Part	Quantity	Cost Per Unit	Vendor/Link	Notes
Redcat Racing Blackout SC 1/10 Scale Electric Short Course Truck	1	\$155.99	https://www.amazon.com/Redcat-Racing-Blackout- Waterproof-Electronics/dp/B00VRNR9KS/	
Servo 2Kg, Metal Arm	1	\$17.99	https://www.amazon.com/gp/product/B01MU7TQV8	
Sensorless Brushless Motor	1	\$24.50	https://www.amazon.com/gp/product/B075Q6FYRN	Sensored BLDC motor also available for \$20 more. Alternatively, can buy chassis with BLDC already installed (Redcat Blacout SC Pro version)
VESC	1	\$83.89	https://hobbyking.com/en_us/turnigy-sk8-esc-for- electric-skateboard-conversion.html	
Heat Shrink	1	\$2.66	https://www.digikey.com/product-detail/en/3m/FP- 301VW-1-4-BLACK-4-BUL/3M161471-ND/3130855	(Can purchase additional colors if desired)
Solderless Wire Connector	1	\$6.98	https://www.amazon.com/gp/product/B01N7XS4Z7	
3 pin Through Hole Male Header	1	\$0.18	https://www.digikey.com/products/en?keywords=952- 2263-nd	
USB Mini Cable 1ft	1	\$6.99	https://www.amazon.com/gp/product/B01N5PHSJE	
Jetson Nano	1	\$99	https://www.nvidia.com/en-us/autonomous- machines/embedded-systems/jetson-nano/	
Micro SD Card	1	\$12.36	https://www.amazon.com/gp/product/B073JYVKNX	
WiFi Card	1	\$23.90	https://www.amazon.com/gp/product/B01MZA1AB2	
WiFi Antennae	1	\$7.99	https://www.amazon.com/gp/product/B01MAV4Z2O	
Power Barrel Connector 5.5x2.1 mm	1	\$4.12	https://www.digikey.com/product-detail/en/tensility- international-corp/10-01780/839-1246-ND/5638256	
Pin Jumper	1	\$0.10	https://www.digikey.com/product-detail/en/sullins- connector-solutions/STC02SYAN/S9000-ND/76372	
Buck Converter	1	\$9.99	https://www.amazon.com/gp/product/B06XRDV49T	

Battery Connector	1	\$12.99	https://www.amazon.com/gp/product/B01E3999FA
4mm			
5000mAH	1	\$33.49	https://www.amazon.com/Redcat-Racing-HX-5000MH-
NiMH			B-Battery-7-2V-Connector/dp/B00D253GSI
battery			
Logitech	1	\$39.00	https://www.amazon.com/gp/product/B0041RR0TW
F710			
Gamepad			
Zip Ties	1	\$4.99	https://www.amazon.com/gp/product/B01018DB2E
M3	1	\$3.83 /	https://www.mcmaster.com/92125a150
Flathead		pack of 25	
Screw			
40mm			
M3 Nylon	1	\$3.60 /	https://www.mcmaster.com/95610a530
Washers		pack of 100	
M2.5 Pan	1	\$4.43 /	https://www.mcmaster.com/92005a071
Head		pack of 100	
Screws			
10mm			
M2.5 Flat	1	\$7.20 /	https://www.mcmaster.com/91294a018
Head		pack of 25	
Screws			
10mm			
M2.5 Hex	1	\$2.22 /	https://www.mcmaster.com/90591a270
Nut		pack of 100	

Sensor Options

Part	Quantity	Cost Per Unit	Vendor/Link	Notes
YDLidar	1	\$99	https://www.robotshop.com/en/ydlidar-x4-360- laser-scanner.html	
USB Micro Splitter 1ft	1	\$7.99	https://www.amazon.com/gp/product/B06XCKX7XC	
Realsense D435i	1	\$199	https://store.intelrealsense.com/buy-intel-realsense- depth-camera-d435i.html	
USB 3.0 1ft	1	\$5.99	https://www.amazon.com/gp/product/B01809N39W	
M3 Pan Head Screw 6mm	1	\$5.06	https://www.mcmaster.com/92095a179	
Realsense T265	1	\$199	https://store.intelrealsense.com/buy-intel-realsense- tracking-camera-t265.html	

M3 Pan	1	\$5.06	https://www.mcmaster.com/92095a179	
Head Screw				
6mm				
Razor IMU	1	\$37.50	https://www.digikey.com/product- detail/en/sparkfun-electronics/SEN-14001/1568-	
			1460-ND/6569364	
MicroUSB 1	1	\$7.99	https://www.amazon.com/Sabrent-6-Pack-Premium-	
ft			Cables-CB-UM61/dp/B011KMSNXM	

Optional Items

Part	Quantity	Cost Per Unit	Vendor/Link	Notes
Redcat Racing Fast Charger	1	\$18.70	https://www.amazon.com/gp/product/B015ZQEID8	
5000mAH NiMH battery	1	\$33.49	https://www.amazon.com/Redcat-Racing-HX- 5000MH-B-Battery-7-2V-Connector/dp/B00D253GSI	Extra Battery
Four Port USB 3.0 Hub	1	\$17.49	https://www.amazon.com/gp/product/B00DQFGH80	Increase USB ports from 4 to 7
Velcro	1	\$5.77	https://www.amazon.com/gp/product/B000WLFRXC	