

## TEAM 201 BOM

| Part Name/Description                      | Unit | Quantity | Unit Prototype Cost | Total Prototype Cost | Unit Production Cost | Total Production Cost | Manufacturer                    | Manufacturer Part # | Vendor Link   | Datasheet Link  | Supplier    | Supplier Part #             | # Ordered | Date Ordered | # Received | Surplus | Schematic Reference Designators |
|--|------|----------|---------------------|----------------------|----------------------|-----------------------|---------------------------------|---------------------|---|---|-------------|-----------------------------|-----------|--------------|------------|---------|---------------------------------|
| PIC18F27Q10, SOIC, MCU                     |      | 1        | \$1.54              | \$1.54               | \$1.17               | \$1.17                | Microchip                       | PIC18F27Q10-I/SO    | <a href="https://www.microchip.com">https://www.microchip.com</a> | <a href="https://ww1.microchip.com">https://ww1.microchip.com</a>     | Microchip   | PIC18F27Q10-I/SO            | 5         | 2/15/2023    |            |         | -1 U2                           |
| L6981N33DR, SOIC, Voltage Regulator        |      | 1        | \$3.02              | \$3.02               | \$1.61               | \$1.61                | STMicroelectronics              | L6981N33DR          | <a href="https://www.digikey.com">https://www.digikey.com</a>     | <a href="https://www.st.com/ico">https://www.st.com/ico</a>           | Digikey     | 497-L6981N33DRCT-ND         | 5         | 2/15/2023    |            |         | -1 U1                           |
| MGAH1004330M-10, 33 uH Inductor            |      | 1        | \$0.94              | \$0.94               | \$0.42               | \$0.42                | Laird-Signal Integrity Products | MGAH1004330M-10     | <a href="https://www.digikey.com">https://www.digikey.com</a>     | <a href="https://www.laird.com/">https://www.laird.com/</a>           | Digikey     | 240-MGAH1004330M-10CT-ND    | 5         | 2/15/2023    |            |         | -1 L1                           |
| CL21A106KQNNNE, 10 uF capacitor            |      | 1        | \$0.10              | \$0.10               | \$0.02               | \$0.02                | Samsung Electro-mechanics       | CL21A106KQNNNE      | <a href="https://www.digikey.com">https://www.digikey.com</a>     | <a href="https://media.digikey.com">https://media.digikey.com</a>     | Digikey     | 1276-1096-1-ND              | 25        | 2/15/2023    |            |         | -1 C3                           |
| CL21B105KBFNNNG, 1 uF capacitor            |      | 1        | \$0.11              | \$0.11               | \$0.02               | \$0.02                | Samsung Electro-mechanics       | CL21B105KBFNNNG     | <a href="https://www.digikey.com">https://www.digikey.com</a>     | <a href="https://media.digikey.com">https://media.digikey.com</a>     | Digikey     | 1276-6470-1-ND              | 25        | 2/15/2023    |            |         | -1 C2                           |
| 08055C104MAT2A, 100 nF capacitor           |      | 8        | \$0.16              | \$1.28               | \$0.03               | \$0.24                | KYOCERA AVX                     | 08055C104MAT2A      | <a href="https://www.digikey.com">https://www.digikey.com</a>     | <a href="https://datasheets.kyoc">https://datasheets.kyoc</a>         | Digikey     | 478-3351-1-ND               | 25        | 2/15/2023    |            |         | -8 C4,C5, C6, C7,C8,C9          |
| CL21A226MQNNNG, 22 uF capacitor            |      | 1        | \$0.13              | \$0.13               | \$0.02               | \$0.02                | Samsung Electro-mechanics       | CL21A226MQNNNG      | <a href="https://www.digikey.com">https://www.digikey.com</a>     | <a href="https://media.digikey.com">https://media.digikey.com</a>     | Digikey     | 1276-6460-1-ND              | 25        | 2/15/2023    |            |         | -1 C1                           |
| RNCP0805FTD10K0, 10k resistor              |      | 4        | \$0.10              | \$0.40               | \$0.01               | \$0.04                | Stackpole Electronics           | RNCP0805FTD10K0     | <a href="https://www.digikey.com">https://www.digikey.com</a>     | <a href="https://www.seitelect.co">https://www.seitelect.co</a>       | Digikey     | RNCP0805FTD10K0CT-ND        | 25        | 2/15/2023    |            |         | -4 R1, R6, R7,R11               |
| RC0805JR-07470RL, 470 ohm resistor         |      | 1        | \$0.10              | \$0.10               | \$0.01               | \$0.01                | Yageo                           | RC0805JR-07470RL    | <a href="https://www.digikey.com">https://www.digikey.com</a>     | <a href="https://www.yageo.com">https://www.yageo.com</a>             | Digikey     | 311-470ARCT-ND              | 25        | 2/15/2023    |            |         | -1 R2                           |
| RC0805JR-07220RL, 220 ohm resistor         |      | 5        | \$0.10              | \$0.50               | \$0.01               | \$0.05                | Yageo                           | RC0805JR-07220RL    | <a href="https://www.digikey.com">https://www.digikey.com</a>     | <a href="https://www.yageo.com">https://www.yageo.com</a>             | Digikey     | 311-220ARCT-ND              | 25        | 2/21/2023    |            |         | -5 R3, R5, R8, R9, R10          |
| 696108003002, Fuse Holder                  |      | 1        | \$0.68              | \$0.68               | \$0.39               | \$0.39                | Würth Elektronik                | 696108003002        | <a href="https://www.digikey.com">https://www.digikey.com</a>     | <a href="https://www.we-online.com">https://www.we-online.com</a>     | Digikey     | 732-11376-ND                | 5         | 2/15/2023    |            |         | -1 F1                           |
| Temp Sensor                                |      | 1        | \$1.09              | \$1.09               | \$1.09               | \$1.09                | Microchip Technology            | TC74A4-3.3VCTTR     | <a href="https://www.digikey.com">https://www.digikey.com</a>     | <a href="https://www.microchip.com">https://www.microchip.com</a>     | Digikey     | TC74A4-3.3VCTDKR-ND         | 0         |              | 5          |         | 4 U4                            |
| Push Button                                |      | 1        | \$4.24              | \$4.24               | \$4.24               | \$4.24                | E-Switch                        | RP3502MBRED         | <a href="https://www.digikey.com">https://www.digikey.com</a>     | <a href="https://www.e-switch.com">https://www.e-switch.com</a>       | Digikey     | SWITCH PUSH SPST-NC 3A 120V | 0         |              |            |         | -1 SW1                          |
| RGB LED                                    |      | 1        | \$1.16              | \$1.16               | \$1.16               | \$1.16                | Kingbright                      | APTf3216QBDZGSU     | <a href="https://www.digikey.com">https://www.digikey.com</a>     | <a href="https://www.kingbright.com">https://www.kingbright.com</a>   | Digikey     | 754-2167-6-ND               | 5         | 2/15/2023    |            |         | -1                              |
| 1FX9201SGAUMA1                             |      | 1        | \$4.88              | \$4.88               | \$4.88               | \$4.88                | Infineon                        | 1FX9201SGAUMA1      | <a href="https://www.digikey.com">https://www.digikey.com</a>     | <a href="https://www.infineon.com">https://www.infineon.com</a>       | Digikey     | 1FX9201SGAUMA1CT-ND         | 5         | 2/15/2023    |            |         | -1 U5                           |
| MOT-KM NJSC-12-A DC brushed motor          |      | 1        | \$18.75             | \$18.75              | \$18.75              | \$18.75               | ISL Products International      | MOT-KM NJSC-12-A    | <a href="https://www.digikey.com">https://www.digikey.com</a>     | <a href="https://www.islproducts.com">https://www.islproducts.com</a> | ISL Product | MOT-KM NJSC-12-A            | 0         |              |            |         | -1 U6                           |
| HIH6130-021-001, Honeywell Humidity Sensor |      | 1        | \$18.77             | \$18.77              | \$18.14              | \$18.14               | Honeywell                       | HIH6130-021-001     | <a href="https://www.digikey.com">https://www.digikey.com</a>     | <a href="https://www.honeywell.com">https://www.honeywell.com</a>     | Digikey     | HIH6130-021-001             | 3         | 2/15/2023    |            |         | -1 U7                           |
| RAPC742X, Barrel Jack                      |      | 1        | \$1.56              | \$1.56               | \$1.56               | \$1.56                | Switchcraft Inc.                | RAPC742X            | <a href="https://www.digikey.com">https://www.digikey.com</a>     | <a href="https://www.switchcraft.com">https://www.switchcraft.com</a> | Digikey     | SC1574-ND                   | 2         | 2/15/2023    |            |         | -1 J1                           |
| L74A26-2-1-2WX, Battery Pack               |      | 1        | \$17.87             | \$17.87              | \$17.87              | \$17.87               | Dantona Industries              | L74A26-2-1-2WX      | <a href="https://www.digikey.com">https://www.digikey.com</a>     | <a href="https://www.dantona.com">https://www.dantona.com</a>         | Digikey     | 3145-L74A26-2-1-2WX-ND      | 0         |              | 3          |         | 2 J.5 in                        |