

Part	Quantity	Price/per	Total	Ordered?	Needed for V2
MECHANICAL					
2020 Extrusion	96in	\$0.16	\$17.32	Y	N
2020 nuts m4	50	\$0.21	\$10.50	Y	N
100x M4 Button Screws	1	\$9.90	\$9.90	Y	N
Flanged Bearings	8	\$3.97	\$31.76	Y	Y
Shaft Collars	8	\$3.89	\$31.12	Y	Y
12" Shaft	1	\$7.72	\$7.72	Y	Y
6-32 Thread Size, 1-1/4" Long, wheel screws	1	\$6.80	\$6.80	Y	N
6-32 Thread Size,wheel/frame nuts	1	\$3.40	\$3.40	Y	N
6-32 Thread Size, 2" Long, frame screws	1	\$6.90	\$6.90	Y	Y
Intake Rod	1 ft	\$5.45	\$5.45	Y	N
NEMA Screws	1	\$4.18	\$4.18	Y	N
Hex Nuts	2	\$2.14	\$4.28	Y	N
Lead Screws	1	\$5.14	\$5.14	Y	N
Lead Screw Coupling Tubing	10ft	\$7.00	\$7.00	Y	N
50x 10-32 Screws	1	\$6.06	\$6.06	Y	N
motor sprockets	2	\$13.85	\$27.70	Y	Y
Motors	2	\$7.25	\$14.50	Y	Y
Gearboxes	2	\$56.50	\$113.00	Y	Y
Gearbox Mount Accesories	2	\$4.50	\$9.00	Y	Y
Chain	1	\$16.88	\$16.88	Y	Y
Chain Tools	1	\$21.80	\$21.80	Y	N
NEMA 17 Vertical Bar Actuator	3	\$12.99	\$38.97	Y	N
2020 tubing 20mmX20mm	96	\$0.16	\$15.36	Y	Y
100x Frame screws	1	\$9.90	\$9.90	Y	Y
flanged bearings for axles	8	\$3.97	\$31.76	Y	Y
Shaft collars for axles	8	\$3.89	\$31.12	Y	Y
Axle	1	\$7.72	\$7.72	Y	Y
Sprocket	2	\$13.85	\$27.70	Y	Y
Motor	2	\$7.25	\$14.50	Y	Y
Gearbox for motors	2	\$45.90	\$91.80	Y	Y

Motor mounts	2	\$6.50	\$13.00	Y	Y
Dual DC motor Controller	1	\$63.39	\$63.39	Y	Y
PLA pro blue	1	\$21.99	\$21.99	Y	Y
PLA pro orange	1	\$22.99	\$22.99	Y	Y
MECHANICAL TOTAL BUDGET			\$750.61		
ELECTRICAL					
Raspberry Pi 3B+	2	\$30.00	\$60.00	Y	Y
Arduino Nano	2	\$20.00	\$40.00	Y	Y
3 Stepper Motor Driver	1	\$30.00	\$30.00	Y	N
Dual DC Motor Driver (70A inrush)	1	\$70.00	\$70.00	Y	Y
Auxillary LiPo Battery	1	\$30.00	\$30.00	Y	Y
Main 12V LiPo Battery	1	\$30.00	\$30.00	Y	Y
5V Voltage Regulator	1	\$10.00	\$10.00	Y	Y
Raspberry Pi Camera V2.1	2	\$20.00	\$40.00	Y	Y
Raspberry Pi Camera Ribbon Cable	1	\$10.00	\$10.00	Y	Y
USB-B to USB-A Cable	1	\$5.00	\$5.00	Y	Y
YDLIDAR Module	1	\$100.00	\$100.00	Y	Y
Various Connectors and Wires	1	\$0.00	\$0.00	Y	Y
Razor IMU M0	2	\$35.95	\$71.90	Y	Y
Raspberry Pi GPIO tall header	2	\$1.95	\$3.90	Y	Y
LIDAR	1	\$99.00	\$99.00	Y	Y
Capacitive Encoder	2	\$21.86	\$43.72	Y	Y
Servo	2	\$17.89	\$35.78	Y	Y
Pi Cam Cable	1	\$5.43	\$5.43	Y	Y
LCD	2	\$9.79	\$19.58	Y	Y
ELECTRICAL TOTAL BUDGET			\$704.31		
FULL ESTIMATED PROJECT BUDGET			\$1,454.92		
ACTUAL COST					