| Reference | Value | Quantity | Digi-Key_PN | Manufacturer Part# | Footprint |
|---|---|---|---|---|---|
| CA1 | 0.1uf | 1 | 399-1168-1-ND | C0805C104K3RACTU | Capacitor_SMD:C_0805_2012Metric_Pad1.18x1.45mm_HandSolder |
| CA2 | 4.7uf | 1 | 399-5505-1-ND | C0805C475K3PACTU | Capacitor_SMD:C_0805_2012Metric_Pad1.18x1.45mm_HandSolder |
| CBOOT1 | 0.1uf 50V | 1 | 399-1171-1-ND | C0805C104J5RACTU | Capacitor_SMD:C_0805_2012Metric_Pad1.18x1.45mm_HandSolder |
| > CF21, CF34, CF48 | 0.1uf | 3 | 399-1168-1-ND | C0805C104K3RACTU | Capacitor_SMD:C_0805_2012Metric_Pad1.18x1.45mm_HandSolder |
| CFIL1 | 0.1uf | 1 | 399-1171-1-ND | C0805C104J5RACTU | Capacitor_SMD:C_0805_2012Metric_Pad1.18x1.45mm_HandSolder |
| CHF1 | 0.22uf 50V X7R | 1 | 399-7018-1-ND | C1206C224K5RACAUTO | Capacitor_SMD:C_1206_3216Metric |
| CIN1 | 10uf 50V | 1 | 490-12456-1-ND | GRT31CR61H106KE01L | Capacitor_SMD:C_1210_3225Metric_Pad1.33x2.70mm_HandSolder |
| CMCP1 | 0.1uf | 1 | 399-1168-1-ND | C0805C104K3RACTU | Capacitor_SMD:C_0805_2012Metric_Pad1.18x1.45mm_HandSolder |
| > COUT1, COUT2 | 22uf | 2 | 490-12450-1-ND | GRT31CR61E226KE01L | Capacitor_SMD:C_1210_3225Metric_Pad1.33x2.70mm_HandSolder |
| > CQ1, CQ2 | 20pf | 2 | 399-9987-1-ND | C0805C200J4GAC7800 | Capacitor_SMD:C_0805_2012Metric_Pad1.18x1.45mm_HandSolder |
| CRST1 | 0.1uf | 1 | 399-1168-1-ND | C0805C104K3RACTU | Capacitor_SMD:C_0805_2012Metric_Pad1.18x1.45mm_HandSolder |
| CUFG1 | 4.7pf 1K | 1 | 1608-1394-1-ND | 1206J1K04P70CCT | Capacitor_SMD:C_1206_3216Metric_Pad1.33x1.80mm_HandSolder |
| CV1 | 0.1uf | 1 | 399-1168-1-ND | C0805C104K3RACTU | Capacitor_SMD:C_0805_2012Metric_Pad1.18x1.45mm_HandSolder |
| CV2 | 10uf | 1 | 587-2985-1-ND | TMK212BBJ106KG-T | Capacitor_SMD:C_0805_2012Metric_Pad1.18x1.45mm_HandSolder |
| CVCC1 | 1uf 16V min | 1 | 399-8001-1-ND | 399-8001-1-ND | Capacitor_SMD:C_0805_2012Metric_Pad1.18x1.45mm_HandSolder |
| CVDD1 | 1uf | 1 | 399-8001-1-ND | 399-8001-1-ND | Capacitor_SMD:C_0805_2012Metric_Pad1.18x1.45mm_HandSolder |
| D_JA1 | MBR230LSFT1G | 1 | MBR230LSFT1GOSCT-ND | MBR230LSFT1G | Diode_SMD:D_SOD-123F |
| D_US1 | MBR230LSFT1G | 1 | MBR230LSFT1GOSCT-ND | MBR230LSFT1G | Diode_SMD:D_SOD-123F |
| F_VDD1 | 220 ohm Ferrite | 1 | 445-1568-1-ND | MPZ2012S221AT000 | Resistor_SMD:R_0805_2012Metric_Pad1.20x1.40mm_HandSolder |
| FUSE1 | MF-MSMF050-2 | 1 | MF-PSMF050X-2CT-ND | MF-MSMF050-2 | Fuse:Fuse_1812_4532Metric_Pad1.30x3.40mm_HandSolder |
| > J_1, J_2 | Conn_01x24 | 2 | | | Connector_PinHeader_2.54mm:PinHeader_1x24_P2.54mm_Vertica |
| J_POW1 | Barrel_Jack_sw_4pin | 1 | PJ-102AH | CP-102AH-ND | z21g:BarrelJack_CUI_PJ-102AH_Horiz_4pin |
| J_PWR1 | Conn_01x02 | 1 | | | Connector_PinHeader_2.54mm:PinHeader_1x02_P2.54mm_Vertica |
| J_SWD1 | Conn_ARM_JTAG_SWD_10 | 1 | 1175-1627-ND | 3220-10-0100-00 | z21g:ARM_JTAG_2x05_P1.27mm_Vertical |
| J_USB1 | USB_B_Micro | 1 | 670-2675-1-ND | DX4R005JJ2R1800 | Connector_USB:USB_Micro-B |
| L_DEF1 | Blue | 1 | 160-1645-1-ND | LTST-C171TBKT | LED_SMD:LED_0805_2012Metric_Pad1.15x1.40mm_HandSolder |
| L_PWR1 | Yellow | 1 | 160-1428-1-ND | LTST-C171KSKT | LED_SMD:LED_0805_2012Metric_Pad1.15x1.40mm_HandSolder |
| L_RX1 | Green | 1 | 160-1426-1-ND | LTST-C171KGKT | LED_SMD:LED_0805_2012Metric_Pad1.15x1.40mm_HandSolder |
| L_TX1 | Red | 1 | 160-1427-1-ND | LED RED CLEAR SMD | LED_SMD:LED_0805_2012Metric_Pad1.15x1.40mm_HandSolder |
| LT1 | 1.2uH | 1 | 732-1093-1-ND | 7440430012 | z21g:L_Coil5030 |
| Q32 | 32.768KHz 12.5pf | 1 | 535-9808-1-ND | ABS07-32.768KHZ-1-T | Crystal:Crystal_SMD_MicroCrystal_CC7V-T1A-2Pin_3.2x1.5mm |
| RA0 | 10K | 1 | | | Resistor_SMD:R_0805_2012Metric_Pad1.20x1.40mm_HandSolder |
| RDMRST1 | 330 | 1 | | | Resistor_SMD:R_0805_2012Metric_Pad1.20x1.40mm_HandSolder |
| RFBT1 | 100K 1% | 1 | | | Resistor_SMD:R_0805_2012Metric_Pad1.20x1.40mm_HandSolder |
| RGLED1 | 22 | 1 | | | Resistor_SMD:R_0805_2012Metric_Pad1.20x1.40mm_HandSolder |
| RLED1 | 330 | 1 | | | Resistor_SMD:R_0805_2012Metric_Pad1.20x1.40mm_HandSolder |
| RPDLED1 | 10K | 1 | | | Resistor_SMD:R_0805_2012Metric_Pad1.20x1.40mm_HandSolder |
| RPWR1 | 330 | 1 | | | Resistor_SMD:R_0805_2012Metric_Pad1.20x1.40mm_HandSolder |
| RRBB1 | 43.2K 1% | 1 | | | Resistor_SMD:R_0805_2012Metric_Pad1.20x1.40mm_HandSolder |
| RRST1 | 10K | 1 | | | Resistor_SMD:R_0805_2012Metric_Pad1.20x1.40mm_HandSolder |
| RRX1 | 820 | 1 | | | Resistor_SMD:R_0805_2012Metric_Pad1.20x1.40mm_HandSolder |
| RSCL1 | 4.7K | 1 | | | Resistor_SMD:R_0805_2012Metric_Pad1.20x1.40mm_HandSolder |
| RSDA1 | 4.7K | 1 | | | Resistor_SMD:R_0805_2012Metric_Pad1.20x1.40mm_HandSolder |
| RSWCLK1 | 1K | 1 | 311-1.00KCRCT-ND | RC0805FR-071KL | Resistor_SMD:R_0805_2012Metric_Pad1.20x1.40mm_HandSolder |

| | | | | | |
|---|---|---|---|---|---|
| RSWRST1 | 39 1% | 1 | A129732CT-ND | CRGCQ0805F39R | Resistor_SMD:R_0805_2012Metric_Pad1.20x1.40mm_HandSolder |
| RTX1 | 820 | 1 | | | Resistor_SMD:R_0805_2012Metric_Pad1.20x1.40mm_HandSolder |
| RUFG1 | 1Meg | 1 | | | Resistor_SMD:R_0805_2012Metric_Pad1.20x1.40mm_HandSolder |
| SW_RST1 | SW_SPST | 1 | CKN10684CT-ND | KMR621NG LFS | Button_Switch_SMD:SW_Push_1P1T_NO_CK_KMR2 |
| U_ATSAMD21G18 | ATSAMD21G18A-AUT | 1 | ATSAMD21G18A-AUTCT- ND | ATSAMD21G18A-AUT | Package_QFP:TQFP-48_7x7mm_P0.5mm |
| U_LMR33630 | LMR33630CDDA | 1 | 296-49767-1-ND | LMR33630CDDAR | Package_SO:Texas_HSOP-8-1EP_3.9x4.9mm_P1.27mm_ThermalVi |
| U_MCP23008 | MCP23008 | 1 | MCP23008T-E/SSCT-ND | MCP23008T-E/SS | z21g:SSOP-20_5.3x7.2mm_P0.65mm_fix |
| U_NMOS2 | 2N7002PW.115 | 1 | 1727-4793-1-ND | 2N7002PW,115 | Package_TO_SOT_SMD:SOT-323_SC-70_Handsoldering |
| U_PRTR5 | PRTR5V0U2X | 1 | 1727-3884-1-ND | PRTR5V0U2X,215 | Package_TO_SOT_SMD:SOT-143 |

**Spare parts of interest:**

| | | | | | |
|---|---|---|---|---|---|
| SOLDER PASTE LOW TEMP | | 1 | Digi# 2260-SSLTNC-T5-15G-ND | SSLTNC-T5-15G | |
| DESOLDER BRAID ROSIN 0.03" 5' | | 1 | Digi# 473-1060-ND | MP# 423 | |
| Long Pin Stacking Header 1x24 | Two 24 pin jacks .100 pitch | | Adafruit #3366 | Cut down - 36-pin Stacking header - pack of 5! | |

| | | | |
|---|---|---|---|
| Used to program the bootloader | Microchip Atmel-ICE debugger with access | ATATMEL-ICE-ND | ATATMEL-ICE |
| | or | | |
| | EMU FOR SAM AND AVR MCU PCB ONLY | ATATMEL-ICE-PCBA-ND | ATATMEL-ICE-PCBA |
| | CABLE SAM ICE | ATATMEL-ICE-CABLE-ND | ATATMEL-ICE-CABLE |