

Part	Description	Weight(g, ml)	CostPerUnit	Amount	Price
Printed Parts (Cubes)					
Cube V5 (Slotted)	N/A	23.6	\$0.71	6	\$4.26
Cube V5 (Closed)	N/A	26.94	\$0.81	23	\$18.63
Cube V5 (Mixed)	N/A	22.11	\$0.66	2	\$1.32
Cube V5	N/A	18.06	\$0.54	2	\$1.08
Printed Parts (Inserts)					
Dichroic Mirror Mount	N/A	23.37	\$0.70	1	\$0.70
Filter Mount SM1	N/A	4.44	\$0.13	1	\$0.13
Filter Mount SM05	N/A	5.64	\$0.17	0	\$0.00
Half Inch Lense Holder	N/A	4.62	\$0.14	1	\$0.14
One Inch Lense Holder	N/A	5.86	\$0.18	3	\$0.54
One Inch Lense Holder (SM1)	N/A	6.32	\$0.19	0	\$0.00
One Inch Lense Holder (SM05)	N/A	4.52	\$0.14	0	\$0.00
Laser Mount (USB Laser)	N/A	5.21	\$0.16	2	\$0.32
Laser Mount (Smaller Laser)	N/A	4.70	\$0.14	0	\$0.00
Mirror Base Horizontal	N/A	9.43	\$0.28	2	\$0.56
Mirror Plate Horizontal	N/A	4.23	\$0.13	2	\$0.26
Mirror Base Vertical	N/A	13.50	\$0.41	1	\$0.41
Mirror Plate Vertical	N/A	3.56	\$0.11	1	\$0.11
Flashlight Mount	N/A	14.68	\$0.44	1	\$0.44
Objective Mount	N/A	13.12	\$0.39	1	\$0.39
Tunnel Horizontal	N/A	21.17	\$0.64	1	\$0.64
Tunnel Vertical	N/A	14.49	\$0.43	1	\$0.43
Printed Parts (XYZ Stage)					
X Stage Body	N/A	5.71	\$0.17	1	\$0.17
XStage Clamp	N/A	1.29	\$0.04	1	\$0.04
X Stage Motor Clamp	N/A	0.91	\$0.03	1	\$0.03
X Stage Part	N/A	6.86	\$0.21	1	\$0.21
Y Stage Body	N/A	10.81	\$0.32	1	\$0.32
Y Stage Motor Clamp	N/A	1.2	\$0.04	1	\$0.04
Y Stage Part	N/A	3.02	\$0.09	1	\$0.09
Z Stage Body	N/A	63.58	\$1.91	1	\$1.91
Z Stage Electrical Cover	N/A	4.07	\$0.12	1	\$0.12
Z Stage LED Mount	N/A	1.13	\$0.03	1	\$0.03
Z Stage Motor Clamp	N/A	1.08	\$0.03	1	\$0.03
Z Stage Part	N/A	20.34	\$0.61	1	\$0.61
Joystick Lower Mount	N/A	3.72	\$0.41	1	\$0.41
Joystick Upper Mount	N/A	2.58	\$0.08	1	\$0.08
Printed Parts (Tools)					
Baseplate Magnet Press	N/A	32.62	\$0.98	1	\$0.98
Bottom Cube Press	N/A	6.01	\$0.18	1	\$0.18
Top Cube Press	N/A	6.01	\$0.18	1	\$0.18
Laser Alignment Tool	N/A	3.27	\$0.10	25	\$2.50
Parts List (McMaster)					
Multipurpose 304 Stainless Steel Rod	3mm x 3ft	N/A	\$9.42	1	\$9.42
Alloy Steel Low-Profile Socket Head Screw	M3 x 0.5 mm Thread, 12 mm Long 25ct	N/A	\$7.85	1	\$7.85
Black-Oxide Alloy Steel Socket Head Screw	M3 x 0.5 mm Thread, 8 mm Long, 100ct	N/A	\$9.22	1	\$9.22
Parts List (Thorlabs)					
F30 1/2" Lense	1/2" Lense	N/A	\$60.59	1	\$60.59
F200 1" Lense	1" Lense	N/A	\$89.10	3	\$267.30
M4 x 5mm Setscrew	50ct	N/A	\$5.90	1	\$5.90
M6 x 12mm Secrew	25ct	N/A	\$6.43	1	\$6.43
M6 x 16mm Setscrew	25ct	N/A	\$6.97	1	\$6.97
Parts List (Amazon)					
Magnets 4mm	200ct	N/A	\$9.99	5	\$49.95
Magnets 5mm	150ct	N/A	\$9.99	1	\$9.99
M3 x 0.5-Pitch Length Coupling Nuts	8mm	N/A	\$7.39	1	\$7.39
Knurled Threaded Insert	M3 x 5mm L x 4mm OD, 100ct	N/A	\$8.50	1	\$8.50
Motor Gearboxes	DC 6V Gear Motor	N/A	\$8.61	3	\$25.83
Mini USB Cable	For Camera	N/A	\$5.99	1	\$5.99
Super Glue	You will need it	N/A	\$9.99	1	\$9.99
USB-C Cables x 2	For XYZ Stage	N/A	\$5.99	1	\$5.99
Stainless Steel Rods	For XYZ Stage	N/A	\$7.99	0.25	\$2.00
Parts List (Adafruit)					
Gamepad	Mini I2C Gamepad with seesaw - STEMMA QT / Qwiic	N/A	\$7.50	1	\$7.50
Adafruit LED Sequins	Warm White	N/A	\$3.95	1	\$3.95
Parts List (DigiKey)					
STEMMA QT/QWIIC CABLE	400mm	N/A	\$1.50	1	\$1.50
QUAD MOTOR CONTROLLER	MOTOR 2040	N/A	\$24.60	1	\$24.60
Parts List (Pimoroni)					
JST-SH Cables x 4	300mm	N/A	\$4.90	1	\$4.90
Encoder Kits	Micro Metal Motor Encoder (MMME) (pack of 2)	N/A	\$9.42	1	\$9.42
Encoder Kits (Sideways)	Micro Metal Motor Encoder (MMME) (pack of 2)	N/A	\$9.42	1	\$9.42
Motors	Micro Metal Gearmotor (Extended back shaft) – 50:1	N/A	\$4.82	3	\$14.46
Parts List (Misc)					
Heat Set Insert Kit	M3 Heat Inserts	N/A	\$9.89	1	\$9.89
White Acrylic (Standard)	Opaque, Glossy, Masked, Cast, 1/8"	N/A	\$18.50	1	\$18.50
Laptop	Gateway 11.6" Ultra Slim Notebook	N/A	\$89.00	1	\$89.00
Prusament PLA	One for Each Color + 3 Blacks	1000g	\$30.00	12	\$360.00
Bambu Labs PLA-CF	1kg	1000g	\$34.99	1	\$34.99
Bambu Lab A1 Printer Bundle	Recommended Printer	N/A	\$1,449.00	1	\$1,449.00
Lasers (Choose One)					
Red Laser	650nm	N/A	\$9.98	1	\$9.98
Blue Laser	405nm	N/A	\$17.98	1	\$17.98
Green Laser	532nm	N/A	\$9.98	1	\$9.98
Cameras (Choose One)					
DMK 22BUC03	The Imaging Source "One for all" camera, USB 2.0, 1/3" CMOS, monochrome, max resolution 744x480, ROI to increase speed, global shutter, trigger in, digital out, C/CS-mount (Without lens and cables)	N/A	\$206.00	1	\$206.00
DMK 42BUC03	The Imaging Source "One for all" camera, USB 2.0, 1/3" CMOS, monochrome, 1280x960 pixel, global shutter, trigger in, digital out, C/CS-mount, WITHOUT lens and cables	N/A	\$229.00	1	\$229.00
Objectives (Choose One)					
20x Microscope Objective Lens	CCIS EC Plan 20x Strain Free Microscope Objective Lens	N/A	\$317.00	1	\$317.00
40x Microscope Objective Lens	CCIS EC Plan 40x Strain Free Microscope Objective Lens	N/A	\$414.00	1	\$414.00
Dichroics & Filters (Choose One)					
Custom_405LaserSetZET405/10xT4	Chroma ID: CS451075, Containing zet405/10x, T425LPXR-UF1 and ET1460/50m,25mm diameter excitation/clean-up and barrier/emissionfilters, 25.5x36x1mm thick dichroic mirror	N/A	\$825.00	1	\$825.00
Custom_532LaserSetZET532/10xZT	Chroma ID: CS451193, Containing zet532/10x, zt532rdc-UF1 and ET575/50m,25mm diameter excitation/clean-up and barrier/emissionfilters, 25.5x36x1mm thick dichroic mirror	N/A	\$825.00	1	\$825.00
Custom_640LaserSetZET640/20xZT	Chroma ID: CS451194, Containing zet640/20x, zt640rdc-UF1 and ET690/50m,25mm diameter excitation/clean-up and barrier/emissionfilters, 25.5x36x1mm thick dichroic mirror	N/A	\$825.00	1	\$825.00
Total					
\$2,588.71					

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https://www.mcmaster.com/1272T33-1272T12/
https://www.mcmaster.com/93070A070/
https://www.mcmaster.com/91290A113/
https://www.thorlabs.com/thorproduct.cfm?partnumber=AC127-030-A
https://www.thorlabs.com/thorproduct.cfm?partnumber=AC254-200-A
https://www.thorlabs.com/thorproduct.cfm?partnumber=SS4MS5
https://www.thorlabs.com/thorproduct.cfm?partnumber=SS6MS10
https://www.thorlabs.com/thorproduct.cfm?partnumber=SS6MS16
https://a.co/d/f4sNGOT
https://a.co/d/0iCdR7Io
https://a.co/d/6JlM6d4
https://a.co/d/bxMPw1L
https://a.co/d/5GOWpqV
https://a.co/d/7T3tGII
https://a.co/d/7T3tGII
https://a.co/d/i5DBRwO
https://a.co/d/hvkBIIS
https://www.adafruit.com/product/5743
https://www.adafruit.com/product/1758
https://www.digikey.com/en/products/detail/adafruit-industries-llc/5385/16546436
https://www.digikey.com/en/products/detail/pimoroni-ltd/PIM618/17051430
https://shop.pimoroni.com/products/jst-sh-cable-6-pin?variant=39292536488019
https://shop.pimoroni.com/products/micro-metal-motor-encoder?variant=39888423321683
https://shop.pimoroni.com/products/micro-metal-motor-encoder?variant=39888423354451
https://shop.pimoroni.com/products/micro-metal-gearmotor-extended-back-shaft?variant=3073681025
https://west3d.com/products/heat-insert-tool-kit
https://shop.glowforge.com/products/white-acrylic-cast-opaque-glossy?variant=39434530783330
Gateway 11.6" Ultra Slim Notebook, HD, Intel® Celeron®, Dual Core, 64GB Storage, 4GB RAM, Mini HDMI, 1.0MP Webcam, Windows 10 S
https://www.prusa3d.com/category/prusament-pla/
https://us.store.bambulab.com/products/pla-cf?variant=41003202248840
https://us.store.bambulab.com/collections/3d-printer/products/a1
https://a.co/d/3TRZW0U
https://a.co/d/7nuj360
https://a.co/d/a5kr8Kf
https://dl-gui.theimagingsource.com/en_US/0ea79de3-100f-510e-8601-2ba7061b001e/
https://www.theimagingsource.com/en-us/product/industrial/2u/dmk42buc03/
https://www.motic-microscope.com/p-763-ccis-ec-plan-20x-strain-free-microscope-objective-lens.aspx
https://www.motic-microscope.com/p-1846-ccis-ec-plan-40x-strain-free-microscope-objective-lens.aspx
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