| System | Item \# | Description | Units | Unit Cost | Quantity | Total Cost |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mechanical | 1 | 1/4" Duron | 32 sq ft | \$27.46 | 0.16 | \$4.29 |
|  | 2 | 1/8" Acrylic | 8 sq ft | \$18.56 | 0.13 | \$2.32 |
|  | 3 | 3D Printing Filament |  | \$43.00 | 1 | \$43.00 |
|  | 4 | 1/8" Aluminum Hex Bar | 1 ft | \$1.21 | 1 | \$1.21 |
|  | 5 | Spring | 1 in | \$0.00 | 1 | \$0.00 |
|  | 6 | Retroreflective tape | 1 ft | \$0.00 | 4 | \$0.00 |
|  | 7 | Wheel |  | \$1.50 | 2 | \$3.00 |
|  | 8 | Ball caster |  | \$1.60 | 4 | \$6.39 |
|  | 9 | Foam wheel |  | \$0.00 | 5 | \$0.00 |
|  | 10 | Clear PETG sheet | sq ft | \$4.00 | 1 | \$4.00 |
|  | 11 | Spider coupler |  | \$1.95 | 4 | \$7.80 |
|  | 12 | Pillow block |  | \$3.00 | 5 | \$15.00 |
|  | 13 | Fasteners | All | \$10.00 | 1 | \$10.00 |
|  | 14 | Electrical tape |  | \$1.97 | 1 | \$1.97 |
|  | 15 | Hot glue |  | \$0.10 | 0.5 | \$0.05 |
|  | 16 | Velcro | Pk of 12 | \$2.93 | 1 | \$1.47 |
|  | 17 | Foam tubing | 1 ft | \$0.00 | 1 | \$0.00 |
|  | 18 | Epoxy |  | \$0.00 | 1 | \$0.00 |
|  | 19 | Wood | sq ft | \$0.00 | 0.25 | \$0.00 |
| Electrical Sensors | 20 | Tape Sensor |  | \$2.00 | 3 | \$6.00 |
|  | 21 | Limit Switch |  | \$0.00 | 1 | \$0.00 |
|  | 22 | Power switch |  | \$0.75 | 1 | \$0.75 |
|  | 23 | Motor power switch |  | \$4.21 | 1 | \$4.21 |
|  | 24 | Magnetic Encoder Pair Kit |  | \$8.95 | 1 | \$8.95 |
|  | 25 | Ultrasonic Sonar Distance Sensor |  | \$3.95 | 1 | \$3.95 |
|  | 26 | Adafruit Color Sensor TCS34725 |  | \$0.00 | 1 | \$0.00 |
|  | 27 | On-Off-On Toggle Switch |  | \$0.00 | 1 | \$0.00 |
|  | 28 | IR Receiver |  | \$0.69 | 1 | \$0.69 |
| Electrical <br> Actuators | 29 | 33GN2732-141-G-5 DC Motor |  | \$0.00 | 2 | \$0.00 |
|  | 30 | Maxon motor |  | \$0.00 | 1 | \$0.00 |
|  | 31 | Tower Pro MG996R Servo |  | \$11.95 | 1 | \$11.95 |
|  | 32 | Tower Pro SG90 Servo |  | \$0.00 | 2 | \$0.00 |
| Electrical <br> ICs and Semiconductors | 33 | MCP6294 |  | \$1.57 | 2 | \$3.14 |
|  | 34 | IRLZ34N |  | \$1.25 | 1 | \$1.25 |
|  | 35 | 2N7000 |  | \$0.07 | 1 | \$0.07 |
|  | 36 | LM339AN |  | \$0.39 | 1 | \$0.39 |
| Electrical <br> Diodes, <br> Resistors, and Capacitors | 37 | 100 Resistor |  | \$0.01 | 3 | \$0.03 |
|  | 38 | 2.7K Resistor |  | \$0.01 | 1 | \$0.01 |
|  | 39 | 3.3K Resistor |  | \$0.01 | 2 | \$0.02 |
|  | 40 | 4.7K Resistor |  | \$0.01 | 1 | \$0.01 |
|  | 41 | 10K Resistor |  | \$0.01 | 4 | \$0.04 |
|  | 42 | 27K Resistor |  | \$0.01 | 2 | \$0.02 |
|  | 43 | 82K Resistor |  | \$0.01 | 2 | \$0.02 |
|  | 44 | 100K Resistor |  | \$0.01 | 1 | \$0.01 |
|  | 45 | 330K Resistor |  | \$0.01 | 2 | \$0.02 |
|  | 46 | 1M Resistor |  | \$0.01 | 1 | \$0.01 |
|  | 47 | 0.1 uF capacitor |  | \$0.17 | 6 | \$1.02 |
|  | 48 | 10uF capacitor |  | \$0.06 | 1 | \$0.06 |
|  | 49 | 100 uF capacitor |  | \$0.09 | 6 | \$0.54 |
|  | 50 | Small LED |  | \$0.00 | 1 | \$0.00 |
|  | 51 | Jumbo LED |  | \$0.50 | 2 | \$1.00 |
|  | 52 | IR LED |  | \$0.00 | 1 | \$0.00 |
|  | 53 | Silicon Diode |  | \$0.00 | 1 | \$0.00 |
| Electrical Miscellaneous | 54 | Motor Driver Kit |  | \$9.50 | 2 | \$19.00 |
|  | 55 | Battery |  | \$13.50 | 2 | \$27.00 |
|  | 56 | 5A Fuse |  | \$0.08 | 1 | \$0.08 |
|  | 57 | Tiva |  | \$0.00 | 1 | \$0.00 |
|  | 58 | Wire | ft | \$0.10 | 50 | \$5.00 |
|  | 59 | Perfboards |  | \$0.50 | 5 | \$2.50 |
|  | 60 | Molex Connectors |  | \$0.19 | 50 | \$9.50 |
|  | 61 | COMPASS |  | \$0.00 | 1 | \$0.00 |
|  | 62 | 2.1 mm DC Power Plug |  | \$2.31 | 1 | \$2.31 |
|  | 63 | 5 V buck converter |  | \$1.78 | 1 | \$1.78 |
|  | 64 | Terminal block |  | \$4.99 | 1 | \$4.99 |
|  | 65 | In-line fuse holder |  | \$2.08 | 1 | \$2.08 |
|  |  |  |  |  |  |  |
| Total |  |  |  |  |  | \$218.89 |

