

Part Number	Description	Manufacturer	#	Product Link	Cost per Item	Total Cost
A000005	Arduino Nano	Arduino	4	<a href="https://store-usa.arduino.cc/products/arduino-nano?selectedStore=us">https://store-usa.arduino.cc/products/arduino-nano?selectedStore=us</a>	\$20.70	\$82.80
RP4B4GB	Raspberry Pi 4 Model B - 4 GB RAM	Raspberry Pi	2	<a href="https://vilros.com/products/raspberry-pi-4-4gb-raspberry?src=raspberry">https://vilros.com/products/raspberry-pi-4-4gb-raspberry?src=raspberry</a>	\$55.00	\$110.00
SC0025	Official Raspberry Pi 7" Touchscreen LCD Display	Raspberry Pi	2	<a href="https://vilros.com/products/raspberry-pi-7-touchscreen-lcd-display?src=raspberry">https://vilros.com/products/raspberry-pi-7-touchscreen-lcd-display?src=raspberry</a>	\$74.95	\$149.90
TMCS1100A4QDRQ1	Automotive hall effect sensor	Texas Instruments	3	<a href="https://www.mouser.com/ProductDetail/Texas-Instruments/TMCS1100A4QDRQ1?qs=QNEbhJQKvbjO1r%252BMdmvKQ%3D%3D">https://www.mouser.com/ProductDetail/Texas-Instruments/TMCS1100A4QDRQ1?qs=QNEbhJQKvbjO1r%252BMdmvKQ%3D%3D</a>	\$3.76	\$11.28
S2GFS M3G	Power Diode	Taiwan Semiconductor	3	<a href="https://www.digikey.com/en/products/detail/taiwan-semiconductor-corporation/S2GFS-M3G/12806672">https://www.digikey.com/en/products/detail/taiwan-semiconductor-corporation/S2GFS-M3G/12806672</a>	\$4.34	\$13.02
MTPM-P33-1M18	DC Motor	IronHorse	1	<a href="https://www.automationdirect.com/adc/shopping/catalog/motors/dc_motors_(up_to_2hp)/general_purpose/mtpm-p33-1m18">https://www.automationdirect.com/adc/shopping/catalog/motors/dc_motors_(up_to_2hp)/general_purpose/mtpm-p33-1m18</a>	\$186	\$186
WGA-40M-020-H1	Gearbox	IronHorse	1	<a href="https://www.automationdirect.com/adc/shopping/catalog/power_transmission_(mechanical)/general_purpose_aluminum_worm_gearboxes/wga-40m-020-h1">https://www.automationdirect.com/adc/shopping/catalog/power_transmission_(mechanical)/general_purpose_aluminum_worm_gearboxes/wga-40m-020-h1</a>	\$140	\$140
KY-032	Tachometer	Keyes	3	<a href="https://www.amazon.com/Electronics-Infrared-Obstacle-Avoidance-Arduino/dp/B0786B8J92">https://www.amazon.com/Electronics-Infrared-Obstacle-Avoidance-Arduino/dp/B0786B8J92</a>	\$3	\$9
4493	Potentiometer	STEMMA	2	<a href="https://www.adafruit.com/product/4493#description">https://www.adafruit.com/product/4493#description</a>	\$3.95	\$7.90
N/A	Motor Controller PCB	JLCPCB	5	<a href="https://cart.jlpcb.com/quote">https://cart.jlpcb.com/quote</a>	\$2.00	\$2.00

B07DR9S5C9	E-Bike Brake Levers with Switches	Dioche	2	<a href="https://www.amazon.com/Brakes-Durable-Bicycle-Electric-Replacement/dp/B07DR9S5C9/ref=sr_1_2?keywords=e-bike+brake+lever&amp;qid=1643332384&amp;sr=8-2">https://www.amazon.com/Brakes-Durable-Bicycle-Electric-Replacement/dp/B07DR9S5C9/ref=sr_1_2?keywords=e-bike+brake+lever&amp;qid=1643332384&amp;sr=8-2</a>	\$21.99	\$43.98
4936T345	1" OD galvanized steel framing rail (10 feet)	McMaster-Carr	1	<a href="https://www.mcmaster.com/4936T101-4936T345/">https://www.mcmaster.com/4936T101-4936T345/</a>	\$85.09	\$85.09
4936T307	1" OD galvanized steel framing rail (5 feet)	McMaster-Carr	1	<a href="https://www.mcmaster.com/4936T101-4936T307/">https://www.mcmaster.com/4936T101-4936T307/</a>	\$42.54	\$42.54
4698T31	90 degree elbow connector for 1" rail	McMaster-Carr	2	<a href="https://www.mcmaster.com/4698T31/">https://www.mcmaster.com/4698T31/</a>	\$10.52	\$21.04
4698T96	Adjustable angle wye connector for 1" rail	McMaster-Carr	4	<a href="https://www.mcmaster.com/4698T96/">https://www.mcmaster.com/4698T96/</a>	\$18.16	\$72.64
4698T86	Adjustable angle cross connector for 1" rail	McMaster-Carr	1	<a href="https://www.mcmaster.com/4698T86/">https://www.mcmaster.com/4698T86/</a>	\$26.92	\$26.92
4698T73	Adjustable angle elbow connector for 1" rail	McMaster-Carr	2	<a href="https://www.mcmaster.com/4698T73/">https://www.mcmaster.com/4698T73/</a>	\$22.84	\$45.68
NB-SC6-B S12	Tie down cradle for 1" tubing (set of 6)	BIKEGEAR	1	<a href="https://www.amazon.com/BIKEGEAR-Replacement-Accessory-Hitching-Carriers/dp/B08DFDCH5J/ref=sr_1_1_sspa?crid=O1DJ872W4DS9&amp;keywords=bike+rack+cradle&amp;qid=1643338235&amp;srefix=bike+rack+cradle%2Caps%2C132&amp;sr=8-1-spons&amp;psc=1&amp;spLa=ZW5jcmlwdGVkUXVhbGlmaWVyPUEzNFJlM01RWk9LUzRUJmVuY3J5cHRlZElkPUEwMzQ1ODM3MkhURFVYWVBIT0hYVSZlbnNyeXB0ZWRBZEIkPUwNDY0ODIxMUNUMklRODZBSVFFUiZ3aWRnZXROYW1lPXNwX2F0ZiZhY3Rpb">https://www.amazon.com/BIKEGEAR-Replacement-Accessory-Hitching-Carriers/dp/B08DFDCH5J/ref=sr_1_1_sspa?crid=O1DJ872W4DS9&amp;keywords=bike+rack+cradle&amp;qid=1643338235&amp;srefix=bike+rack+cradle%2Caps%2C132&amp;sr=8-1-spons&amp;psc=1&amp;spLa=ZW5jcmlwdGVkUXVhbGlmaWVyPUEzNFJlM01RWk9LUzRUJmVuY3J5cHRlZElkPUEwMzQ1ODM3MkhURFVYWVBIT0hYVSZlbnNyeXB0ZWRBZEIkPUwNDY0ODIxMUNUMklRODZBSVFFUiZ3aWRnZXROYW1lPXNwX2F0ZiZhY3Rpb</a>	\$49.50	\$49.50

				<a href="https://www.amazon.com/Zefal-Cristophe-Mountain-Bicycle-Clips/dp/B000AO9K9S/ref=sr_1_23?keywords=toe%2Bcages%2Bfor%2Bbike%2Bpedals&amp;qid=1642108542&amp;s=sporting-goods&amp;sprefix=toe%2Bcage%2Csporting%2C124&amp;sr=1-23&amp;th=1&amp;psc=1">249Y2xpY2tSZWRpc mVjdCZkb05vdExvZ0 NsaWNrPXRydWU=</a>		
72457	Zefal "Cristophe" Mountain Bicycle Half Toe Clip S/M (CHOOSE S/M SIZE)	Zefal	1	<a href="https://www.amazon.com/Zefal-Cristophe-Mountain-Bicycle-Clips/dp/B000AO9K9S/ref=sr_1_23?keywords=toe%2Bcages%2Bfor%2Bbike%2Bpedals&amp;qid=1642108542&amp;s=sporting-goods&amp;sprefix=toe%2Bcage%2Csporting%2C124&amp;sr=1-23&amp;th=1&amp;psc=1">https://www.amazon.co m/Zefal-Cristophe-Mo untain-Bicycle-Clips/d p/B000AO9K9S/ref=sr _1_23?keywords=toe %2Bcages%2Bfor%2B bike%2Bpedals&amp;qid=1 642108542&amp;s=sportin g-goods&amp;sprefix=toe% 2Bcage%2Csporting% 2C124&amp;sr=1-23&amp;th=1 &amp;psc=1</a>	\$11.90	\$11.90
854175117 4	Universal Monitor Pole Mount Bracket with VESA 75/100	Loutytuo	1	<a href="https://www.amazon.com/Loutytuo-Universal-Punching-Adjustable-Diameter/dp/B07R7SC4B8/ref=sr_1_3?crid=3SLT4U65QIGL7&amp;keywords=vesa%2Bpole%2Bmount&amp;qid=1642092404&amp;s=office-product&amp;sprefix=vesa%2Bpo&lt;br/&gt;le%2Bmount%2Coffic&lt;br/&gt;e-products%2C81&amp;sr=&lt;br/&gt;1-3&amp;th=1">https://www.amazon.co m/Loutytuo-Universal- Punching-Adjustable- Diameter/dp/B07R7SC 4B8/ref=sr_1_3?crid=3 SLT4U65QIGL7&amp;key words=vesa%2Bpole% 2Bmount&amp;qid=164209 2404&amp;s=office-product s&amp;sprefix=vesa%2Bpo le%2Bmount%2Coffic e-products%2C81&amp;sr= 1-3&amp;th=1</a>	\$37.89	\$37.89
B089NKP W39	Bike Trainer Stand Indoor Riding Steel Bicycle Exercise Stand with Noise Reduction Wheel Magnetic Stationary Stand fits for 26-28inch, 700C Wheel	Unisky	1	<a href="https://www.amazon.com/Exercise-Magnetic-Training-Stationery-Mountain/dp/B0876XCFC3/ref=sr_1_2_sspa?cr&lt;br/&gt;id=3OLXTK8CJPKB1&lt;br/&gt;&amp;keywords=bike%2Bt&lt;br/&gt;rainer&amp;qid=16420927&lt;br/&gt;62&amp;s=sporting-goods&lt;br/&gt;&amp;sprefix=bike%2Btrai&lt;br/&gt;ner%2Csporting%2C1&lt;br/&gt;02&amp;sr=1-2-spons&amp;spL&lt;br/&gt;a=ZW5jcnlwdGVkUX&lt;br/&gt;VhbGlmaWVyPUExM&lt;br/&gt;FcyN1UyTElWMFBH&lt;br/&gt;JmVuY3J5cHRlZElkP&lt;br/&gt;UEwNDU1NTk4M0R&lt;br/&gt;IMDJBUzQ4UkdXViZ&lt;br/&gt;lbnNyeXB0ZWRBZE&lt;br/&gt;lkPUEwOTQ1Mjk1M&lt;br/&gt;0VJNDdBSk0xUzM5&lt;br/&gt;RSZ3aWRnZXROYW&lt;br/&gt;1lPXNwX2F0ZiZhY3&lt;br/&gt;Rpb249Y2xpY2tSZW&lt;br/&gt;RpcmVjdCZkb05vdEx&lt;br/&gt;vZ0NsaWNrPXRydW&lt;br/&gt;U&amp;th=1">https://www.amazon.co m/Exercise-Magnetic- Training-Stationery-M ountain/dp/B0876XCF C3/ref=sr_1_2_sspa?cr id=3OLXTK8CJPKB1 &amp;keywords=bike%2Bt rainer&amp;qid=16420927 62&amp;s=sporting-goods &amp;sprefix=bike%2Btrai ner%2Csporting%2C1 02&amp;sr=1-2-spons&amp;spL a=ZW5jcnlwdGVkUX VhbGlmaWVyPUExM FcyN1UyTElWMFBH JmVuY3J5cHRlZElkP UEwNDU1NTk4M0R IMDJBUzQ4UkdXViZ lbnNyeXB0ZWRBZE lkPUEwOTQ1Mjk1M 0VJNDdBSk0xUzM5 RSZ3aWRnZXROYW 1lPXNwX2F0ZiZhY3 Rpb249Y2xpY2tSZW RpcmVjdCZkb05vdEx vZ0NsaWNrPXRydW U&amp;th=1</a>	\$89.99	\$89.99
B092VJX GJ6	HDMI Splitter, 1 in 2 Out 4K HDMI	ZI YOUREN	1	<a href="https://www.amazon.com/Splitter-Monitors-Duplicate-Amplifier-Displays/dp/B092VJXGJ6">https://www.amazon.co m/Splitter-Monitors-D uplicate-Amplifier-Dis plays/dp/B092VJXGJ6</a>	\$10.99	\$10.99

	Splitter Display Duplicate/Mirror, 1x2 HDMI Splitter One Input to Two Outputs for Full HD 4K@30HZ 1080P 3D Splitter (1 Source to 2 Displays)			<a href="/ref=asc_df_B092VJXGJ6/?tag=hyprod-20&amp;linkCode=df0&amp;hvadid=507563721518&amp;hvpos=&amp;hvnetw=g&amp;hvrnd=12334949305384762110&amp;hvpone=&amp;hvptwo=&amp;hvqmt=&amp;hvdev=c&amp;hvdvcmdl=&amp;hvlocint=&amp;hvlocphy=1025954&amp;hvtargid=pla-1344998815656&amp;psc=1">/ref=asc_df_B092VJXGJ6/?tag=hyprod-20&amp;linkCode=df0&amp;hvadid=507563721518&amp;hvpos=&amp;hvnetw=g&amp;hvrnd=12334949305384762110&amp;hvpone=&amp;hvptwo=&amp;hvqmt=&amp;hvdev=c&amp;hvdvcmdl=&amp;hvlocint=&amp;hvlocphy=1025954&amp;hvtargid=pla-1344998815656&amp;psc=1</a>		
BO81ZQKXN4	Power Strip with 2 Outlets and 3 USBs	One Beat	1	<a href="#">Amazon.com: Power Strip with USB - 2 Outlets 3 USB Charging Ports(3.1A, 15W), Desktop Charging Station with 5 ft Braided Extension Cord, Flat Plug Travel Power Strip for Cruise, Home Office, ETL Listed : Electronics</a>	\$12.29	\$12.29
QXAD0072	M1.6x2.5mm(OD)x4mm(L), 30 Pcs	Antrader	1	<a href="https://www.amazon.com/Antrader-Female-Knurled-Embedment-Assortment/dp/B07TTQXVQH/ref=sr_1_4?crd=198A91X2M0809&amp;keywords=m1.6%2Bstandoff&amp;qid=1643760584&amp;srefix=m1.6%2Bstandoff%2Caps%2C466&amp;sr=8-4&amp;th=1">https://www.amazon.com/Antrader-Female-Knurled-Embedment-Assortment/dp/B07TTQXVQH/ref=sr_1_4?crd=198A91X2M0809&amp;keywords=m1.6%2Bstandoff&amp;qid=1643760584&amp;srefix=m1.6%2Bstandoff%2Caps%2C466&amp;sr=8-4&amp;th=1</a>	\$5.99	\$5.99
20181113	OEM Standoff Bolt Stainless Steel M1.6	Yufu	16	<a href="https://www.alibaba.com/product-detail/Yufu-OEM-Standoff-Bolt-Stainless-Steel_60827022836.html?spm=a2700.7724857.normal_offer.d_title.446c12cc1INXW7">https://www.alibaba.com/product-detail/Yufu-OEM-Standoff-Bolt-Stainless-Steel_60827022836.html?spm=a2700.7724857.normal_offer.d_title.446c12cc1INXW7</a>	\$0.01	\$0.16
NJASD632891	Caution Electrical Safety Hazard Sticker Pack of 3	D Sticky Company	1	<a href="https://www.amazon.com/Caution-Electrical-Safety-Hazard-Sticker/dp/B085G4VS7F/ref=sr_1_23?crd=3KBNQEYMJTJIX&amp;keywords=electric+hazard+label&amp;qid=1643913803&amp;srefix=electric+hazard+label%2Caps%2C92&amp;sr=8-23">https://www.amazon.com/Caution-Electrical-Safety-Hazard-Sticker/dp/B085G4VS7F/ref=sr_1_23?crd=3KBNQEYMJTJIX&amp;keywords=electric+hazard+label&amp;qid=1643913803&amp;srefix=electric+hazard+label%2Caps%2C92&amp;sr=8-23</a>	\$6.99	\$6.99
47065T801	T-Slotted Framing	McMaster-Carr	2	<a href="https://www.mcmaster.com/47065T801/">https://www.mcmaster.com/47065T801/</a>	\$5.53	\$11.06

	Single Four Slot Rail, Silver, 1" High x 1" Wide, Solid INPUT 7 INCH LENGTH					
3136N147	T-Slotted Framing Screw on Bumper for 1" High Single Rail	McMaster-Carr	4	<a href="https://www.mcmaster.com/3136N147/">https://www.mcmaster.com/3136N147/</a>	\$4.25	\$17.00
3787K13	Flexible Shaft with Female x Female Fittings 1/2 Feet Overall Length, 1/4" OD	McMaster-Carr	1	<a href="https://www.mcmaster.com/3787K13/">https://www.mcmaster.com/3787K13/</a>	\$84.81	\$84.81
3084K66	Machinable-Bore Clamping Shaft Coupling Steel, for 5/8" x 0.625"-0.235" Keyed Shaft Diameter	McMaster-Carr	1	<a href="https://www.mcmaster.com/3084K66/">https://www.mcmaster.com/3084K66/</a>	\$54.72	\$54.72
3084K91	Machinable-Bore Clamping Shaft Coupling Steel, for 10 mm x 10.000 mm-6.000 mm Round Shaft Diameter	McMaster-Carr	1	<a href="https://www.mcmaster.com/3084K91/">https://www.mcmaster.com/3084K91/</a>	\$43.03	\$43.03
1555T121	Linear Motion Shaft 1060 Carbon Steel, 1/4" Diameter, 6" Long	McMaster-Carr	1	<a href="https://www.mcmaster.com/1555T121/">https://www.mcmaster.com/1555T121/</a>	\$9.07	\$9.07
MTA-BASE-W56	STABLE motor base, for use with	Automation Direct	1	<a href="https://www.automationdirect.com/adc/shopping/catalog/motors/motor_bases_(for_nema_motors)/mta-base-w56">https://www.automationdirect.com/adc/shopping/catalog/motors/motor_bases_(for_nema_motors)/mta-base-w56</a>	\$12.25	\$12.25

	56 frame motors					
47065T233	T-Slotted Framing Drop-in Nut with Stud, 1/4"-20 Thread Size	McMaster-Carr	4	<a href="https://www.mcmaster.com/47065T233/">https://www.mcmaster.com/47065T233/</a>	\$1.86	\$7.44
1954	Machine Screw: M1.6, 3mm Length, Phillips (6-pack)	Generic	3	<a href="https://www.pololu.com/product/1954/specs">https://www.pololu.com/product/1954/specs</a>	\$1.99	\$5.79
ASHATAy53iq2gz9w	20Pcs Threaded Insert, Self Tapping Slotted Screw Thread Insert, Stainless Steel, Knife Thread, M3 x 0.5 Inner Thread, M5 x 0.5 Outer Thread, 6mm	ASHATA	1	<a href="https://www.amazon.com/Stainless-SUS303-Tapping-Slotted-Thread/dp/B07X9JQ79Q/ref=sr_1_13?crid=2284E9EBZAQTY&amp;keywords=m3+screw+and+threaded+insert+for+plastic&amp;qid=1644008768&amp;prefix=m3+screw+and+threaded+insert+for+plastic%2Caps%2C138&amp;sr=8-13">https://www.amazon.com/Stainless-SUS303-Tapping-Slotted-Thread/dp/B07X9JQ79Q/ref=sr_1_13?crid=2284E9EBZAQTY&amp;keywords=m3+screw+and+threaded+insert+for+plastic&amp;qid=1644008768&amp;prefix=m3+screw+and+threaded+insert+for+plastic%2Caps%2C138&amp;sr=8-13</a>	\$10.19	\$10.19
GDA6015	2-Pack 60mm x 15mm USB Fan 5V Brushless DC Cooling Fans	GDSTIME	1	<a href="https://www.amazon.com/GDSTIME-2-Pack-60mm-x-15mm-USB-Fan-5V-Brushless-DC-Cooling-Fans-for-PC-Computer-Case-Cooler-Raspberry-Pi-Radiator-Ventilation-Electronics">Amazon.com: GDSTIME 2-Pack 60mm x 15mm USB Fan 5V Brushless DC Cooling Fans for PC Computer Case Cooler Raspberry Pi Radiator Ventilation : Electronics</a>	\$14.26	\$14.26
ADS1015	12-Bit ADC - 4 Channel with Programmable Gain Amplifier	Adafruit	1	<a href="https://www.adafruit.com/product/1083">https://www.adafruit.com/product/1083</a>	\$9.95	\$9.95
B08SQDF6F3	2-Pack 60mm x 15mm USB Fan 5V	GDSTIME	1	<a href="https://www.amazon.com/gp/product/B08SQDF6F3/ref=ppx_yo_dt_b_asin_title_o00_s00?ie=UTF8&amp;th=1">https://www.amazon.com/gp/product/B08SQDF6F3/ref=ppx_yo_dt_b_asin_title_o00_s00?ie=UTF8&amp;th=1</a>	\$12.99	\$12.99
Total Quantity of Parts:			82	Total Cost:	\$1,545.11	

