



Parallax RFID Read/Write USB Module (#28540) Rev. A

Bill-of-Materials

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Notes:

- 1) BOM does not include PCB, assembly, or packaging
- 2) Unused designators: R5, L1

| Item | Quantity | Reference | Manufacturer | Manuf. Part # | Distributor | Distrib. Part # | Description |
|------|----------|-------------------------|--------------------|---------------------|-------------|-------------------|------------------------------------------------------|
| 1 | 7 | C1,C2,C3,C9,C10,C13,C18 | Kemet | C0603C104K4RACTU | Digi-Key | 399-1096-1-ND | Capacitor, 0.1uF, 16V, X7R, 0603 |
| 2 | 1 | C4 | Panasonic | ECH-U1H821GX5 | Digi-Key | PCF1295CT-ND | Capacitor, 820pF, 2%, 50V, PPS Film, 0805 |
| 3 | 1 | C5 | Panasonic | ECH-U1H222GX5 | Digi-Key | PCF1300CT-ND | Capacitor, 2200pF, 2%, 50V, PPS Film, 0805 |
| 4 | 1 | C6 | Panasonic | ECH-U1H331GX5 | Digi-Key | PCF1290CT-ND | Capacitor, 330pF, 2%, 50V, PPS Film, 0805 |
| 5 | 1 | C7 | TDK | C1608C0G1H390J080AA | Digi-Key | 445-1276-1-ND | Capacitor, 39pF, 5%, 50V, NP0, 0603 |
| 6 | 1 | C8 | TDK | C2012C0G1H152J060AA | Digi-Key | 445-1331-1-ND | Capacitor, 1500pF, 5%, 50V, NP0, 0805 |
| 7 | 2 | C11,C12 | Kemet | C0603C103K5RACTU | Digi-Key | 399-1091-1-ND | Capacitor, 0.01uF, 50V, X7R, 0603 |
| 8 | 1 | C14 | Kemet | C0603C102K5RACTU | Digi-Key | 399-1082-1-ND | Capacitor, 0.001uF, 50V, X7R, 0603 |
| 9 | 1 | C15 | Kemet | T491A106M016AS | Digi-Key | 399-3687-1-ND | Capacitor, 10uF, 20%, 16V, tantalum, size A |
| 10 | 1 | C16 | Kemet | C0603C822J5RACTU | Digi-Key | 399-7960-1-ND | Capacitor, 8200pF, 5%, 50V, X7R, 0603 |
| 11 | 1 | C17 | Murata | GRM188R71H473KA61D | Digi-Key | 490-3287-1-ND | Capacitor, 0.047uF, 10%, 50V, X7R, 0603 |
| 12 | 1 | C19 | Kemet | T491B107M010AT | Digi-Key | 399-9722-1-ND | Capacitor, 100uF, 20%, 10V, tantalum, size B |
| 13 | 1 | D1 | Kingbright | APB3025ESGC-F01 | Digi-Key | 754-1645-1-ND | LED, Red/Green Bi-Color, 1201W SMT |
| 14 | 1 | L2 | TDK | MPZ2012S221A | Digi-Key | 445-1568-1-ND | Inductor, Ferrite Bead, 220R@100MHz, 3A, 0805 |
| 15 | 2 | R1,R4 | Panasonic | ERJ-3GEYJ103V | Digi-Key | P10KGCT-ND | Resistor, 10k, 5%, 1/10W, 0603 |
| 16 | 1 | R2 | Panasonic | ERJ-3GEYJ821V | Digi-Key | P820GCT-ND | Resistor, 820 ohm, 5%, 1/10W, 0603 |
| 17 | 1 | R3 | Panasonic | ERJ-3GEYJ271V | Digi-Key | P270GCT-ND | Resistor, 270 ohm, 5%, 1/10W, 0603 |
| 18 | 1 | R6 | Panasonic | ERJ-6GEYJ8R2V | Digi-Key | P8.2ACT-ND | Resistor, 8.2 ohm, 5%, 1/8W, 0805 |
| 19 | 1 | U1 | Microchip | PIC16F723-I/SS | Digi-Key | PIC16F723-I/SS-ND | IC, Microcontroller, SSOP28 |
| 20 | 1 | U2 | EM Microelectronic | EM4095HMSO16A | Omni Pro | N/A | IC, 125kHz RFID Basestation Front End, SOIC16 |
| 21 | 1 | U3 | FTDI | FT232RL | Parallax | 604-00043 | IC, USB-to-UART Bridge, SSOP28 |
| 22 | 1 | U4 | Micrel | MIC2025-2YMM | Digi-Key | 576-1692-5-ND | IC, Power Distribution Switch, Single-channel, MSOP8 |
| 23 | 1 | JP1 | SMP Technology | N/A | Parallax | 452-10006 | Connector, Mini USB, 5 pin, R/A female, SMT |