

| Assembly   | Id | Quantity | Reference          | Side   | Note     | Description   | Manufacturer      | ManufacturerPN       | DigikeyPN       |
|------------|----|----------|--------------------|--------|----------|---|-------------------|----------------------|-----------------|
| Common     | 1  | 1        | J1                 | Top    | -        | 20x2P 100mil male box header  | Sullins Connector | SBH11-PBPC-D20-ST-BK | S9175-ND        |
| Common     | 2  | 3        | P1,P5,P6           | Bottom | NOSTUFF  | 8x1P 100mil male header, 11.5mm pin length, breakaway strip   | -                 | -                    | -               |
| Common     | 3  | 5        | P2,P3              | Bottom | -        | 8x1P 100mil male header, 11.5mm pin length, breakaway strip   | -                 | -                    | -               |
| Common     | 4  | 1        | P4                 | Bottom | -        | 10x1P 100mil male header, 11.5mm pin length, breakaway strip  | -                 | -                    | -               |
| Common     | 5  | 1        | P7                 | Bottom | -        | 18x2P 100mil male header, 11.5mm pin length, breakaway strip  | -                 | -                    | -               |
| Common     | 6  | 2        | P8,P9              | Top    | NOSTUFF  | 6x1P 100mil male header, 11.5mm pin length, breakaway strip   | -                 | -                    | -               |
| Common     | 7  | 1        | P10                | Top    | -        | 7x1P 100mil male header, 11.5mm pin length, breakaway strip   | -                 | -                    | -               |
| Common     | 8  | 1        | P10                | Top    | -        | Sparkfun microSD breakout board ( <a href="https://www.sparkfun.com/products/13743">https://www.sparkfun.com/products/13743</a> ) | SparkFun          | DEV-13743            | -               |
| Common     | 9  | 3        | C1,C2,C3           | Top    | -        | 100nF/16V ceramic capacitor, 100mil spacing   | Vishay            | K104K10X7RF53L2      | BC5137-ND       |
| Common     | 10 | 2        | C4,C5              | Top    | -        | 33uF/16V electrolytic capacitor, radial, 100mil spacing, 6mm max diameter   | Panasonic         | ECE-A1CKS330         | P968-ND         |
| Common     | 11 | 1        | D1                 | Top    | -        | LED, RED, 5mm diameter, 100mil spacing  | Broadcom          | HLMP-4700            | 516-1325-ND     |
| Common     | 12 | 1        | D2                 | Top    | -        | LED, YEL, 5mm diameter, 100mil spacing  | Broadcom          | HLMP-4719            | 516-1326-ND     |
| Common     | 13 | 1        | D3                 | Top    | -        | LED, GRN, 5mm diameter, 100mil spacing  | Broadcom          | HLMP-4740            | 516-1327-ND     |
| Common     | 14 | 3        | R24,R25,R26        | Top    | -        | 1Kohm,1/8W resistor (for 2mA LED current; value appropriate to LED)   | Stackpole         | CF18JT1K00           | CF18JT1K00CT-ND |
| Common     | 15 | 5        | R3,R12,R18,R22,R23 | Top    | -        | 390ohm,1/4W resistor  | Yageo             | CFR-25JB-52-390R     | 390QBK-ND       |
| Common     | 16 | 3        | R10,R11,R21        | Top    | -        | 180ohm,1/4W resistor  | Yageo             | CFR-25JB-52-180R     | 180QBK-ND       |
| Common     | 17 | 1        | R4                 | Top    | -        | 120ohm,1/4W resistor  | Yageo             | CFR-25JB-52-120R     | 120QBK-ND       |
| v3 Version | 18 | 3        | U1,U2,U3           | Top    | -        | DS8641N quad bus transceiver  | -                 | -                    | -               |
| v3 Version | 19 | 3        | U1,U2,U3           | Top    | Optional | 16p 300mil DIP socket   | -                 | -                    | -               |
| v4 Version | 20 | 7        | Q1-Q7              | Top    | -        | 2N7000 transistor, TO-92 package  | Microchip         | 2N7000-G             | 2N7000-G-ND     |
| v4 Version | 21 | 1        | U1                 | Top    | -        | 74HCT/AHCT14 hex schmitt inverter (or HC/AHC14)   | Texas Instruments | SN74AHCT14N          | 296-4674-5-ND   |
| v4 Version | 22 | 1        | U1                 | Top    | Optional | 14p 300mil DIP socket   | Assman            | A 14-LC-TT           | AE9989-ND       |