

| Comment             | Description                                   | Designator   | Footprint              | LibRef             | Quantity |
|---------------------|---|--|------------------------|--------------------|----------|
|                     | Capacitor                                     | C1, C2, C3, C4, C5, C8,  |                        |                    |          |
| Cap Semi            | (Semiconductor SIM<br>Model)                  | C9, C10, C11, C12, C13,<br>C14, C15, C16, C17  | 1608[0603]             | Cap Semi           | 15       |
|                     | Capacitor                                     |  |                        |                    |          |
| 16V                 | (Semiconductor SIM                            | 04.07  | 1/00[0/02]             | Cara Caral         |          |
| 100                 | Model)<br>Typical RED, GREEN,                 | C6, C7   | 1608[0603]             | Cap Semi           | 2        |
|                     | YELLOW, AMBER GaAs                            |  |                        |                    |          |
| LTST-C171KRKT       | LED   | D1   | LED_pcb                | LED2               | 1        |
| MBR0520L            | Schottky Diode                                | D2   | SMB                    | D Schottky         | 1        |
| MBR0520L-D          | Schottky Diode                                | D3, D4   | SODFL375X128-2N        | D Schottky         | 2        |
|                     | Typical RED, GREEN,<br>YELLOW, AMBER GaAs     |  |                        |                    |          |
| LTST-C171KGKT       | LED   | D5   | LED_pcb                | LED2               | 1        |
|                     |   |  |                        |                    |          |
|                     | PH Series 2 Position 2.0 mm Through Hole Side |  |                        |                    |          |
| Battery connector   | Entry Shrouded Header                         | J1   | JST_S2B-PH-K-S(LF)(SN) | S2B-PH-K-S(LF)(SN) | 1        |
| I                   | Inductor                                      | L1   | 0603                   | Inductor           | 1        |
| Header 6            | Header, 6-Pin                                 | P1   | HDR1X6                 | Header 6           | 1        |
| MMBT2907A-7-F       | PNP Bipolar Transistor                        | Q1   | SOT90P240X110-3N       | PNP                | 1        |
| MMBT2222A-7-F       | NPN Bipolar Transistor                        | Q2   | SOT90P240X110-3N       | NPN                | 1        |
| BSL316CH6327XTSA1   |   | Q3   | TSOP95P250X110-6N      | Component_1        | 1        |
| NTR4101PT1G         | P-Channel MOSFET                              | Q4, Q5   | SOT95P290X111-3N       | MOSFET-P           | 2        |
| Res3                | Resistor                                      | R1, R2, R3, R4, R5, R6,<br>R7, R8, R9, R10, R11,<br>R12, R13, R14, R15,<br>R21, R22, R23, R24,<br>R25, R26, R27, R28 | J1-0603                | Res3               | 23       |
|                     |   |  |                        |                    |          |
| 1k                  | Resistor                                      | R16, R17, R18, R19, R20  | J1-0603                | Res3               | 5        |
| MCP73831T-2ACI/OT   |   | U1   | SOT95P270X145-5N       | Component_1        | 1        |
| AOZ1280CI           |   | U2   | SOT95P280X125-6N       | Component_1        | 1        |
| TCR2EF33,LM(CT      |   | U3   | SOT95P275X111-5N       | Component_1        | 1        |
| PIC24FJ64GA002-I/SO |   | U4   | SOIC127P1030X265-28N   | Component_1        | 1        |
| PCA9546APWR         |   | U5   | PCA9546APWR            | Component_1        | 1        |
| BH1745NUC           |   | U6, U7, U8   | *UDFN-8                | Component_1        | 3        |
| C1030B028F          |   | U9, U10  | PCBComponent_1         | Component_1        | 2        |
| Charge_Pad          |   | U11  | charge_pad             | Component_1        | 1        |