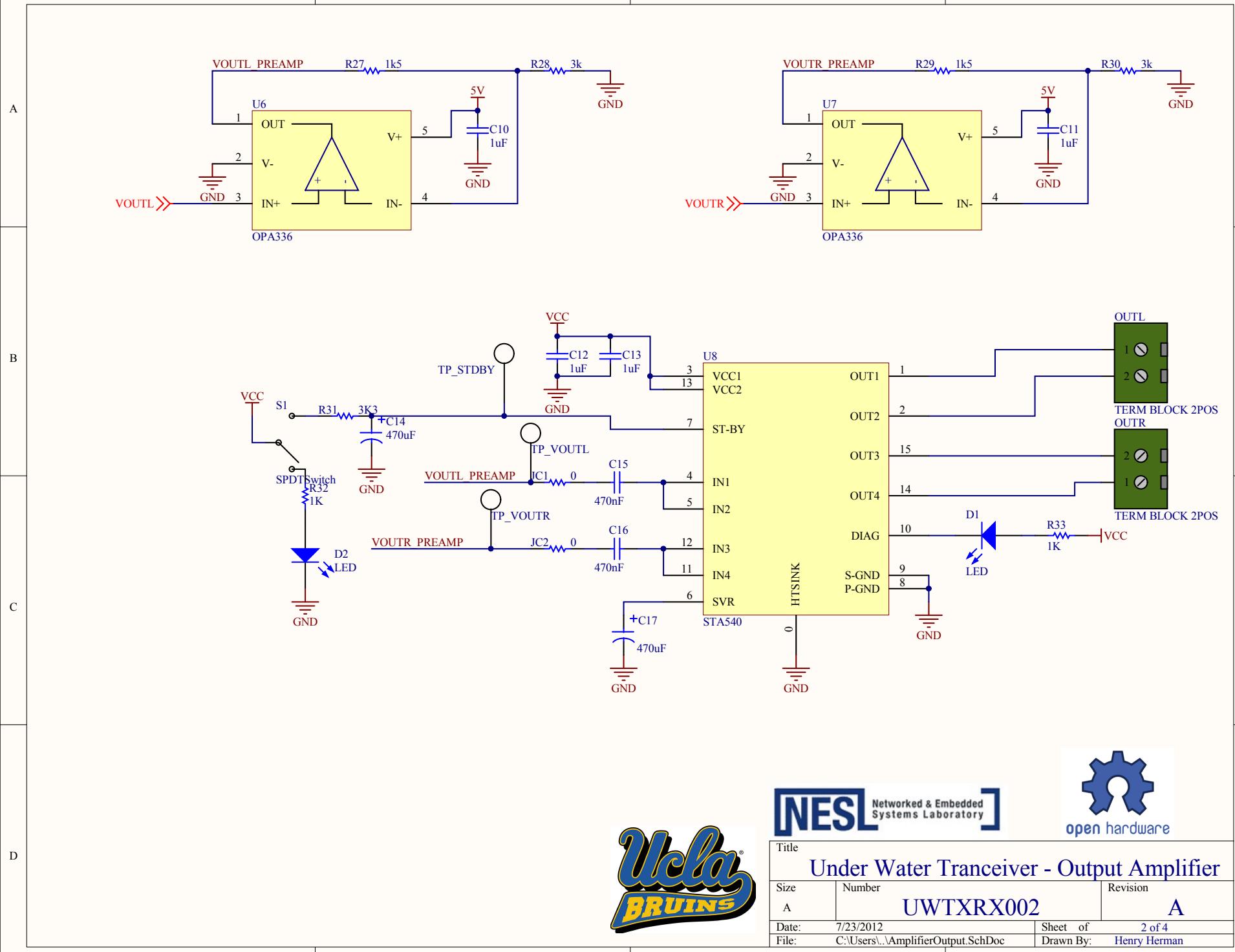


1

2

3

4



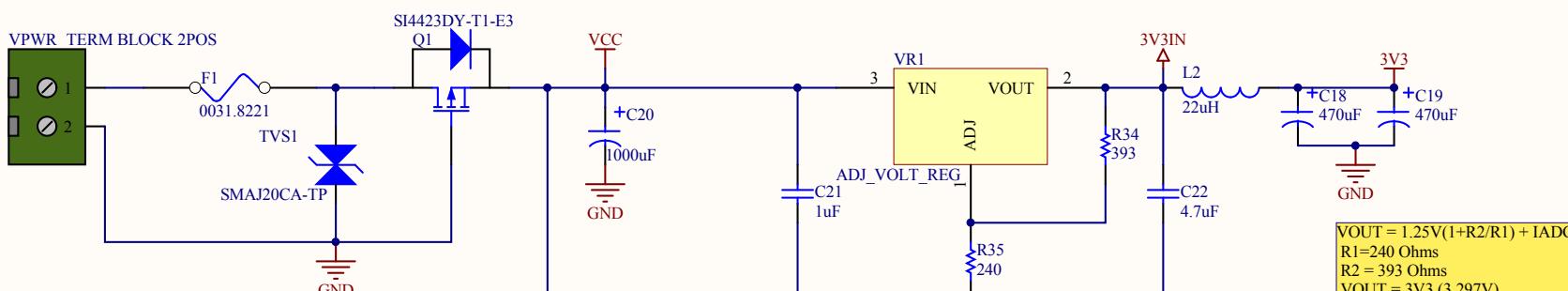
1

2

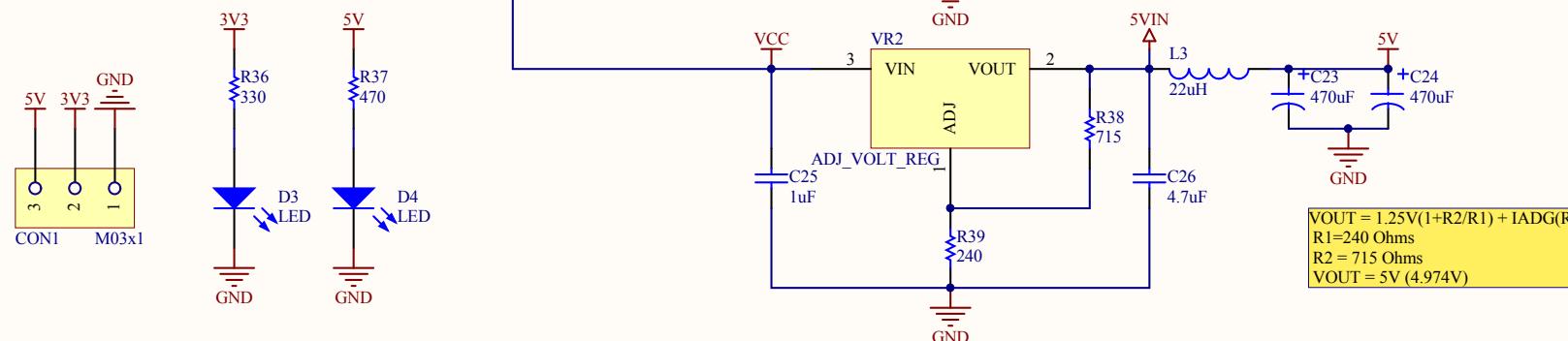
3

4

A



B

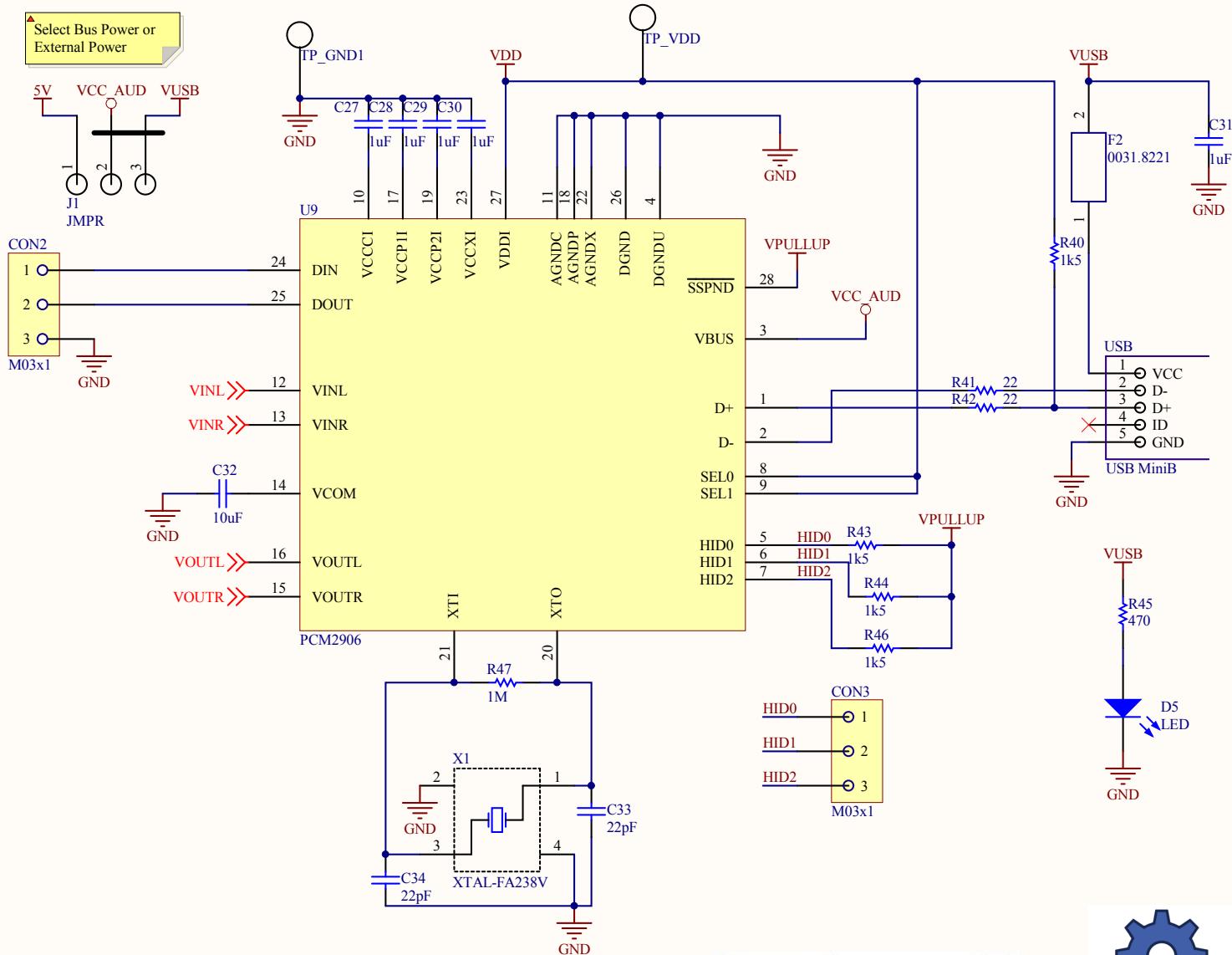


C



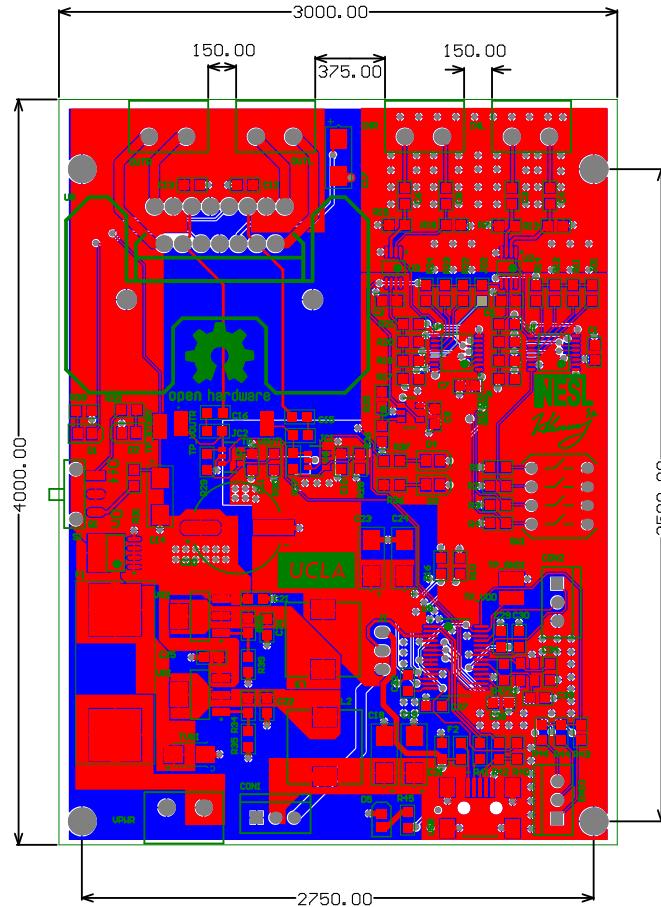
Title Under Water Tranceiver - Power Supply

| Size | Number | Revision |
|-------|------------------------------|------------------------|
| A | UWTXRX004 | A |
| Date: | 7/23/2012 | Sheet of 4 of 4 |
| File: | C:\Users...\PWRSUPPLY.SchDoc | Drawn By: Henry Herman |



Under Water Transmitter - ADC & DAC

| Under Water Transceiver - ADC & DAC | | |
|-------------------------------------|---------------------------------------|------------------------|
| Size | Number | Revision |
| A | UWTXRX001 | A |
| Date: | 7/23/2012 | Sheet of 1 of 4 |
| File: | C:\Users..\USBStereoAudioCodec.SchDoc | Drawn By: Henry Herman |



| | |
|------------------|--|
| DRAWN | |
| H. Herman | |
| CHECKED | |
| H. Herman | |
| QA | |
| MFG | |
| APPROVED | |
| H. Herman | |
| | |
| | |

NESL UCLA



TITLE

USB Audio Amplifier

1

SIZE

1

DWG NO.

REV

A

2

1

| Item # | mn Name Error:Manufad | #Column Name Error:Manufacturer No | Quantity | #Column Name Error:Note | Designator | Description | Footprint | Comment | LibRef |
|--------|-----------------------|------------------------------------|----------|-------------------------|---|---|---------------------------------|------------------|--|
| 1 | | | 16 | | C1, C2, C5, C7, C9, C10, C11, C12, C13, C21, C25, C27, C28, C29, C30, C31 | CAP | S/M_C_0805 | CAP | CAP |
| 2 | | | 4 | | C3, C4, C6, C8 | CAP | S/M_C_0805 | CAP | CAP |
| 3 | | | 6 | | C14, C17, C18, C19, C23, C24 | CAP | S/M/CT_6032_12 | CAP_POL | CAP_POL |
| 4 | | | 2 | | C15, C16 | CAP | S/M_C_0805 | CAP | CAP |
| 5 | | | 1 | | C20 | CAP | CAP-CAN-SMD-POL- | CAP_POL | CAP_POL |
| 6 | | | 2 | | C22, C26 | CAP | 12.5mmDia | CAP | CAP |
| 7 | | | 1 | | C32 | CAP | S/M_C_0805 | CAP | CAP |
| 8 | | | 2 | | C33, C34 | CAP | S/M_C_0805 | CAP | CAP |
| 9 | | | 3 | | CON1, CON2, CON3 | CAP | M03x1 | M03x1 | M03x1 |
| 10 | | | 5 | | D1, D2, D3, D4, D5 | CAP | LED-0805 | LED | LED |
| 11 | | | 1 | | F1 | FUSEHOLDER BLACK FOR SMD 5X20MM | SCHURTER/SMD/2 PADS/0031.8221 | 0031.8221 | 2105 |
| 12 | | | 1 | | F2 | Ferrite Bead | SMR_0805 | 0031.8221 | |
| 13 | | | 5 | | INL, INR, OUTL, OUTR, VPWR | Ferrite Bead | Conn-ScrewTerminal-2pin-Phoenix | TERM BLOCK 2POS | Ferrite Bead 2Pin-PhoenixTerminalBlock |
| 14 | | | 1 | | J1 | Jumper | M03x1-nolock | JMPR | JMPR-3 |
| 15 | | | 8 | | JC1, JC2, J01, J02, R5, R10, R16, R17 | Resistor | SMR_0805 | Res | Res |
| 16 | | | 2 | | L2, L3 | INDUCTOR SHIELD PWR 22UH 10145 | G_JMETRIC/TDK/SLE10145 | 22uH | 1660 |
| 17 | | | 1 | | O1 | mosfet,p ch,20v,10a,8soic; transistor polarity:p channel; | SOIC-8-Lead-Vishay-PFET | SI4423DY-T1-E3 | 2390 |
| 18 | | | 10 | | R1, R2, R3, R4, R11, R12, R14, R22, R23, R24 | Resistor | SMR_0805 | Res | Res |
| 19 | | | 2 | | R6, R19 | Resistor | SMR_0805 | Res | Res |
| 20 | | | 4 | | R7, R13, R15, R18 | Resistor | SMR_0805 | Res | Res |
| 21 | | | 2 | | R8, R20 | Resistor | SMR_0805 | Res | Res |
| 22 | | | 3 | | R9, R21, R47 | Resistor | SMR_0805 | Res | Res |
| 23 | | | 4 | | R25, R26, R28, R30 | Resistor | SMR_0805 | Res | Res |
| 24 | | | 6 | | R27, R29, R40, R43, R44, R46 | Resistor | SMR_0805 | Res | Res |
| 25 | | | 1 | | R31 | Resistor | SMR_0805 | Res | Res |
| 26 | | | 2 | | R32, R33 | Resistor | SMR_0805 | Res | Res |
| 27 | | | 1 | | R34 | Resistor | SMR_0805 | Res | Res |
| 28 | | | 2 | | R35, R39 | Resistor | SMR_0805 | Res | Res |
| 29 | | | 1 | | R36 | Resistor | SMR_0805 | Res | Res |
| 30 | | | 2 | | R37, R45 | Resistor | SMR_0805 | Res | Res |
| 31 | | | 1 | | R38 | Resistor | SMR_0805 | Res | Res |
| 32 | | | 2 | | R41, R42 | Resistor | SMR_0805 | Res | Res |
| 33 | | | 1 | | S1 | SPDTswitch | SPDTswitch | SPDTswitch | SPDTswitch |
| 34 | | | 1 | | SW1 | DIPSW4PIN | 4 POS DIP SWITCH | 4 POS DIP SWITCH | |
| 35 | | | 5 | | TP_GND1, TP_STDBY, TP_VDD, TP_VOUTL, TP_VOUTR | TEST_PT_SMD | TEST_PT | TEST_PT | TEST_PT |
| 36 | | | 1 | | TVS1 | TVS 400W 12V BIDIRECT SMA | D0-214AC | SMAJ20CA-TP | 2519 |
| 37 | | | 2 | | U1, U4 | TSSOP 16LEAD - Analog Devices - ADG1609 | ADG1609 | ADG1609 | |
| 38 | | | 2 | | U2, U3 | MSOP-8PIN-TI | INA331 | INA331 | |
| 39 | | | 3 | | U5, U6, U7 | SOT23-5-TI | OPA336 | OPA335 | |
| 40 | | | 1 | | U8 | STA540 Multiwatt15 | STA540 | STA540 | |
| 41 | | | 1 | | U9 | SSOP-28PIN-TI | PCM2906 | PCM2906C | |
| 42 | | | 1 | | USB | USB-MiniB | USB MiniB | USB MiniB | |
| 43 | | | 2 | | VR1, VR2 | NPN General Purpose Amplifier | LM317-SOT23-POS-ADJ-VOLT_REG | ADJ_VOLT_REG | ADJ_VOLT_REG |
| 44 | | | 1 | | X1 | | XTAL 12MHz SMD | XTAL-FA238V | XTAL-FA238V |