

LWP BOM \$285:

Raspberry pi zero 2W #1 (\$15 at microcenter)

<https://www.microcenter.com/product/643085/raspberry-pi-zero-2-w>

PCA9685 board #2 (\$8.50, \$17 pack of 4)

[https://www.amazon.com/dp/B08RN1S311?ref=ppx\\_yo2ov\\_dt\\_b\\_fed\\_asin\\_title&th=1](https://www.amazon.com/dp/B08RN1S311?ref=ppx_yo2ov_dt_b_fed_asin_title&th=1)

RPI camera module V2 #1 (\$13)

[https://www.amazon.com/dp/B01ER2SKFS?ref=ppx\\_yo2ov\\_dt\\_b\\_fed\\_asin\\_title](https://www.amazon.com/dp/B01ER2SKFS?ref=ppx_yo2ov_dt_b_fed_asin_title)

Alternate RPI camera:

RPI camera module V3 wide angle #1 (\$35 at microcenter)

[Arducam for Raspberry Pi Camera Module 3 Wide, 120°\(D\) IMX708 Autofocus Pi Camera V3, 15cm 15-22 Pin FFC Cable](#)

Spool of PLA print filament #1 (\$14/spool)

[https://www.amazon.com/dp/B07XG3RM58?ref=ppx\\_yo2ov\\_dt\\_b\\_fed\\_asin\\_title](https://www.amazon.com/dp/B07XG3RM58?ref=ppx_yo2ov_dt_b_fed_asin_title)

Servo motors #20 (\$85, \$17 pack of 4)

[https://www.amazon.com/dp/B07MFK266B?ref=ppx\\_yo2ov\\_dt\\_b\\_fed\\_asin\\_title&th=1](https://www.amazon.com/dp/B07MFK266B?ref=ppx_yo2ov_dt_b_fed_asin_title&th=1)

2000mAh batteries #10 (\$68 pack of 10)

[https://www.amazon.com/dp/B08HQWXQ6Y?ref=ppx\\_yo2ov\\_dt\\_b\\_fed\\_asin\\_title&th=1](https://www.amazon.com/dp/B08HQWXQ6Y?ref=ppx_yo2ov_dt_b_fed_asin_title&th=1)

USB C BMS battery charger #6 (\$4, \$10 pack of 20)

[https://www.amazon.com/dp/B0C2VD3ZW3?ref=ppx\\_yo2ov\\_dt\\_b\\_fed\\_asin\\_title&th=1](https://www.amazon.com/dp/B0C2VD3ZW3?ref=ppx_yo2ov_dt_b_fed_asin_title&th=1)

Boost converter 3.7V-5V/8V #7 (\$5, \$7 pack of 10)

[https://www.amazon.com/dp/B089JYBF25?ref=ppx\\_yo2ov\\_dt\\_b\\_fed\\_asin\\_title&th=1](https://www.amazon.com/dp/B089JYBF25?ref=ppx_yo2ov_dt_b_fed_asin_title&th=1)

Rectifier diode #7 (\$5 for pack of 100)

[https://www.amazon.com/dp/B071YWNBVM?ref=ppx\\_yo2ov\\_dt\\_b\\_fed\\_asin\\_title](https://www.amazon.com/dp/B071YWNBVM?ref=ppx_yo2ov_dt_b_fed_asin_title)

Power Switch #1 (\$1, \$8 pack of 10)

[https://www.amazon.com/dp/B07S2QJKTIX?ref=ppx\\_yo2ov\\_dt\\_b\\_fed\\_asin\\_title](https://www.amazon.com/dp/B07S2QJKTIX?ref=ppx_yo2ov_dt_b_fed_asin_title)

Battery connect wire #5 (\$3.50, \$7 pack of 10)

[https://www.amazon.com/dp/B07NWD5NTN?ref=ppx\\_yo2ov\\_dt\\_b\\_fed\\_asin\\_title](https://www.amazon.com/dp/B07NWD5NTN?ref=ppx_yo2ov_dt_b_fed_asin_title)

Wires of various length 10-20-30cm (\$2, \$22 per pack)

[Multicolored Breadboard Jumper Wire Dupont Kit for Arduino, Raspberry Pi \(120 Wires - 10CM - 4INCH\): Amazon.com: Industrial & Scientific](#)

Common Cathode RGB LEDs #6  
Don't worry about these. I have enough.

Large Bearings 20x27x4mm #5 (\$13, \$11 pack of 4)  
[https://www.amazon.com/dp/B082PS5HHN?ref=ppx\\_yo2ov\\_dt\\_b\\_fed\\_asin\\_title&th=1](https://www.amazon.com/dp/B082PS5HHN?ref=ppx_yo2ov_dt_b_fed_asin_title&th=1)

Small Bearings 6x17x6mm #15 (\$15, \$9 pack of 10)  
[https://www.amazon.com/dp/B07JJC9SFK?ref=ppx\\_yo2ov\\_dt\\_b\\_fed\\_asin\\_title&th=1](https://www.amazon.com/dp/B07JJC9SFK?ref=ppx_yo2ov_dt_b_fed_asin_title&th=1)

M2 screws #? (\$8/pack)  
[https://www.amazon.com/dp/B0D3X33XGB?ref=ppx\\_yo2ov\\_dt\\_b\\_fed\\_asin\\_title&th=1](https://www.amazon.com/dp/B0D3X33XGB?ref=ppx_yo2ov_dt_b_fed_asin_title&th=1)

M3 screws #? (\$8/pack)  
[https://www.amazon.com/dp/B0D3X7R5H2?ref=ppx\\_yo2ov\\_dt\\_b\\_fed\\_asin\\_title&th=1](https://www.amazon.com/dp/B0D3X7R5H2?ref=ppx_yo2ov_dt_b_fed_asin_title&th=1)

M2 heat set inserts ~#100 (\$9 pack of 100)  
[https://www.amazon.com/dp/B0CS6XJSSL?ref=ppx\\_yo2ov\\_dt\\_b\\_fed\\_asin\\_title&th=1](https://www.amazon.com/dp/B0CS6XJSSL?ref=ppx_yo2ov_dt_b_fed_asin_title&th=1)

M3 heat set inserts #10 (\$1, \$15 pack of various sizes)  
[https://www.amazon.com/dp/B0B8YWC454?ref=ppx\\_yo2ov\\_dt\\_b\\_fed\\_asin\\_title](https://www.amazon.com/dp/B0B8YWC454?ref=ppx_yo2ov_dt_b_fed_asin_title)

20mm 5v Chassis Fan (\$5, \$10 pack of 2)  
[https://www.amazon.com/dp/B08MKP8P3S?ref=ppx\\_yo2ov\\_dt\\_b\\_fed\\_asin\\_title&th=1](https://www.amazon.com/dp/B08MKP8P3S?ref=ppx_yo2ov_dt_b_fed_asin_title&th=1)

Nylon paracord 3ft (\$5 50ft)  
[https://www.amazon.com/dp/B0BJGZ8VQC?ref=ppx\\_yo2ov\\_dt\\_b\\_fed\\_asin\\_title&th=1&psc=1](https://www.amazon.com/dp/B0BJGZ8VQC?ref=ppx_yo2ov_dt_b_fed_asin_title&th=1&psc=1)