

ML1 Parts	Qty.	Description	Mfg. Part #	Unit cost	Cost	Supplier	Comments
Frame	2	Aluminum Frame - side rails	HFSB5-2525-460	\$7.68	\$15.36	us.misumi-ec.com	
	1	Aluminum Frame - top rail	HFSB5-2525-285	\$4.97	\$4.97	us.misumi-ec.com	
	1	Aluminum Frame - bottom rail	HFSB5-2550-285	\$8.47	\$8.47	us.misumi-ec.com	
	1	Aluminum Frame - y axis	HFSQN4-1050-345	\$5.96	\$5.96	us.misumi-ec.com	(2 holes 107mm)
	2	Smooth Rods	RGOC8-375	\$11.52	\$23.04	us.misumi-ec.com	
Threaded Rod 320mm	2	M6 x 1.00mm x 1m Rod	99067A245	\$5.20	\$10.40	McMaster.com	Alt: Fastenal, Grainger
Alu Y Carriage	1	Y carriage Plate	8.625 with hole pattern	\$15.10	\$15.10	Laserfab.net	
	1	Y Glass	8.375 x 7.9375 x .125"	\$3.75	\$3.75	St Pete Glass & Mirror, 5565 64th Way N, St Pete	
	1	PCB Black	Ebay avantircuits.com	\$17.00	\$17.00		Contact Avanti for direct purchasing, logo options, etc.
Pulleys	2	Pulley - 20 tooth aluminum	GT2PEA	\$4.95	\$9.90	Ultibots.com	Possible alt = B&B Manufacturing
Belts	2	6mm GT2 Belt - 1164mm length	817752010986	\$8.50	\$17.00	Lulzbot.com	\$8.50 Lulz - \$9.95 Ulti
X Idler	1	Vslot Idler	V-Slot Smooth Idler Pulley Kit	\$4.95	\$4.95	Ultibots.com	
Wheels	4	Vslot Wheel Kits - Delrin	v-Slot Smooth Idler Pulley Kit	\$4.00	\$16.00	Ultibots.com	Cheaper at OpenBuilds.com
Bearings	2	8mm x 22mm 608-ZZ Bearing	0474510	\$0.88	\$1.76	Fastenal	8pk/\$7.95 Ulti
	4	Pillow block bearing	KSTM-08	\$6.00	\$24.00	Igus.com	4/\$16 at Lulzbot 817752011433
Extruder motor	1	PG35L geared stepper motor	PG35L	\$24.95	\$24.95	Ultibots.com	
Heat sink	1	PG35L short fin heat sink	PG35L short fin heat sink	\$7.95	\$7.95	Ultibots.com	
Extruder hardware	1	Micro-extruder kit	MEV5HWK3	\$22.95	\$22.95	Ultibots.com	
Fan	3	Fan - 40 x 40 x 10 mm 12v 8cfm	40mm 12v	\$1.99	\$5.97	store.quintessentialuniversalbuildingdevice.com	
Rambo	1	Rambo V1.3	UMRAMBOPAC13	\$170.00	\$170.00	Ultimachine.com	
Nema 17	4	Nema-17 Stepper Motors	817752011303	\$13.95	\$55.80	Lulzbot.com	<a href="http://www.mpja.com/NEMA-17-Stepper-Motors/products/520/">http://www.mpja.com/NEMA-17-Stepper-Motors/products/520/</a>
Hotend	1	Budaschnozzle 2.0 w/ .35 nozzle	817752014212	\$95.00	\$95.00	Lulzbot.com	
Power Supply	1	4-pin female power receptacle	817752012485	\$2.50	\$2.50	Lulzbot.com	seems basic, perhaps cheaper source?
	1	12vDC 16A PSU w/ 4pin plug	817752012478	\$45.00	\$45.00	Lulzbot.com	
Wiring	12	#14 str ins CU (red & black) - 12"			\$0.00	Radio Shack	local purchase as needed - no bulk supplier yet
		#14 female blade crimp connector	58568	\$0.24	\$0.00	Fastenal	23.63 / 100
	1	Rocker Switch	CH784-ND	\$1.50	\$1.50	Digikey.com	1.43 > 10
	1	Molex Male Housing	WM6676-ND	\$1.21	\$1.21	Digikey.com	1.06 > 10
	1	Molex Male Pin	WM2517CT-ND	\$0.14	\$0.14	Digikey.com	0.08 > 100
		Molex Female Housing	WM5329-ND	\$0.41	\$0.00	Digikey.com	0.39 > 10 (usually comes w/ board)
		Molex Female Pin	WM2573CT-ND	\$0.24	\$0.00	Digikey.com	0.15 > 100 (usually comes w/ board)
	18	1/2" PET Braided Sleeving - 18"	X000FEJPET	\$0.02	\$0.36	Amazon/ElectriDuct Inc.	100' roll, \$25.00
		1/4" PET Braided sleeving	BS-XO-025-BK-100		\$0.00	ElectriDuct Inc.	100' roll, \$25.00
	1	1/2" heat shrink tubing	0705396	\$0.10	\$0.10	Fastenal	20 x 6" / \$11.53 = \$0.096 per inch
	6	1/4" heat shrink tubing	0705394	\$0.07	\$0.43	Fastenal	26 x 6" / \$11.16 = \$0.072 per inch
	84"	#24 CU stranded coated (red)					Red
	42"	#24 CU stranded coated (others)					Orange, Yellow, Green, Blue, Black
Spring		Compression Spring, 302 Stainless Steel, .18" OD, .022" Wire Size, .0365" Compression Length, .69" Free Length, 2.61# Load Capacity, 8"# Spring Rate	C01800220690S				
Filament	4		B005KSQ4H0	\$1.14	\$4.56	Amazon	10 per pack at \$11.35
	1	One free roll of PLA filament		\$40.00	\$40.00		
Total					\$698.83		
					\$24.06	Total from Screws Page	
					\$18.69	Total from Toolkit Page	