

Part Number	Description	Manufacturer	#	Product Link	Cost per Item	Total Cost
A000005	Arduino Nano	Arduino	4	https://store-usa.arduino.cc/products/arduino-nano?selectedStore=us	\$20.70	\$82.80
RP4B4GB	Raspberry Pi 4 Model B - 4 GB RAM	Raspberry Pi	2	https://vilros.com/products/raspberry-pi-4-4gb-raspberry?src=raspberry	\$55.00	\$110.00
SC0025	Official Raspberry Pi 7" Touchscreen LCD Display	Raspberry Pi	2	https://vilros.com/products/raspberry-pi-7-touchscreen-lcd-display?src=raspberry	\$74.95	\$149.90
TMCS1100A4QDRQ1	Automotive hall effect sensor	Texas Instruments	3	https://www.mouser.com/ProductDetail/Texas-Instruments/TMCS1100A4QDRQ1?qs=QNEbhJQKvbjO1r%252BMdmvKQ%3D%3D	\$3.76	\$11.28
S2GFSM3G	Power Diode	Taiwan Semiconductor	3	https://www.digikey.com/en/products/detail/taiwan-semiconductor-corporation/S2GFS-M3G/12806672	\$4.34	\$13.02
MTPM-P33-1M18	DC Motor	IronHorse	1	https://www.automationdirect.com/adc/shopping/catalog/motors/dc_motors_(up_to_2hp)/general_purpose/mtpm-p33-1m18	\$186	\$186
WGA-40M-020-H1	Gearbox	IronHorse	1	https://www.automationdirect.com/adc/shopping/catalog/power_transmission_(mechanical)/general_purpose_aluminum_worm_gearboxes/wga-40m-020-h1	\$140	\$140
KY-032	Tachometer	Keyes	3	https://www.amazon.com/Electronics-Infrared-Obstacle-Avoidance-Arduino/dp/B0786B8J92	\$3	\$9
4493	Potentiometer	STEMMA	2	https://www.adafruit.com/product/4493#description	\$3.95	\$7.90
N/A	Motor Controller PCB	JLCPCB	5	https://cart.jlpcb.com/quote	\$2.00	\$2.00

B07DR9S5C9	E-Bike Brake Levers with Switches	Dioche	2	https://www.amazon.com/Brakes-Durable-Bicycle-Electric-Replacement/dp/B07DR9S5C9/ref=sr_1_2?keywords=e-bike+brake+lever&qid=1643332384&sr=8-2	\$21.99	\$43.98
4936T345	1" OD galvanized steel framing rail (10 feet)	McMaster-Carr	1	https://www.mcmaster.com/4936T101-4936T345/	\$85.09	\$85.09
4936T307	1" OD galvanized steel framing rail (5 feet)	McMaster-Carr	1	https://www.mcmaster.com/4936T101-4936T307/	\$42.54	\$42.54
4698T31	90 degree elbow connector for 1" rail	McMaster-Carr	2	https://www.mcmaster.com/4698T31/	\$10.52	\$21.04
4698T96	Adjustable angle wye connector for 1" rail	McMaster-Carr	4	https://www.mcmaster.com/4698T96/	\$18.16	\$72.64
4698T86	Adjustable angle cross connector for 1" rail	McMaster-Carr	1	https://www.mcmaster.com/4698T86/	\$26.92	\$26.92
4698T73	Adjustable angle elbow connector for 1" rail	McMaster-Carr	2	https://www.mcmaster.com/4698T73/	\$22.84	\$45.68
NB-SC6-B S12	Tie down cradle for 1" tubing (set of 6)	BIKEGEAR	1	https://www.amazon.com/BIKEGEAR-Replacement-Accessory-Hitching-Carriers/dp/B08DFDCH5J/ref=sr_1_1_sspa?crid=O1DJ872W4DS9&keywords=bike+rack+cradle&qid=1643338235&srefix=bike+rack+cradle%2Caps%2C132&sr=8-1-spons&psc=1&spLa=ZW5jcmlwdGVkUXVhbGlmaWVyPUEzNFJJM01RWk9LUzRUJmVuY3J5cHRlZElkPUEwMzQ1ODM3MkhURFVYWVBIT0hYVSZlbnNyeXB0ZWRBZEIkPUwNDY0ODIxMUNUMklRODZBSVFFUiZ3aWRnZXROYW1lPXNwX2F0ZiZhY3Rpb	\$49.50	\$49.50

				249Y2xpY2tSZWRpcmVjdCZkb05vdExvZ0NsaWNrPXRydWU=		
72457	Zefal "Cristophe" Mountain Bicycle Half Toe Clip S/M (CHOOSE S/M SIZE)	Zefal	1	https://www.amazon.com/Zefal-Cristophe-Mountain-Bicycle-Clips/dp/B000AO9K9S/ref=sr_1_23?keywords=toe%2Bcages%2Bfor%2Bbike%2Bpedals&qid=1642108542&s=sporting-goods&sprefix=toe%2Bcage%2Csporting%2C124&sr=1-23&th=1&psc=1	\$11.90	\$11.90
854175117 4	Universal Monitor Pole Mount Bracket with VESA 75/100	Loutytuo	1	https://www.amazon.com/Loutytuo-Universal-Punching-Adjustable-Diameter/dp/B07R7SC4B8/ref=sr_1_3?crid=3SLT4U65QIGL7&keywords=vesa%2Bpole%2Bmount&qid=1642092404&s=office-products&sprefix=vesa%2Bpole%2Bmount%2Coffice-products%2C81&sr=1-3&th=1	\$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	https://www.amazon.com/Exercise-Magnetic-Training-Stationery-Mountain/dp/B0876XCFC3/ref=sr_1_2_sspa?crid=3OLXTK8CJPKB1&keywords=bike%2Btrainer&qid=1642092762&s=sporting-goods&sprefix=bike%2Btrainer%2Csporting%2C102&sr=1-2-spons&spL_a=ZW5jcnlwdGVkUXVhbGlmaWVyPUExMFcyN1UyTElWMFBHJmVuY3J5cHRlZElkPUEwNDU1NTk4M0RlMDJBUzQ4UkdXViZlbnNyeXB0ZWRBZElkPUEwOTQ1Mjk1M0VJNDdBSc0xUzM5RSZ3aWRnZXROYW1lPXNwX2F0ZiZhY3Rpb249Y2xpY2tSZWRpcmVjdCZkb05vdExvZ0NsaWNrPXRydWU&th=1	\$89.99	\$89.99
B092VJX GJ6	HDMI Splitter, 1 in 2 Out 4K HDMI	ZI YOUREN	1	https://www.amazon.com/Splitter-Monitors-Duplicate-Amplifier-Displays/dp/B092VJXGJ6	\$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)			/ref=asc_df_B092VJXGJ6/?tag=hyprod-20&linkCode=df0&hvadid=507563721518&hvpos=&hvnetw=g&hvrnd=12334949305384762110&hvpone=&hvptwo=&hvqmt=&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=1025954&hvtargid=pla-1344998815656&psc=1		
BO81ZQK XN4	Power Strip with 2 Outlets and 3 USBs	One Beat	1	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	\$12.29	\$12.29
QXAD007 2	M1.6x2.5mm(OD)x4mm(L), 30 Pcs	Antrader	1	https://www.amazon.com/Antrader-Female-Knurled-Embedment-Assortment/dp/B07TTQXVQH/ref=sr_1_4?crd=198A91X2M0809&keywords=m1.6%2Bstandoff&qid=1643760584&srefix=m1.6%2Bstandoff%2Caps%2C466&sr=8-4&th=1	\$5.99	\$5.99
20181113	OEM Standoff Bolt Stainless Steel M1.6	Yufu	16	https://www.alibaba.com/product-detail/Yufu-OEM-Standoff-Bolt-Stainless-Steel_60827022836.html?spm=a2700.7724857.normal_offer.d_title.446c12cc1INXW7	\$0.01	\$0.16
NJASD63 2891	Caution Electrical Safety Hazard Sticker Pack of 3	D Sticky Company	1	https://www.amazon.com/Caution-Electrical-Safety-Hazard-Sticker/dp/B085G4VS7F/ref=sr_1_23?crd=3KBNQEYMJTJIX&keywords=electric+hazard+label&qid=1643913803&srefix=electric+hazard+label%2Caps%2C92&sr=8-23	\$6.99	\$6.99
47065T80 1	T-Slotted Framing	McMaster-Carr	2	https://www.mcmaster.com/47065T801/	\$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	https://www.mcmaster.com/3136N147/	\$4.25	\$17.00
3787K13	Flexible Shaft with Female x Female Fittings 1/2 Feet Overall Length, 1/4" OD	McMaster-Carr	1	https://www.mcmaster.com/3787K13/	\$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	https://www.mcmaster.com/3084K66/	\$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	https://www.mcmaster.com/3084K91/	\$43.03	\$43.03
1555T121	Linear Motion Shaft 1060 Carbon Steel, 1/4" Diameter, 6" Long	McMaster-Carr	1	https://www.mcmaster.com/1555T121/	\$9.07	\$9.07
MTA-BASE-W56	STABLE motor base, for use with	Automation Direct	1	https://www.automationdirect.com/adc/shopping/catalog/motors/motor_bases_(for_nema_motors)/mta-base-w56	\$12.25	\$12.25

	56 frame motors					
47065T233	T-Slotted Framing Drop-in Nut with Stud, 1/4"-20 Thread Size	McMaster-Carr	4	https://www.mcmaster.com/47065T233/	\$1.86	\$7.44
1954	Machine Screw: M1.6, 3mm Length, Phillips (6-pack)	Generic	3	https://www.pololu.com/product/1954/specs	\$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	https://www.amazon.com/Stainless-SUS303-Tapping-Slotted-Thread/dp/B07X9JQ79Q/ref=sr_1_13?crid=2284E9EBZAQTY&keywords=m3+screw+and+threaded+insert+for+plastic&qid=1644008768&prefix=m3+screw+and+threaded+insert+for+plastic%2Caps%2C138&sr=8-13	\$10.19	\$10.19
GDA6015	2-Pack 60mm x 15mm USB Fan 5V Brushless DC Cooling Fans	GDSTIME	1	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	\$14.26	\$14.26
ADS1015	12-Bit ADC - 4 Channel with Programmable Gain Amplifier	Adafruit	1	https://www.adafruit.com/product/1083	\$9.95	\$9.95
B08SQDF6F3	2-Pack 60mm x 15mm USB Fan 5V	GDSTIME	1	https://www.amazon.com/gp/product/B08SQDF6F3/ref=ppx_yo_dt_b_asin_title_o00_s00?ie=UTF8&th=1	\$12.99	\$12.99
Total Quantity of Parts:			84	Total Cost:	\$1,568.05	