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	

Part	Quantity	Cost Per Unit	Vendor/Link	Notes
Battery Connector 4mm	1	$12.99	https://www.amazon.com/gp/product/B01E3999FA	
5000mAH NiMH battery	1	$33.49	https://www.amazon.com/Redcat-Racing-HX-5000MH-B-Battery-7-2V-Connector/dp/B00D253GSI	
Logitech F710 Gamepad	1	$39.00	https://www.amazon.com/gp/product/B0041RR0TW	
Zip Ties	1	$4.99	https://www.amazon.com/gp/product/B01018DB2E	
Medium Strength Thread Locker	1	$3.50	https://www.amazon.com/Permatex-24200-Medium-Strength-Threadlocker/dp/B0002UEMZ2	
Super Glue	1	$3.99	https://www.amazon.com/Loctite-Ultra-Control-4-Gram-1363589/dp/B003Y49R7G	
Electrical Tape	1	$2.00	https://www.amazon.com/Scotch-Electrical-Tape-4-Inch-66-Foot/dp/B001ULCB1O	
M3 Flathead Screw 40mm	1	$3.83 / pack of 25	https://www.mcmaster.com/92125a150	
M3 Nylon Washers	1	$3.60 / pack of 100	https://www.mcmaster.com/95610a530	
M2.5 Pan Head Screws 10mm	1	$4.43 / pack of 100	https://www.mcmaster.com/92005a071	
M2.5 Flat Head Screws 10mm	1	$7.20 / pack of 25	https://www.mcmaster.com/91294a018	
M2.5 Hex Nut	1	$2.22 / pack of 100	https://www.mcmaster.com/90591a270	

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

Optional Items

Part	Quantity	Cost Per Unit	Vendor/Link	Notes
Power Supply (5V 4Amp)	1	$13.99	https://www.amazon.com/ALITOVE-Converter-5-5x2-1mm-100V-240V-Security/dp/B078RT3ZPS	Power the Jetson Nano without using battery
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	
Bumper Switch	1	$12.99	https://www.robotshop.com/en/vex-bumper-switch.html	Detects when the front bumper has made contact with an object
Female to Female Jumper Cable	1	$1.95 per pack of 20	https://www.digikey.com/product-detail/en/sparkfun-electronics/PRT-12796/1568-1513-ND/5993861	
1K Ohm Resistor	1	$0.10	https://www.digikey.com/product-detail/en/stackpole-electronics-inc/CF14JT1K00/CF14JT1K00CT-ND/1830350	

| 1/8" Heat Shrink | 1 | $1.41 | https://www.digikey.com/product-detail/en/alpha-wire/F221B1-8-BK100/A018B-4-ND/281671x | |
| 20mm M2.5 Pan Head Screws | 1 | $5.92 per pack of 100 | https://www.mcmaster.com/92000a111 | |