

| Reference | Value            | Footprint  | Datasheet | Description                        | Distributor | Part Number           | Distributor | Dist. PN     |
|-----------|------------------|--|-----------|------------------------------------|-------------|-----------------------|-------------|--------------|
| R13       |                  | 51 Resistors_SMD:R_1206_HandSoldering                        |           | RES 51 5% 1/4W SMD 1206            | DigiKey     | 311-51ERCT-ND         |             |              |
| R14       |                  | 51 Resistors_SMD:R_1206_HandSoldering                        |           | RES 51 5% 1/4W SMD 1206            | DigiKey     | 311-51ERCT-ND         |             |              |
| R4        |                  | 510 Resistors_SMD:R_1206_HandSoldering                       |           | RES 510 5% 1/4W SMD 1206           | DigiKey     | 311-510ERCT-ND        |             |              |
| C10       | 0.1uF            | Capacitors_SMD:C_1210_HandSoldering                          |           | CAP Ceramic 0.1uF 50V 10% X7R 1210 | DigiKey     | 1276-3318-1-ND        |             |              |
| C11       | 0.1uF            | Capacitors_SMD:C_1210_HandSoldering                          |           | CAP Ceramic 0.1uF 50V 10% X7R 1210 | DigiKey     | 1276-3318-1-ND        |             |              |
| C12       | 0.1uF            | Capacitors_SMD:C_1210_HandSoldering                          |           | CAP Ceramic 0.1uF 50V 10% X7R 1210 | DigiKey     | 1276-3318-1-ND        |             |              |
| C14       | 0.1uF            | Capacitors_SMD:C_1210_HandSoldering                          |           | CAP Ceramic 0.1uF 50V 10% X7R 1210 | DigiKey     | 1276-3318-1-ND        |             |              |
| C15       | 0.1uF            | Capacitors_SMD:C_1210_HandSoldering                          |           | CAP Ceramic 0.1uF 50V 10% X7R 1210 | DigiKey     | 1276-3318-1-ND        |             |              |
| C16       | 0.1uF            | Capacitors_SMD:C_1210_HandSoldering                          |           | CAP Ceramic 0.1uF 50V 10% X7R 1210 | DigiKey     | 1276-3318-1-ND        |             |              |
| C17       | 0.1uF            | Capacitors_SMD:C_1210_HandSoldering                          |           | CAP Ceramic 0.1uF 50V 10% X7R 1210 | DigiKey     | 1276-3318-1-ND        |             |              |
| C18       | 0.1uF            | Capacitors_SMD:C_1210_HandSoldering                          |           | CAP Ceramic 0.1uF 50V 10% X7R 1210 | DigiKey     | 1276-3318-1-ND        |             |              |
| C19       | 0.1uF            | Capacitors_SMD:C_1210_HandSoldering                          |           | CAP Ceramic 0.1uF 50V 10% X7R 1210 | DigiKey     | 1276-3318-1-ND        |             |              |
| C2        | 0.1uF            | Capacitors_SMD:C_1210_HandSoldering                          |           | CAP Ceramic 0.1uF 50V 10% X7R 1210 | DigiKey     | 1276-3318-1-ND        |             |              |
| C20       | 0.1uF            | Capacitors_SMD:C_1210_HandSoldering                          |           | CAP Ceramic 0.1uF 50V 10% X7R 1210 | DigiKey     | 1276-3318-1-ND        |             |              |
| C21       | 0.1uF            | Capacitors_SMD:C_1210_HandSoldering                          |           | CAP Ceramic 0.1uF 50V 10% X7R 1210 | DigiKey     | 1276-3318-1-ND        |             |              |
| C22       | 0.1uF            | Capacitors_SMD:C_1210_HandSoldering                          |           | CAP Ceramic 0.1uF 50V 10% X7R 1210 | DigiKey     | 1276-3318-1-ND        |             |              |
| C23       | 0.1uF            | Capacitors_SMD:C_1210_HandSoldering                          |           | CAP Ceramic 0.1uF 50V 10% X7R 1210 | DigiKey     | 1276-3318-1-ND        |             |              |
| C4        | 0.1uF            | Capacitors_SMD:C_1210_HandSoldering                          |           | CAP Ceramic 0.1uF 50V 10% X7R 1210 | DigiKey     | 1276-3318-1-ND        |             |              |
| C7        | 0.1uF            | Capacitors_SMD:C_1210_HandSoldering                          |           | CAP Ceramic 0.1uF 50V 10% X7R 1210 | DigiKey     | 1276-3318-1-ND        |             |              |
| C8        | 0.1uF            | Capacitors_SMD:C_1210_HandSoldering                          |           | CAP Ceramic 0.1uF 50V 10% X7R 1210 | DigiKey     | 1276-3318-1-ND        |             |              |
| R1        | 1.00K            | Resistors_SMD:R_1206_HandSoldering                           |           | RES 1.00K 1% 1/4W SMD 1206         | DigiKey     | RMCF1206FT1K00CT-ND   |             |              |
| R2        | 1.00K            | Resistors_SMD:R_1206_HandSoldering                           |           | RES 1.00K 1% 1/4W SMD 1206         | DigiKey     | RMCF1206FT1K00CT-ND   |             |              |
| R6        | 1.00K            | Resistors_SMD:R_1206_HandSoldering                           |           | RES 1.00K 1% 1/4W SMD 1206         | DigiKey     | RMCF1206FT1K00CT-ND   |             |              |
| R11       | 10K              | Resistors_SMD:R_1206_HandSoldering                           |           | RES 10.0K 1% 1/4W SMD 1206         | DigiKey     | RMCF1206FT10K0CT-ND   |             |              |
| R8        | 10K              | Resistors_SMD:R_1206_HandSoldering                           |           | RES 10.0K 1% 1/4W SMD 1206         | DigiKey     | RMCF1206FT10K0CT-ND   |             |              |
| R9        | 10K              | Resistors_SMD:R_1206_HandSoldering                           |           | RES 10.0K 1% 1/4W SMD 1206         | DigiKey     | RMCF1206FT10K0CT-ND   |             |              |
| C1        | 10uF             | Capacitors_Tantalum_SMD:TantalC_SizeE_EIA-7360_HandSoldering |           | CAP Tant 10uF 50V 10% 2917         | DigiKey     | 718-1022-1-ND         |             |              |
| C13       | 10uF             | Capacitors_Tantalum_SMD:TantalC_SizeE_EIA-7360_HandSoldering |           | CAP Tant 10uF 50V 10% 2917         | DigiKey     | 718-1022-1-ND         |             |              |
| C24       | 10uF             | Capacitors_Tantalum_SMD:TantalC_SizeE_EIA-7360_HandSoldering |           | CAP Tant 10uF 50V 10% 2917         | DigiKey     | 718-1022-1-ND         |             |              |
| C25       | 10uF             | Capacitors_Tantalum_SMD:TantalC_SizeE_EIA-7360_HandSoldering |           | CAP Tant 10uF 50V 10% 2917         | DigiKey     | 718-1022-1-ND         |             |              |
| C5        | 10uF             | Capacitors_Tantalum_SMD:TantalC_SizeE_EIA-7360_HandSoldering |           | CAP Tant 10uF 50V 10% 2917         | DigiKey     | 718-1022-1-ND         |             |              |
| C6        | 10uF             | Capacitors_Tantalum_SMD:TantalC_SizeE_EIA-7360_HandSoldering |           | CAP Tant 10uF 50V 10% 2917         | DigiKey     | 718-1022-1-ND         |             |              |
| C9        | 10uF             | Capacitors_Tantalum_SMD:TantalC_SizeE_EIA-7360_HandSoldering |           | CAP Tant 10uF 50V 10% 2917         | DigiKey     | 718-1022-1-ND         |             |              |
| C3        | 220uF            | Capacitors_SMD:c_elec_10x10                                  |           | CAP Alum 220uF 20% 50V smd         | DigiKey     | 493-2228-1-ND         |             | 493-228-1-ND |
| R10       | 47K              | Resistors_SMD:R_1206_HandSoldering                           |           | Resistor 47K 5% 1/4W SMD 1206      | DigiKey     | 311-47KERCT-ND        |             |              |
| R12       | 47K              | Resistors_SMD:R_1206_HandSoldering                           |           | Resistor 47K 5% 1/4W SMD 1206      | DigiKey     | 311-47KERCT-ND        |             |              |
| U3        | ADAFRUIT_TXB0104 | PiMib:ADAFRUIT_TXB0104                                       |           | TXB0104 Level Shifter              | Adafruit    | 1875                  |             |              |
| U5        | ADAFRUIT_TXB0104 | PiMib:ADAFRUIT_TXB0104                                       |           | TXB0104 Level Shifter              | Adafruit    | 1875                  |             |              |
| Q4        | BCV62            | PCBFootprints:SOT-143_Handsoldering                          |           | Trans, 2PNP, 30V, 0.1A, SOT143     | DigiKey     | BCV62BE6327HTSA1CT-ND |             |              |
| Q5        | BCV62            | PCBFootprints:SOT-143_Handsoldering                          |           | Trans, 2PNP, 30V, 0.1A, SOT143     | DigiKey     | BCV62BE6327HTSA1CT-ND |             |              |
| P1        | CONN_01X02       | Connect:ANDERSON_POWERPOLE_1X2_RA_WINGS                      |           |                                    |             |                       |             |              |
| P4        | CONN_01X03       | Connectors_Molex:Pin_Header_Keyed_1x03                       |           |                                    |             |                       |             |              |
| P5        | CONN_01X03       | Connectors_Molex:Pin_Header_Keyed_1x03                       |           |                                    |             |                       |             |              |
| P6        | CONN_01X03       | Connectors_Molex:Pin_Header_Keyed_1x03                       |           |                                    |             |                       |             |              |
| P7        | CONN_01X03       | Connectors_Molex:Pin_Header_Keyed_1x03                       |           |                                    |             |                       |             |              |
| P8        | CONN_01X03       | Connectors_Molex:Pin_Header_Keyed_1x03                       |           |                                    |             |                       |             |              |
| P9        | CONN_01X03       | Connectors_Molex:Pin_Header_Keyed_1x03                       |           |                                    |             |                       |             |              |
| P14       | CONN_01X04       | Pin_Headers:Pin_Header_Straight_1x04                         |           |                                    |             |                       |             |              |
| P12       | CONN_02X05       | Connect:he10-10d   |           | Conn Header 10pos, KEYED, EJECTOR  | DigiKey     | MHS10S-ND             |             |              |
| P13       | CONN_02X05       | Connect:he10-10d   |           | Conn Header 10pos, KEYED, EJECTOR  | DigiKey     | MHS10S-ND             |             |              |
| P10       | CONN_02X07       | Connect:he10-14d   |           | Conn Header 14pos KEYED EJECTOR    | DigiKey     | MHS14S-ND             |             |              |
| P11       | CONN_02X07       | Connect:he10-14d   |           | Conn Header 14pos KEYED EJECTOR    | DigiKey     | MHS14S-ND             |             |              |
| D1        | D                | Diodes_SMD:SMB-SMC_Universal_Handsoldering                   |           | Diode Gen Purpose, 100V, 5A, SMC   | DigiKey     | S5BC-FDICT-ND         |             |              |
| Q2        | DMG2305UX        | PCBFootprints:SOT-23   |           | Mosfet, P-Ch 20V, 4.2A SOT23       | DigiKey     | DMG2305UX-13DICT-ND   |             |              |
| Q3        | DMG2305UX        | PCBFootprints:SOT-23   |           | Mosfet, P-Ch 20V, 4.2A SOT23       | DigiKey     | DMG2305UX-13DICT-ND   |             |              |
| JP1       | Jumper_NC_Dual   | Pin_Headers:Pin_Header_Straight_1x03                         |           |                                    |             |                       |             |              |
| JP2       | Jumper_NC_Dual   | Pin_Headers:Pin_Header_Straight_1x03                         |           |                                    |             |                       |             |              |
| JP3       | Jumper_NC_Dual   | Pin_Headers:Pin_Header_Straight_1x03                         |           |                                    |             |                       |             |              |
| JP4       | Jumper_NC_Dual   | Pin_Headers:Pin_Header_Straight_1x03                         |           |                                    |             |                       |             |              |
| JP5       | Jumper_NC_Dual   | Pin_Headers:Pin_Header_Straight_1x03                         |           |                                    |             |                       |             |              |

|      |                     |  |  |   |          |                      |          |  |
|------|---------------------|--|--|---|----------|----------------------|----------|--|
| JP6  | Jumper_NC_Dual      | Pin_Headers:Pin_Header_Straight_1x03     |  |   |          |                      |          |  |
| LED1 | LED                 | LEDs:LED-1206                            |  |   |          |                      |          |  |
| U7   | LT1129CST-3.3       | PCBFootprints:SOT-223                    |  | IC Regulator, Linear, 3.3V, 700mA, SOT223-3 | DigiKey  | LT1128CST-3.3#PBF-ND |          |  |
| U4   | MAX488              | Sockets_DIP:DIP-8__300                   |  | MAX488, DIP-8                               | DigiKey  | MAX488CPA+-ND        |          |  |
| U1   | PDQ30-Q24-S5-D      | PiMib:pdq30                              |  | DC/DC Converter, 5V, 30W                    | DigiKey  | 102-3891-ND          |          |  |
| U2   | PowerBoost 1000     | Socket_Strips:Socket_Strip_Straight_1x08 |  | PowerBoost 1000 Battery Backup              | Adafruit | 2465                 |          |  |
| U6   | PSOC_5LP            | PiMib:DIP-52_1_ELL                       |  | PSOC 5LP Prototyping Kit                    | DigiKey  | 428-3390-ND          |          |  |
| P2   | Raspberry_Pi_+_Conn | Socket_Strips:Socket_Strip_Straight_2x20 |  | Header, Female 40Pin,                       | DigiKey  | 952-2150-ND          |          |  |
| P3   | Raspberry_Pi_+_Conn | Pin_Headers:Pin_Header_Straight_2x20     |  | Conn Header Verticle 40pos 0.1inch          | DigiKey  | 732-5310-ND          |          |  |
| J1   | RJ12                | Connect:RJ12_E                           |  | RJ-45 Conector                              |          | 553-2258-ND          | Digi-Key |  |