

Mainboard_BOM

Project: Mainboard
 Tool: kicad
 Number of Parts 97

| Reference | Quantity | Value | Distributor | Distributor # | Price | Extended Price |
|--------------------------------|----------|---------------|-------------|------------------|--------|----------------|
| Q1 | 1 | FDC638 | DigiKey | FDC638PCT-ND | \$0.55 | \$0.55 |
| Q2,Q3 | 2 | FZT788B | DigiKey | FZT788BCT-ND | \$1.01 | \$2.02 |
| F1 | 1 | Fiducial | DigiKey | NA | | \$0.00 |
| C2,C4 | 2 | 6pF | DigiKey | 311-1095-1-ND | \$0.18 | \$0.36 |
| C15 | 1 | 39pF | DigiKey | 1276-1769-1-ND | \$0.10 | \$0.10 |
| C18,C17 | 2 | 47pF | DigiKey | 1276-1832-1-ND | \$0.10 | \$0.20 |
| C5,C6,C7,C9,C8,C10,C19,C20,C22 | 9 | 0.1uF | DigiKey | 399-1167-1-ND | \$0.11 | \$0.99 |
| C23 | 1 | 0.22uF | DigiKey | 587-1287-1-ND | \$0.12 | \$0.12 |
| C3,C1,C14,C13,C12 | 5 | 1uF | DigiKey | 1276-1275-1-ND | \$0.10 | \$0.50 |
| C21 | 1 | 4.7uF | DigiKey | 1276-1065-1-ND | \$0.21 | \$0.21 |
| C11 | 1 | 22uF Tant | DigiKey | 511-1506-1-ND | \$1.03 | \$1.03 |
| C16 | 1 | 68uF Tant | DigiKey | 478-8414-1-ND | \$1.08 | \$1.08 |
| C24 | 1 | 0.1 | DigiKey | 399-1167-1-ND | \$0.11 | \$0.11 |
| R21,R22 | 2 | 0.2, 1W | DigiKey | 989-1049-1-ND | \$0.61 | \$1.22 |
| R2 | 1 | 0.5,1W | DigiKey | RCWE.51FCT-ND | \$0.79 | \$0.79 |
| R1 | 1 | 0.51, 1W | DigiKey | RCWE.51FCT-ND | \$0.79 | \$0.79 |
| R34,R33 | 2 | 27 | DigiKey | P27ACT-ND | \$0.10 | \$0.20 |
| R30 | 1 | 49.9 | DigiKey | P49.9KCCT-ND | \$0.10 | \$0.10 |
| R35,R36 | 2 | 56 | DigiKey | 311-56JRCT-ND | \$0.10 | \$0.20 |
| R9 | 1 | 730 | DigiKey | P732CCT-ND | \$0.10 | \$0.10 |
| R7,R8,R27,R28 | 4 | 1k | DigiKey | P1.0KACT-ND | \$0.10 | \$0.40 |
| R10,R12 | 2 | 1540 | DigiKey | P1.54KCCT-ND | \$0.10 | \$0.20 |
| R11,R13 | 2 | 2100 | DigiKey | P2.10KCCT-ND | \$0.10 | \$0.20 |
| R16,R17 | 2 | 2550 | DigiKey | 311-2.55KCRCT-ND | \$0.10 | \$0.20 |
| R3 | 1 | 4.7k | DigiKey | P10KACT-ND | \$0.10 | \$0.10 |
| R23,R24 | 2 | 5k | DigiKey | P4.99KCCT-ND | \$0.10 | \$0.20 |
| R4,R6,R18,R19,R20,R38,R40,R42 | 8 | 10k | DigiKey | P10KACT-ND | \$0.10 | \$0.80 |
| R25,R26,R32 | 3 | 49.9k | DigiKey | P49.9KCCT-ND | \$0.10 | \$0.30 |
| R31 | 1 | 150k | DigiKey | P150KCCT-ND | \$0.10 | \$0.10 |
| R14,R15,R29 | 3 | 200k | DigiKey | P200KACT-ND | \$0.10 | \$0.30 |
| R5 | 1 | 470k | DigiKey | 311-470KCRCT-ND | \$0.10 | \$0.10 |
| H1,H2,H3,H4 | 4 | Mounting_Hole | DigiKey | NA | | \$0.00 |

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|---------------|---|---------------|----------|------------------------|----------------|---------|
| L1 | 1 | 6.8uH | DigiKey | SRN6045-6R8YCT-ND | \$0.43 | \$0.43 |
| D2 | 1 | LED | DigiKey | 160-1404-1-ND | \$0.39 | \$0.39 |
| D5 | 1 | Diode-Shottky | DigiKey | 1N5819HW-FDICT-ND | \$0.52 | \$0.52 |
| D6 | 1 | GRN | DigiKey | 350-2885-ND | \$0.47 | \$0.47 |
| D7 | 1 | YLW | DigiKey | 511-1275-1-ND | \$0.62 | \$0.62 |
| D1,D3,D4 | 3 | 1N5819 | DigiKey | 1N5819HW-FDICT-ND | \$0.52 | \$1.56 |
| U1 | 1 | LTC4412 | DigiKey | LTC4412ES6#TRPBFCT-ND | \$3.07 | \$3.07 |
| P1 | 1 | CONN_01X02 | DigiKey | ED2740-ND | \$0.38 | \$0.38 |
| U2 | 1 | ATmega328P | DigiKey | ATMEGA328P-AU-ND | \$3.58 | \$3.58 |
| J1 | 1 | ICSP | DigiKey | S2011EC-03-ND | \$0.36 | \$0.36 |
| U3,U4 | 2 | LTC6800 | DigiKey | LTC6800HMS8#PBF-ND | \$3.12 | \$6.24 |
| U5 | 1 | ADS1015 | DigiKey | 296-25227-1-ND | \$3.32 | \$3.32 |
| U6,U7 | 2 | bq2057CTS | DigiKey | 296-25916-1-ND | \$1.85 | \$3.70 |
| TH1 | 1 | NTC | DigiKey | BC2384-ND,455-1657-ND | \$1.70 | \$1.70 |
| TH2 | 1 | NTC | DigiKey | BC2384-ND, 455-1657-ND | \$1.70 | \$1.70 |
| U9 | 1 | LMR61428 | DigiKey | LMR61428XMM/NOPBCT-ND | \$1.87 | \$1.87 |
| U8 | 1 | SM72238 | DigiKey | 296-39811-5-ND | \$1.67 | \$1.67 |
| U10 | 1 | FT230X | DigiKey | 768-1135-1-ND | \$2.38 | \$2.38 |
| J2 | 1 | USB | DigiKey | UE27AC54100-ND | \$0.40 | \$0.40 |
| U11 | 1 | LM75BDP | DigiKey | 568-4768-1-ND | \$0.74 | \$0.74 |
| U12 | 1 | HIH6130 | DigiKey | 480-3651-1-ND | \$13.75 | \$13.75 |
| X1 | 1 | 32kHz | DigiKey | 300-8744-1-ND | \$1.18 | \$1.18 |
| | 1 | | OSH PARK | | \$13.78 | \$13.78 |
| | 1 | | Polycase | WP-33*15 | \$16.49 | \$16.49 |
| TOTAL: | | | | | \$93.87 | |