

# AT88Microbase BOM

| Qty              | Reference      | Value      | Description           | Case               | Manufacturer PN      |
|------------------|----------------|------------|-----------------------|--------------------|----------------------|
| <b>CAPACITOR</b> |                |            |                       |                    |                      |
| 2                | C125-126       | 20pF       | Ceramic               | 0603               | GRM1885C1H200JA01D   |
| 1                | C164           | 150pF      | Ceramic               | 0603               | C1608C0G1H151J       |
| 1                | C151           | 1nF        | Ceramic               | 0603               | C0603X7R500-102KNE   |
| 1                | C102           | 10nF       | Ceramic               | 0603               | C0603X7R500-103JNE   |
| 1                | C163           | 15nF       |                       | 0603               | ECJ1VB1H153K         |
| 1                | C184           | 220nF      | Ceramic               | 0603               | GRM188R71A224KA01D   |
| 5                | C117 C119      | 0.1uF      | Ceramic               | 0603               | C0603Y5V250-104ZNE   |
|                  | C121           |            | Ceramic               | 0603               |                      |
|                  | C123-124       |            | Ceramic               | 0603               |                      |
| 4                | C101 C103      | 1uF        |                       | 0603               | C0603Y5V250-105ZNE   |
|                  | C120 C172      |            | Ceramic               | 0603               |                      |
| 1                | C118           | 10uF       | Ceramic               | 0805               | C0805X5R6R3-106KNE   |
| <b>RESISTOR</b>  |                |            |                       |                    |                      |
| 1                | R1             | 0          | 1/16 W                | 0603               | CR0603-16W-000T      |
| 2                | R180-181       | 22         | 1/16 W                | 0603               | CR0603-16W-220JT     |
| 3                | R3 R6-R7       | 180        | 1/16 W                | 0603               | CR0603-16W-181JT     |
| 4                | R103-105, R171 | 825        | 1/16 W                | 0603               | CRCW0603825RFKEA     |
| 1                | R183           | 1.5K       | 1/16 W                | 0603               | CR0603-16W-152JT     |
| 1                | R144           | 4.7K       | 1/16 W                | 0603               | CR0603-16W-472JT     |
| 1                | R172           | 3.92K      | 1/16 W                | 0603               | ERJ3EKF3921V         |
| 2                | R151 R184      | 47K        | 1/16 W                | 0603               | CRCW060347K0FKEA     |
| 1                | R2             | DNI        | 1/16 W                | 0603               |                      |
| 2                | R4, R5         | 0          | 1/16 W                | 0402               | CR0402-16W-000T      |
| <b>IC</b>        |                |            |                       |                    |                      |
| 1                | IC2            | -          | ATMEL AVR             | 64 PIN QFN         | AT90USB647-64QFN     |
| 1                | Y121           | 16MHz      | Crystal               | SMD                | ABM3B-16.000MHZ-B2-T |
| 1                | U1             | 3.3V       | Regulator             | SOT-23-5           | MIC5219-3.3YM5 TR    |
| 1                | U6             | -          | ATMEL CryptoCompanion | 8ld SOIC           | ATSC018-SU-CM        |
| <b>DIODE</b>     |                |            |                       |                    |                      |
| 1                | LEDP           | BLUE       | LED                   | 0603               | MB1111C-TR           |
| 3                | LED1-3         | RED        | LED                   | 0603               | BR1111C-TR           |
| 2                | D181-182       | -          | ESD Suppressor        | 0603               | PGB1010603MR         |
| 1                | D1             | DIODE      | Schotkky              | SOD-323            | NSR1020MW2T1G        |
| 1                | D2             | DIODE      | Schotkky              | SOD-123            | MBR0520L             |
| <b>MISC</b>      |                |            |                       |                    |                      |
| 1                | USB            | WM17117-ND | TYPE A                | USB RT ANG.        | 48037-0001           |
| 1                | L161           | -          | Ferrit Bead           | 0603               | MI0603J601R-10       |
| 1                | Q1             | NPN        | Transistor            | SOT23-3            | MMBTA42LT1G          |
| 1                | H2             | 0.1" Pitch | JTAG                  | 2x5 Male Header RA | TSW-105-16-L-D-RA    |
| 1                | J1             | 0.1" Pitch | PORT-D Interface      | 2x5 Male Header    | PBC05DAAN            |
| 1                | B121           | -          | Buzzer                | SMD                | SMT-0540-S-R         |
| 2                | B151           | -          | Push Button           | SMD                | PTS635SL25SMTR LFS   |
| 1                | K1             | -          | DPDT switch           | SMD                | CAS-220TA            |