

Part	Size	Length/type	Quantity	description	Source	parts*bots	single part cost	total
<b>Screws</b>	6-32	1/2"	7	Y motor mount, 3 hotend mount, 2 power supply mount	mcmaster	7	\$0.12	\$0.85
		3/4"	50	frame	mcmaster	50	\$0.20	\$9.80
		1 1/4"	7	6 X carriage, 1 extruder clamp	mcmaster	7	\$0.30	\$2.11
		1 3/4"	8	X ends	mcmaster	8	\$0.62	\$4.95
	m3	10mm	30	4 X, 3 Y, 8 ZZ, 3 E, 8 z clamp, 4 endstops	mcmaster	30	\$0.07	\$2.06
	m3	20mm	15	4 LCD, 4 electronics, 4 heatbed mount, 1 extruder tensioner, 2 endstops	mcmaster	15	\$0.09	\$1.28
	m4	18mm	3	Power supply mount	mcmaster	3	\$0.11	\$0.33
	m5	30mm	6	2 X and Y Idler, 4 spool rollers	mcmaster	6	\$0.12	\$0.74
	m5	14mm	1	extruder idler	mcmaster	1	\$0.12	\$0.12
	All screws are button-head except the m4							
<b>Nuts</b>	6-32	square	58		mcmaster	58	\$0.02	\$0.95
	6-32	thin nylock	14		mcmaster	14	\$0.03	\$0.37
	m5	hex	9	2 for x ends, 2 for idler screws, 1 extruder idler, 4 spool rollers	mcmaster	9	\$0.02	\$0.19
	m3	hex	27	4 LCD, 4 electronics, 4 heatbed, 1 idler, 8 z clamp, 6 endstop	mcmaster	27	\$0.01	\$0.38
<b>Washers</b>	6-32	flat	100	frame, motors, ps, etc. This washer will fit m3, m4 and 6-32 screws just fine.	mcmaster	100	\$0.01	\$1.35
	m5	flat	6	idlers	mcmaster	6	\$0.02	\$0.13
<b>Bearings</b>	lm8uu	linear	10	3 X, 3 Y, 4 Z	aliexpress	10	\$0.60	\$6.00
	605zz	roller	7	3 idlers, 4 spool rollers	aliexpress	7	\$0.42	\$2.94
<b>Smooth Rod</b>	m8	400mm	2	X rods - 15.75"	misumi	2	\$8.44	\$16.88
		342mm	2	Y rods - 13.5"	misumi	2	\$8.44	\$16.88
		318mm	2	Z rods - 12.5"	misumi	2	\$8.44	\$16.88
	m8	36" drill rod	3		mcmaster	3	\$5.70	\$17.10
<b>Threaded Rod</b>	m5	300mm	2		mcmaster	2	\$5.12	\$10.24
<b>Wire</b>	16 gauge power wire	2 conductor	5	2 2' runs PS to electronics	mcmaster powe	5	\$0.69	\$3.45
			1	1 1' run electronics to heatbed		1	\$0.69	\$0.69
			0	cut up a bit to install power switch		0	\$0.69	\$0.00
<b>Other</b>	motors	nema 17	5		kysan	5	\$16.00	\$80.00
	electronics	rumba	1	Includes heatbed, pulleys, belts, LCD, grub screws, wiring	reprapdiscount	1	\$159.00	\$159.00
	Power Switch		1		amazon	1	\$6.00	\$6.00
	Power cord	computer cord	1		amazon	1	\$5.00	\$5.00
	fuse		1		amazon	1	\$1.20	\$1.20
	female spade connectors	22/18	6		<a href="http://www.ama">http://www.ama</a>	6	\$0.13	\$0.80
	power supply	24v 15a	1		amazon	1	\$25.00	\$25.00
	induction sensor	8mm range, 18	1		amazon	1	\$8.20	\$8.20
	plastic	for me to print w	1		my print cave	1	\$20.00	\$20.00
	borosilicate glass	8x8.5x1/8	1		cincinnati gasket	1	\$22.00	\$22.00
	Kapton tape sheet	8x8	2		amazon	2	\$3.59	\$7.18
	plastic reel	for you	1		Microcenter	1	\$25.00	\$25.00
	MDF sheet	1/4"x48x24	1	Cut to 39x24 before laser cutting	home depot	1	\$6.00	\$6.00
	Laser Cutting	in hours	1.5	it's a lot of cuts.	Nova Labs	1.5	\$20.00	\$30.00
	Paul putting all this toget	brownie points	16			16	\$0.00	\$0.00
Stanley organizer	25 compartment	1		<a href="http://www.ama">http://www.ama</a>	1	\$13.00	\$13.00	
hotend	e3d V6	1		filastruder	1	\$80.00	\$80.00	
Bed Clips	3/4" wide, 5/16"	4		mcmaster	4	\$0.07	\$0.28	
Zip Ties	4"	25		mcmaster	25	\$0.02	\$0.55	
<b>Printed Parts</b>	Power Supply Cover		1			1		0
	Z clamps		4			4		0
	Endstops		2			2		0
	Stop Switch		1			1		0
	Encoder Dial		1			1		0
	Extruder Mount		1			1		0
	Extruder Mount		1			1		0
Induction Mount		1			1		0	
<b>Budget</b>								\$550
<b>Totals</b>							pre-cut hardened steel	\$588.77
							drill rod, needs to be cut to length	\$555.23
<b># of Printers</b>	<b>1</b>						pre-cut leftover	-\$39
							drill rod leftover	-\$5
Note: Shipping isn't included anywhere.								