

Klondike 1 - Nano ASIC Miner

Preliminary Parts List

| Part# | Description | Product # | MFR. | Value | Package | QTY | Cost Qty 1 | Cost Qty 25 | Cost Qty 100 | Dist. |
|----------|------------------------------------|--------------------|-------------|--------------|------------------|-----------|--------------|-------------|--------------|-----------|
| PCB | 4 Layer Circuit Board | PCB | China | 5cm x 2.5cm | | 1 | 2.500 | 0.900 | 0.600 | |
| U3 | Avalon ASIC chip | AVALON | Avalon | | QFN48 | 1 | 0.000 | 0.000 | 0.000 | Avalon |
| U2 | USB Micro Controller | PIC16LF1459-I/SS | Microchip | | TSSOP-20 | 1 | 1.620 | 1.480 | 1.340 | Microchip |
| U1 | 1.2V, 2A Buck Step Down Regulator | AP6502A | Diodes Inc. | 2A | SOIC-8 | 1 | 0.930 | 0.728 | 0.351 | Mouser |
| U4 | 3.3V, 250mA LDO Regulator | MCP1700T-3302E/TT | Microchip | 250mA | SOT-23 | 1 | 0.400 | 0.310 | 0.280 | Microchip |
| U4 | Alternate: AP7313-33 LDO Regulator | AP7313-33 | Diodes Inc. | 150mA | SOT-23R | 0 | 0.450 | 0.301 | 0.204 | Mouser |
| U5 | 1.2V, 600mA LDO Regulator | AP7217D-12YG-13 | Diodes Inc. | 600mA | SOT-89-3L | 1 | 0.490 | 0.360 | 0.309 | Mouser |
| U6 | Single NOR Gate | 74AUP1G02 | NXP | | SOT-353 | 1 | 0.140 | 0.132 | 0.124 | Mouser |
| X1 | Oscillator | ASDMB-32.0-LC | Abracon | 32MHz | QFN4 | 1 | 1.690 | 1.430 | 1.010 | Digikey |
| D1 | Schottky Diode, Low Vf | SL02-GS08 | Vishay | 1A, 30V | DO-219AB | 1 | 0.220 | 0.190 | 0.170 | Mouser |
| D2 | Red LED (Data) | VLMS1300-GS08 | Vishay | 2V, 20mA | 0603 | 1 | 0.080 | 0.072 | 0.066 | Mouser |
| D3 | Green LED (Power) | VLMG1300-GS08 | Vishay | 2V, 20mA | 0603 | 1 | 0.080 | 0.076 | 0.070 | Mouser |
| L1 | Power Inductor | SRN4018-3R3M | Bourns | 3.3uH, 2.2A | 4x4mm | 1 | 0.320 | 0.275 | 0.250 | Mouser |
| C1,C9-11 | Ceramic Capacitor | C1608X5R0J106M | TDK | 10uF | 0603 | 4 | 0.120 | 0.120 | 0.095 | Mouser |
| C2,C8 | Ceramic Capacitor | GRM188R61C104KA01D | Murata | 0.1uF | 0603 | 2 | 0.100 | 0.015 | 0.014 | Mouser |
| C3-4 | Ceramic Capacitor | GRM188R71E683KA01J | Murata | 6.8nF | 0603 | 2 | 0.200 | 0.027 | 0.018 | Mouser |
| C5-6 | Ceramic Capacitor | C1608X5R0J226M | TDK | 22uF | 0603 | 2 | 0.150 | 0.117 | 0.106 | Mouser |
| C7 | Ceramic Capacitor | VJ0402Y103KXXAC | Vishay | 0.01uF | 0402 | 1 | 0.025 | 0.016 | 0.015 | Mouser |
| C12-23 | Ceramic Capacitor | C1005X7S1A474K | TDK | 0.47uF | 0402 | 12 | 0.020 | 0.017 | 0.015 | Mouser |
| C24 | Ceramic Capacitor | GRM1555C1E300JA01D | Murata | 30pF | 0402 | 1 | 0.250 | 0.034 | 0.024 | Mouser |
| R1 | Thick Film Resistor | ERJ-3EKF3001V | Panasonic | 3K | 0603 | 1 | 0.070 | 0.020 | 0.003 | Mouser |
| R2 | Thick Film Resistor | ERJ-3EKF1002V | Panasonic | 10K | 0603 | 1 | 0.070 | 0.020 | 0.003 | Mouser |
| R3 | Thick Film Resistor | ERJ-3EKF3241V | Panasonic | 3.24K | 0603 | 1 | 0.070 | 0.020 | 0.003 | Mouser |
| R4-5 | Thick Film Resistor | ERJ-3EKF2201V | Panasonic | 1K | 0603 | 2 | 0.070 | 0.020 | 0.003 | Mouser |
| R6 | Thick Film Resistor | ERJ-2RKF1003X | Panasonic | 100K | 0402 | 1 | 0.070 | 0.020 | 0.003 | Mouser |
| R7,R8 | Thick Film Resistor | ERJ-3EKF1000V | Panasonic | 100 1% | 0603 | 2 | 0.070 | 0.020 | 0.003 | Mouser |
| | | | | TOTAL | PER BOARD | 44 | 10.93 | 7.17 | 5.47 | |