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	$15.88	https://www.amazon.com/gp/product/B01MU7TQV8	
Sensorless Brushless Motor	1	$19.99	https://www.amazon.com/gp/product/B01DBS3MQQ	Sensored BLDC motor also available for $20 more. Alternatively, can buy chassis with BLDC already installed (Redcat Blacout SC Pro version)
VESC	1	$89.90	https://www.robotshop.com/en/maytech-vesc-50a-brushless-speed-controller-eskateboard-robotics.html https://hobbyking.com/en_us/turnigy-sk8-esc-v4-12-for-electric-skateboard-conversion-w-bec.html	
Heat Shrink	1	$2.88	https://www.digikey.com/product-detail/en/alpha-wire/F221B1-4-BK100/A014B-4-ND/281675	(Can purchase additional colors if desired)
Solderless Wire Connector	1	$9.99	https://www.amazon.com/dp/B01C26ZBMG	
3 pin Through Hole Male Header	1	$0.18	https://www.digikey.com/products/en?keywords=952-2263-nd	
USB Mini Cable 1ft	1	$4.23	https://www.amazon.com/StarTech-com-30cm-ft-Mini-Cable/dp/B002L5U7N2	
Jetson Nano	1	$99	https://www.amazon.com/NVIDIA-Jetson-Nano-Developer-Kit/dp/B07PZHBDKT	
Micro SD Card	1	$19.99	https://www.amazon.com/gp/product/B06XWZWYVP	
WiFi & Bluetooth Card	1	$22.89	https://www.amazon.com/gp/product/B01MZA1AB2	
WiFi Antennae	1	$6.99	https://www.amazon.com/gp/product/B01MAV4Z2O	

Power Barrel Connector 5.5x2.1 mm	1	$4.33	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 4mm	1	$12.99	https://www.amazon.com/gp/product/B01E3999FA	
5000mAH NiMH battery	1	$38.99	https://www.amazon.com/Flylinktech-Rechargeable-Batteries-Associated-Connectors/dp/B073W57G7Y	Comes in a pack of 2, but only need one battery. Can replace with any other rc battery that fits, just need to be able to connect to input of voltage regulator.
Tamiya Battery Connector	1	$9.80	https://www.amazon.com/gp/product/B0746GQF56	
Velcro	1	$2.10	https://www.amazon.com/VELCRO-Brand-Fasteners-Perfect-General/dp/B000TGSPV6	Use to hold battery in place
Bluetooth Playstation 4 Controller	1	$43.95	https://www.amazon.com/gp/product/B01LWVX2RG	
Zip Ties	1	$4.99	https://www.amazon.com/gp/product/B01018DB2E	
Medium Strength Thread Locker	1	$7.49	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	$3.98	https://www.amazon.com/Scotch-Super-Vinyl-Electrical-Tape/dp/B00004WCCL	
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	$4.66 / pack of 100	https://www.mcmaster.com/92005a071	

Part	Quantity	Cost Per Unit	Vendor/Link	Notes
M2.5 Flat Head Screws 10mm	1	$4.19 / pack of 25	https://www.mcmaster.com/92010a020	
M2.5 Hex Nut	1	$2.22 / pack of 100	https://www.mcmaster.com/90591a270	
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 if desired
Redcat Racing Fast Charger	1	$18.81	https://www.amazon.com/gp/product/B015ZQEID8	

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	$9.99	https://www.amazon.com/gp/product/B0179OXY9I	
Realsense D435i	1	$199	https://store.intelrealsense.com/buy-intel-realsense-depth-camera-d435i.html	
USB 3.0 Type C 1ft	1	$5.99	https://www.amazon.com/TITACUTE-Durable-Reversible-Connector-Charging/dp/B06XXRL4R9	
M3 Pan Head Screw 18mm	1	$9.34	https://www.mcmaster.com/92000a127	
Realsense T265	1	$199	https://store.intelrealsense.com/buy-intel-realsense-tracking-camera-t265.html	
M3 Pan Head Screw 18mm	1	$9.34	https://www.mcmaster.com/92000a127	
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
Four Port USB 3.0 Hub	1	$17.49	https://www.amazon.com/gp/product/B00DQFGH80	Increase USB ports from 4 to 7
Push Button	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	