB) Anechoic, 50Hz to 20K ±1dB Anechoic
Sound Pressure Level (maximum)	100dB
NAD Direct Digital DAC/Amplifier	35 bit/844kHz, 0.005% THD
Bi-amplified System with Digital Crossover and Volume Control	
Digital Soft Clipping™	
Bluetooth aptX Wireless Hi-fidelity Receiver	2.4Ghz
Driver Complement	2 x 2.75" Full range drivers with aluminium dome/cone and dual magnetic drive 1 x 5.75" Subwoofer with symmetrical magnetic drive
Connectivity	Optical Digital Input – 32KHz to 96KHz PCM Component Video Output – Y Pb Pr USB port for software upgrades
Accessories	Remote control model VISO 1
Power Consumption	AC Power – 100V to 240V 50/60Hz 35W (1/3 Output Power) AC Idle Power – 10W
Net Dimensions (WxHxD)	480mm (18.9") x 261mm (10.25") x 300mm (11.8")
Weight	5.6kg (12.34lbs)



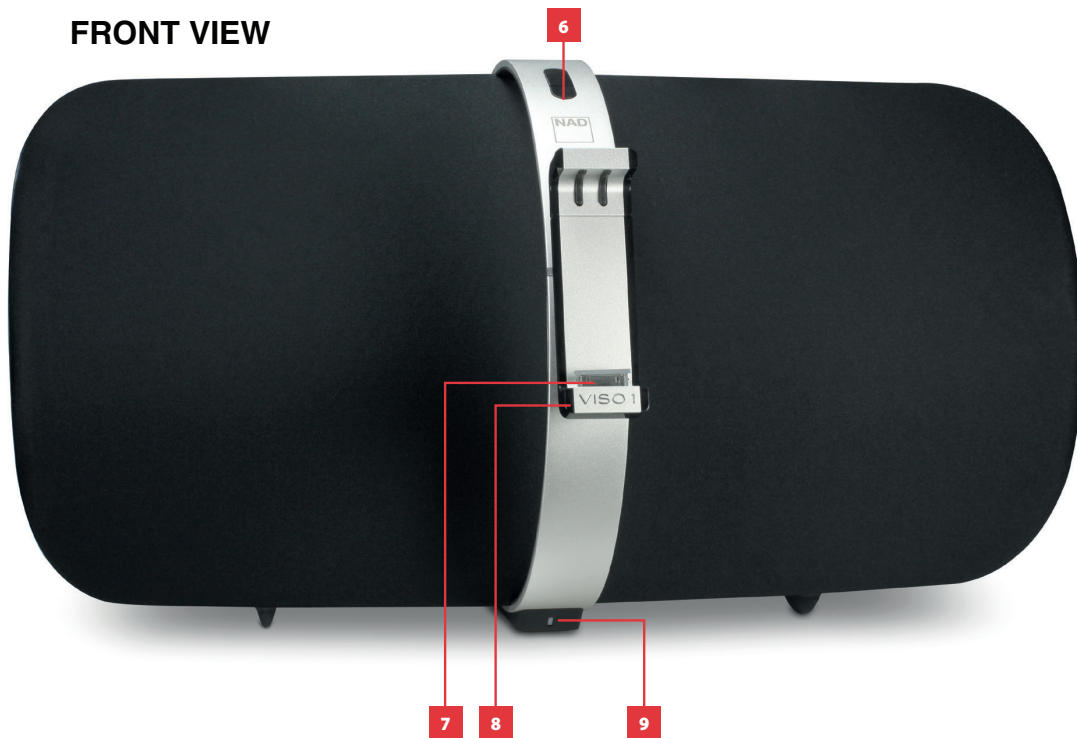
REAR / FRONT VIEW

REAR VIEW



1. POWER BUTTON
2. USB
3. S/PDIF (OPTICAL)
4. COMPONENT VIDEO OUT
5. AC MAINS INPUT

FRONT VIEW



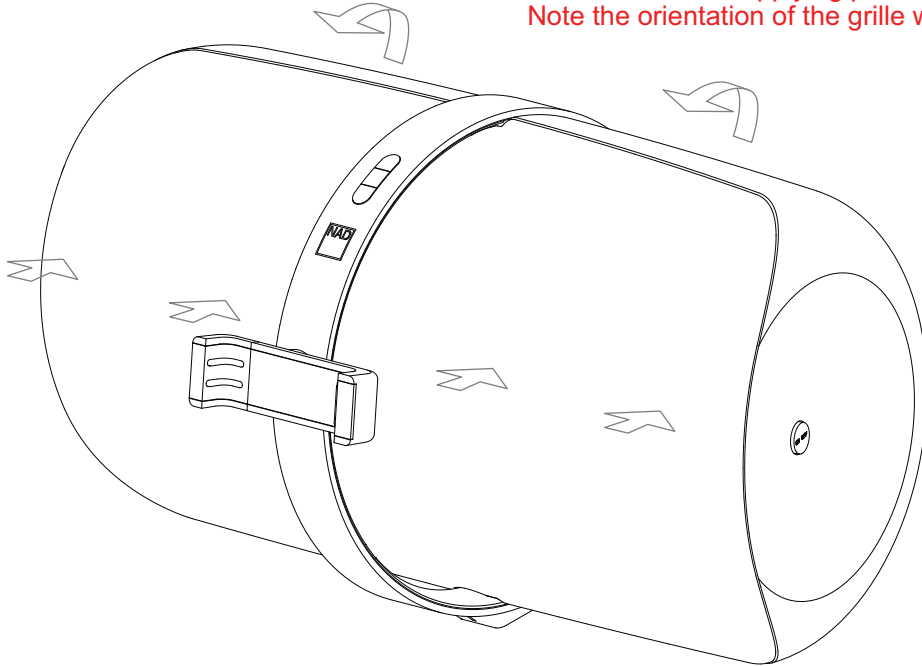
6. S, +/- BUTTONS
- 7/8. DOCKING CRADLE/CONNECTOR
9. POWER INDICATOR

DISASSEMBLY INSTRUCTIONS

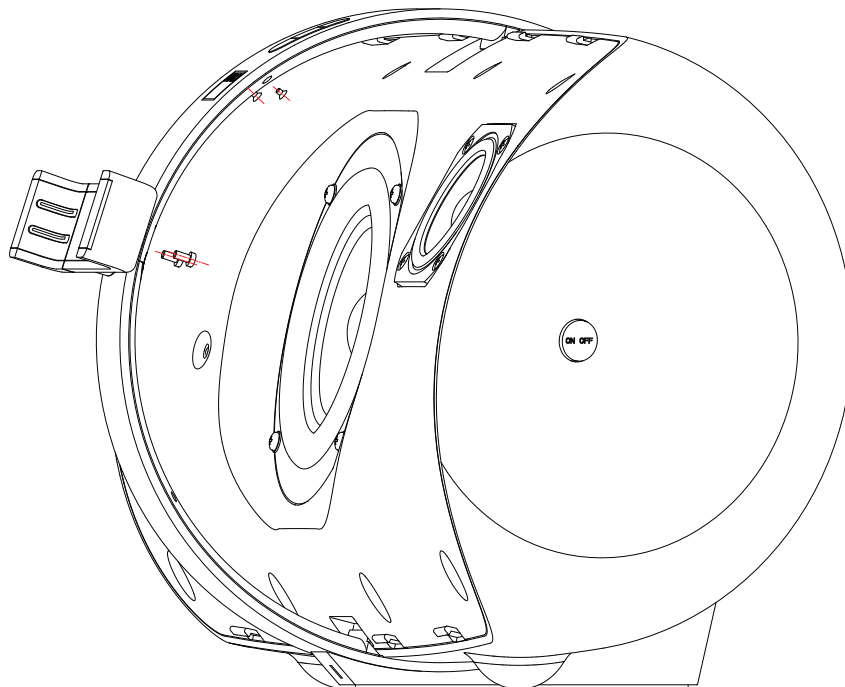
SERVICE ADVISORY

Do not power on or test amplifier section without a load connected. For example, one should check all speakers and speaker connections for open conditions before applying power. Note the orientation of the grille when installing.

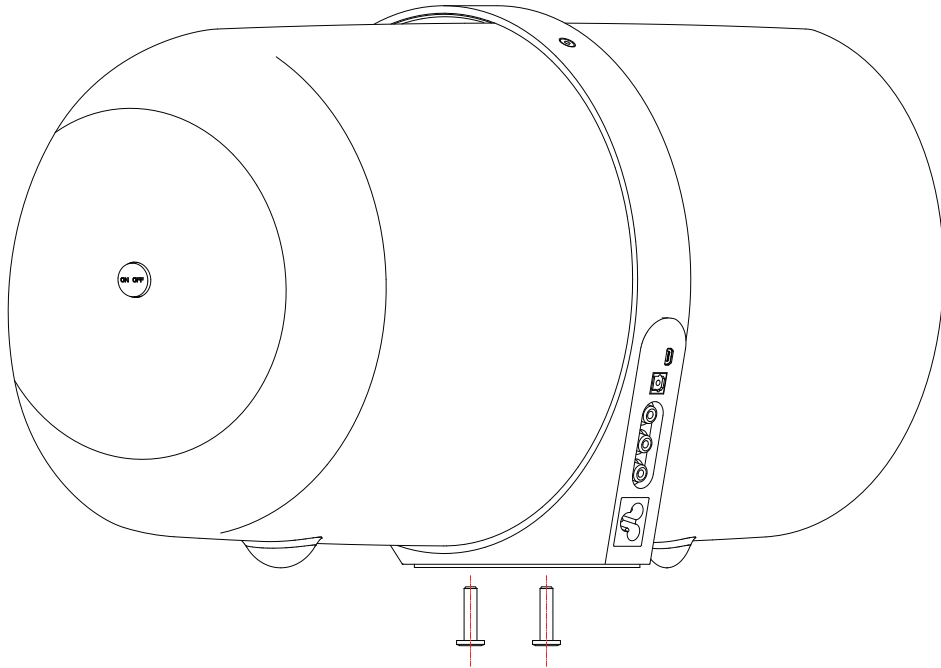
1. Push to center of grille assembly to remove.



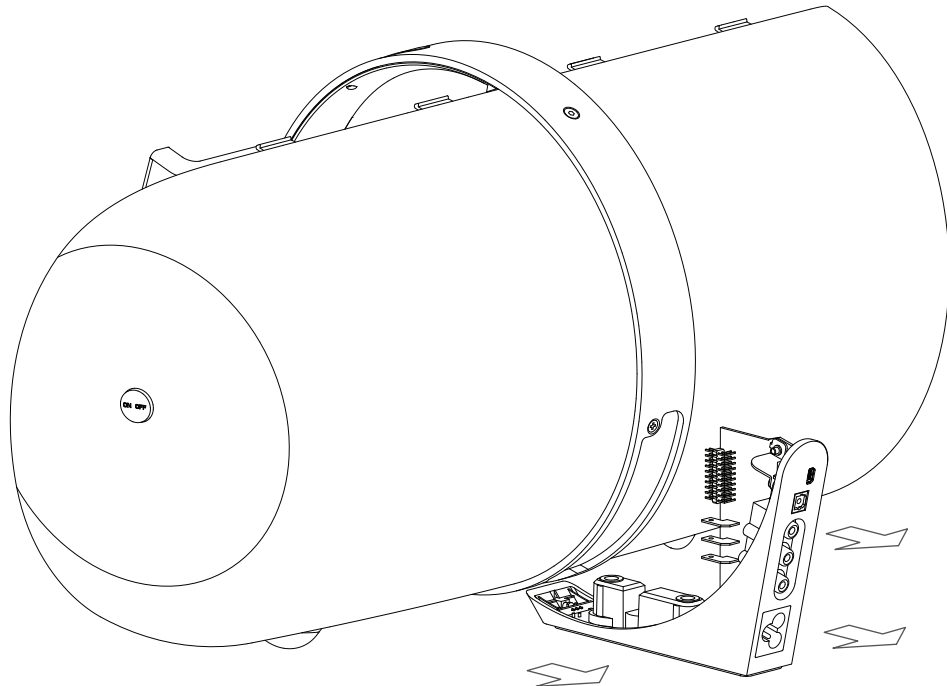
2. Remove the 4 pcs screws at the back of aluminium ring.



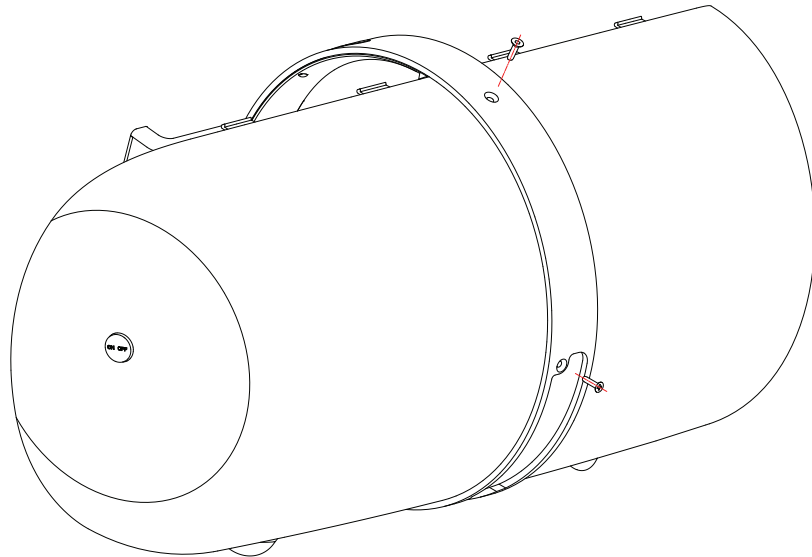
3. Remove the 2 pcs M6 screws at the bottom of the unit.



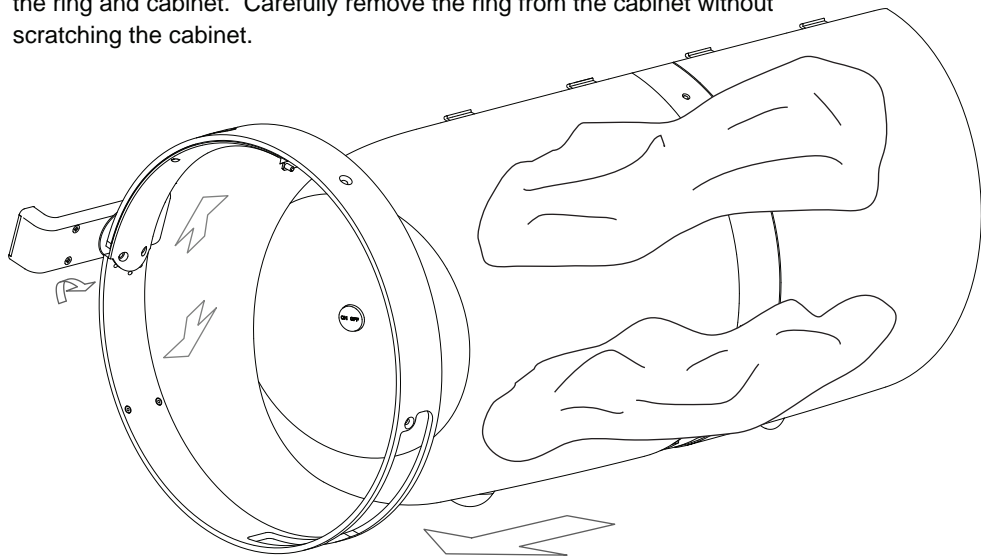
4. Pull out the I/O stand assembly.



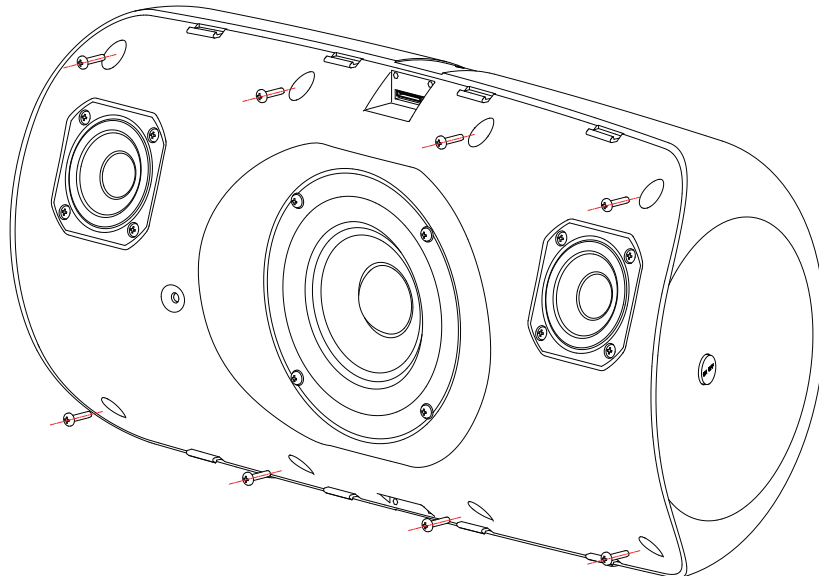
5. Remove the 2 pcs screws at the back of the ring.



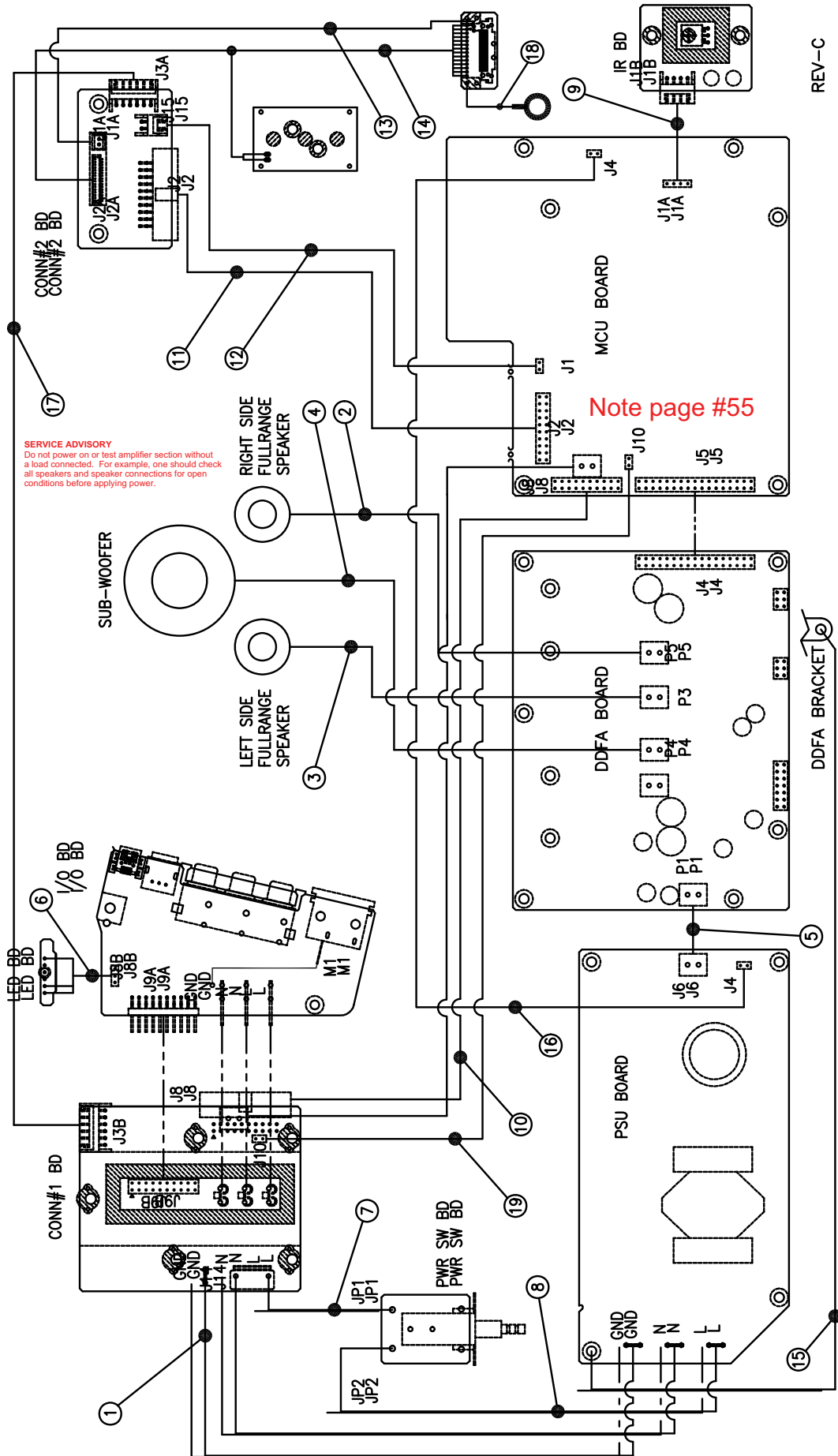
6. Split the ring apart allowing space to form between the ring and cabinet. Push the ring toward the baffle and place two pieces of lint free cloth between the ring and cabinet. Carefully remove the ring from the cabinet without scratching the cabinet.



7. Remove total of 8 screws to open the cabinet. **Always replace the old gasket with a new gasket before assembly to avoid air leakage between the baffle and cabinet. (Location # 31 Exploded View).**



WIRING DIAGRAM

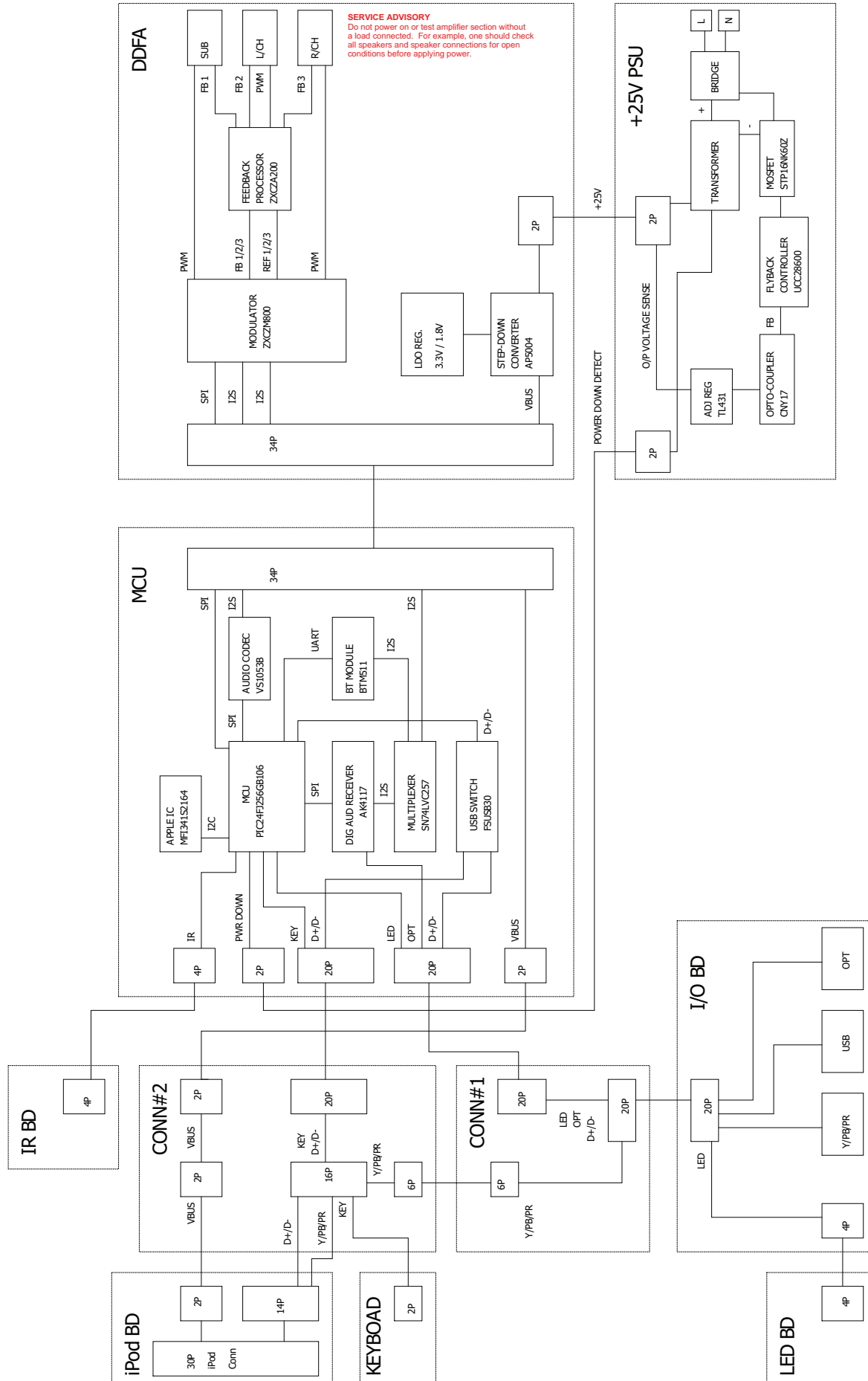


REV-C

WIRING DIAGRAM PARTS LIST

Item	Database Part Number	Description	Remark
1	0600100317-902000	CABLE ASSY UL1015 AWG18 1PIN L=340MM GRN/YEL FASTON "ROHS"	"CONN#1/PSU GND"
2	0600100318-902000	CABLE ASSY UL1007 AWG18 2PIN L=400MM RED/BLK FASTON 4.8/2.8 "ROHS"	"DDFA BD P3"
3	0600100319-902000	CABLE ASSY UL1007 AWG18 2PIN L=600MM RED/WHT FASTON 4.8/2.8 "ROHS"	"DDFA BD P5"
4	0600100320-902000	CABLE ASSY UL1007 AWG18 2PIN L=300MM BLK/WHT FASTON 4.8/2.8 "ROHS"	"DDFA BD P4"
5	0600100375-902000	CABLE ASSY UL1007 AWG18 2PIN 3.96P L=460mm "ROHS"	"DDFA BD P1"
6	0600100315-902000	CABLE ASSY UL1007 AWG28 3PIN 2.5P L=220mm "ROHS"	"LED BD D3W,D3G,D3B"
7	0600100310-902000	CABLE ASSY UL1672 AWG18 4PIN W/O 2/3 PIN 3.96P L=320MM BROWN/BLUE "ROHS"	"PWR SW BD JP1"
8	0600100311-902000	CABLE ASSY UL1672 AWG18 1PIN L=260MM BROWN FASTON "ROHS"	"PWR SW BD JP2"
9	0600100312-902000	CABLE ASSY UL2468 AWG26 4PIN 2.5P L=220MM "ROHS"	"IR BD J1B"
10	0600100126-902000	CABLE ASSY UL2651 AWG28 20PIN L=240mm PCB MOUNT "ROHS"	"MCU BD J8"
11	0600100353-902000	CABLE ASSY UL2651 AWG28 20PIN L=320mm PCB MOUNT "ROHS"	"MCU BD J2"
12	0600100379-902000	CABLE ASSY UL1007 AWG20 2PIN 2.5P L=360mm "ROHS"	"MCU BD J1"
13	0600100380-902000	CABLE ASSY UL1007 AWG20 2PIN 2.5P L=300mm "ROHS"	"IPOD BD J1B1 J1B4"
14	0600100359-902000	CABLE ASSY UL1571 AWG30 16/14PIN 1.0P L=300mm "ROHS"	"IPOD BD J2B"
15	0600100383-902000	CABLE ASSY UL1007 AWG18 1PIN GRN/YEL L=400mm W/ RING TERMINAL "RoHS"	PSU/DDFA BKT
16	0600100403-902000	CABLE ASSY UL2468 AWG26 2PIN 2.5P L=640mm "RoHS"	MCU/PSU
17	0600100369-902000	CABLE ASSY UL1533 AWG26x1C 6PIN 2.5P L=580mm "RoHS"	"CONN#2 J3A"
18	0600100374-902000	CABLE ASSY UL1007 AWG22 1PIN W/ RING TERMINAL "ROHS"	"IPOD BD SPRING"
19	0600100309-902000	CABLE ASSY UL1533 AWG26X1C 2PIN 2.5P L=320MM "ROHS"	"MCU BD J10"

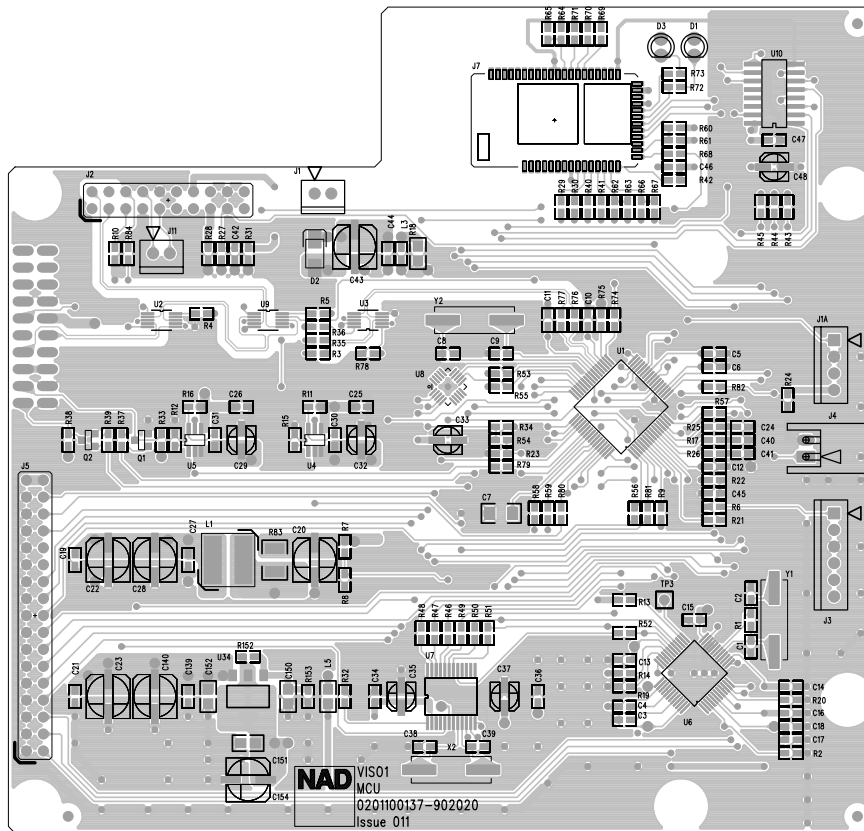
BLOCK DIAGRAM



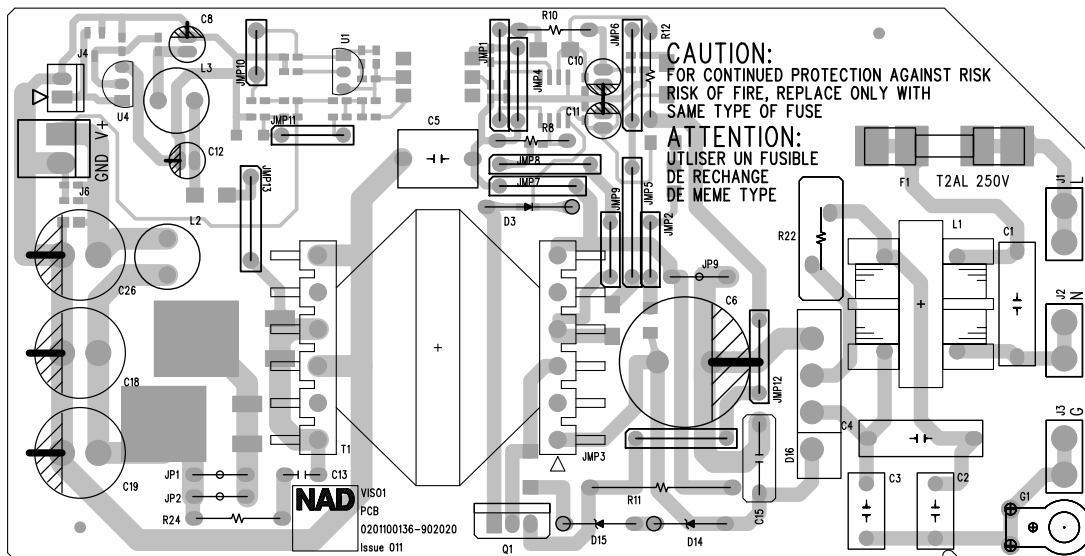
SPECIAL KEY PRESSES

Action	Method	Display
Factory Reset	Press and Hold Volume Up Key on Power On.	LED will turn red and then flash three times. Viso One will then continue to initialize.
Toggle the IR Channel	Press and Hold Volume Down Key on Power On.	LED will flash three times for IR Channel 1 and two times for IR Channel 0.
Change Near/Far Filter	<ol style="list-style-type: none">1. Hold down the Sync key for 5 sec. After 5 sec the Power indicator flashes continuously.2. While Power indicator is flashing, press Volume Up to set to far field or Volume Down to set to near field. Unit remains in Field Mode and Power LED remains flashing.3. No activity for 5 sec will default back to normal mode and power indicator stops flashing.	LED indication described on the left.
Firmware Upgrade	<ol style="list-style-type: none">1. Put VisoOne_v1XX.hex onto a USB stick and rename it to viso1.hex. The bootloader searches for a file called viso1.hex.2. Connect USB stick to the USB socket (using an adapter cable P/N10-00003-ND).3. Hold SYNC key while turning on the Viso One. If it finds a file called viso1.hex it will blink the LED as it is upgrading. When it is done it will automatically start running the new code.	LED indication described on the left.

PCB LAYOUT MCU BOARD



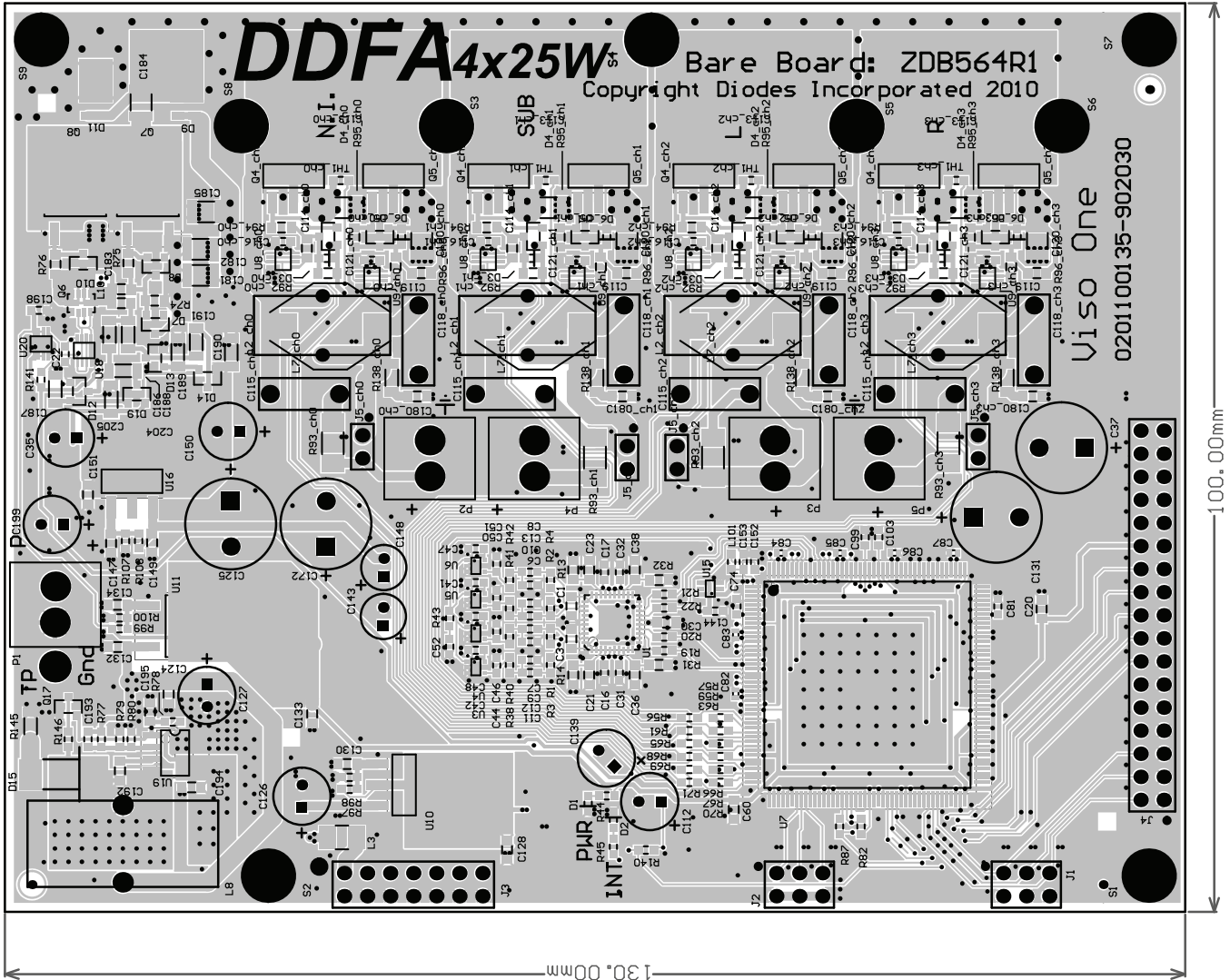
PSU BOARD



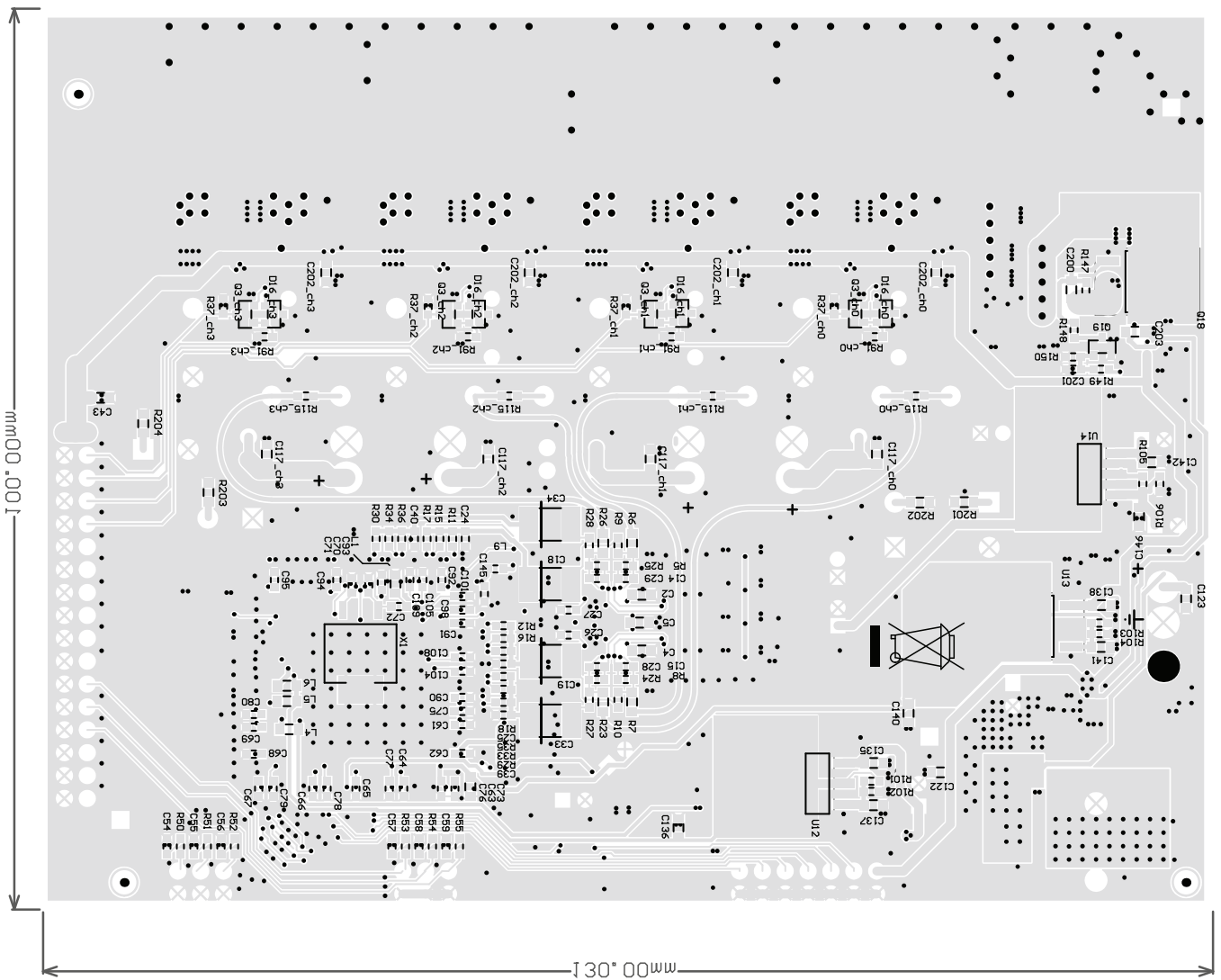
DDFA BOARD - COMPONENT SIDE

SERVICE ADVISORY

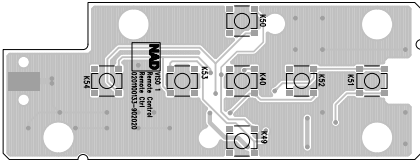
Do not power on or test amplifier section without a load connected. For example, one should check all speakers and speaker connections for open conditions before applying power.



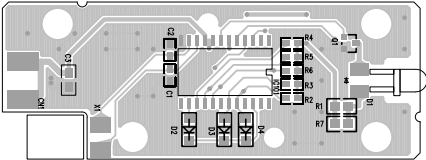
DDFA BOARD - SOLDER SIDE



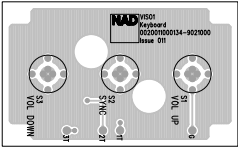
REMOTE BOARD - COMPONENT SIDE



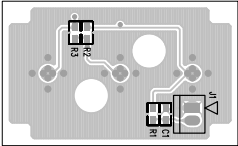
REMOTE BOARD - SOLDER SIDE



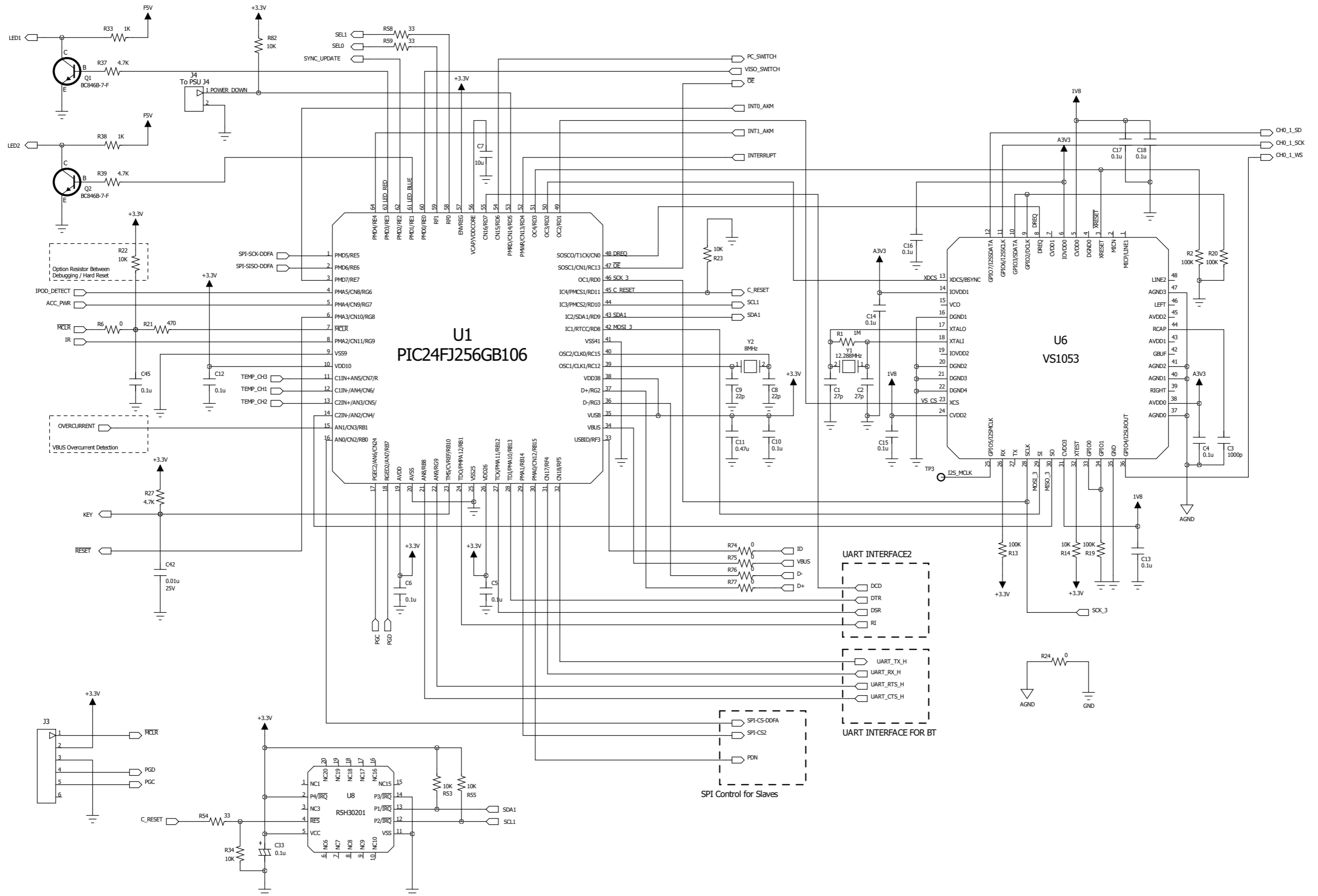
KEY BOARD - COMPONENT SIDE



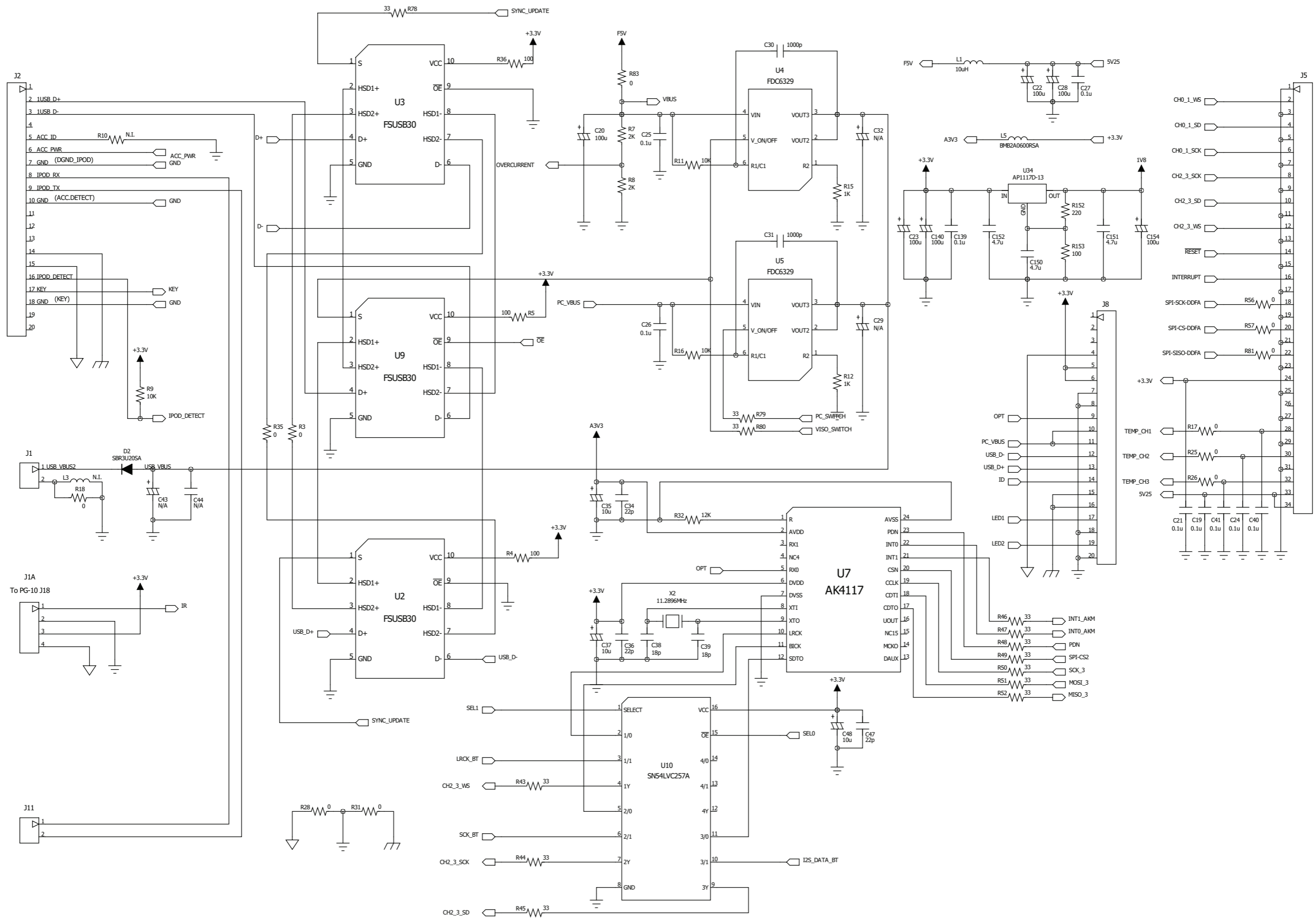
KEY BOARD - SOLDER SIDE



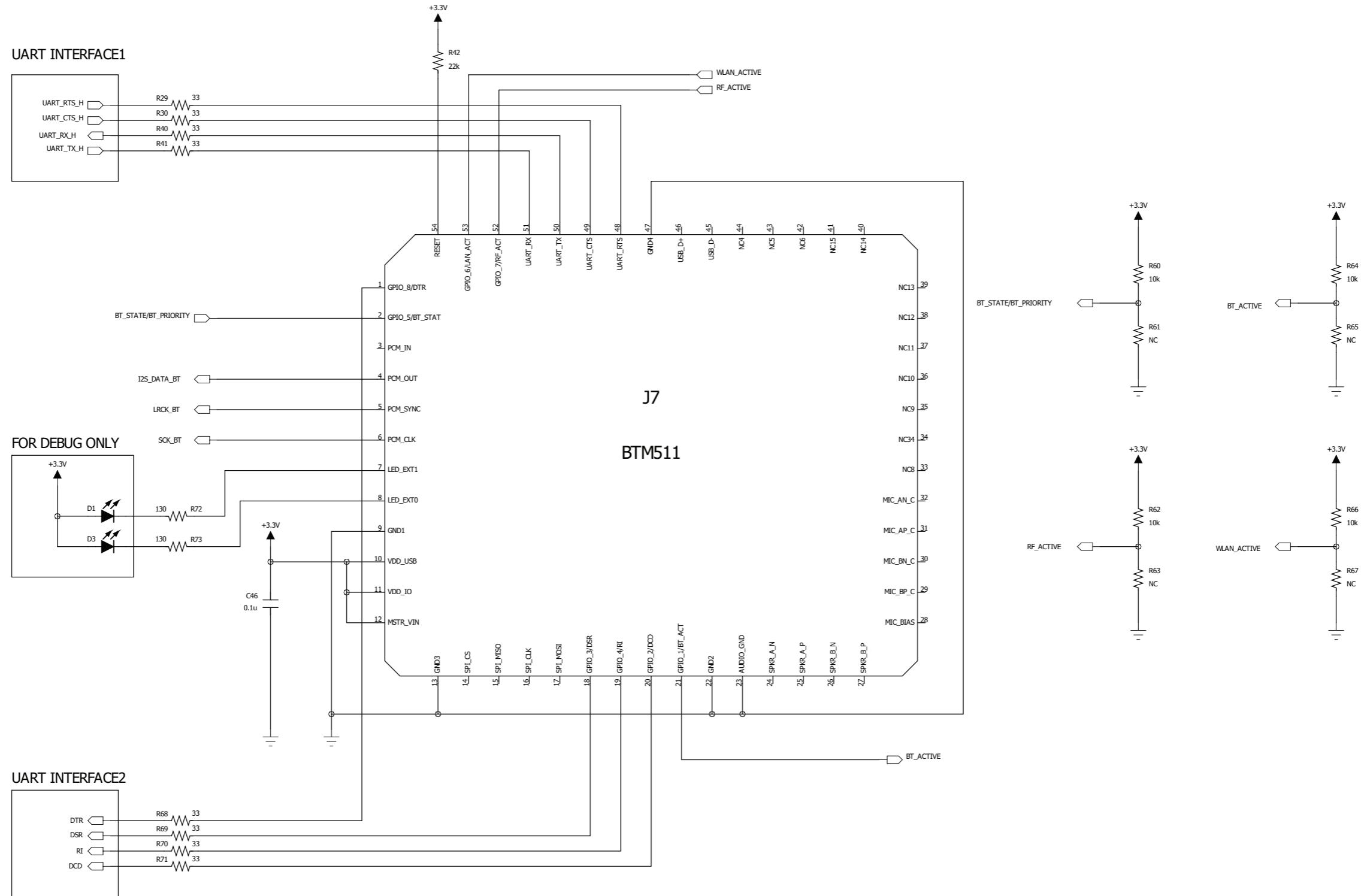
SCHEMATIC DIAGRAM MCU BOARD (1)



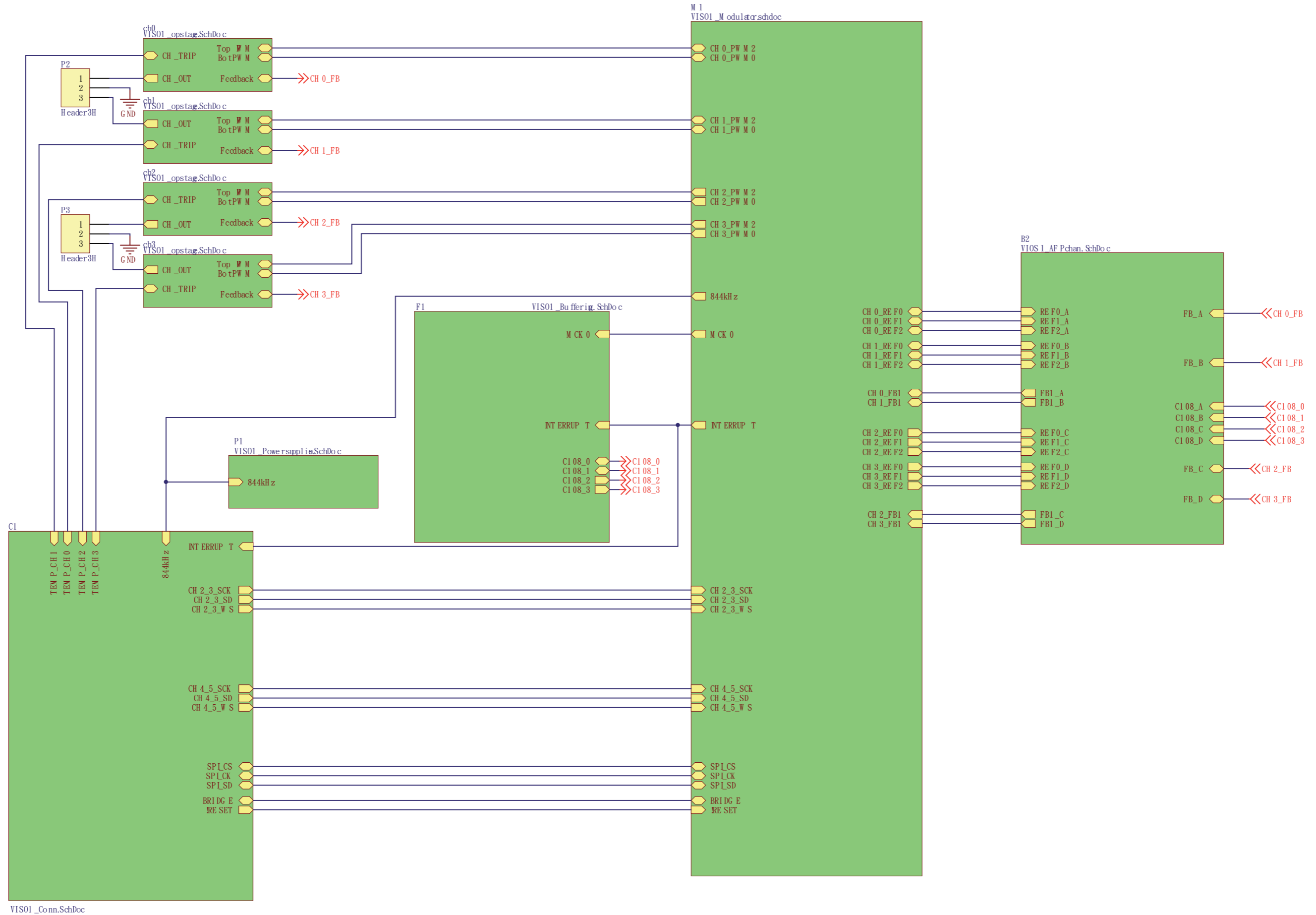
MCU BOARD (2)



MCU BOARD (3)

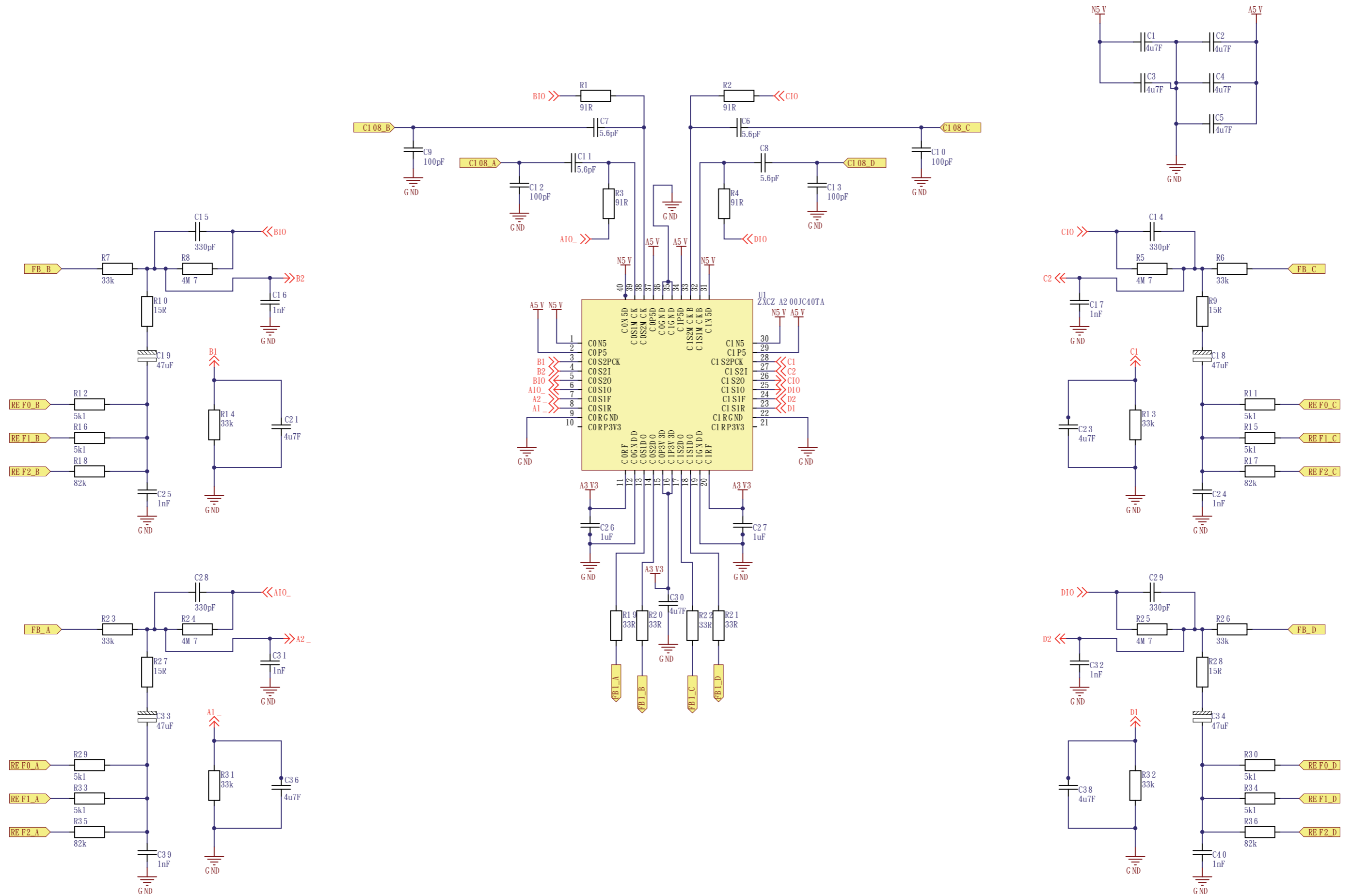


DDFA BOARD (1)

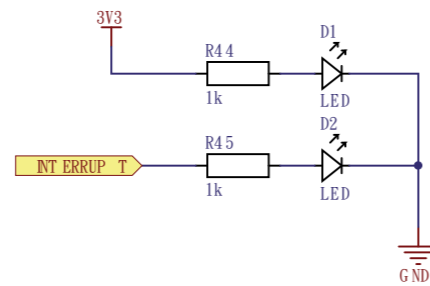
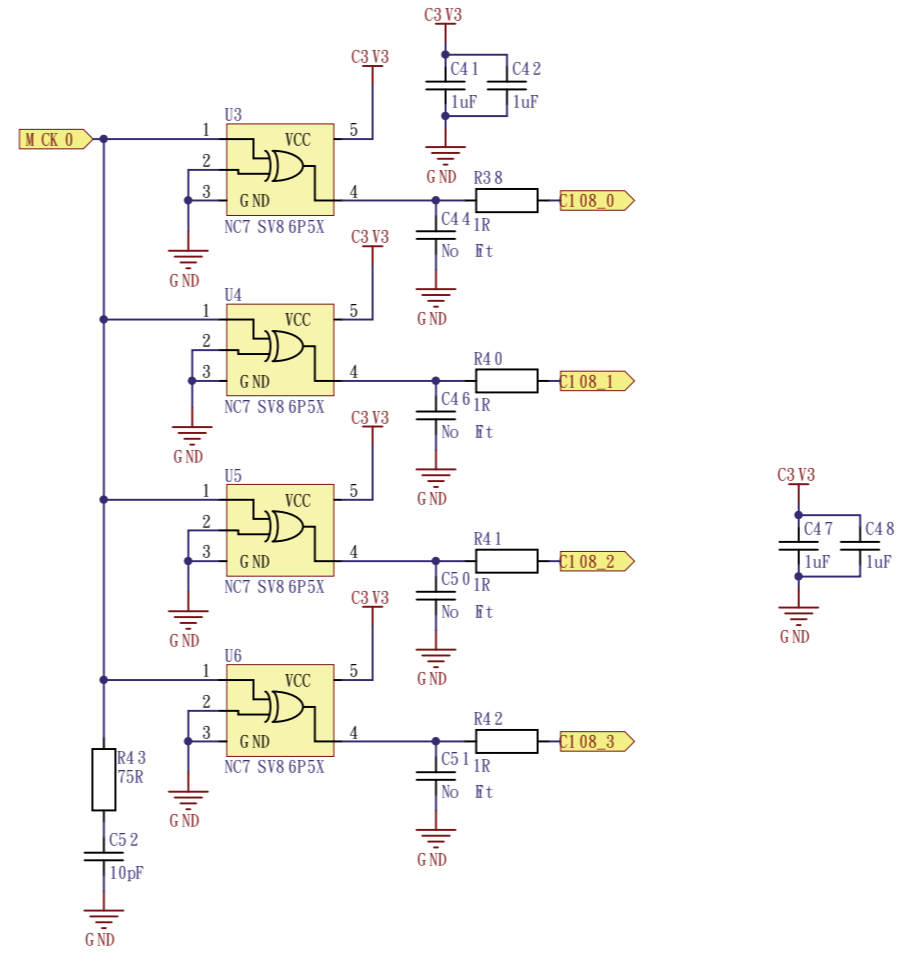


VIS01_Conn.SchDoc

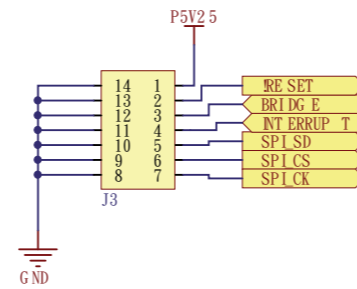
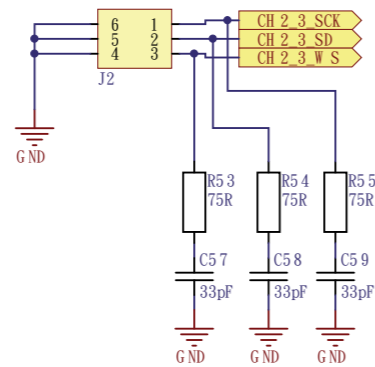
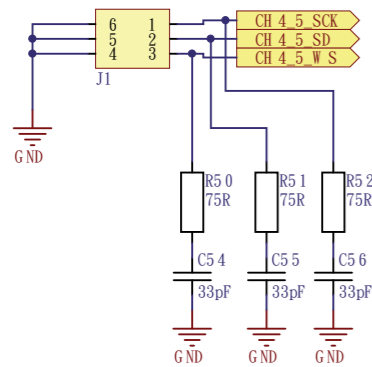
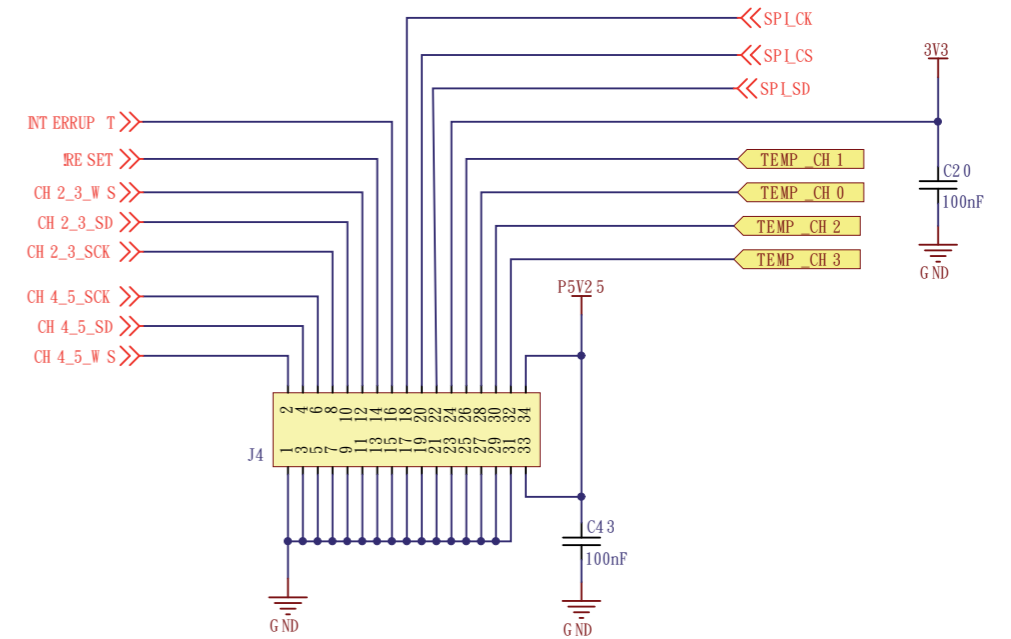
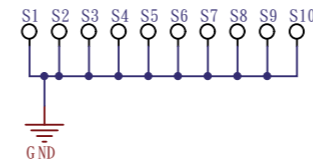
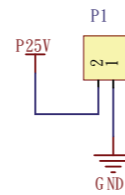
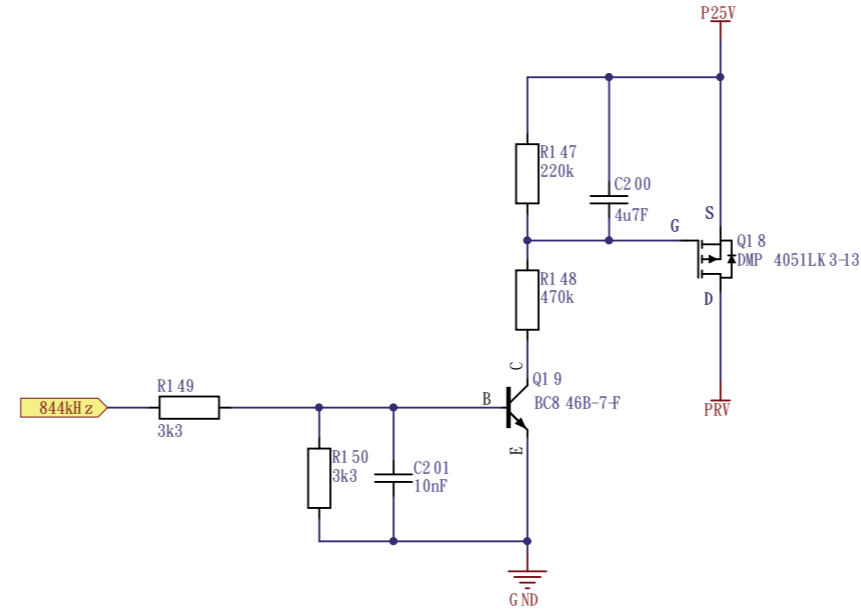
DDFA BOARD (2)



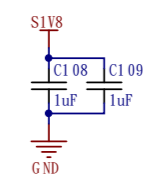
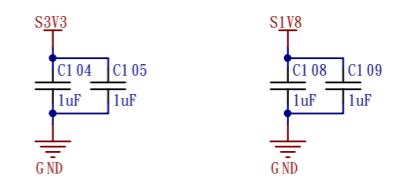
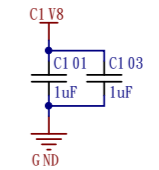
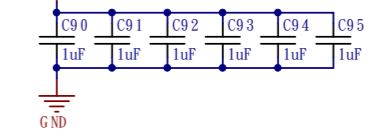
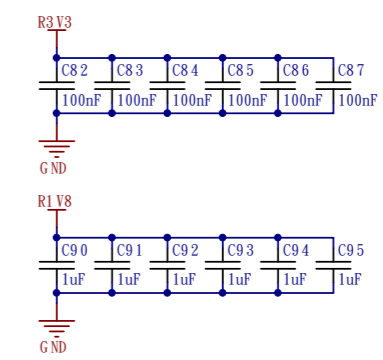
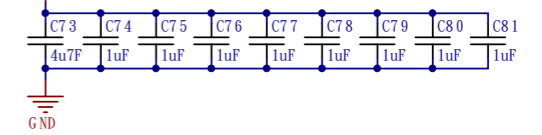
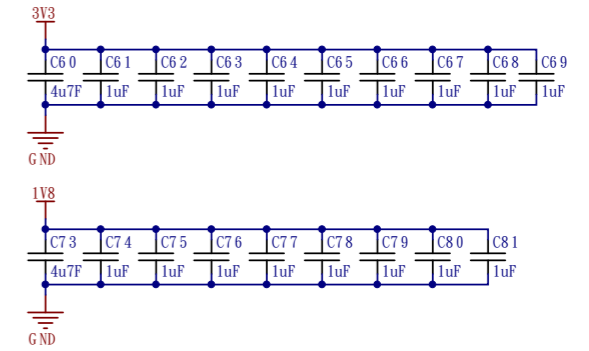
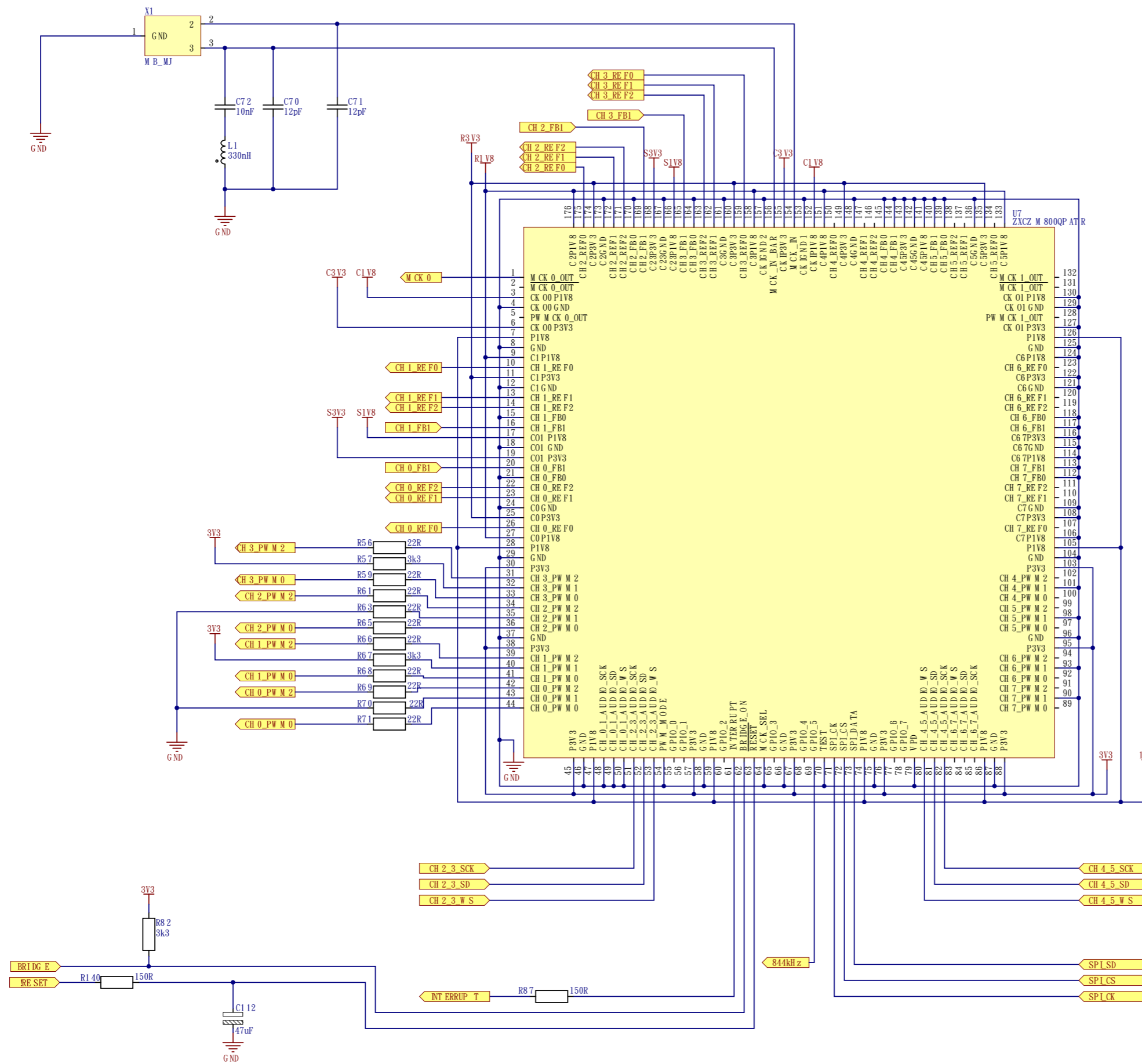
Triangle buffers



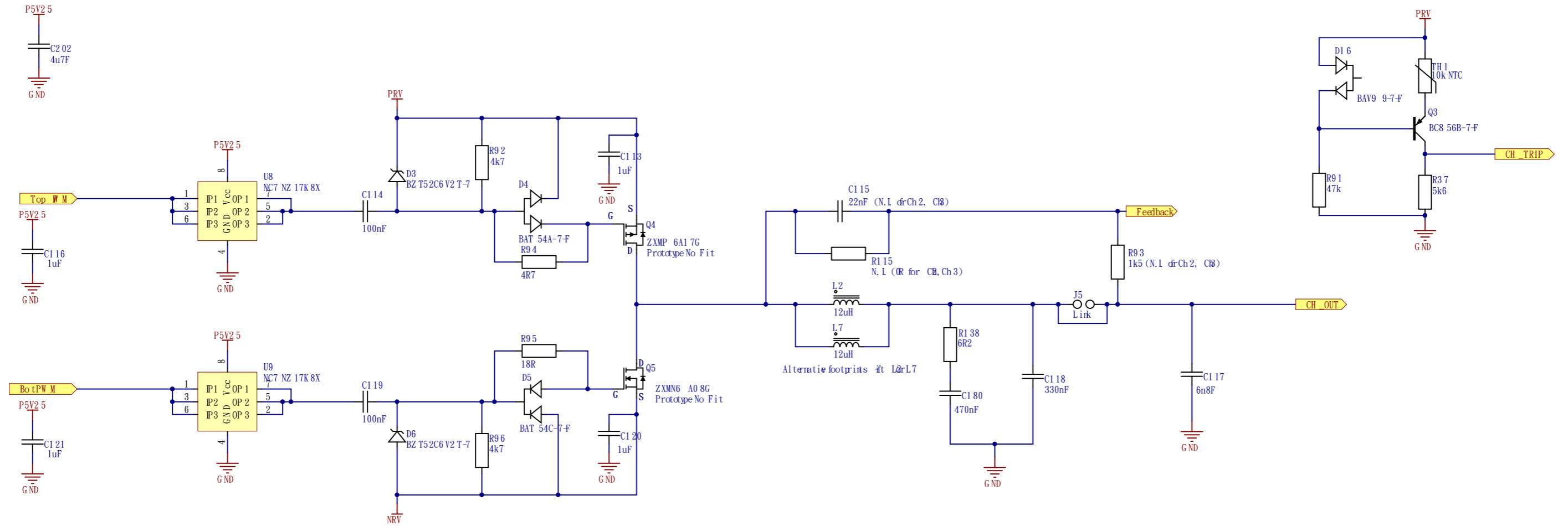
DDFA BOARD (4)



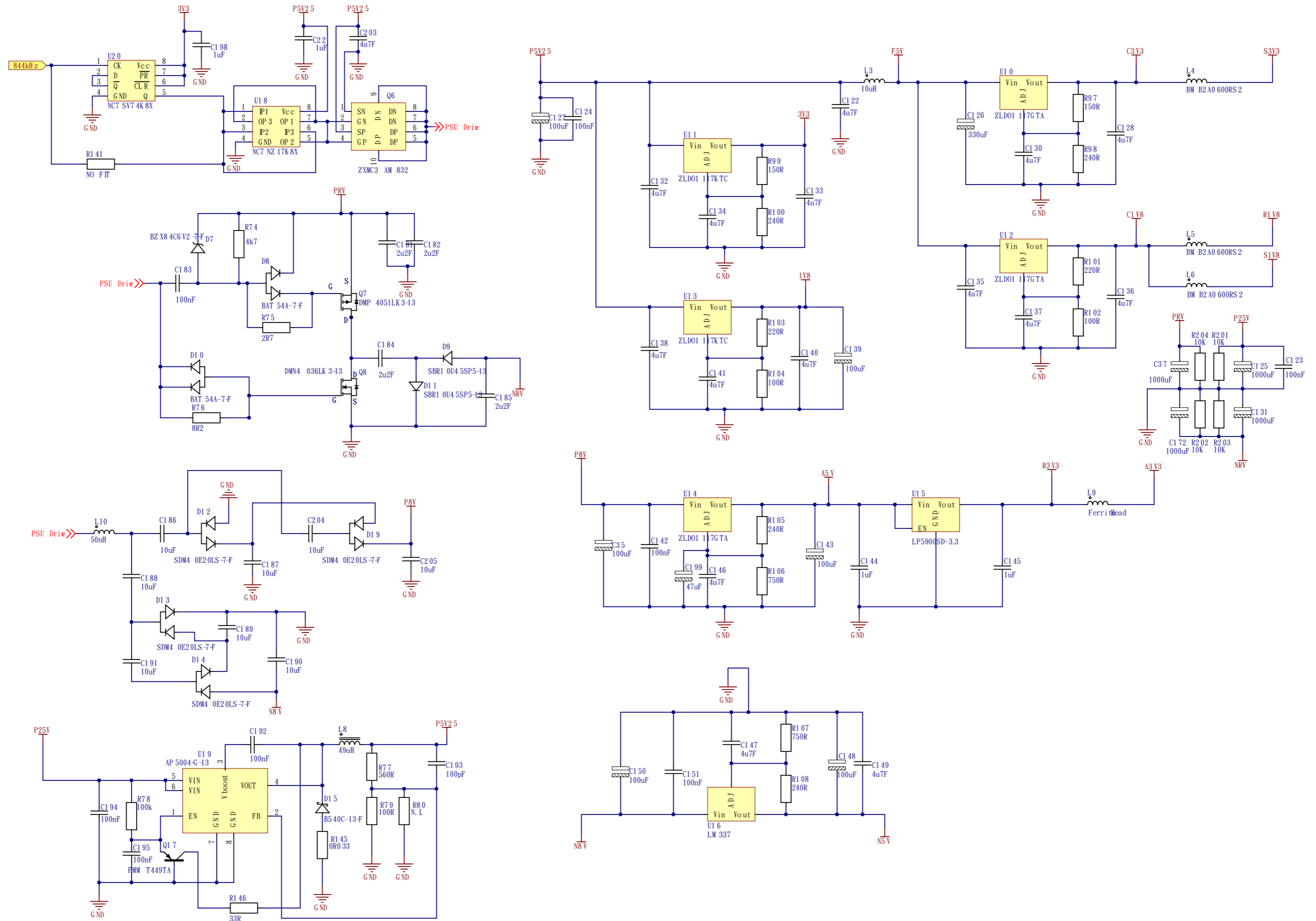
DDFA BOARD (5)



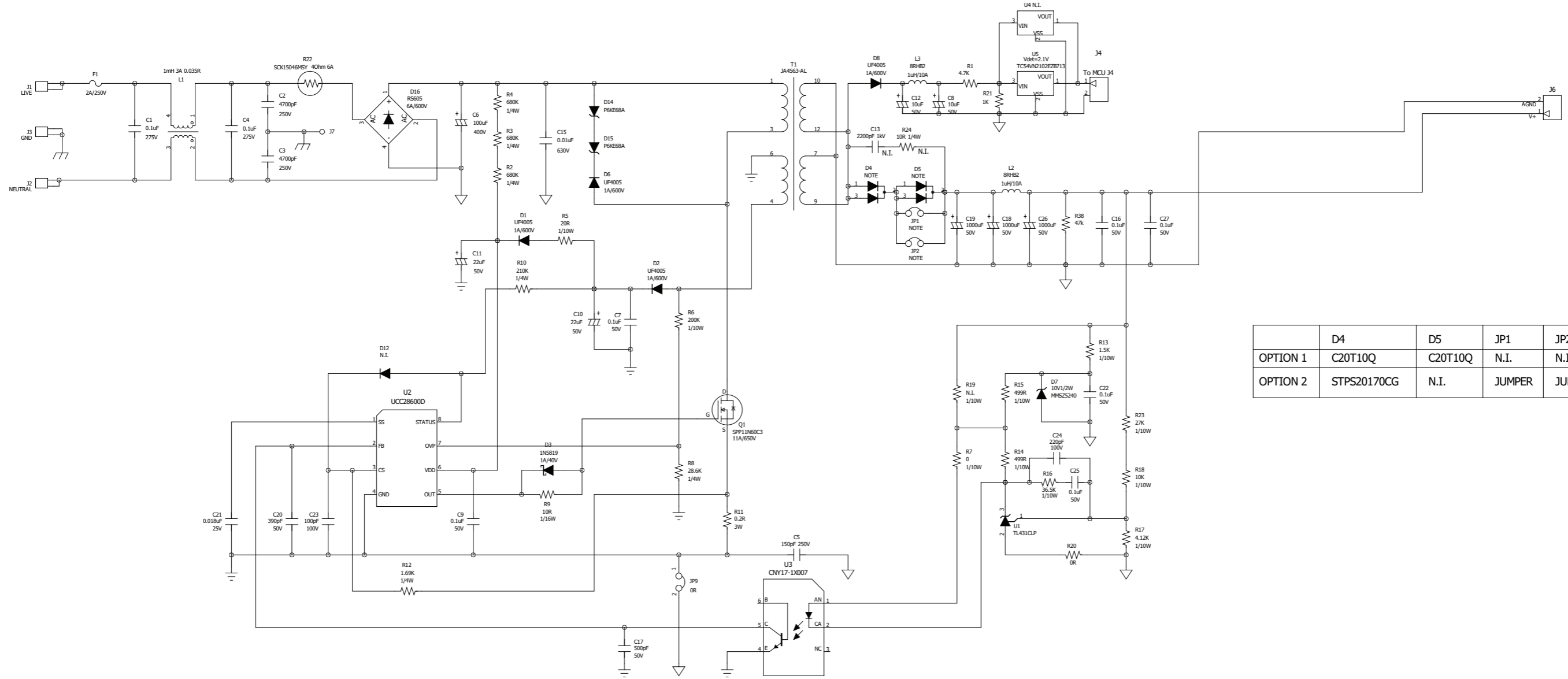
DDFA BOARD (6)



DDFA BOARD (7)

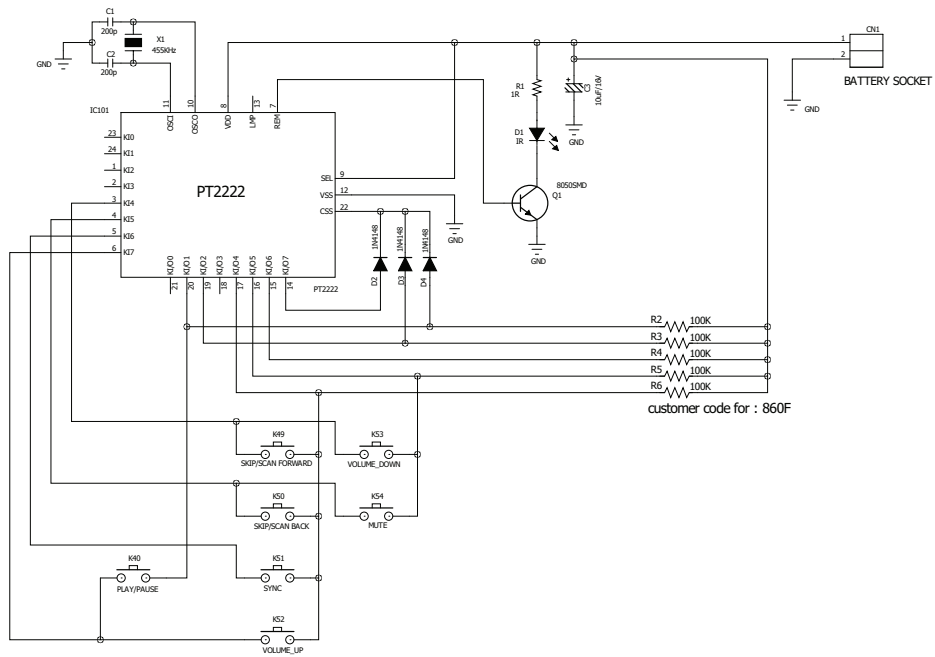


PSU BOARD (FCC)

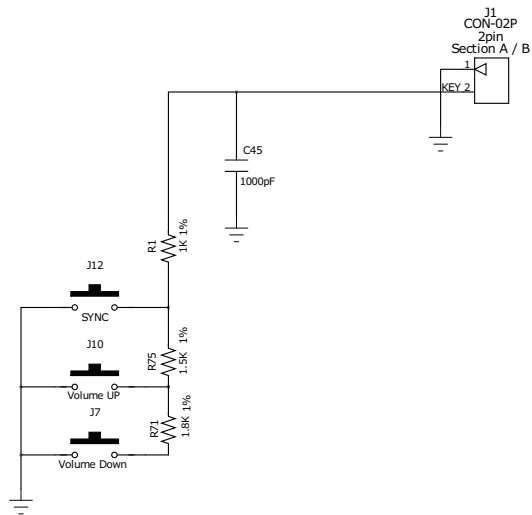


	D4	D5	JP1	JP2
OPTION 1	C20T10Q	C20T10Q	N.I.	N.I.
OPTION 2	STPS20170CG	N.I.	JUMPER	JUMPER

REMOTE BOARD



KEY BOARD



ELECTRICAL PARTS LIST

PCB ASSEMBLY	90SVISO1PSU00-902	VISO 1 SP PSU BOARD ASSY
RESISTOR		
R11	1126210029-902000	RES MO 3W 5% 0.2R TAPE
R12	1122001691-902000	RES MF 1/4W 1% 1.69K TAPE
R10	1122002103-902000	RES MF 1/4W 1% 210K TAPE
R8	1122002872-902000	RES MF 1/4W 1% 28.7K TAPE
CAPACITORS		
C1 C4	1227001104-902000	CAP RAD X2 0.1UF 10% 275VAC P=15MM 18X13.5X6MM(WXHXT)
C2-3	1227001472-902000	CAP RAD CER Y2 4700PF 20% 250VAC P=7.5MM JY UL/CSA/VDE
C5	1227001151-902000	CAP RAD CER Y1/X1 150PF 10% 250VAC/440VAC P=10MM UL/CSA/VDE
C6	1220011107-902000	CAP RAD ELEC 100UF 20% 400V P=7.5MM 18*30MM 105°C
C8 C12	1220006106-902000	CAP RAD ELEC 10UF 20% 50V P=2MM 5*11MM 105°C LOW ESR
C10-11	1220003226-902000	CAP RAD ELEC 22UF 20% 50V P=2MM 5*11MM 105°C LOW ESR
C15	1222001103-902000	CAP RAD POLY 0.01UF 10% 630V P=10MM 11.5X9X5MM(WXHXT)
C18-19 C26	1220008108-902000	CAP RAD ELEC 1000UF 20% 50V P=5MM 13*25MM 105°C LOW ESR
IC		
U1	1300100431-902000	IC TL431C TO-92 ADJ SHUNT REGULA TOR "HTC" TL431C
THERMISTOR		
R22	1400115056-902000	THERMISTOR NTC 4 OHM 6A UL /CUL/ TUV/CSA "THINKING" SCK15046MSY
DIODE		
D14-15	1400100668-902000	DIODE P6KE68A DO-15 68V 5W TRAN SIENT VOLTAGE SUPPRESSOR "SEMTECH" P6KE68A
D3	1400205819-902000	DIODE SCHOTTKY 1N5819 DO-41 1A/40V "MIC" 1N5819
D16	1410100605-902000	DIODE BRIDGE RS605 6A/600V "DC" RS605
INDUCTORS		
L2 L3	1500100075-902000	INDUCTOR RAD 1UH 20% 10A DRC2W8X10-1R0M-B
L1	1500100076-902000	INDUCTOR CHOKE 1MH 3.6A NT2075NL(UU16)
TRANSFORMER		
T1	1501100079-902000	X'FORMER RM12 SOVI MAGIC POWER "ALLIANCE" AML09714
FUSE		
F1	1601100014-902000	FUSE 5*20MM TIME-LAG 2A 250V "WAL TER" TSD2A250V

TRANSISTOR

Q1	1430101660-902000	MOSFET STP16NK60Z TO-220 14A/600V N-CH "ST" STP16NK60Z
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SMD RESISTORS

R2 R4 R3	1152016803-902000	RES SMD 1206 1/4W 1% 680K
R5	1160010200-902000	RES SMD 0603 1/16W 1% 20R
R23	1160012702-902000	RES SMD 0603 1/16W 1% 27K
R18	1160011002-902000	RES SMD 0603 1/16W 1% 10K
R6	1160012003-902000	RES SMD 0603 1/16W 1% 200K
R17	1160014121-902000	RES SMD 0603 1/16W 1% 4.12K
R14-15	1160014990-902000	RES SMD 0603 1/16W 1% 499R
R7,R20	1160210000-902000	RES SMD 0603 1/16W 5% 0R
R13	1160211501-902000	RES SMD 0603 1/16W 5% 1.5K
R9	1167010100-902000	RES SMD 0603 1/10W 1% 10R
R16	1167013652-902000	RES SMD 0603 1/10W 1% 36.5K

SMD CAPACITORS

C21	1231001183-902000	CAP SMD CER 0.018UF 10% 50V 0603 X7R
C20	1231001391-902000	CAP SMD CER 390PF 5% 50V 0603 NPO
C17	1231001471-902000	CAP SMD CER 470PF 5% 50V 0603 NPO
C23	1231002101-902000	CAP SMD CER 100PF 10% 50V 0603 NPO
C24	1231002221-902000	CAP SMD CER 220PF 5% 100V 0603 NPO
C7 C9 C16 C22 C25 C27	1231003104-902000	CAP SMD CER 0.1UF 10% 50V 0603 X7R

SMD ICs

U3	1300117100-902000	IC CNY17-1X007 SMD 6-PIN OPTOCOU PLER
U2	1300128600-902000	IC UCC28600D SMD 8-PIN SOIC QUASI- RESONANT FLYBACK GREEN-MODE CONTROLLER
U5	1300154210-902000	IC TC54VN2102ECB713 SMD SOT-23A VOLTAGE DETECTOR 2.1V

SMD DIODES

D1-2 D6 D8	1400101603-902000	DIODE ULTRAFAST MURS160T3G SMD SMB 1A/600V
D7	1400115240-902000	DIODE ZENER MM1Z5240B SMD SOD123 5% 10V 500MW
D4	1400120170-902000	DIODE SCHOTTKY STPS20170CG SMD D2PAK 20A/170V

SMD RESISTORS

R1	1160014701-902000	RES SMD 0603 1/16W 1% 4.7K
R21	1160011001-902000	RES SMD 0603 1/16W 1% 1K
R38	1147214702-902000	RES SMD 0805 1/10W 5% 47K

PCB ASSEMBLY**90SVISO1DDFA0-902****VISO 1 SP DDFA AMP BOARD ASSY****CAPACITORS**

C112	1220008476-902000	CAP RAD ELEC 47UF 20% 63V P=2.5MM 6.3*12MM 105°C
C115_ch1	1223002223-902000	CAP RAD BOX METALLIZED POLYPRO PYLENE 0.022UF 5% 250VDC/160VAC P=7.5MM 9.8X8.4X4.8MM
C118_ch1 C118_ch2 C118_ch3	1223002334-902000	CAP RAD BOX 0.33UF 5% 100V P=7.5MM 9X5.1X2.7MM(WXHXT)
C126	1220004337-902000	CAP RAD ELEC 330UF 20% 6.3V P=2.5MM 6.3*11MM 105°C LOW ESR
C199	1220003475-902000	CAP RAD ELEC 4.7UF 20% 50V P=2MM 5*11MM 105°C
C35 C127 C139 C150 C143 C148	1220010107-902000	CAP RAD ELEC 100UF 20% 10V P=2MM 5*11MM 105°C LOW ESR
C37 C125 C131 C172	1220010108-902000	CAP RAD ELEC 1000UF 20% 35V P=5MM 10*30MM 105°C LOW ESR

INDUCTORS

L2_ch1 L2_ch2 L2_ch3	1500100068-902000	INDUCTOR 13UH 10%
L8	1500100072-902000	INDUCTOR 49UH 20%

SMD RESISTORS

R1 R2 R3 R4	1160010910-902000	RES SMD 0603 1/16W 1% 91R
R101 R103	1160012200-902000	RES SMD 0603 1/16W 1% 220R
R106 R107	1160017500-902000	RES SMD 0603 1/16W 1% 750R
R11 R12 R15 R16 R29 R30 R33,	1160015101-902000	RES SMD 0603 1/16W 1% 5.1K
R138_ch1 R138_ch2 R138_ch3	1152210629-902000	RES SMD 1206 1/4W 5% 6.2R
R145	1153110338-902000	RES SMD 1206 1/2W 1% 0.033R
R147	1160012203-902000	RES SMD 0603 1/16W 1% 220K
R148	1160014703-902000	RES SMD 0603 1/16W 1% 470K
R17 R18 R35 R36	1160018202-902000	RES SMD 0603 1/16W 1% 82K
R19 R20 R21 R22 R146	1160010330-902000	RES SMD 0603 1/16W 1% 33R
R201-204	1141011002-902000	RES SMD 0805 1/8W 1% 10K
R37_ch1 R37_ch2 R37_ch3	1160015601-902000	RES SMD 0603 1/16W 1% 5.6K
R38 R40 R41 R42	1160010010-902000	RES SMD 0603 1/16W 1% 1R
R43 R50 R51 R52 R53 R54 R55	1160010750-902000	RES SMD 0603 1/16W 1% 75R
R44 R45	1160011001-902000	RES SMD 0603 1/16W 1% 1K
R5 R8 R24 R25	1160014704-902000	RES SMD 0603 1/16W 1% 4.7M
R56 R59 R61 R63 R65 R66 R68 R69,R70 R71	1160010220-902000	RES SMD 0603 1/16W 1% 22R
R57 R67 R82 R149 R150	1160013301-902000	RES SMD 0603 1/16W 1% 3.3K
R6 R7 R13 R14 R23 R26 R31 R32	1160013302-902000	RES SMD 0603 1/16W 1% 33K
R74 R92_ch1 R92_ch2 R92_ch3 R96_ch1 R96_ch2 R96_ch3	1147014701-902000	RES SMD 0805 1/10W 1% 4.7K
R75	1147210279-902000	RES SMD 0805 1/10W 5% 2.7R
R76	1147210829-902000	RES SMD 0805 1/10W 5% 8.2R
R77	1160015600-902000	RES SMD 0603 1/16W 1% 560R
R78	1160011003-902000	RES SMD 0603 1/16W 1% 100K
R79 R102 R104	1160011000-902000	RES SMD 0603 1/16W 1% 100R
R87 R97 R99 R140	1160011500-902000	RES SMD 0603 1/16W 1% 150R
R9 R10 R27 R28	1160010150-902000	RES SMD 0603 1/16W 1% 15R
R91_ch1 R91_ch2 R91_ch3	1160014702-902000	RES SMD 0603 1/16W 1% 47K
R93_ch1	1198021501-902000	RES SMD 0207 0.5W 1% 1.5K
R94_ch1 R94_ch2 R94_ch3	1147010479-902000	RES SMD 0805 1/10W 1% 4.7R

R95_ch1 R95_ch2 R95_ch3	1147010180-902000	RES SMD 0805 1/10W 1% 18R
R98 R100 R105 R108	1160012400-902000	RES SMD 0603 1/16W 1% 240R
L101	1160210000-902000	RES SMD 0603 1/16W 5% 0R

SMD CAPACITORS

C1 C2 C3 C4 C5 C21 C23 C30 C38 C60 C73 C122 C128 C130 C132 C133 C134 C135 C136 C137 C138 C140 C141 C146 C147 C149 C200 C202_ch1 C202_ch2 C202_ch3 C203	1201002475-902000	CAP SMD CER 4.7UF 10% 25V 0805 C36 X5R
C113_ch1 C113_ch2 C113_ch3 C120_ch1,C120_ch2 C120_ch3	1251001105-902000	CAP SMD CER 1UF 10% 100V 1210 X7R
C114_ch1 C114_ch2 C114_ch3 C119_ch1,C119_ch2 C119_ch3	1201004104-902000	CAP SMD CER 0.1UF 10% 100V 0805 X7R
C123 C124 C142 C151 C183 C192 C194 C195	1201001682-902000	CAP SMD CER 6800PF 5% 50V 0805 NPO
C117_ch1 C117_ch2 C117_ch3	1231001331-902000	CAP SMD CER 330PF 10% 50V 0603 X7R
C14 C15 C28 C29	1231002102-902000	CAP SMD CER 1000PF 5% 50V 0603 C0G
C16 C17 C24 C25 C31 C32 C39 C40	1294002476-902000	CAP SMD TANT 47UF 10% 10V C CASE
C18 C19 C33 C34	1201001474-902000	CAP SMD CER 0.47UF 10% 50V 0805 X7R
C180_ch1 C180_ch2 C180_ch3	1251001225-902000	CAP SMD CER 2.2UF 10% 50V 1210 X7R
C181 C182 C184 C185	1241001106-902000	CAP SMD CER 10UF 10% 16V 1206 X7R
C186 C187 C188 C189 C190 C191 C204 C205	1201001104-902000	CAP SMD CER 0.1UF 10% 50V 0805 X7R
C20 C43	1231003105-902000	CAP SMD CER 1UF 10% 16V 0603 X5R
C22 C26 C27 C41 C42 C47 C48 C61 C62 C63 C64 C65 C66 C67 C68 C69 C74 C75 C76 C77 C78 C79 C80 C81 C90 C91 C92 C93 C94 C95 C98 C99 C101 C103 C104 C105 C108 C109 C116_ch1 C116_ch2 C116_ch3 C121_ch1 C121_ch2 C121_ch3 C1 C52	1231001100-902000	CAP SMD CER 10PF 5% 50V 0603 NPO
C54 C55 C56 C57 C58 C59	1231002330-902000	CAP SMD CER 33PF 5% 100V 0603 NPO
C6 C7 C8 C11	1231001569-902000	CAP SMD CER 5.6PF 5% 50V 0603 NPO
C70 C71	1231001120-902000	CAP SMD CER 12PF 5% 50V 0603 NPO
C72 C201	1231001103-902000	CAP SMD CER 0.01UF 10% 50V 0603 X7R
C82 C83 C84 C85 C86 C87	1271002104-902000	CAP SMD CER 0.1UF 10% 50V 0402 X7R
C9 C10 C12 C13 C193	1231002101-902000	CAP SMD CER 100PF 10% 50V 0603 NPO

SMD ICs

Q6	1300103832-902000	IC ZXMC3AM832 SMD MPL832 COM PLEMENTARY 30V ENHANCEMENT MODE MOSFET
U1	1300120040-902000	IC ZXCZA200JC40TA SMD 40-PIN QFN DDFA ANALOG FEEDBACK PROCES SOR

U10 U12 U14	300201117-902000	IC ZLDO1117GTA SMD SOT223-3L 1A LDO POSITIVE REGULATOR WITH ADJ OUTPUT
U11 U13	1300101117-902000	IC ZLDO1117KTC SMD TO252-3L 1A LDO POSITIVE REGULATOR WITH ADJ OUTPUT
U15	1300159003-902000	IC LP5900SD-3.3 SMD LLP-6 LOW NOISE 150MA LINEAR REGULATOR
U16	1300200337-902000	IC LM337IMP SMD SOT-223 VREG ADJ -1.2V TO -37V 1A
U19	1300105004-902000	IC AP5004 SMD SOP-8L PWM 2.5A STEP-DOWN CONVERTER
U20	1300100748-902000	IC NC7SV74K8X SMD 8-PIN US8 D-TYPE FLIP-FLOP
U3 U4 U5 U6	1300107865-902000	IC NC7SV86P5X SMD 5-PIN SC70 TINY LOGIC ULP-A 2 INPUT XOR GATE
U7	1300100800-902000	IC ZXCZM800QPATR SMD 176-PIN LQFP DDFA DIGITAL MODULATOR
U8_ch1 U8_ch2 U8_ch3 U9_ch1 U9_ch2,U9_ch3 U18	1300107178-902000	IC NC7NZ17K8X SMD 8-PIN US8 TINYLOGIC UHS TRIPLE BUFFER
SMD DIODES		
D12 D13 D14 D19	1400104020-902000	DIODE SCHOTTKY SDM40E20LS SMD SOT-23 DUAL 0.4A/20V
D15	1400300054-902000	DIODE SCHOTTKY SS54 SMD DO-214AB 5A/40V
D16_ch1 D16_ch2 D16_ch3	1400100099-902000	DIODE BAV99 SOT-23 DUAL SWITCHING DIODE 75V 215MA
D3_ch1 D3_ch2 D3_ch3 D6_ch1 D6_ch2 D6_ch3	1400105262-902000	DIODE ZENER BZT52C6V2T SMD SOD-523 5% 6.2V 300MW
D4_ch1 D4_ch2 D4_ch3 D8 D10	1400200054-902000	DIODE SCHOTTKY BAT54A SMD SOT-23 0.2A/30V COMMON ANODE
D5_ch1 D5_ch2 D5_ch3	1400100054-902000	DIODE SCHOTTKY BAT54C SMD SOT-23 0.2A/30V COMMON CATHODE
D7	1400108462-902000	DIODE ZENER BZX84C6V2 SMD SOT-23 5% 6.2V 350MW
D9 D11	1400110455-902000	DIODE SBR10U45SP5-13 SMD POWERDI5 10A 45V
SMD TRANSISTORS		
Q17	1410100449-902000	TRANS FMMT449TA SMD SOT-23 1A/30V N-CHANNEL
Q19	1410100846-902000	TRANS BC846B SMD SOT-23 NPN 0.1A/65V HFE 200-450
Q3_ch1 Q3_ch2 Q3_ch3	1410100856-902000	TRANS BC856B SMD SOT-23 PNP 0.1A/65V HFE 220-475
Q4_ch1 Q4_ch2 Q4_ch3	1430100617-902000	MOSFET ZXMP6A17G SMD SOT223 4.1A/60V P-CHANNEL
Q5_ch1 Q5_ch2 Q5_ch3	1430100608-902000	MOSFET ZXMN6A08G SMD SOT223 5.3A/60V N-CHANNEL
Q7,Q18	1430140513-902000	MOSFET DMP4051LK3 SMD TO252-3L 10.5A/40V P-CHANNEL
Q8	1430140363-902000	MOSFET DMN4036LK3 SMD TO252-3L 12.2A/40V N-CHANNEL
SMD THERMISTOR		
TH1_ch1 TH1_ch2 TH1_ch3	1400118103-902000	THERMISTOR NTC 10K 5% 25°C SMD 0603

SMD INDUCTORS

L1	1500100067-902000	INDUCTOR SMD 0805 0.33UH 10% 250MA
L3	1500100069-902000	INDUCTOR SMD 1210 10UH 10% 450MA
L4, L5, L6	1500100070-902000	FERRITE BEAD SMD 0805 600 OHM 500MA
L9	1500100073-902000	FERRITE BEAD SMD 0603 1000 OHM 400MA
L10	1500100074-902000	INDUCTOR SMD 0805 48NH 5% 1.2A

SMD CRYSTAL

X1	1502111086-902000	CRYSTAL SMD 108MHZ 3RD O.T. 20PPM 10PF
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PCB ASSY**90SVISO1LED00-902 VISO 1 SP LED BOARD ASSY****LED**

D3	1401100031-902000	LED BLUE/RED WHITE DIFFUSED RND 3X5MM
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PCB ASSY**90SVISO1IO000-902 VISO 1 SP IO BOARD ASSY****IC**

D2	1300101226-902000	IC JSR1226 FIBER OPTIC RECEIVING UNIT
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JACK & AC SOCKET

J6	1703100067-902000	RCA JACK 3 G-BL-R PCB MOUNT GOLD (W COVER)
M1	1703100077-902000	AC SOCKET IEC320 C6 3PINS RF-190-A

SMD CAPACITORS

C2	1231003104-902000	CAP SMD CER 0.1UF 10% 50V 0603 X7R
C21-23	1290006227-902000	CAP ELEC SMD 220UF 20% 16V 6.3X7.7MM
C41	1290003106-902000	CAP SMD ELEC 10UF 20% 16V 4*5.4MM
C40	1231001220-902000	CAP SMD CER 22PF 5% 50V 0603 NPO

SMD RESISTORS

R33	1160214700-902000	RES SMD 0603 1/16W 5% 470R
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SMD USB SOCKET

J4	1703100075-902000	USB MINI SOCKET TYPE AB "MOLEX" 67803-8020 W/ COVER TAPE
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SMD IC

U1	1300100062-902000	IC USBLC6-2 SMD SOT23-6L VERY LOW CAPACITANCE ESD PROTECTION
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PCB ASSY**90SVISO1FPCKB-902 VISO 1 SP FPC KEYBOARD ASSY****SMD CAPACITORS**

R1	1160011501-902000	RES SMD 0603 1/16W 1% 1.5K
R2	1160013001-902000	RES SMD 0603 1/16W 1% 3K
R3	1160019101-902000	RES SMD 0603 1/16W 1% 9.1K

SMD RESISTOR

C1	1231002102-902000	CAP SMD CER 1000PF 5% 50V 0603 COG
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PCB ASSY 90SVISO1PWSW0-902 **VISO 1 SP POWER SWITCH BOARD ASSY**
SWITCH

S1	1600100021-902000	PUSH SWITCH TV-5 5A/80A 250VAC UL/VDE/BSI/CSA 1.5MM TRAVEL
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CAPACITOR

(S1 - SOLDER SIDE)	1227001472-902000	CAP RAD CER Y2 4700PF 20% 250VAC P=7.5MM JY UL/CSA/VDE
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PCB ASSY 90SVISO1IR000-902 **VISO 1 SP IR BOARD ASSY**
IR SENSOR

D1	1420160382-902000	IR RX 37.9KHZ SHIELD
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CAPACITORS

C1 C26	1220001107-902000	CAP RAD ELEC 100UF 20% 16V P=2MM 5*11MM
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SMD CAPACITOR

C24	1231001104-902000	CAP SMD CER 0.1UF 20% 50V 0603 Y5V
C25	1231001471-902000	CAP SMD CER 470PF 5% 50V 0603 NPO

SMD RESISTORS

R11-12	1160211000-902000	RES SMD 0603 1/16W 5% 100R
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PCB ASSY 90SVISO1MCU00-902 **VISO 1 SP MCU BOARD ASSY**
SMD RESISTORS

R1	1160211004-902000	RES SMD 0603 1/16W 5% 1M
R12 R15 R33 R38	1160211001-902000	RES SMD 0603 1/16W 5% 1K
R152	1160012200-902000	RES SMD 0603 1/16W 1% 220R
R153 R4-5 R36	1160011000-902000	RES SMD 0603 1/16W 1% 100R
R18	1141210000-902000	RES SMD 0805 1/8W 5% 0R
R2 R13 R19-20	1160211003-902000	RES SMD 0603 1/16W 5% 100K
R21	1160214700-902000	RES SMD 0603 1/16W 5% 470R
R27 R37 R39	1160214701-902000	RES SMD 0603 1/16W 5% 4.7K
R29-30 R40-41 R43-52 R54 R58-59	1160210330-902000	RES SMD 0603 1/16W 5% 33R
R68-71 R78-80		
R3 R6 R17 R24-26 R28 R31 R35 R56-57	1160210000-902000	RES SMD 0603 1/16W 5% 0R
R74-77 R81		
R32	1160211202-902000	RES SMD 0603 1/16W 5% 12K
R42	1160212202-902000	RES SMD 0603 1/16W 5% 22K
R72-73	1160011300-902000	RES SMD 0603 1/16W 1% 130R
R7-8	1160212001-902000	RES SMD 0603 1/16W 5% 2K
R83	1151210000-902000	RES SMD 1206 1/8W 5% 0R
R9 R11 R14 R16 R22-23 R34 R53 R55	1160211002-902000	RES SMD 0603 1/16W 5% 10K
R60 R62 R64 R66 R82		

SMD CAPACITORS

C11	1231001474-902000	CAP SMD CER 0.47UF 10% 16V 0603 X5R
C1-2	1231001270-902000	CAP SMD CER 27PF 5% 50V 0603 NPO
C150-152	1201001475-902000	CAP SMD CER 4.7UF 20% 16V 0805 Y5V
C20 C23 C140 C154	1290001107-902000	CAP SMD ELEC 100UF 20% 16V 6.3*5.5MM
C22 C28	1241001107-902000	CAP SMD CER 100uF 20% 10V 1206 X5R
C30-31 C3	1231001102-902000	CAP SMD CER 1000PF 10% 50V 0603 X7R
C33	1290002104-902000	CAP ELEC SMD 0.1UF 20% 50V 4X5.4MM
C35 C37 C48	1290003106-902000	CAP SMD ELEC 10UF 20% 16V 4*5.4MM
C38-39	1231001050-902000	CAP SMD CER 5PF 5% 50V 0603 NPO
C42	1231001103-902000	CAP SMD CER 0.01UF 10% 50V 0603 X7R
C5-6 C10 C12 C25-26 C45 C46 C4	1231001104-902000	CAP SMD CER 0.1UF 20% 50V 0603 Y5V
C13-19 C21 C27 C139 C24 C40-41		
C7	1241001106-902000	CAP SMD CER 10UF 10% 16V 1206 X7R
C8-9 C34 C36 C47	1231001220-902000	CAP SMD CER 22PF 5% 50V 0603 NPO

SMD ICS

U2 U3 U9	1300100030-902000	IC FSUSB30MUX SMD 10-PIN MSOP TWO- PORT USB2.0 SWITCH
U6	1300101053-902000	IC VS1053B SMD 48-PIN LQFP AUDIO CODEC
U7	1300104117-902000	IC AK4117 SMD 24-PIN VSOP 192KHZ DIGITAL AUDIO RECEIVER
U4-5	1300106329-902000	IC FDC6329L SMD SUPERSOT-6 INTE GRATED LOAD SWITCH
U8	1300153020-902000	IC MFI341S2164 SMD TNP-20CV
U34	1300211173-902000	IC LM1117S SMD SOT-223 REGULATOR LDO 1A
U1	1330124256-902000	IC PIC24FJ256GB106 SMD 64-PIN TQFP 16-BIT MCU WITH USB OTG 256KB
U10	1300174257-902000	IC SN74LVC257AD SMD 16-PIN SOIC LOGIC QUAD 2-INPUT MULTIPLEXER WITH 3-STATE OUTPUTS
J7	0761000008-902010	BLUETOOTH AUDIO MODULE

SMD CRYSTAL

Y2	1502138004-902000	CRYSTAL SMD 8MHZ 30PPM 22PF HC-49 SSM
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SMD TRANSISTORS

Q1 Q2	1410100846-902000	TRANS BC846B SMD SOT-23 NPN 0.1A/65V HFE 200-450
L5	1500100070-902000	FERRITE BEAD SMD 0805 600 OHM 500MA

SMD DIODE

D2	1400100320-902000	DIODE SCHOTTKY SBR3U20SA SMD SMA 3A/20V
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<u>PCB ASSY</u>	<u>90SVISO1CONN1-902</u>	<u>VISO 1 SP CONN#1 BOARD ASSY</u>
J8-SOLDER SIDE	1702100108-902000	HEADER 20PIN (10X2) P=2.54MM RT PCB MALE BOX HEADER "ROHS"
J9B	1702100116-902000	HEADER 20PIN (10X2) P=2.54MM ST "ROHS" DUAL ROW FEMALE
J101-103	1704100022-902000	PCB TERMINAL FASTON FEMALE 6.35 X 0.8MM "ROHS" "KANG YANG" PCFS250L
J104	1704100004-902000	FASTON TAB 250 FOR PC BOARD "ROHS" "MOSTLY STRONG"
J14	1702100117-902000	HEADER 4PIN P=3.96MM ST W/O 2/3 PIN "ROHS"
J3B	0600100369-902000	CABLE ASSY UL1533 AWG26x1C 6PIN 2.5P L=580mm "RoHS"
J10-SOLDER SIDE	1702100002-902000	HEADER 2PIN P=2.50MM ST "ROHS" "HENGTAI" ES-2.5-2P-01A

<u>PCB ASSY</u>	<u>90SVISO1CONN2-902</u>	<u>VISO 1 SP CONN#2 BOARD ASSY</u>
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SMD BEAD

L4	1500100064-902000	FERRITE BEAD SMD 0603 600 OHM 0.5A
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SMD CAPACITOR

C3	1231003104-902000	CAP SMD CER 0.1UF 10% 50V 0603 X7R
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SMD ICS

U2	1300100062-902000	IC USBLC6-2 SMD SOT23-6L VERY LOW CAPACITANCE ESD PROTECTION
U4	1300100522-902000	IC RCLAMP0522P SMD 6-PIN SLP1610P4 ULTRA LOW CAPACITANCE TVS ARRAY

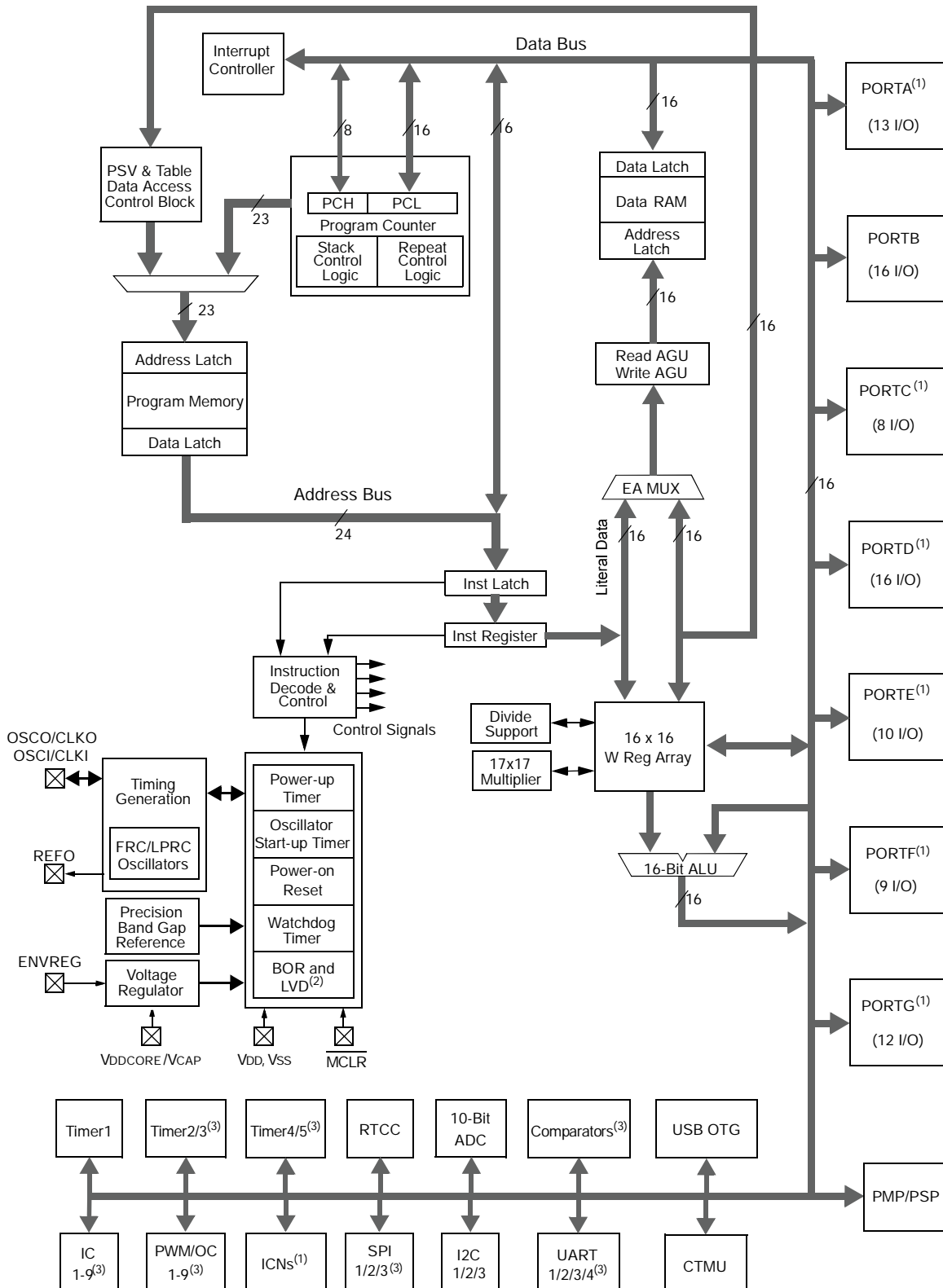
<u>PCB ASSY</u>	<u>90SVISO1IPODC-902</u>	<u>VISO 1 SP IPOD CONNECTOR BOARD ASSY</u>
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SOCKET

	1703100076-902000	IPOD 30PINS SOCKET APPLE MFI514S0084 VERT SMT
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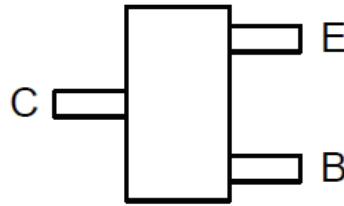
IC BLOCK DIAGRAM

MCU - U1

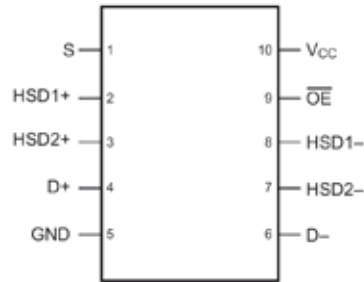


Note 1: Not all I/O pins or features are implemented on all device pinout configurations. See Table 1-4 for specific implementations by pin count.
 Note 2: BOR functionality is provided when the on-board voltage regulator is enabled.
 Note 3: These peripheral I/Os are only accessible through remappable pins.

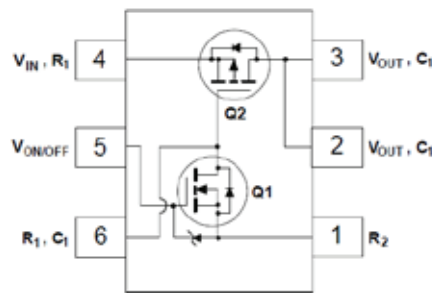
MCU - Q1, Q2



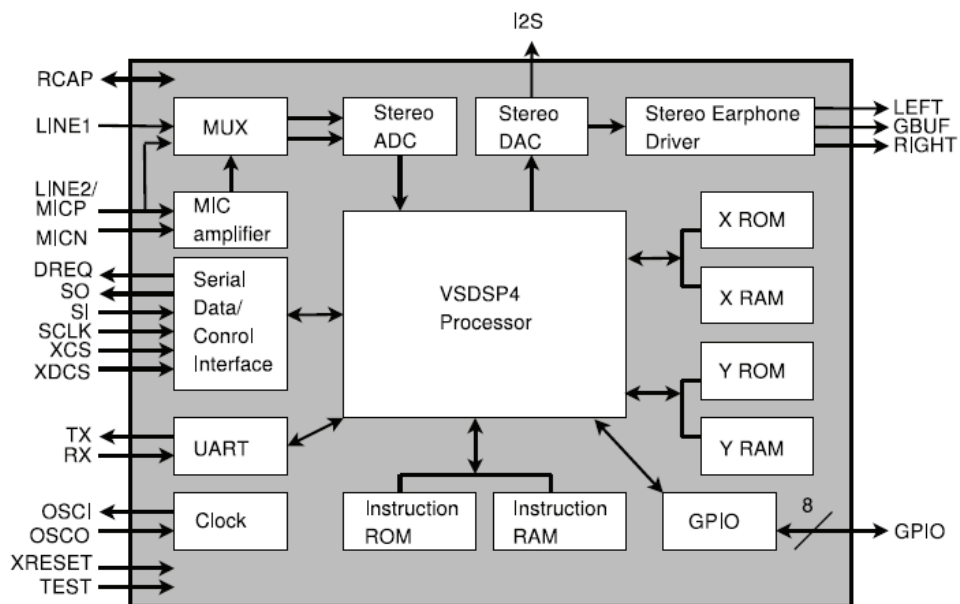
MCU - U2, U3, U9



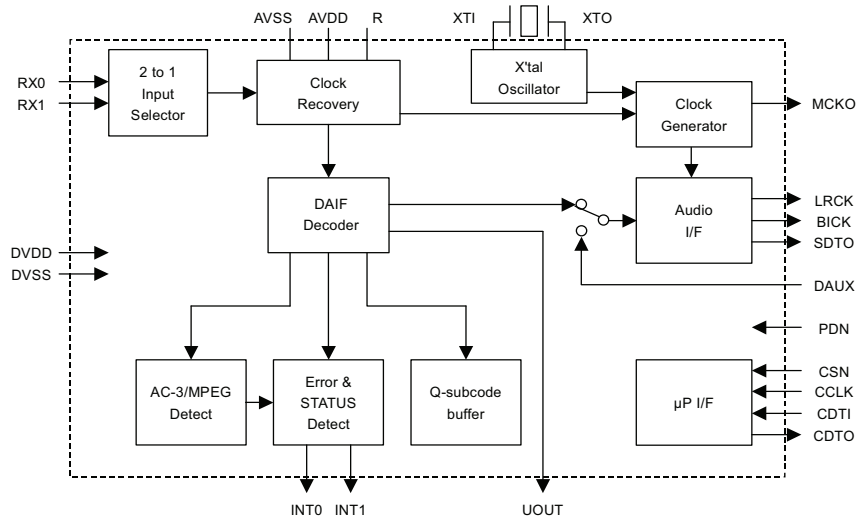
MCU - U4, U5, U8



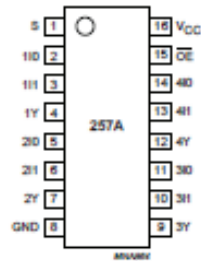
MCU - U6



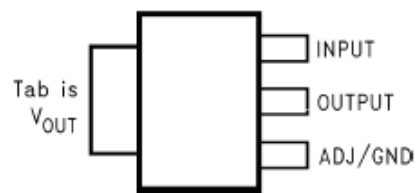
MCU - U7



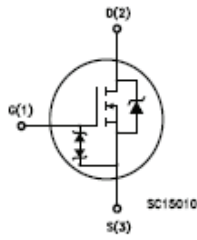
MCU - U10



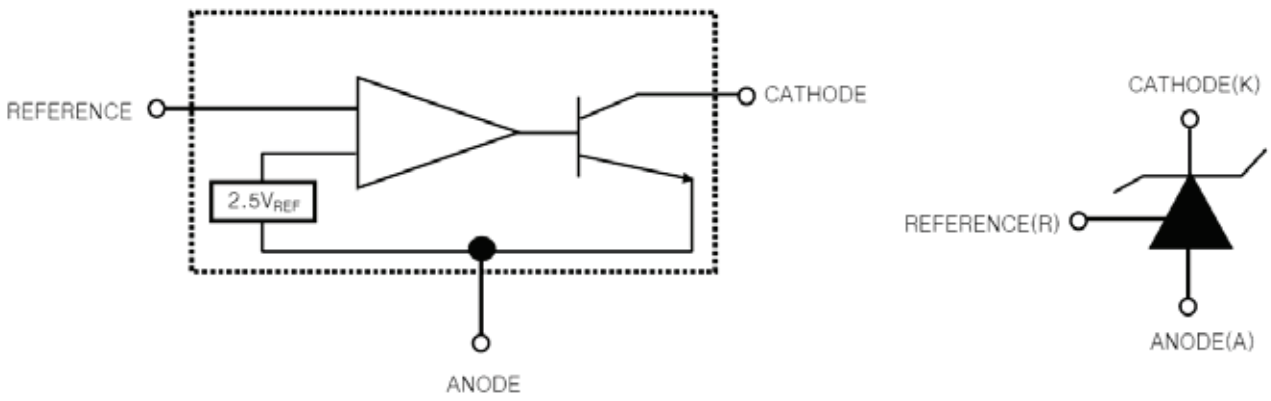
MCU - U34



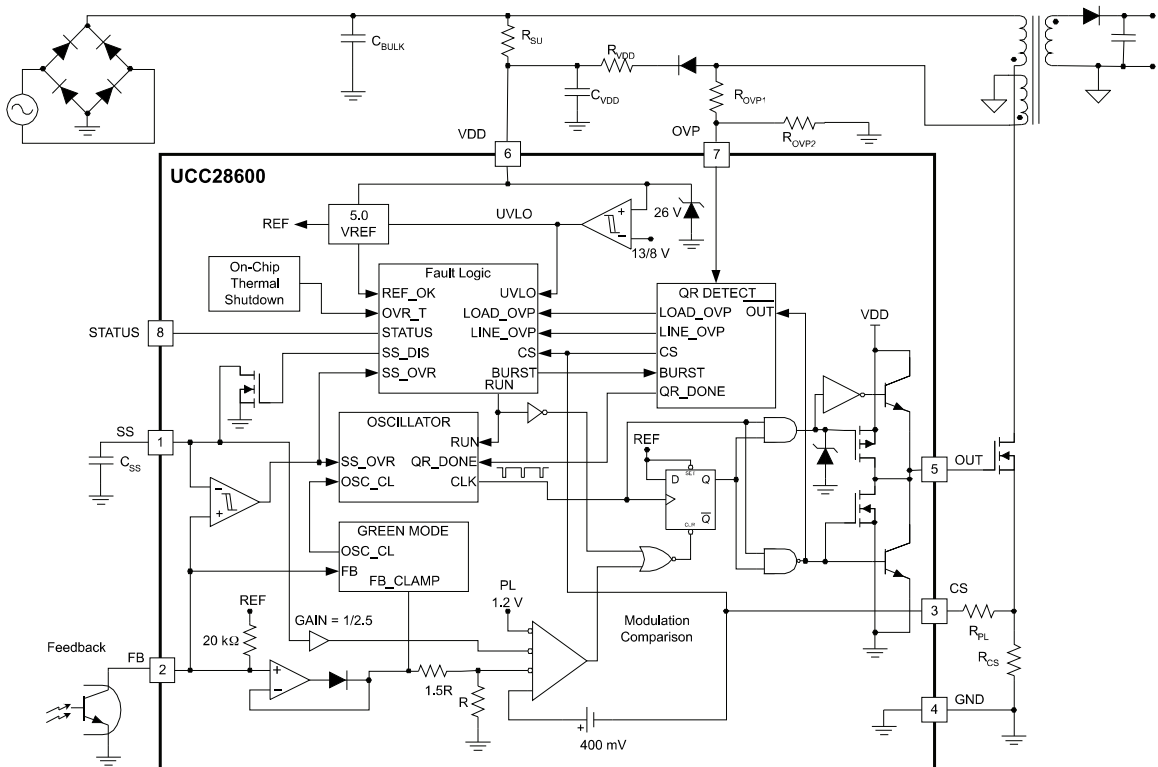
PSU - Q1



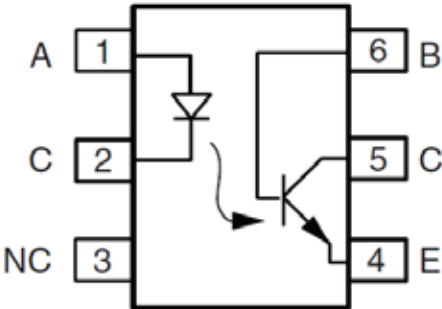
PSU - U1



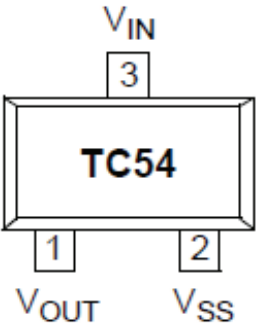
PSU - U2



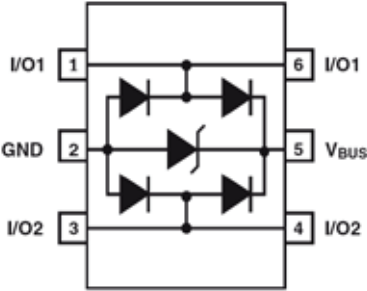
PSU - U3



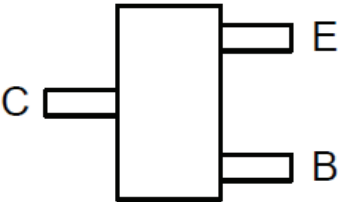
PSU - U5



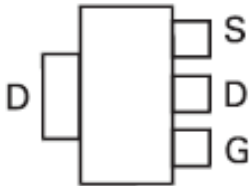
IO - U1, CONN#2 - U2



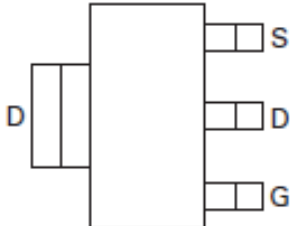
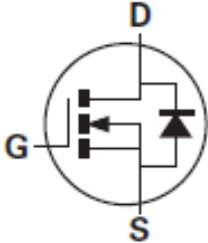
DDFA - Q3



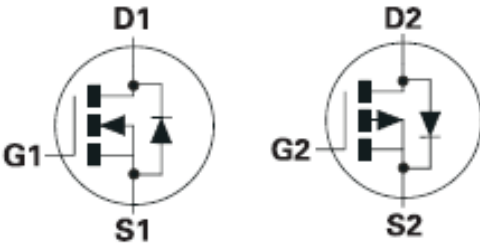
DDFA - Q4



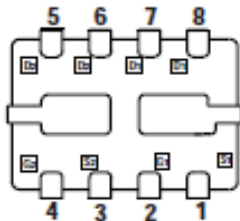
DDFA - Q5



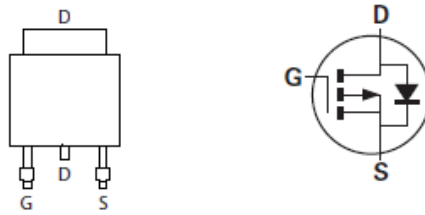
DDFA - Q6



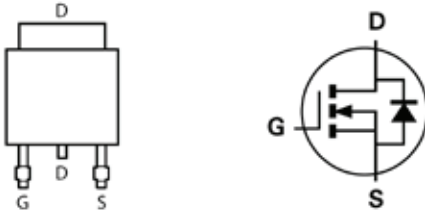
PINOUT



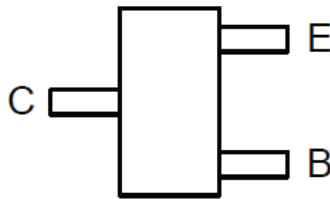
DDFA - Q7, Q18



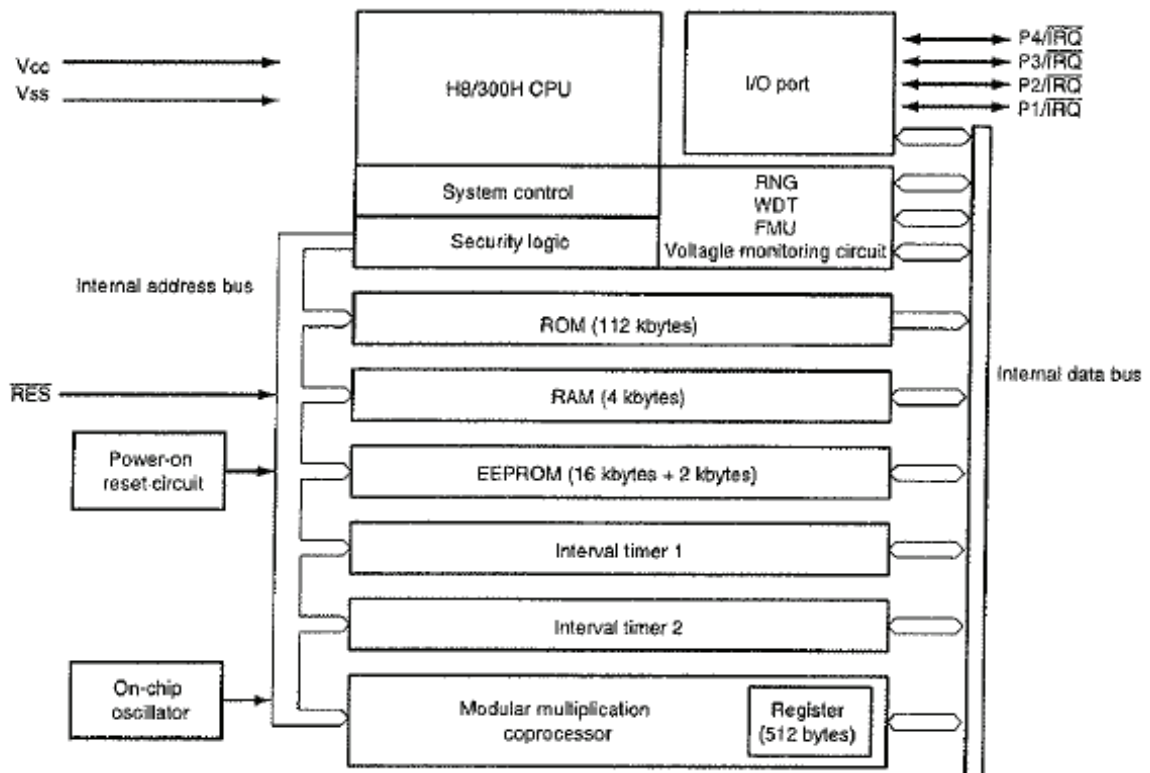
DDFA - Q8



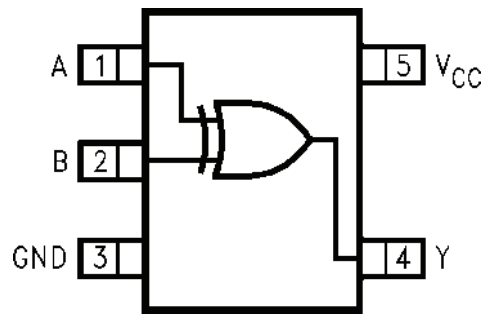
DDFA - Q17, Q19



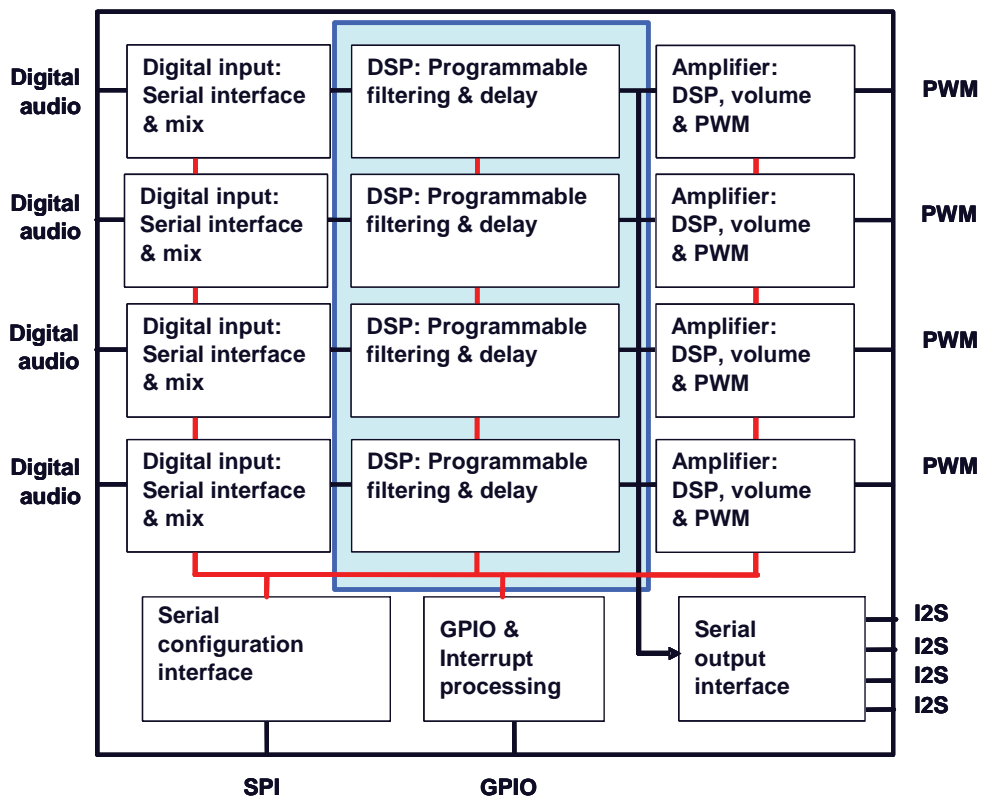
DDFA - U1



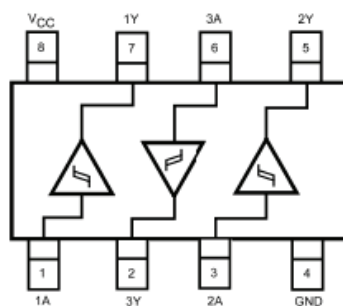
DDFA - U3, U4, U5, U6



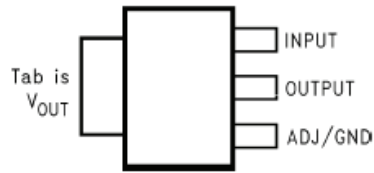
DDFA - U7



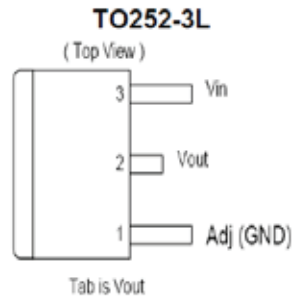
DDFA - U8, U9, U18



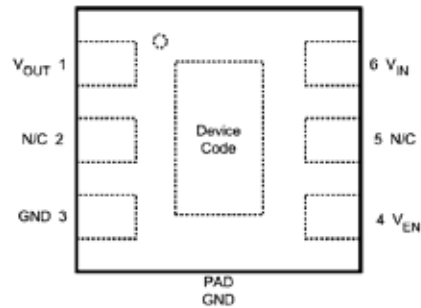
DDFA - U10, U12, U14



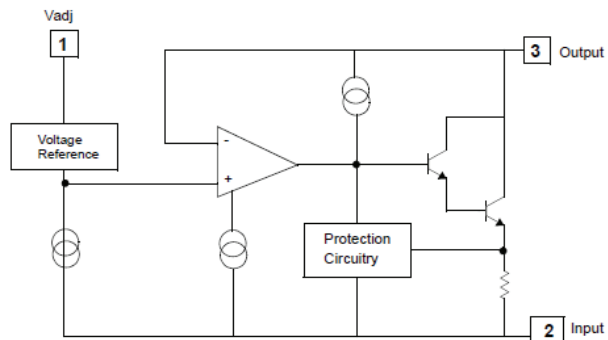
DDFA - U11, U13



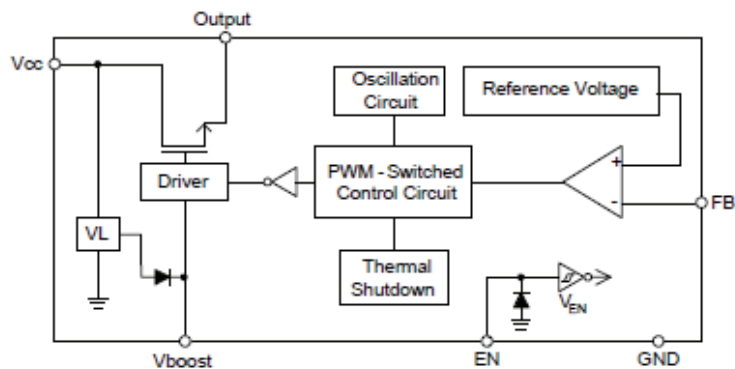
DDFA - U15



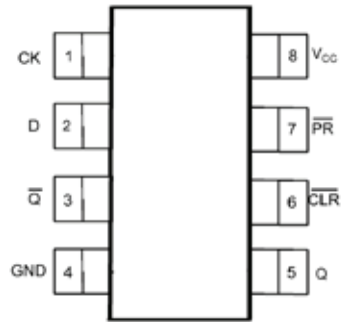
DDFA - U16



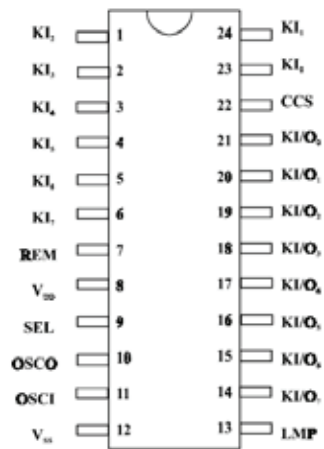
DDFA - U19



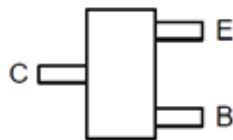
DDFA - U20



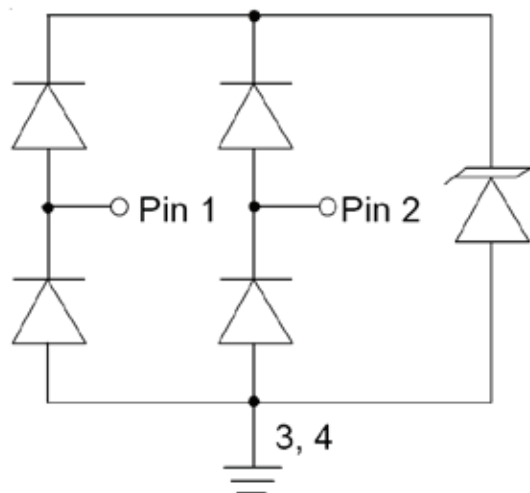
REMOTE - IC101



REMOTE - Q1



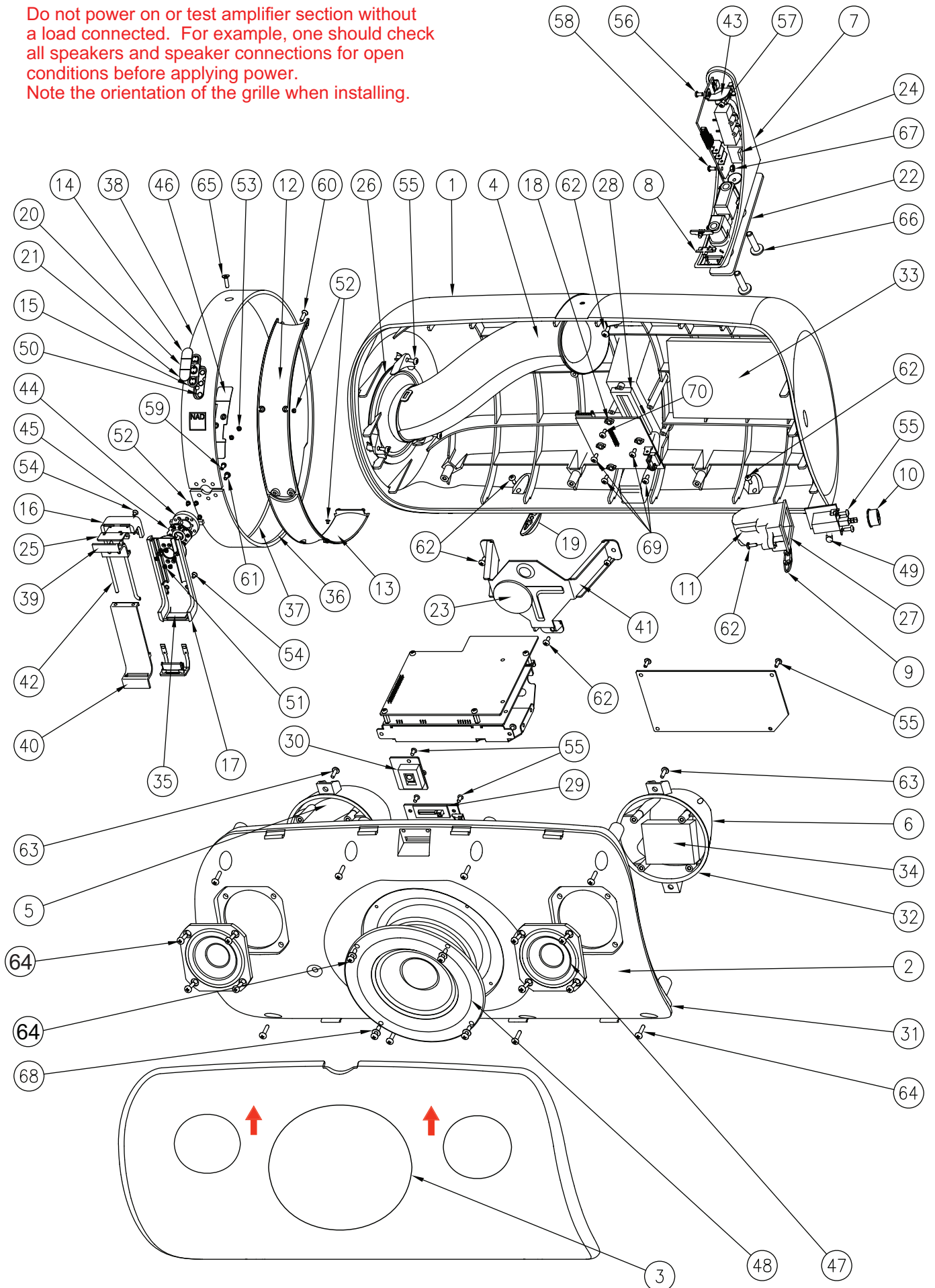
CONN#2 - U4



EXPLODED VIEW - A

SERVICE ADVISORY

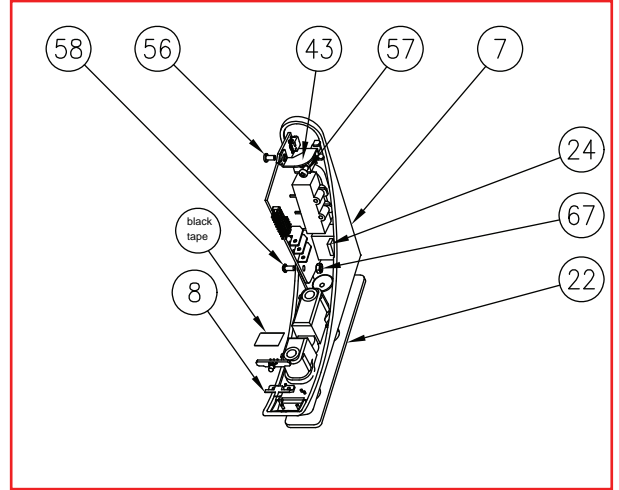
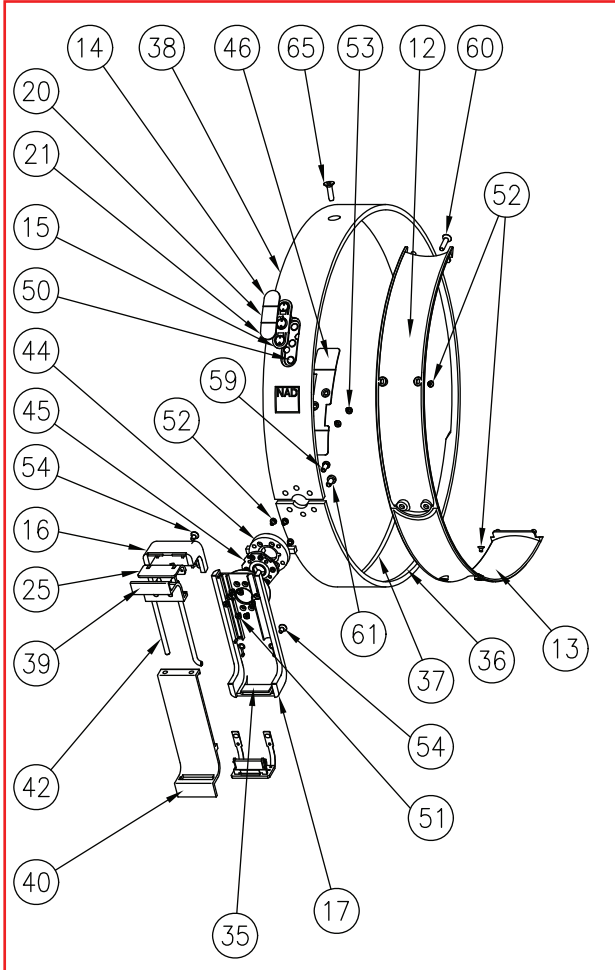
Do not power on or test amplifier section without a load connected. For example, one should check all speakers and speaker connections for open conditions before applying power.
Note the orientation of the grille when installing.



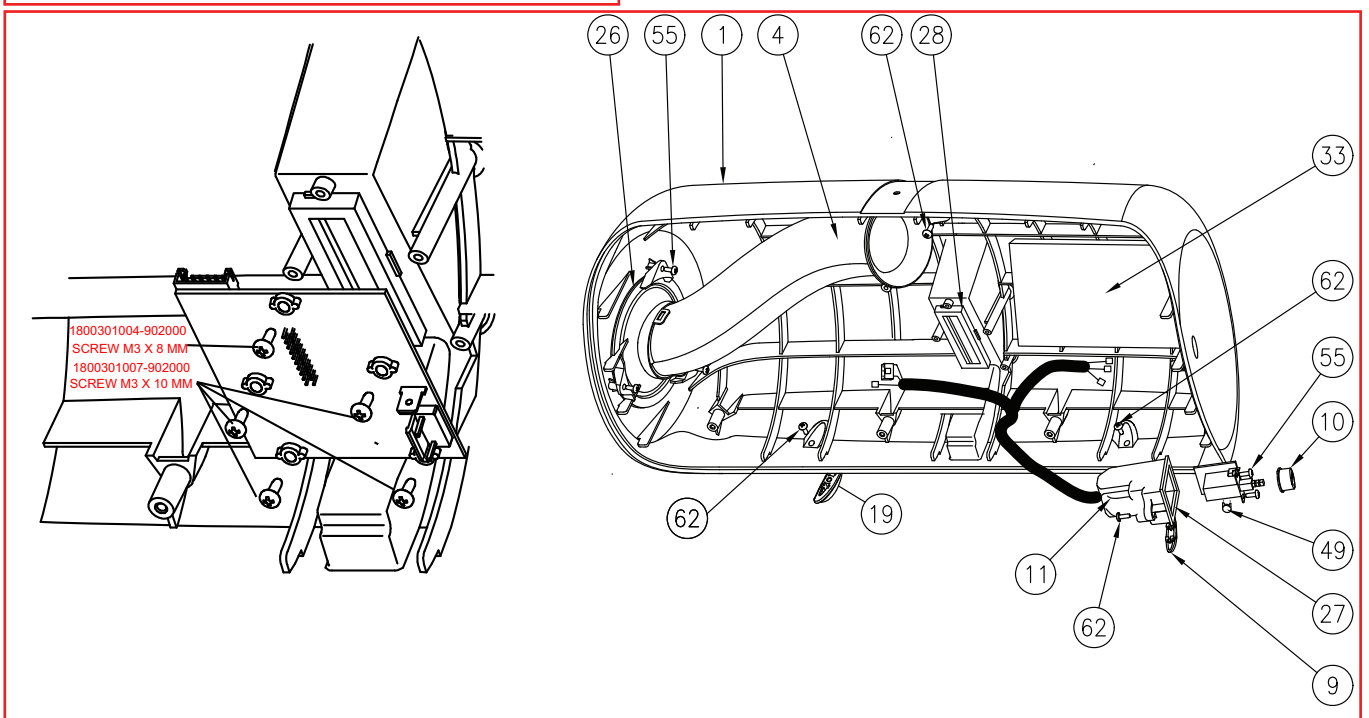
Exploded View Assemblies

90SVISO1BRING-902
 VISO 1 SP COMPLETE RING WITH CRADLE Assembly Black
 90SVISO1WRING-902
 VISO 1 SP COMPLETE RING WITH CRADLE Assembly White

90SVISO1IO000-902
 VISO 1 SP IO + LED Board Assembly Black
 90SVISO1IOW00-902
 VISO 1 SP IO + LED Board Assembly White



90SVISO1BBCAB-902
 VISO 1 SP BACK CABINET BLACK ASSY
 90SVISO1WBCAB-902
 VISO 1 SP BACK CABINET WHITE ASSY

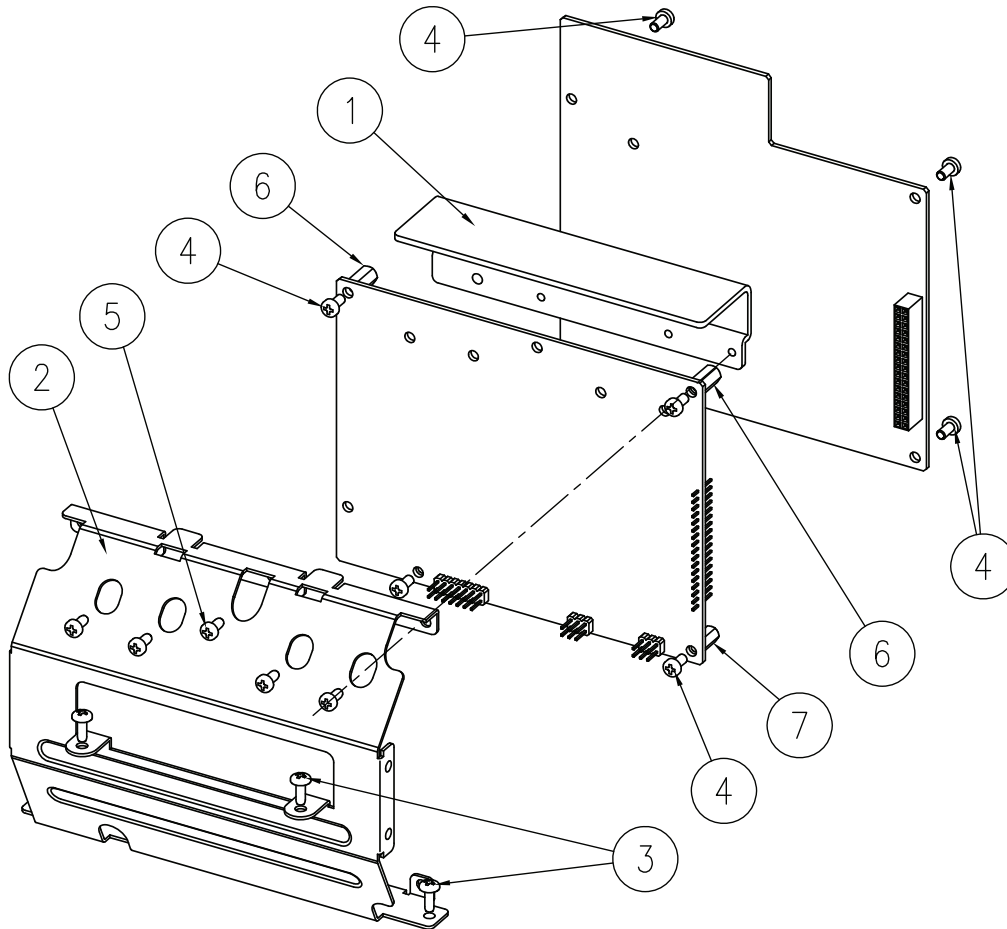


EXPLODED VIEW PARTS LIST

ITEM	PART NO.	DESC.	QTY
1	0202100094-902010	REAR CABINET BLACK R1 "ROHS" VISO 1	1
2	0202100095-902000	FRONT BAFFLE BLACK "ROHS" VISO 1	1
3	0831000042-902010	PLASTIC GRILL W/ CLOTH ASSY "ROHS" R.1 VISO 1	1
4	0202100097-902000	PORT FLANGE BLACK "ROHS" VISO1	1
	0202100098-902000	PORT TUBE - UPPER BLACK "ROHS" VISO1	1
	0202100099-902000	PORT TUBE - LOWER BLACK "ROHS" VISO1	1
5	0202100100-902000	SPEAKER CAP LEFT BLACK "ROHS" VISO1	1
6	0202100101-902000	SPEAKER CAP RIGHT BLACK "ROHS" VISO1	1
7	0202100102-902010	PLASTIC IO STAND BLACK R1 "ROHS" VISO1	1
8	0202100103-902000	LED LENS MILKY CLEAR SAN "ROHS" VISO1	1
9	0202100104-902000	SIDE FEET RIGHT BLACK "ROHS" VISO1	1
10	0202100105-902010	POWER BUTTON BLACK R1 "ROHS" VISO1	1
11	0202100106-902000	POWER BUTTON CAP BLACK "ROHS" VISO1	1
12	0202100107-902020	PLASTIC UPPER RING COVER BLACK R2 "ROHS" VISO1	1
13	0202100108-902010	PLASTIC LOWER RING COVER BLACK R1 "ROHS" VISO1	1
14	0202100109-902000	PLASTIC INPUT KEYS UP BLACK "ROHS" VISO1	1
15	0202100110-902000	PLASTIC INPUT KEYS CORE BLACK "ROHS" VISO1	1
16	0202100111-902000	CRADLE UPPER COVER BLACK "ROHS" VISO1	1
17	0202100112-902010	CRADLE LOWER COVER BLACK R1 "ROHS" VISO1	1
18	0202100119-902000	PLASTIC WASHER W/ 13DEG ANGLE BLACK "ROHS" VISO1	5
19	0202100120-902000	SIDE FEET LEFT BLACK "ROHS" VISO1	1
20	0202100121-902000	PLASTIC INPUT KEYS SYN BLACK "ROHS" VISO1	1
21	0202100122-902000	PLASTIC INPUT KEYS DOWN BLACK "ROHS" VISO1	1
22	0203100009-902000	RUBBER FOOT 127X25X3MM PORON HH48C "ROHS" VISO1	1
23	0203100011-902000	RUBBER PAD OD40 X 2.5mm BLACK W/ D.S. TAPE "ROHS" VISO1	1
24	0203100013-902000	RUBBER 15X15X2.5mm BLACK UL GRADE "ROHS" VISO1	2
25	0216100023-902010	CRADLE RUBBER MOLDED BLACK R1 "ROHS" VISO1	1
26	0216100026-902000	FOAM GASKET OD100 X ID90 X 0.5MM THK. BLACK "ROHS" VISO-1	1
27	0216100027-902000	FOAM 41.5X34X2MM BLACK "ROHS" VISO 1	1
28	0216100028-902000	FOAM 67X21.5X6MM BLACK "ROHS" VISO 1	1
29	0216100029-902000	FOAM 36.3X14.5X4MM BLACK "ROHS" VISO 1	1
30	0216100030-902000	FOAM 24X20X11MM BLACK "ROHS" VISO-1	1
31	0216100031-902010	FOAM CUSHION 1400x8x1.0mm BLACK W/ NITTO 500 "ROHS" (AKA Gasket) VISO1	1
32	0216100035-902000	FOAM 310X7X2MM BLACK "ROHS" VISO-1	2
33	0216100036-902000	INSULATOR SOUND ABSORTING 180 X 120 X 25MM "ROHS"	1
34	0216100037-902000	INSULATOR SOUND ABSORTING 50 X 50 X 25MM "ROHS"	2
35	0216100040-902000	FOAM 20x8x1mm BLACK "ROHS" VISO1	2
36	0216100043-902000	FOAM 4x70x0.5mm BLACK "ROHS" VISO1	2
37	0216100044-902000	FOAM 4x90x0.5mm BLACK "ROHS" VISO1	6
38	0330100117-902010	RING ALU EXTRUSION NATURAL ANODIZE R1 "ROHS" VISO1	1
39	0330100118-902010	CRADLE UPPER PANEL ALU EXTRUSION NATURAL ANODIZE R1 "ROHS" VISO1	1
40	0330100119-902010	CRADLE LOWER PANEL ALU EXTRUSION NATURAL ANODIZE R1 "ROHS" VISO1	1

41	0330100122-902000	WOOFER SUPPORT BRACKET SECC "ROSH" VISO1	1
42	0330100124-902010	CRADLE SLIDER PIN R1 "ROHS" VISO1	1
43	0330100127-902000	IO BOARD MOUNTING BRACKET "ROHS" VISO1	1
44	0330100137-902010	CRADLE PIVOT MOUNT II ZINC CASTING R1 "ROHS" VISO1	1
45	0330100138-902000	CRADLE PIVOT HINGE II "ROHS" VISO1	1
46	0330100139-902000	RING KEY PLATE "ROHS" VISO1	1
47	0721000010-902000	SPEAKER 2-3/4" 4OHM "ROHS" "WAVECOR FULLRANGE FR070CU01-01	2
48	0721000011-902000	SPEAKER 5-3/4" 4OHM "ROHS" "WAVECOR WOOFER SW146CU01-01	1
49	1227001472-902000	CAP RAD CER Y2 4700PF 20% 250VAC P=7.5MM JY UL/CSA/VDE "ROHS"	1
50	1704100020-902000	METAL DOME CONTACT OD5.0MM W/ DOT "ROHS"	3
51	1800201006-902000	SCREW M2 X 3MM M/C +KH NI "ROHS"	6
52	1800201007-902000	SCREW M2 X 3mm M/C +KH BLACK "ROHS"	8
53	1800201009-902000	SCREW M2 X 3mm S/T +BH BLACK "ROHS"	2
54	1800261008-902000	SCREW M2.6 X 5MM TAPTITE +K/H TYPE B BLK "ROHS"	3
55	1800301001-902000	SCREW M3 X 8MM TAPTITE + BH / TYPE B NI "ROHS"	21
56	1800301002-902000	SCREW M3 X 6MM M/C +P/H NI "ROHS"	9
57	1800301006-902000	SCREW M3 X 6MM TAPTITE +P/H TYPE B NI "ROHS"	6
58	1800301013-902000	SCREW M3 X 6MM M/C +WASHER HEAD NI "ROHS"	1
59	1800301029-902000	SCREW M3 X 6MM MC +C/H NI "ROHS"	2
60	1800301031-902000	SCREW M3 X 12MM TAPTITE +K/H TYPE B NI "ROHS"	1
61	1800301041-902000	SCREW M3 x 8mm M/C +P/H BLACK "ROHS"	2
62	1800351001-902000	SCREW M3.5 X 8.0MM TAPTITE +B/H TYPE B NI "ROHS"	10
63	1800351007-902000	SCREW M3.5 X 10MM +B/H TYPE B NI "ROHS"	4
64	1800351015-902000	SCREW M3.5X16MM S/T +BH BLACK "ROHS"	16
65	1800351019-902000	SCREW M3.5X12mm TAPTITE KH HEX. SOCKET AF2.5 TYPE B "ROHS"	1
66	1800601002-902000	SCREW M6 X 25MM M/C CH HEAD HEX SOCKET BLK "ROHS"	2
67	1810301003-902000	NUT HEX M3 X 5.2 X 2.4MM NI "ROHS"	1
68	1820351002-902000	WASHER STEEL ID3.5 X OD8.0 x 0.6mm THK BLK "ROHS" YPT	4
69	1800301007-902000	SCREW M3 X 10MM TAPTITE +B/H TYPE B BLK "ROHS"	4
70	1800301004-902000	SCREW M3 X 8 MM TAPTITE +B/H TYPE B BLK "ROHS"	1
1	90SVISO1WBCAB-902VISO	VISO CABINET White Assy With SWITCH, FEET, & PORT	1
3	0335100089-902010	White Grille	

EXPLODED VIEW - B (DDFA)

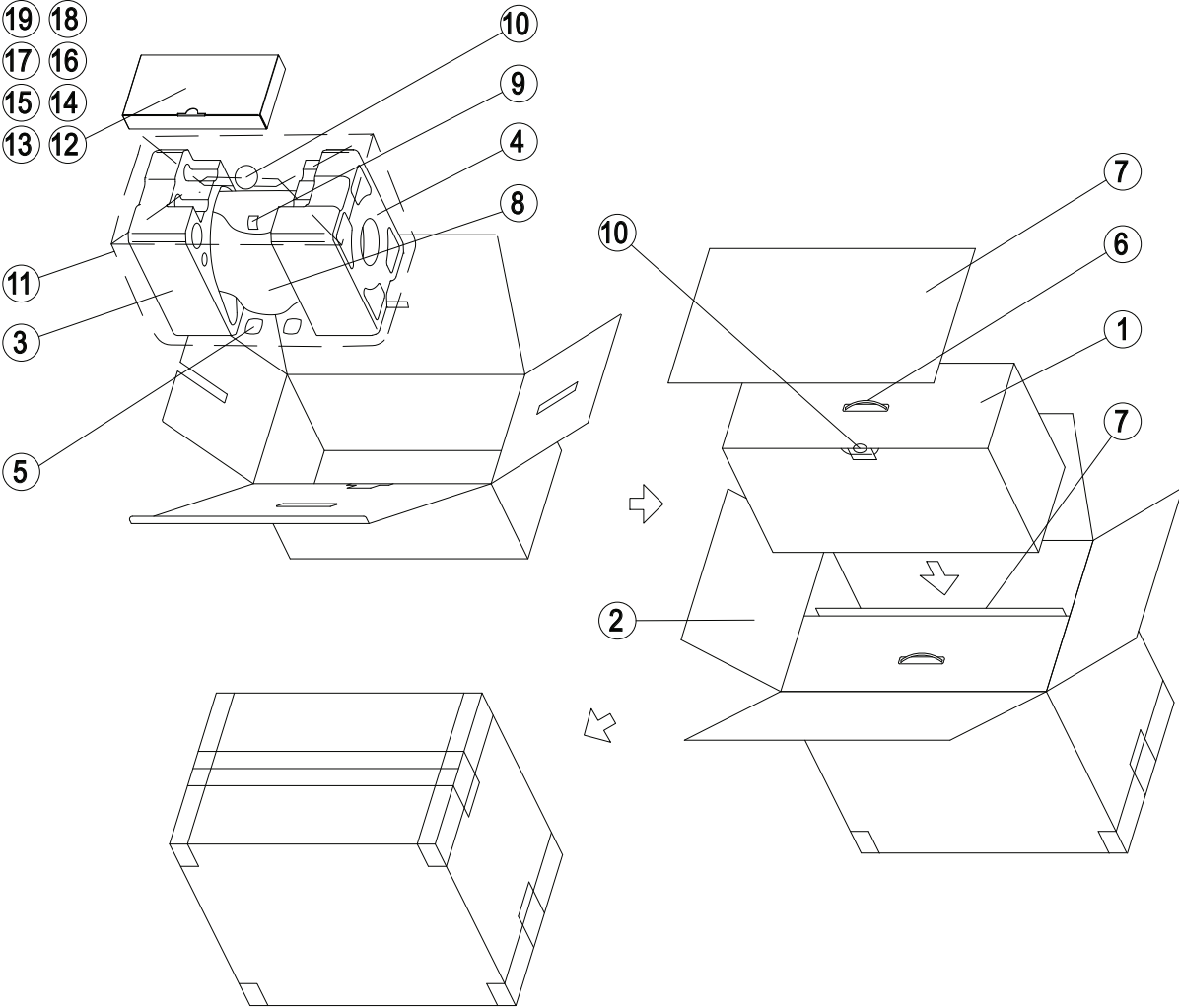


ITEM	PART NO.	DESC.	QTY
1	0319100049-902000	HEATSINK 110X26X30MM 2.0 THK. ALU "ROHS"	1
2	0330100121-902010	DDFA SHIELDING BRACKET SECC R1 "ROHS" VISO1	1
3	1800301001-902000	SCREW M3 X 8MM TAPTITE + BH TYPE B NI "ROHS"	4
4	1800301002-902000	SCREW M3 X 6MM M/C +P/H NI "ROHS"	8
5	1800301006-902000	SCREW M3 X 6MM TAPTITE +P/H TYPE B NI "ROHS"	1
6	1810301016-902000	STANDOFF M3X5.5X10mm HEX F-F CU "ROHS"	2
7	1810301017-902000	STANDOFF M3X4.8X11mm HEX F-F CU "ROHS"	2

SERVICE ADVISORY

Do not power on or test amplifier section without a load connected. For example, one should check all speakers and speaker connections for open conditions before applying power.

PACKING DIAGRAM & PARTS LIST



ITEM	PART NO.	DESCRIPTION	QTY
1	0511000054-902010	MASTER CARTON 4 COLOR OFFSET NEW "ROHS" VISO1-R1	1
2	0511000055-902000	SHIPPING BOX NEW 2-PLY "ROHS" VISO1	0.5
3	0541000030-902000	POLYFOAM ENDCAP LEFT "RoHS" VISO1	1
4	0541000031-902000	POLYFOAM ENDCAP RIGHT "RoHS" VISO1	1
5	0551000006-902000	DESSICANT BAG 10g NON-DMF "RoHS"	2
6	0202100139-902000	BOX HANDLE STRAP PE BLACK "ROHS" VISO1	1
	0202100140-902000	BOX HANDLE SUPPORT PE BLACK "ROHS" VISO1	1
7	0521000052-902000	CARD SHEET B9B "ROHS" VISO1	1
8	- - -	VISO 1 MAIN UNIT	1
	0551000009-902000	CLOTH BAG 660 x 500 VISO PATTERN W/ STRING BLACK 1	
	0551000013-902000	CLOTH BAG 660 x 500 VISO PATTERN W/ STRING WHITE 1	
9	0411000217-902000	LABEL 'LIFT HERE' CLEAR "ROHS" VISO1	1
10	0411000221-902000	LABEL OD50mm "OPEN" POLYESTER CLEAR "ROHS" VISO1	2
11	0531000028-902000	POLYBAG 06HDPE POLYFOAM 800X770mm "ROHS"	1
12	0511000053-902000	FOLD BOX B9 FLUTE 4 COLOR OFFSET "ROHS" VISO1	1
13	0202100141-902000	BLISTER TRAY ACCESSORY "ROHS" VISO1	1
14	0604100024-902000	AC CORD CE 3PIN C5 2.5A 250V LF L=3M H05VV-F 3G 0.75 BLK "ROHS"	1
	0411000220-902000	LABEL 230V AC CORD "ROHS" VISO1	1
15	0604100025-902000	AC CORD US 3PIN C5 7A 125V LF L=3M SPT2	1
	or 0664100025-902000	WG18x3C BLK "ROHS"	
	0411000219-902000	LABEL 120V AC CORD "ROHS" VISO1	1
16	0531000032-902000	POLYBAG CLEAR SELF-ADHESIVE A5 SIZE "ROHS" VISO 1	1
	0421000006-902000	CARD WARRANTY NAD A5 SIZE "ROHS"	1
	0431000026-902000	QUICK START MANUAL VISO1 A4 SIZE "ROHS"	1
17	0551000008-902000	WIPING CLOTH 180 x 160mm BLK TX-20 "ROHS" VISO 1	1
	0411000218-902000	LABEL CLEANING INSTRUCTION "ROHS" VISO1	1
18	RC-VISO 1	VISO 1 REMOTE UNIT BLACK	1
	0220100048-902000	STATIC COVER FOR REMOTE "ROHS" VISO1	1
19	0531000024-902000	POLYBAG 03HDPE BATTERY 50 X 50mm "ROHS"	1
	1604100005-902000	BATTERY 3V LITHIUM BUTTON CELL CR2025 "ROHS"	1

APPENDIX

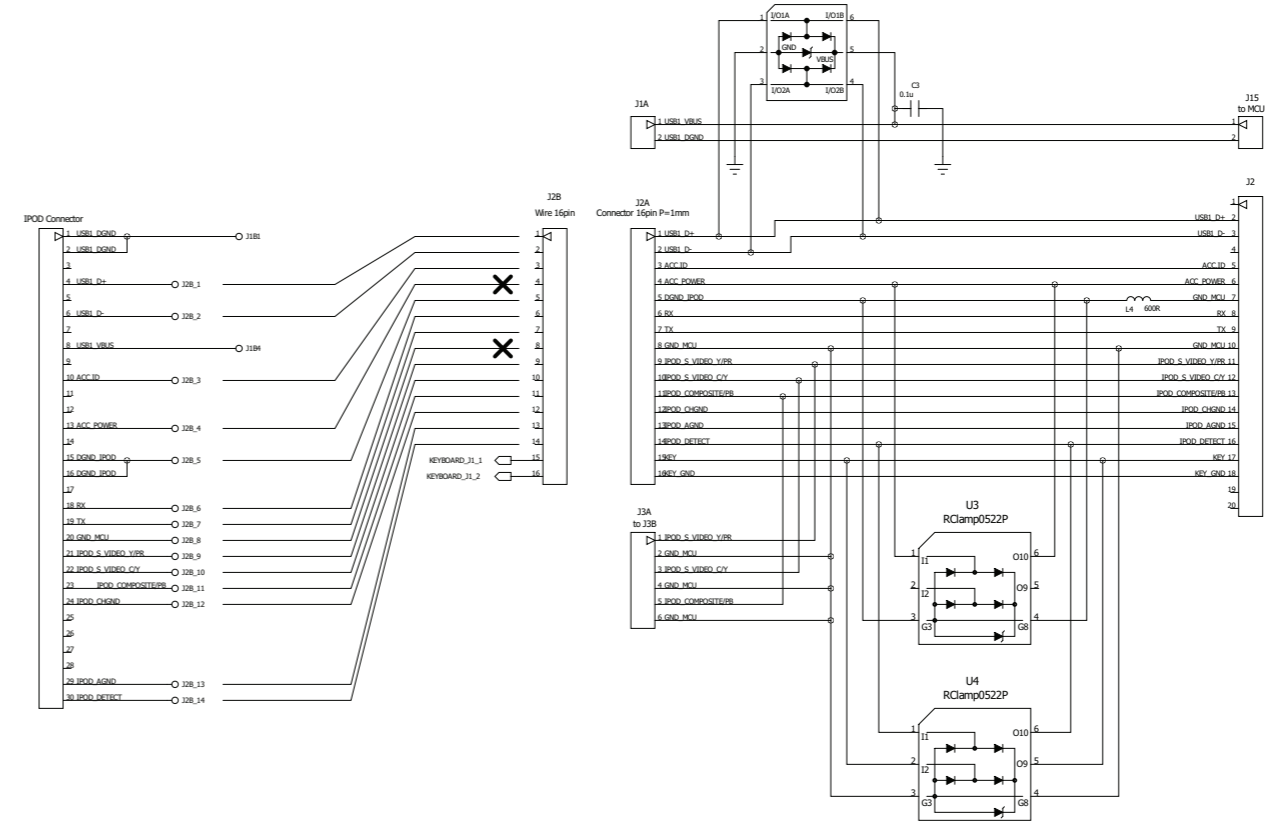
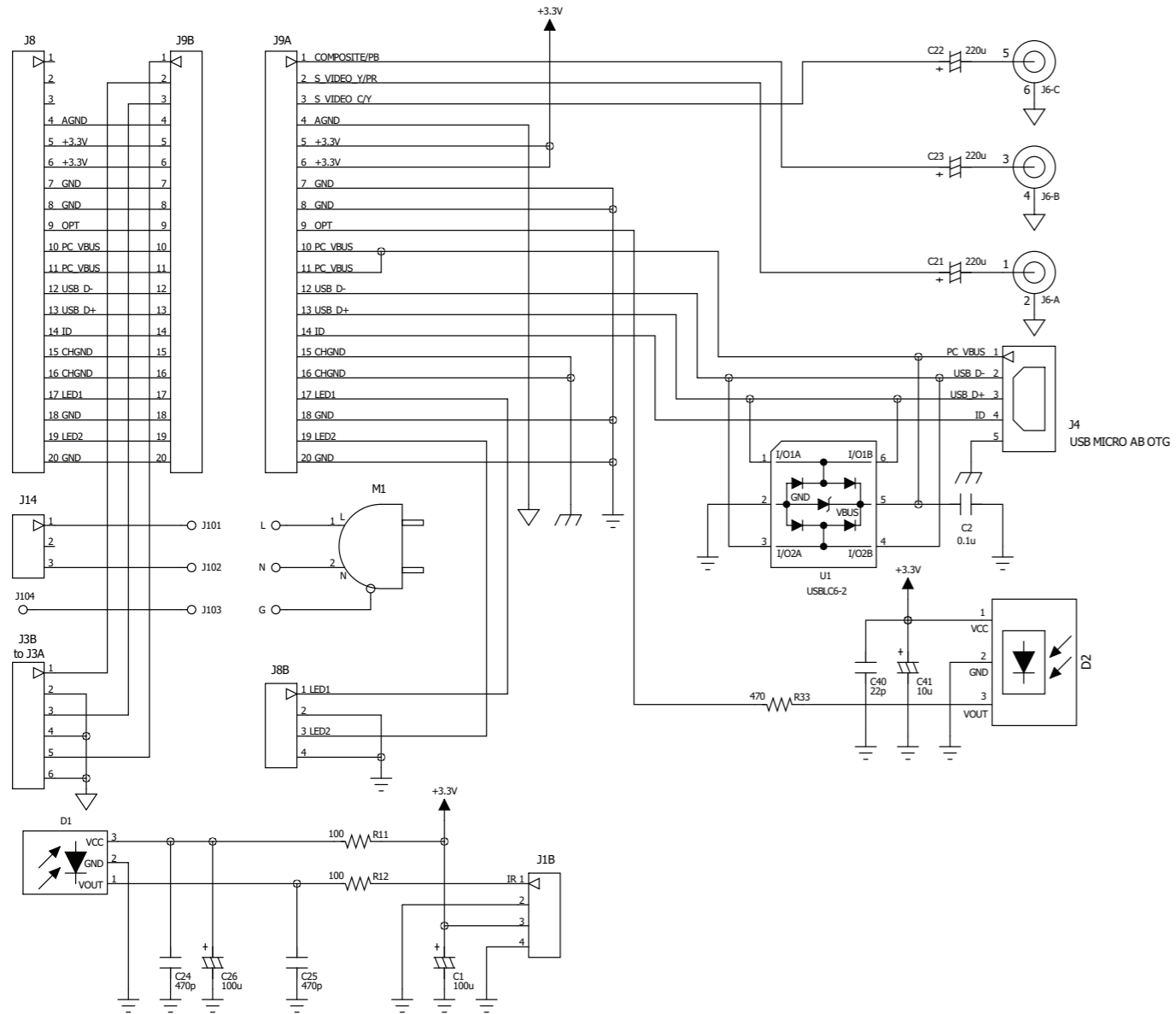
For the following serial range, there are modifications to the MCU board, the CONN#1 board and the CONN#2 board:

PHASE	MCU board	CONN#1	CONN#2	Serial No.
I	1. WITHOUT SHIELD CABLE	1. WITHOUT 2PIN HEADER	1, U3 INSTALLED	K19VISO1001001-K19VISO1004000 K1XVISO1004001-K1XVISO1006000 K1YVISO1006001-K1YVISO1007000 K1ZVISO1007001-K1ZVISO1010000
II	1. WITH 2PIN SHIELD CABLE SOLDER ON THE 20PIN HEADER (J8) PIN 7 AND PIN 9 2. CUT PIN 9 OF 20PIN CABLE (J8)	1. WITH 2PIN HEADER SOLDER ON THE 20PIN HEADER (J8) PIN 7 AND PIN 9	1. U3 NOT INSTALLED	K1ZVISO1010001-K1ZVISO1011000 K21VISO1011001-K21VISO1012000 K24VISO1W012001-K24VISO1W013000
III	1. WITH 2PIN SHIELD CABLE SOLDER ON J10 ON CONN#1 2. CUT THE CONNECTION TO THE 20PIN HEADER J8 BY REMOVING RESISTOR R85	1. ADD 2PIN HEADER J10 2. CUT THE CONNECTION TO THE 20PIN HEADER J8 BY REMOVING RESISTOR R2	1. U3 NOT INSTALLED	K25VISO1W013001-K25VISO1W015000 K27VISO1015001-K27VISO1015200(CCC) K27VISO1015201-K27VISO1016000

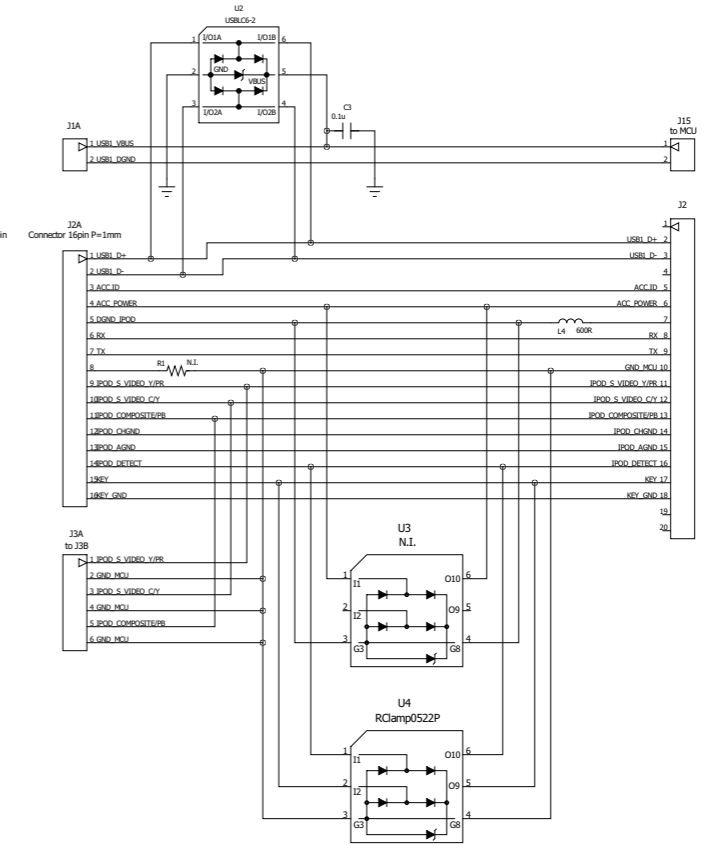
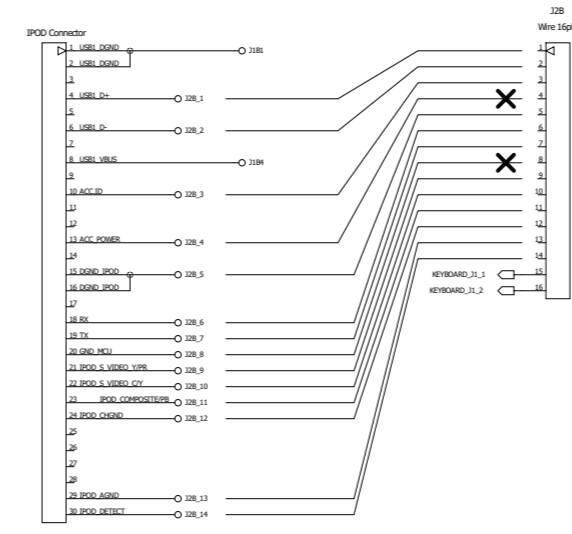
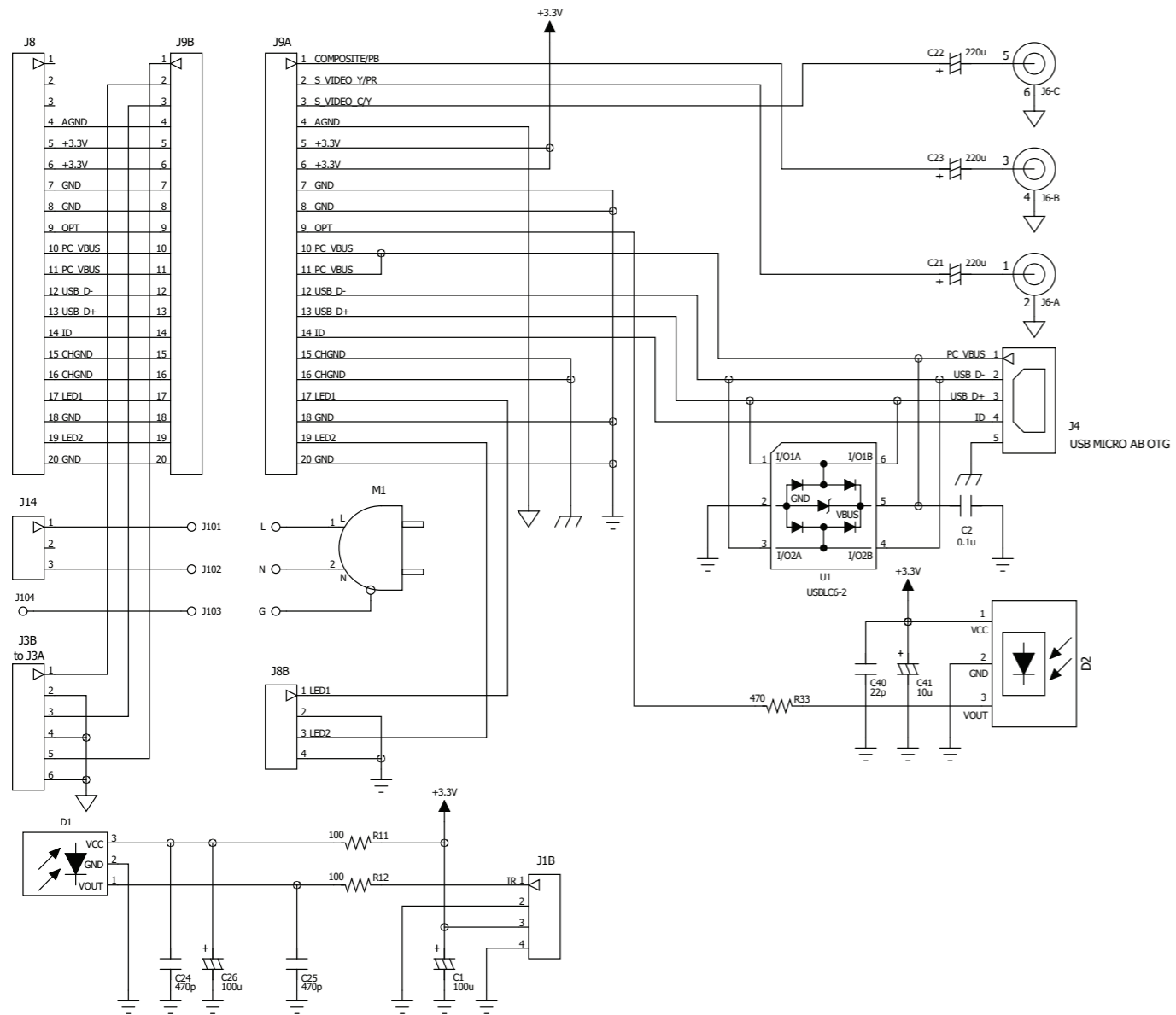
From Phase I, we cut pin 4 and pin 8 of the 16pin cable of J2A. U3 is used for ESD protection of the above two pin. As they are cut, we remove U3 from Phase II.

Combination of Boards	Required Modifications
Phase I MCU + Phase III CONN#1	- need to short R2 on CONN#1
Phase II MCU + Phase III CONN#1	- Connect the shield cable to header J10 on CONN#1
Phase I CONN#1 + Phase III MCU	- need to short R85 on MCU - 2pin shield cable left unconnected
Phase II CONN#1 + Phase III MCU	- Connect the shield cable to the 2pin header solder on CONN#1 J8 pin 7 and pin 9

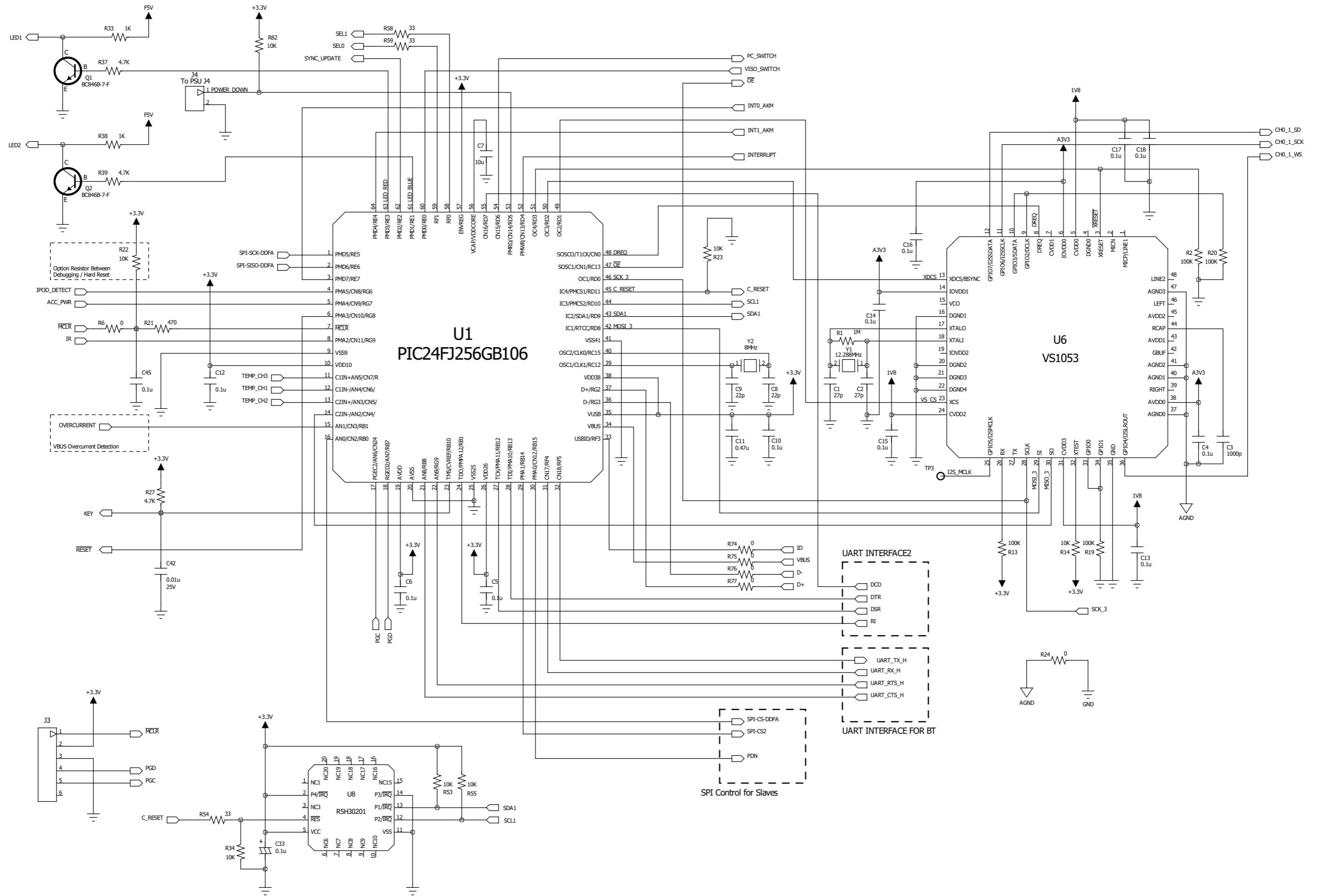
APPENDIX SCHEMATIC DIAGRAM CONN#1&2 BOARD (PHASE I)



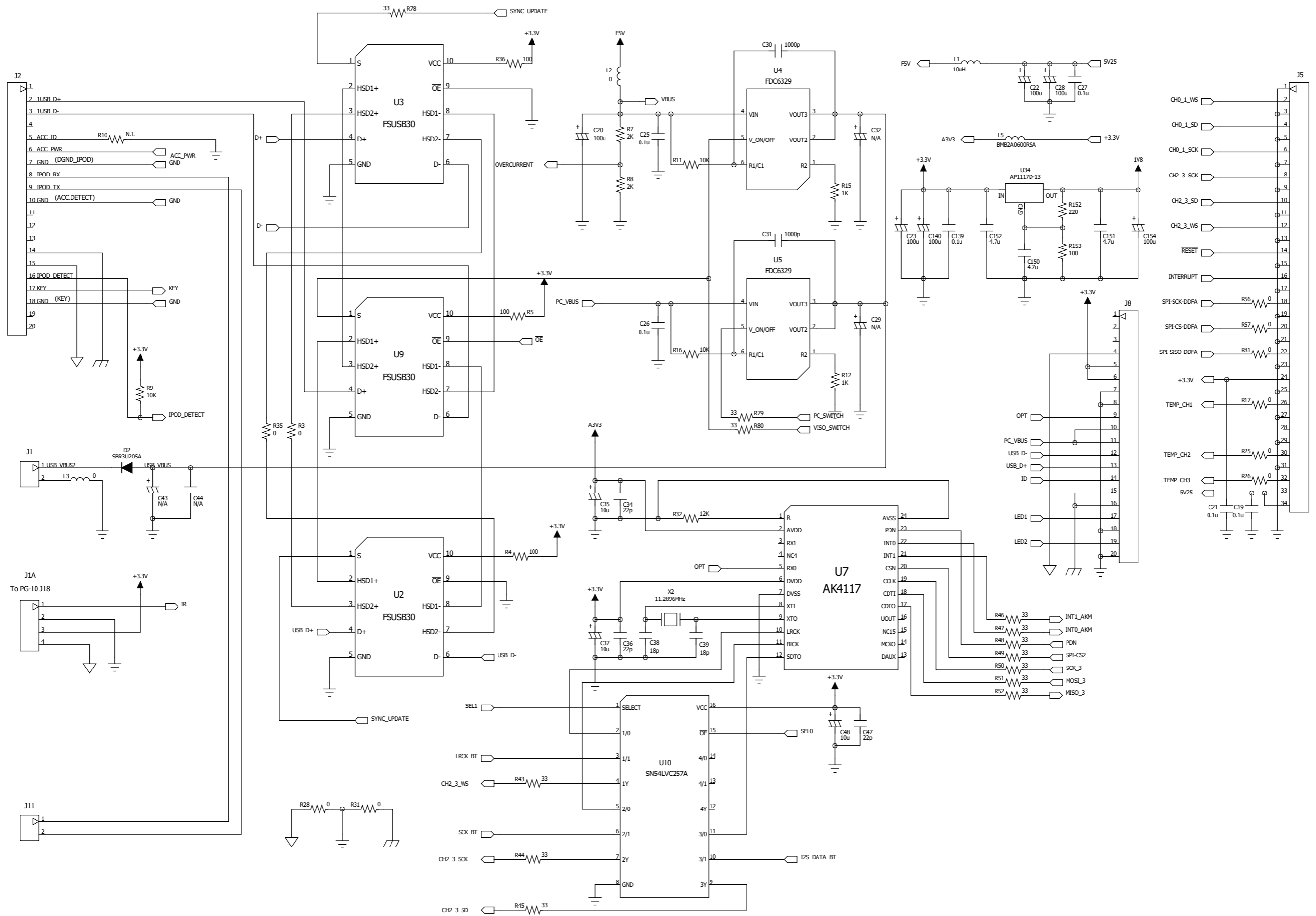
CONN#1&2 BOARD (PHASE II)



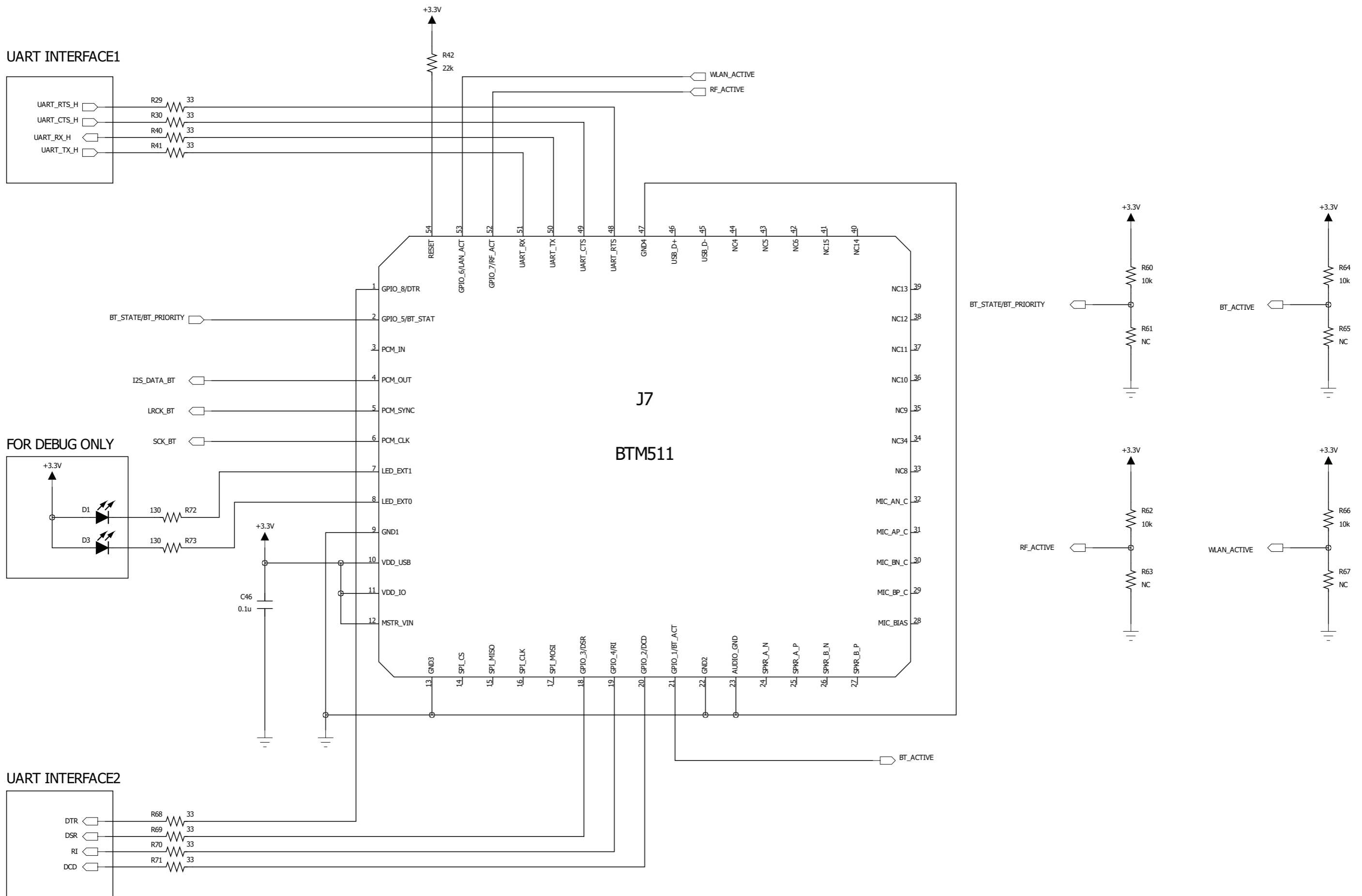
MCU BOARD (PHASE I) - (1)



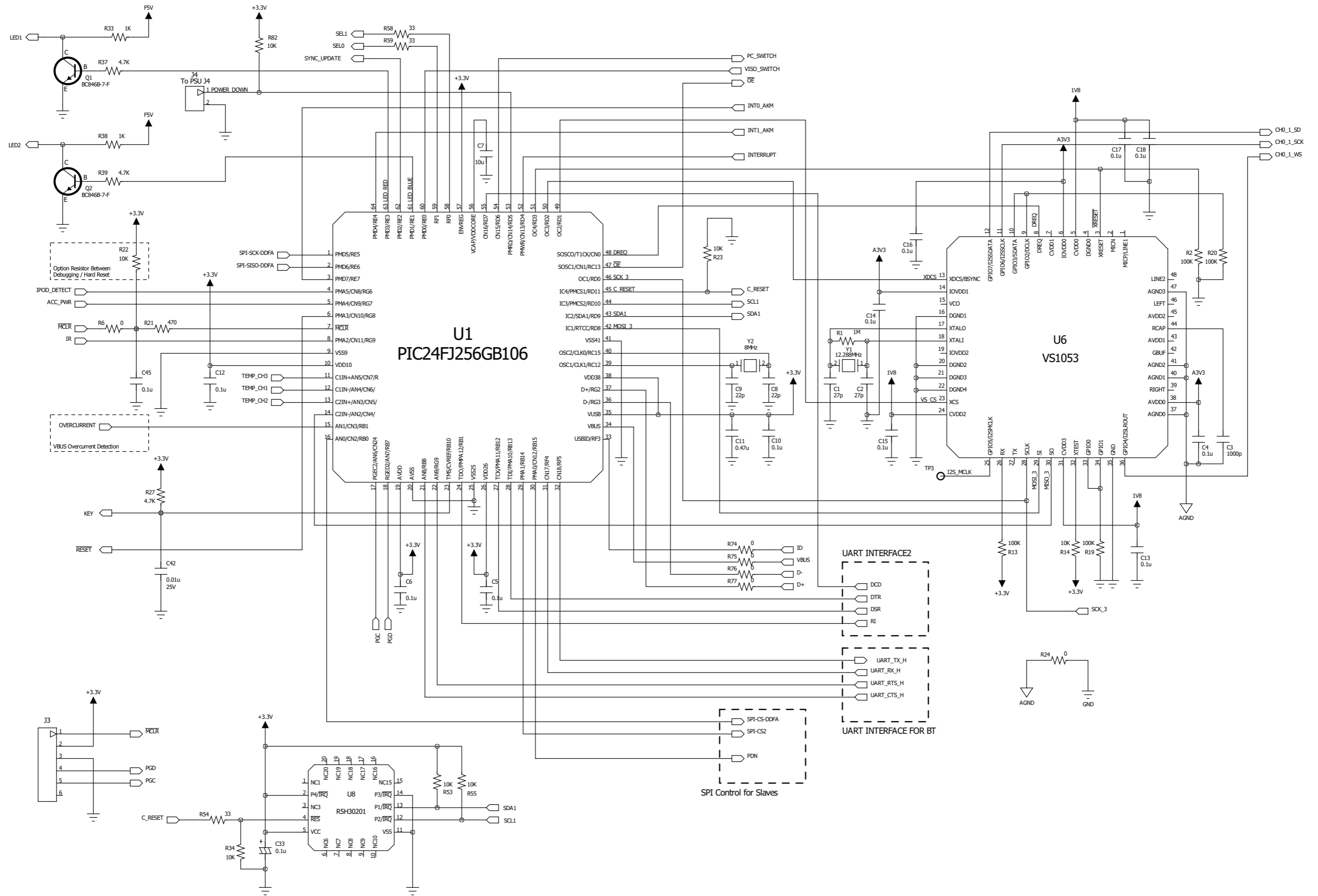
MCU BOARD (PHASE I) - (2)



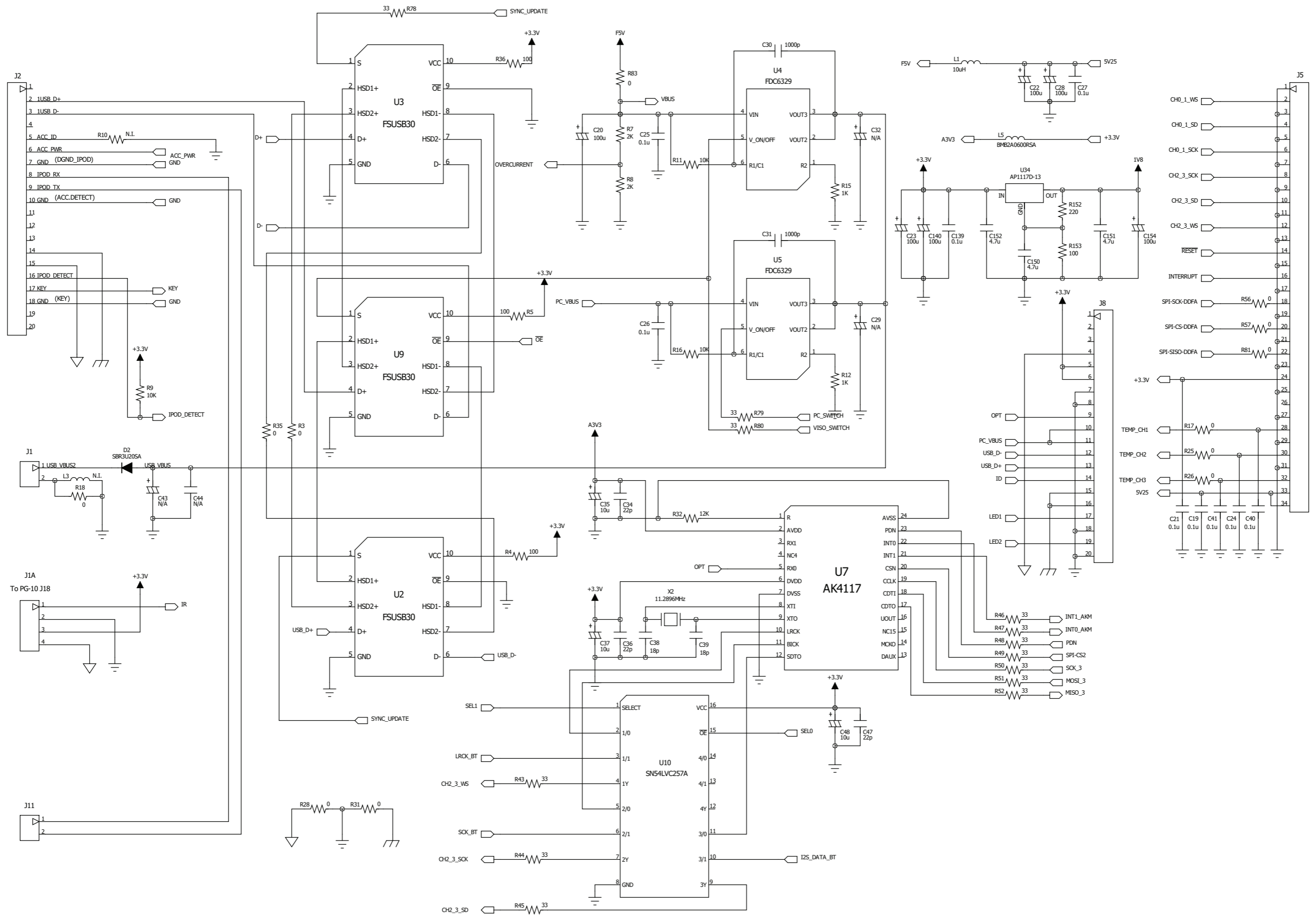
MCU BOARD (PHASE I) - (3)



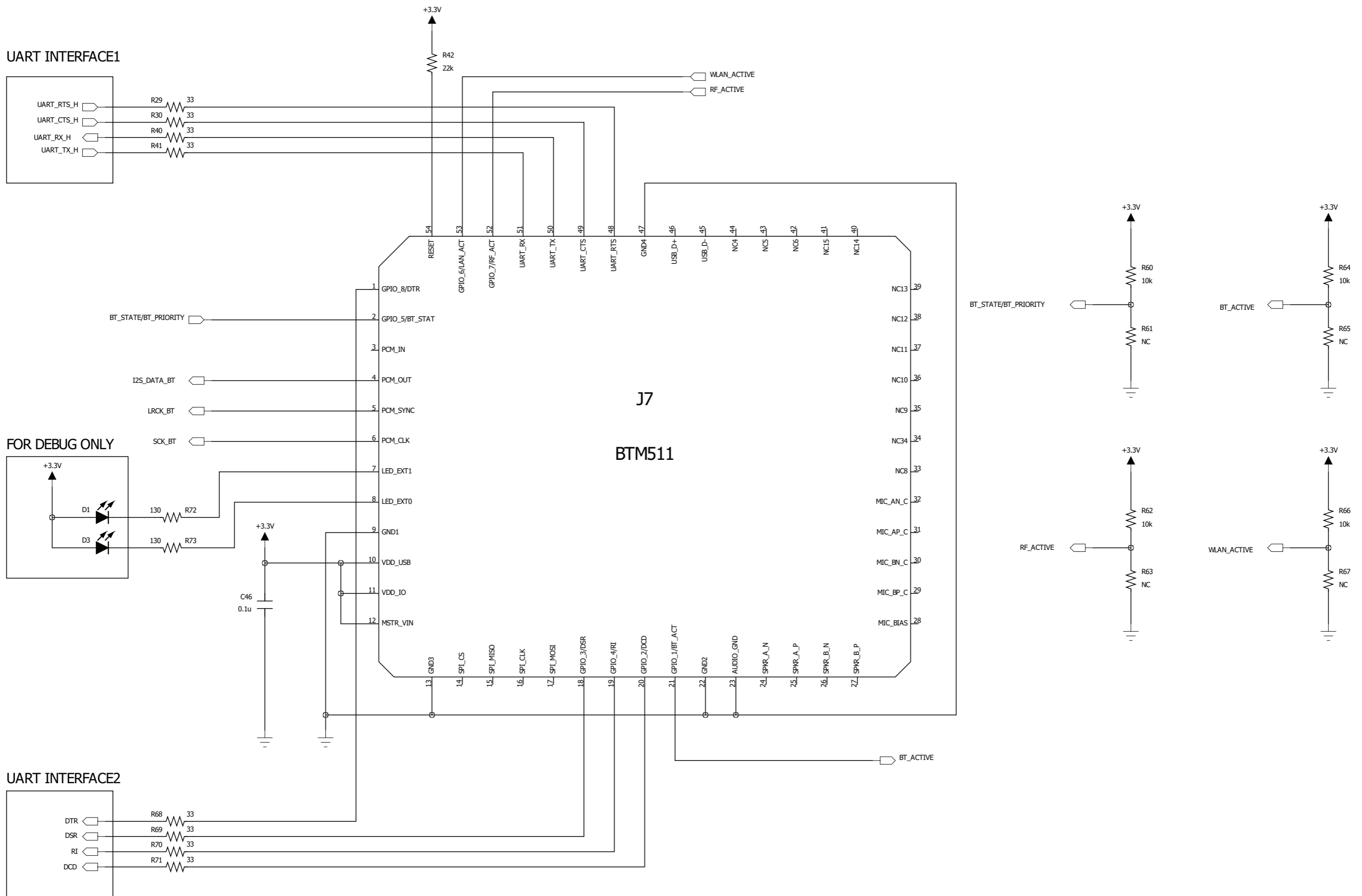
MCU BOARD (PHASE II) - (1)



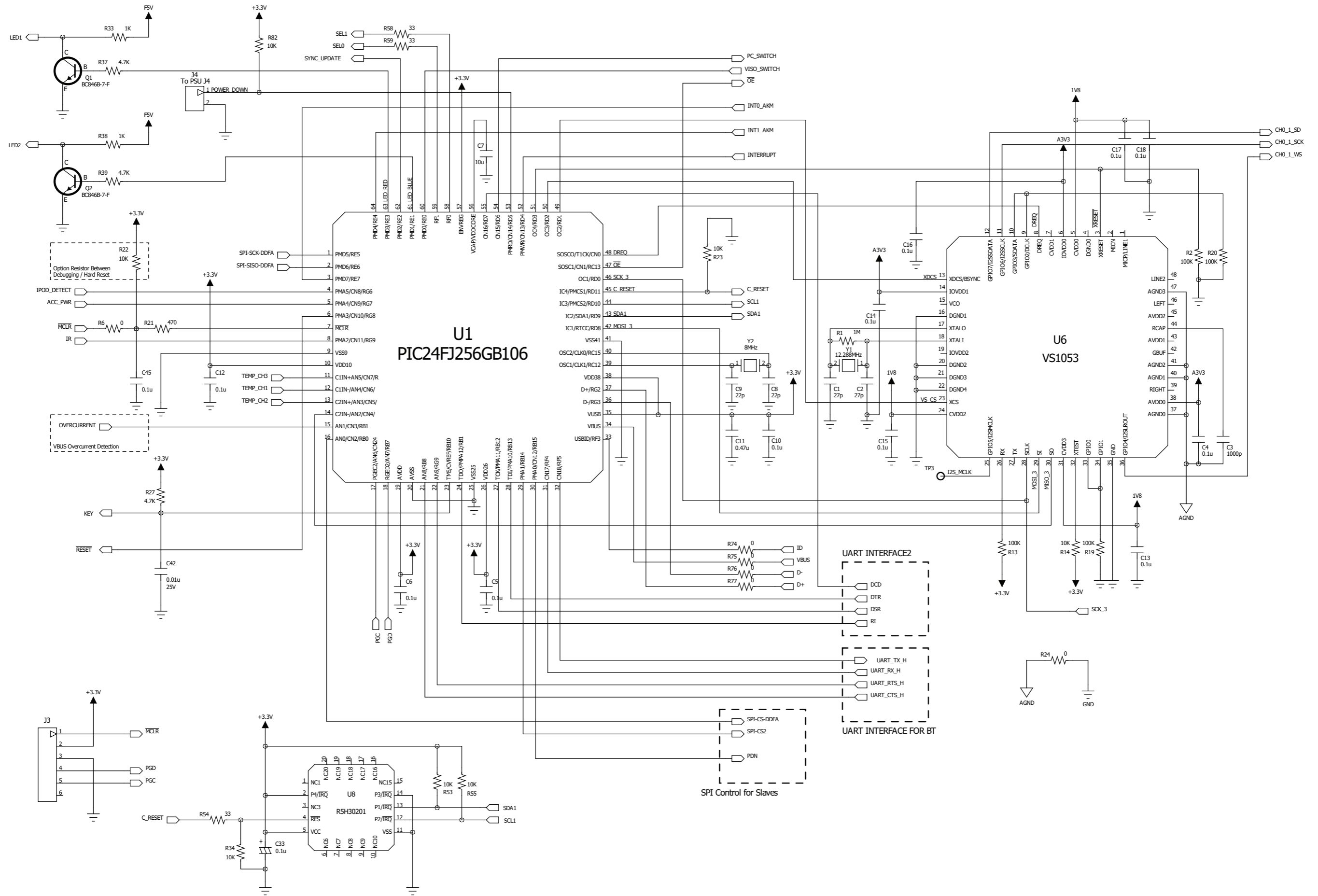
MCU BOARD (PHASE II) - (2)



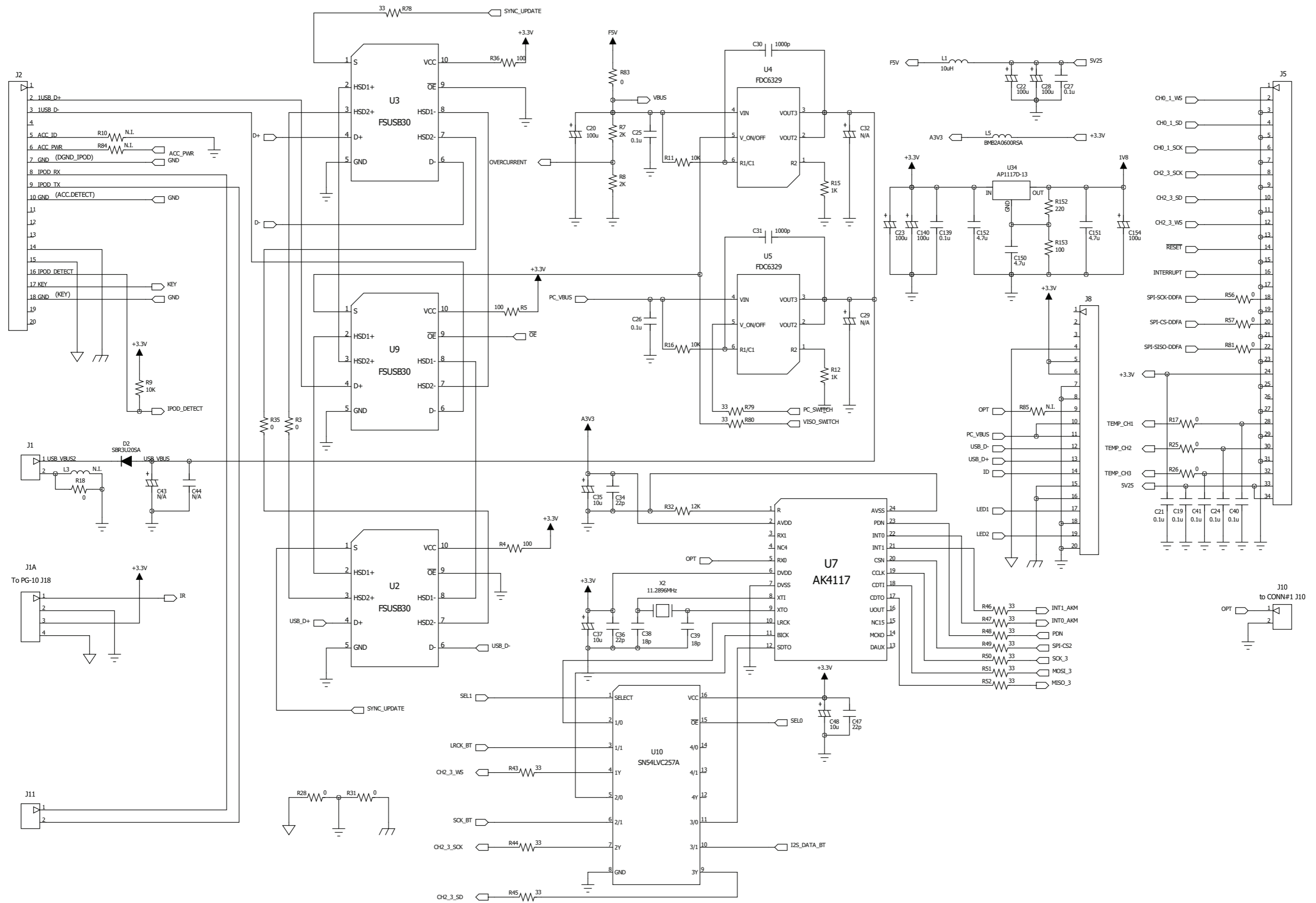
MCU BOARD (PHASE II) - (3)



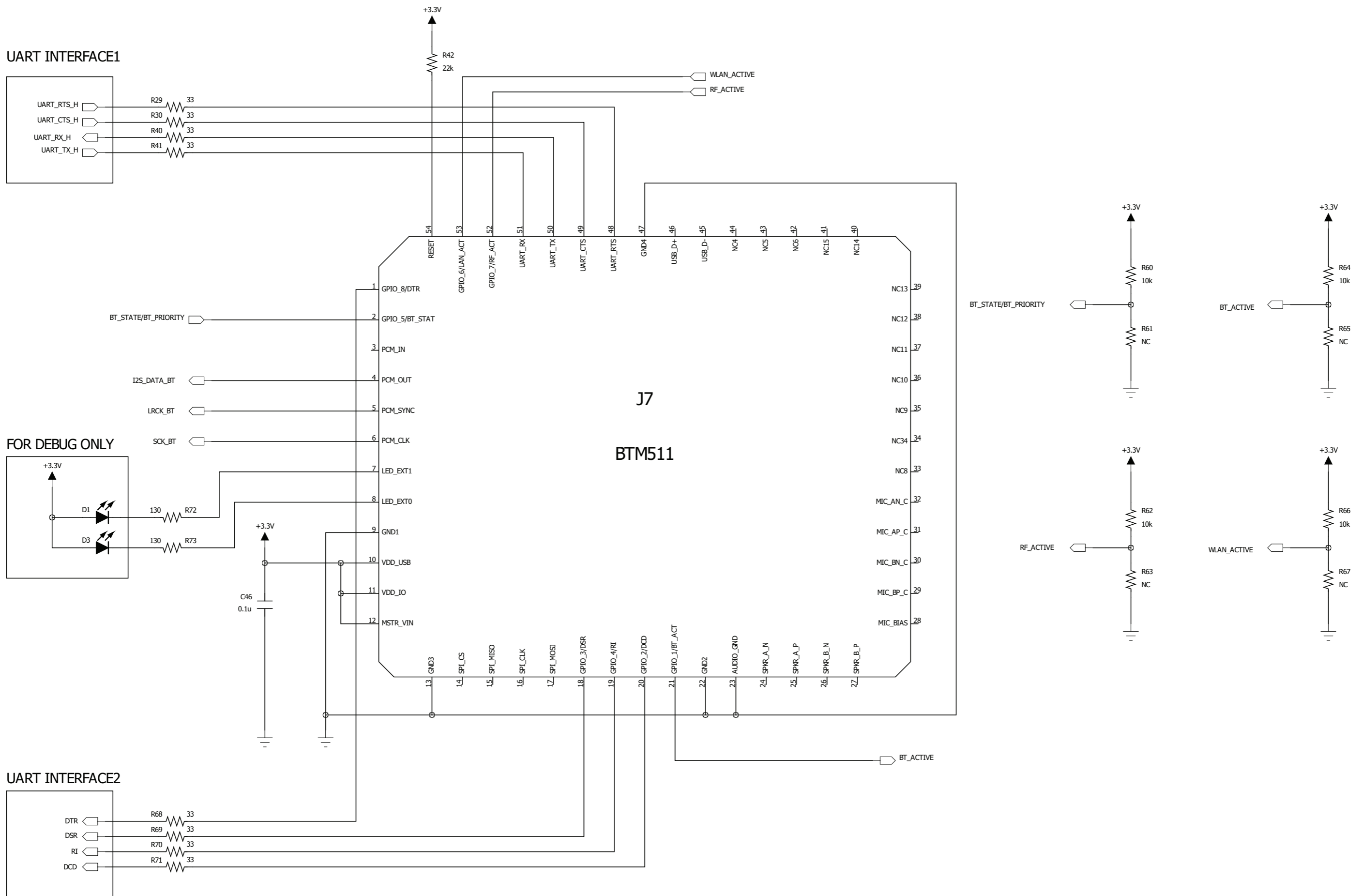
MCU BOARD (PHASE III) - (1)



MCU BOARD (PHASE III) - (2)

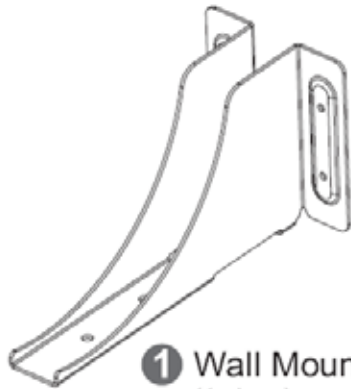


MCU BOARD (PHASE III) - (3)

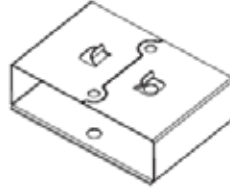


APPENDIX B - WALL MOUNT KIT

Package contents :



1 Wall Mount
(1 piece)



2 Media Streamer Mount (1 piece)



3 Wall Plugs
(4 pieces)



4 Screws
(4 pieces)



5 Bolt M6
(2 pieces)



6 Allen Tool
(1 piece)

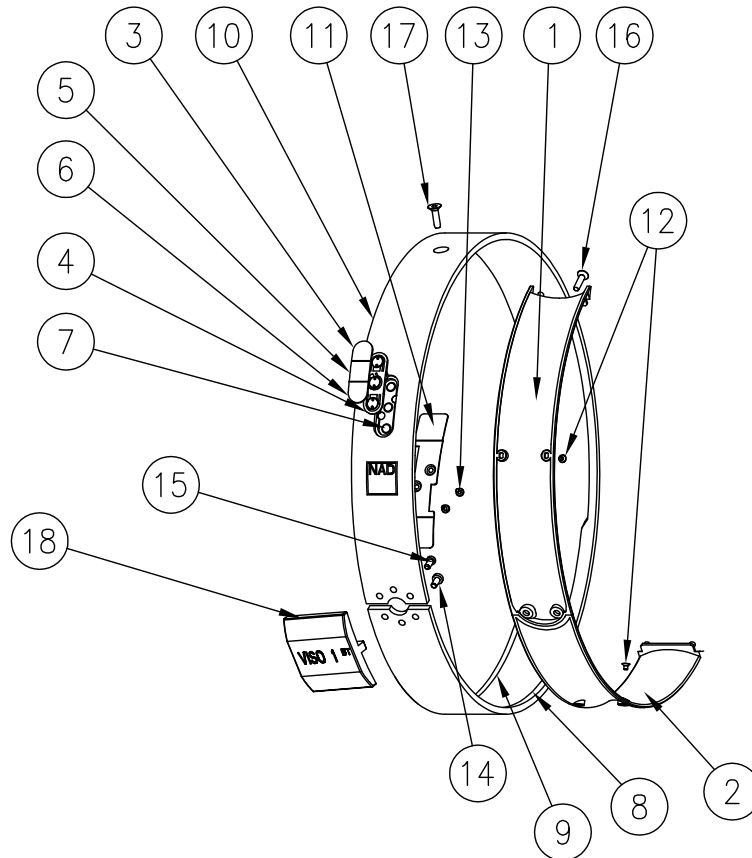
ITEM	PART NO.	DESCRIPTION	QTY
1	0330100142-902000	SCOOP BRACKET WALL MOUNT "ROHS" VWB-1	1
2	0330100143-902000	APPLE TV BRACKET WALL MOUNT "ROHS" VWB-1	1
3	1801400001-902000	PLASTIC STUD PP GRAY D4X29.6mm "KANG YANG" PEB6-31 "ROHS"	4
4	1800401011-902000	SCREW M4X25mm A/B + S/T BLACK ZINC PLATED "ROHS"	4
5	1800601003-902000	SCREW M6 X 12mm M/C CH HEAD HEX SOCKET BLK "ROHS"	2
6	0301100004-902000	ALLEN KEY MILD STEEL AF4 L67mm BLACK ZINC PLATED "ROHS"	1
PACKING :			
7	0511000057-902000	GIFT BOX 4 COLOR OFFSET "ROHS" VWB-1	1
8	0431000028-902000	QUICK START GUIDE VWB-1 "ROHS"	1
9	0216100048-902000	FOAM GASKET LEFT 165x116.5x0.5mm THK. BLACK "ROHS" VISO1 WALL BRACKET	1
10	0216100049-902000	FOAM GASKET RIGHT 165x116.5x0.5mm THK. BLACK "ROHS" VISO1 WALL BRACKET	1

APPENDIX C - ITEMS TO CHANGE TO VISO1 BT

The **RING ASSEMBLY** of Viso1 BT is different from Viso1. The following are the RING ASSEMBLY SP for Viso1 BT :

90SVISOBTBRIN-902
90SVISOBTWRIN-902

VISO1 BT SP COMPLETE RING ASSY BLACK
VISO1 BT SP COMPLETE RING ASSY WHITE



Other than the RING ASSEMBLY, the following parts are also different from Viso1.

COMPONENT VIDEO COVER

for white version :

0202100202-902000 PLASTIC COVER FOR COMPONENT VIDEO GREY "ROHS" VISO1 BT

for black version :

0202100200-902000 PLASTIC COVER FOR COMPONENT VIDEO BLACK "ROHS" VISO1 BT

I/O STAND

for white version :

0202100203-902000 PLASTIC IO STAND GREY R1 "ROHS" VISO1 BT

for black version :

0202100199-902000 PLASTIC IO STAND BLACK R1 "ROHS" VISO1 BT

SERVICE MANUAL

VISO 1 & BT

Wireless Digital Music System