

Final budget						
Part	Description	Part number	Qty used	Supplier	unit price	Preowned
Rover						
65mm Off Road Tires		2.72134E+11	1	Ebay Vendor: skull_m	2.72134E+11	No
Aluminium Sheet		-	33000	Early Bird Steel Brisba	-	No
Romak Hexagon Nuts		2310899	0	Bunnings Warehouse	2310899	No
Romak M3 Bolts		2310352	0	Bunnings Warehouse	2310352	No
Eiger 40Lumen Torches		4410536	1	Bunnings Warehouse	4410536	No
Waterproof LED strip		-	12	Ebay Vendor: green-li	-	No
3mm Hex Wheel Adaptor		PL-2682	2	Little Bird Electronics	PL-2682	No
12V 9.8kg/cm torque micro motors			4	Ebay Vendor: ce10wy		No
IP65 Electronics Enclosure						No
6- Notch Make-a-bracket		-	1	Carinya	-	No
Cable Spirals			1 meter	Ebay Vendor: lucky.warm		No
9g Micro Servo				Ebay Vendor: xinguang-buy		No
Zenith 20mm Angle Bracket		2760591	2	Bunnings Warehouse	2760591	No
Claw						
Servo	13Kgcm	MG995	1		5.1	No
Aluminium servo claw			1	Ebay Vendor: flyfuntech2014		No
Claw arm		I/N: 3962006	1	Bunnings Warehouse		No
Bolts			14	Bunnings Warehouse		No
Rubber bands	No.18			Officeworks		No
Alluminium bracket	90 degrees bent		30mm	Bunnings Warehouse	3.84 aud/m	No
Plexiglass			50mm x 20 mm	-	0.6	Yes
Nuts			13	Bunnings Warehouse		No
Buoy						
Bolts						
Nuts						
EVA Foam Tiles	EVA Foam Tiles		0.4	Kmart	10	No

25m PVC Pipe						Yes
25m PVC Pipe Elbow Connector						
Food Containers	Food Containers		2	Woolworths	1.666666667	
Spiral Binding						
Miscellaneous						
15 Core Unscreened PVC	15 Core Unscreened PVC Cable		2	RS	2.372	No
Motor Driver			1			Yes
Buck			1			No
HC-05			1			No
Rocker Switch, Non Illum	Rocker Switch, Non	A8L-11-15N1	1		1.52	No
Battery Pack	10 Batteries pack		1	Jaycar	4.75	No
DB15 Male Header	DB15 Male Header		2	Digikey	0.51214	No
DB15 Backshell	DB15 Backshell		2	Digikey	0.345	No
Central Controller PCB						
Atmega324	Atmega324	Atmega324-AU-1322	1	Mouser	4.06	Yes
10K Ohm Resistor	10K Ohm Resistor		1	Digikey	0.00148	No
1K Ohm Resistor	1K Ohm Resistor		9	Digikey	0.00106	No
1uF Capacitor	1uF Capacitor		4	Jameco	0.023	No
100pF Capacitor	100pF Capacitor		5	Jameco	0.005	No
L7805CD2T Volateg Regu	Positive voltage reg	L7805CD2T	1	Mouser	0.321	No
L293D Motor Driver	Push-pull four chan	L293D	1	Digikey	2.84	Yes
16 Pin Socket	16 Pin Socket		1	Jameco	0.39	Yes
2 Pin Header	KK Style - Straight Header Male		2	Element14	0.113	No
2 Pin Header	KK Style - Straight Header Female		2	Element14	0.031	No
3 Pin Header	KK Style - Straight Header Male		3	Element14	0.296	No
3 Pin Header	KK Style - Straight Header Female		3	Element14	0.099	No
4 Pin Header	KK Style - Straight Header Male		4	Element14	0.408	No
4 Pin Header	KK Style - Straight Header Female		4	Element14	0.139	No
Crimp	KK Style Crimp		29	Element14	0.027	No
2x3 Pin Header	6 Way 2 Row Header		1	modDIY	0.59	No
DB15 Female Header	DB15 Female Header		1	Digikey	0.81788	No
Diode	0603 Series Blue LE	697-3617	4	RS	0.243	No

Motor Shield	2A(MAX single bridge)		1	gogo-life	1.36	No
PCB	55mm x 60mm x 1.6mm 2 layer PCB		1	PCBway	1	No
Distribution PCB						
1K Ohm Resistor	1K Ohm Resistor		3	Digikey	0.00106	No
1uF Capacitor	1uF Capacitor		2	Jameco	0.023	No
100pF Capacitor	100pF Capacitor		4	Jameco	0.005	No
3 Pin Header	KK Style - Straight Header Male		3	Element14	0.296	No
3 Pin Header	KK Style - Straight Header Female		3	Element14	0.099	No
4 Pin Header	KK Style - Straight Header Male		5	Element14	0.408	No
4 Pin Header	KK Style - Straight Header Female		5	Element14	0.139	No
Crimp	KK Style Crimp		29	Element14	0.027	No
DB15 Female Header	DB15 Female Header		1	Digikey	0.81788	No
Diode	0603 Series Blue LED 697-3617		1	RS	0.243	No
PCB	38mm x 45mm x 1.6mm 2 layer PCB		1	PCBway	1	No
Video feedback						
VHS-USB adaptor	VHS to usb converter		1		6.28	No
Transmitter/Receiver	2.4Ghz Analogue signal		1	BYNCG Car Accessories	4.95	No
Rearview Camera	NTSC/PAL		1	755shipping	4.55	No
Battery Pack	12 V battery holder			patapom	1.3	No
Microservo	5V micro servoi		1	Ociodual	1.5	No

25 mm Saddles						
Alluminium:						
Sheet				33000	1	
Rod					1	
Wood						
Bolts	M3 romak			20		
Nuts	romak hexagon			20		

Glands				3	
Conduit pipe				1.515151515	1.48
Manipulator				1	5.95 AUD
DC motor				4	8.86
Servo				1	
Foam					
Containers					
Stepper				1	
Brackets				2	

Datasheet provide Cost		Sum Total					
	61.9806	165.4581733					
No	6.9						
No	2.19						
No	1.95						
No	1.95						
No	3.67						
No	0.3356						
No	5.98						
No	35.44						
No							
No	0.435						
No	0.15						
Yes	1.69						
No	1.29						
	33.45						
Yes	5.1						
Yes	8.54						
No	5	https://www.bunnings.com.au/carinya-175x200x19x15mm-varnished-plywood-angle-bracket_p3962006					
No	5						
No	3.83	https://www.officeworks.com.au/shop/officeworks/p/j-burrows-no-18-rubber-bands-100g-jbrb18100b?cm_vc=subcat1					
No	0.68	https://www.bunnings.com.au/metal-mate-12-x-12-x-1-4mm-1m-aluminium-equal-angle_p1067849					
No	0.3	http://au.rs-online.com/web/p/products/0825253/?grossPrice=Y&cm_mmc=AU-PLA-_google-_PLA_AU_EN_Abrasives_Ar					
No	5						
	7.333333333	https://www.digikey.com/product-detail/en/microchip-technology/ATMEGA324P-20AUR/ATMEGA324P-20AURCT-ND/344					
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	0	https://www.digikey.com/product-detail/en/yageo/RC0402JR-071KL/311-1.0KJRTR-ND/726408					
No	4	http://www.jameco.com/z/12063G105ZAT2A-AVX-Capacitor-1-uF-25-Volt-Y5-Volt-20-To-80-Surface-Mount-1206-Embosse					

	0	http://www.jameco.com/z/GRM1885C1H101JA01J-Murata-Capacitor-100pf-50-Volt-C0G-5-Surface-Mount-0603-Paper-Tap
	0	http://au.mouser.com/ProductDetail/STMicroelectronics/L7805CD2T-TR/?qs=%2fha2pyFaduj2Hv%2fZGx1UWnCsernFroYrL
No	3.333333333	https://www.digikey.com.au/product-detail/en/stmicroelectronics/L293D/497-2936-5-ND/634700
	0	http://www.jameco.com/z/6100-16-R-Socket-IC-16-Pin-Machine-Tooled-Low-Profile-0-3-Inch-Wide_37402.html
	20.55828	http://au.element14.com/molex/22-27-2021/header-square-pin-2-54mm-2way/dp/9731148?MER=bn_level5_5NP_Engage
Yes	4.744	http://au.element14.com/molex/22-01-3027/housing-square-pin-2-54mm-2way/dp/1462825?ost=22-01-3027&searchView
Yes	2.5	http://au.element14.com/molex/22-27-2031/header-square-pin-2-54mm-3way/dp/9731156
Yes	0.94	http://au.element14.com/molex/22-01-3037/housing-female-3way/dp/1462838?ost=22-01-3037&searchView=table&isrcf
Yes	4.39	http://au.element14.com/molex/22-27-2041/header-square-pin-2-54mm-4way/dp/9731164?ost=22-27-2041&scope=part
Yes	1.52	http://au.element14.com/molex/22-01-3047/housing-female-4way/dp/1462831?MER=bn_level5_5NP_EngagementRecSin
No	4.75	http://au.element14.com/molex/08-50-0113/contact-crimp-terminal-30-22awg/dp/2063734?MER=bn_level5_5NP_Engage
Yes	1.02428	https://www.moddiy.com/products/0.100%22-%282.54-mm%29-Breakaway-Male-Header%3A-2x40%252dPin%2C-Straight
Yes	0.69	https://www.digikey.com/product-detail/en/amphenol-fci/10090926-P154XLF/609-4022-ND/2350294
	16.9229	http://au.rs-online.com/web/p/visible-leds/6973617/?searchTerm=697-3617&relevancy-data=636F3D3126696E3D493138
Yes	4.06	http://www.ebay.com.au/itm/L298N-Stepper-Motor-Drive-Dual-H-Bridge-Controller-Board-DC-Module-For-Arduino-/4013
Yes	0.00148	
Yes	0.00954	
Yes	0.092	https://www.digikey.com/product-detail/en/yageo/RC0402JR-071KL/311-1.0KJRT-ND/726408
Yes	0.025	http://www.jameco.com/z/12063G105ZAT2A-AVX-Capacitor-1-uF-25-Volt-Y5-Volt-20-To-80-Surface-Mount-1206-Embosse
Yes	0.321	http://www.jameco.com/z/GRM1885C1H101JA01J-Murata-Capacitor-100pf-50-Volt-C0G-5-Surface-Mount-0603-Paper-Tap
Yes	2.84	http://au.element14.com/molex/22-27-2031/header-square-pin-2-54mm-3way/dp/9731156
No	0.39	http://au.element14.com/molex/22-01-3037/housing-female-3way/dp/1462838?ost=22-01-3037&searchView=table&isrcf
Yes	0.226	http://au.element14.com/molex/22-27-2041/header-square-pin-2-54mm-4way/dp/9731164?ost=22-27-2041&scope=part
Yes	0.062	http://au.element14.com/molex/22-01-3047/housing-female-4way/dp/1462831?MER=bn_level5_5NP_EngagementRecSin
Yes	0.888	http://au.element14.com/molex/08-50-0113/contact-crimp-terminal-30-22awg/dp/2063734?MER=bn_level5_5NP_Engage
Yes	0.297	https://www.digikey.com/product-detail/en/amphenol-fci/10090926-P154XLF/609-4022-ND/2350294
Yes	1.632	http://au.rs-online.com/web/p/visible-leds/6973617/?searchTerm=697-3617&relevancy-data=636F3D3126696E3D493138
Yes	0.556	
Yes	0.783	
Yes	0.59	http://www.ebay.com.au/itm/USB-2-0-Video-Audio-VHS-to-DVD-Converter-Capture-Card-Adapter-for-PC-WIN7-8-XP-/302
No	0.81788	https://www.aliexpress.com/item/Car-backup-RCA-Video-2-4-Ghz-transmitter-Receiver-kit-for-Car-dvd-GPS-Player-Car/326
Yes	0.972	http://www.ebay.com.au/itm/New-Night-Vision-Car-Rear-View-Reverse-Backup-Camera-170-CMOS-Anti-Fog-NG-/3820982

No	1.36	http://www.ebay.com.au/itm/12Volt-Plastic-Battery-Holder-Box-Storage-Case-For-8Pcs-AA-Batteries-Wire-Leads-/1518794
No	1	http://www.ebay.com.au/itm/SERVO-9g-MICROSERVO-Modelismo-para-Arduino-Robotica-micro-Aeromodelismo-/401323
	6.83306	http://www.ebay.com/itm/Mini-3A-DC-DC-Converter-Adjustable-Step-down-Power-Supply-Module-replace-LM2596s-/262
Yes	0.00318	http://www.ebay.com/itm/Dual-Motor-Driver-TB6612FNG-L298N-Stepper-Motor-Driver-Module-F-Arduino-PIC-AVR-/1122
Yes	0.046	http://www.ebay.com/itm/1-5-10PCS-HC-06-HC-05-30ft-Wireless-Bluetooth-RF-Transceiver-Module-RS232-TTL-/28222135
Yes	0.02	
Yes	0.888	
Yes	0.297	
Yes	2.04	
Yes	0.695	
Yes	0.783	
No	0.81788	
Yes	0.243	
No	1	
	18.38	
No	6.28	https://www.bunnings.com.au/deta-20mm-medium-duty-rigid-cond
No	4.95	http://www.ebay.com.au/itm/Manipulator-Alloy-Paw-Arm-Mechanical-Robotic-Claw-Clamp-for-Arduino-Robot-MG995-/25
Yes	4.55	
No	1.3	
Yes	1.3	
Total	165.4581733	





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