

| Quantity | Part Description | Part Designator | Mouser PN | TaydaElectronics.com | PJRC.com | Digikey.com | Price (USD) | Ext.: (USD) | Comment |
|----------|--|---|----------------------|----------------------|---------------|--------------|-------------|-------------|--------------------|
| 15 | 0.1uF 50V SMD 1206 Ceramic Capacitor | C2, C3, C8, C9, C10 , C11, C13, C14, C16, C19, C20, C23, C24, C26, C31 | C1206C104K5RACTU | | | | \$ 0.05 | \$ 0.81 | |
| 2 | 2.2nF 50V SMD 1206 Capacitor | C32, C34 | 80-C1206C222K5RAC | | | | \$ 0.10 | \$ 0.20 | |
| 1 | 1.0uF 50V SMD 1206 Capacitor | C5 | 187-CL31B105KBHNNNE | | | | \$ 0.15 | \$ 0.15 | |
| 2 | 2.2uF 25V SMD 1206 Capacitor | C28, C29 | 80-C1206C225K5R | 187-CL31A225KB9LNNC | | | \$ 0.17 | \$ 0.34 | |
| 11 | 10uF 16V SMD 1206 Capacitor | C4 , C12, C15, C17, C18, C21, C22, C25, C27, C30, C33 | 80-C1206C106K4P | | | | \$ 0.29 | \$ 3.19 | |
| 3 | 470uF 25V Aluminum Electrolytic Cap | C1, C6, C7 | 667-ECA-1EM471 | | | | \$ 0.39 | \$ 1.17 | |
| 1 | S1A-13-F Diode or equivalent (1N4001) | D1 | 621-S1A-F | | | | \$ 0.24 | \$ 0.24 | |
| 3 | LED Diodes SMD; Colors to suit | D2, D3, D4 | 645-599-0220-007F | | | | \$ 0.28 | \$ 0.84 | |
| 1 | 10V 0.5W SMD Zener Diode | D5 | 78-MMSZ5240C-E3-08 | | | | \$ 0.28 | \$ 0.28 | |
| 4 | 1/8" Female Stereo Jack, PCB Mount | Excite_Out, Mic_In, Rec_In, Audio_Out | 490-S11-3515N | | | CP1-3515N-ND | \$ 1.41 | \$ 5.64 | |
| 3 | Inductor 10uH 20% | L1, L2, L3 | 81-1264EY-100MP3 | | | | \$ 0.47 | \$ 1.41 | |
| 1 | SUP90P06-09L-E3 MOSFET 90A TO-220-3 | Q1 or Q4 (Place one or the other but not both!). | 781-SUP90P06-09L-E3 | | | | \$ 5.05 | \$ 5.05 | |
| 2 | 2N7000 TO-92 | Q2, Q3 | 512-2N7000BU | | | | \$ 0.36 | \$ 0.72 | |
| 3 | 100 Ohm SMD 1206 Resistor | R6, R11, R12 | 652-CR1206FX-1000ELF | | | | \$ 0.10 | \$ 0.30 | |
| 1 | 150 Ohm SMD 1206 Resistor | R15 | 603-RC1206JR-07150RL | | | | \$ 0.10 | \$ 0.10 | |
| 2 | 220 Ohm SMD 1206 Resistor | R4, R5 | 279-CRGCQ1206J220R | | | | \$ 0.10 | \$ 0.20 | |
| 3 | 330 Ohm SMD 1206 Resistor* | R8, R9, R14 | 708-RMCF1206FT330R | | | | \$ 0.10 | \$ 0.30 | |
| 2 | 470 Ohm SMD 1206 Resistor | R10, R13 | CRCW1206470RJNEAC | | | | \$ 0.10 | \$ 0.20 | |
| 1 | 1K Ohm SMD 1206 Resistor | R3 | CRCW12061K00JNEAC | | | | \$ 0.10 | \$ 0.10 | |
| 1 | 2.2K Ohm SMD 1206 Resistor | R7 | CRCW12062K20JNEAC | | | | \$ 0.10 | \$ 0.10 | |
| 2 | 10K Ohm SMD 1206 Resistor | R1, R2 | CRCW120610K0FKEB | | | | \$ 0.10 | \$ 0.20 | |
| 1 | 100K Ohm SMD 1206 Resistor | R16 | 71-CRCW1206100KFKEB | | | | \$ 0.10 | \$ 0.10 | |
| 1 | SPST Momentary Contact Pushbutton | S1 | | A-4720 | | | \$ 0.39 | \$ 0.39 | |
| 1 | Teensy 4.1 | Teensy 4.1 | | | TEENSY41 | | \$ 31.50 | \$ 31.50 | |
| 1 | Teensy Audio Hat | Hat | | | TEENSY4_AUDIO | | \$ 14.40 | \$ 14.40 | |
| 1 | LM7805CT Voltage Reg. TO-220-3 | U1 | 926-LM7805CT/NOPB | | | | \$ 1.70 | \$ 1.70 | |
| 1 | AP7381-50V-A LDO Voltage Reg. TO-92 | U2 | AP7381-50V-A | | | | \$ 0.46 | \$ 0.46 | |
| 1 | LM1117T-3.3 LDO Voltage Reg. TO-220-3 | U3 | 926-LM1117T-3.3/NOPB | | | | \$ 1.69 | \$ 1.69 | |
| 1 | ATTINY85-20PU | U4 | 556-ATTINY85-20PU | | | | \$ 1.66 | \$ 1.66 | |
| 1 | PCM5102APW Stereo DAC TSSOP-20 | U5 | 595-PCM5102APWR | | | | \$ 5.02 | \$ 5.02 | |
| 1 | PCM1808PWR Stereo ADC TSSOP-14 | U6 | 595-PCM1808PWR | | | | \$ 1.71 | \$ 1.71 | |
| 1 | 8-PIN IC Socket | For U4 | | A-001 | | | \$ 0.02 | \$ 0.02 | |
| 1 | IDC 2x6 Female | USBHost | | A-195 | | | \$ 0.22 | \$ 0.22 | |
| 4 | IDC 1x1 Male Pins | TP1, TP2, Fan1, Fan2 | | A-4662 | | | \$ 0.50 | \$ 0.50 | One Set |
| 5 | IDC 2x5 Keyed Male PCB Socket | Bands, Display, FrontPanel, Encoder, RFControl | | A-2939 | | | \$ 0.14 | \$ 0.70 | |
| 1 | IDC 2x3 Keyed Male PCB Socket | Keys/PTT | | | | 732-5394-ND | \$ 0.48 | \$ 0.48 | |
| 1 | IDC 2x3 Male Pins | Ethernet | | | | 732-5394-ND | \$ 0.48 | \$ 0.48 | |
| 1 | IDC 2x3 Male *0.2 pitch | Teensy Ethernet connection | | A-1298 | | 1849-1000-ND | \$ 0.13 | \$ 0.13 | |
| 1 | IDC 2x3 Female *0.2 pitch | Teensy Ethernet connection | | | | S5750-03-ND | \$ 0.80 | \$ 0.80 | |
| 2 | IDC 1x2 Male Pins | Mic_J, SW_J | | A-5773 | | | \$ 0.02 | \$ 0.04 | |
| 2 | IDC 1x2 Female Connectors (with wires) | Mic_P, SW_P | | A-6153 | | | \$ 0.79 | \$ 0.79 | |
| 1 | IDC 1x3 Male Pins | Disp_Pwr | | A-5774 | | | \$ 0.02 | \$ 0.02 | |
| 1 | IDC 2x4 Male Pins | Acc | | A-2948 | | | \$ 0.18 | \$ 0.18 | |
| 1 | IDC Shorting Cap | (for "Disp_Pwr" connector) | | A-1324 | | | \$ 0.02 | \$ 0.02 | |
| 1 | IDC 1x3 Male Pins 90 Degrees | I/Q_P | | A-199 | | | \$ 0.17 | \$ 0.17 | |
| 1 | IDC 1x3 Female Pins (with wires) | I/Q_J | | A-6153 | | | \$ 0.79 | \$ - | Use From Set Above |
| 1 | Male Pin set for the Audio Hat | | | A-4662 | | | \$ 0.50 | \$ 0.50 | |
| 1 | Female Header set for the Teensy | | | A-1055 | | | \$ 0.22 | \$ 0.22 | |
| 1 | 12VDC Fan (40mm x 40mm x 6mm) | Or equivalent | 664-AD0412HXK96XT1 | | | | \$ 9.35 | \$ 9.35 | |
| 2 | TO-220 Type Heat Sinks | For U1, U3 | 490-HSE-B20250-040H | | | | \$ 0.87 | \$ 1.74 | |
| 1 | USB Connector | USBHost (cable with connector to outside world) | | | | | | | |
| 104 | | | | | | | | \$ 96.53 | |

* Use appropriate resistor for LEDs

Populate board with EITHER the parts for the **Shut Down option** or **Reverse Voltage Protection option** but NOT BOTH