











Team P15043 Bill of Materials

Part #	Part Name	Description	Qty	Units [number sold in one pack]	Photo	Source / Company	Lead Time	Unit Cost (USD)	Bulk Unit Cost (USD)	Cost	Shipping
1	EZ2-MB1020	Sonar Sensors	1	1		sparkfun.com/MaxBotix	2-3 Business Days	\$ 27.95	\$ 22.36	\$ 27.95	\$4.01
2	Pololu item #: 994	298:1 Micro Metal Gear motor HP	2	1		http://www.pololu.com/product/994	3-5 Business Days	\$15.95	\$ 11.96	\$ 31.90	\$3.95
3	INA K3X6X7TN	Bearing for haptic feedback (button)	2	1		Amazon	1-2 Months	\$ 3.88	\$ 3.88	\$ 7.76	
4	91585A076	3mm Diam, 40 mm long	1	25		McMaster-Carr	5-7 Business Days	\$ 10.57		\$ 10.57	
5	89215K425	High Strength Al bar 1/2ft x 1" x 1/2"	1	1		McMaster-Carr	5-7 Business Days	\$ 13.65		\$ 13.65	
6	KXD94	Accelerometer	1	1		digkey.com		\$ 6.45	\$ 3.23	\$ 6.45	
7	7804K124	Double Shielded Bearing	1	1		McMaster-Carr	5-7 Business Days	\$ 6.79		\$ 6.79	
8	Tenergy Li-Ion 18650	Battery	1	1		Amazon		\$ 12.50	\$ 12.50	\$ 12.50	
9	ABS Filament	ABS - Filament	1	2.2lb pack		MakerBot		\$ 9.11	\$ 9.11	\$ 9.11	\$0.00
10	LMR10515X	Buck Converter IC	1	1		digkey.com		\$ 1.31	\$ 0.69	\$ 1.31	
11	TPS61252	Boost Converter IC	1	1		digkey.com		\$ 2.48	\$ 1.36	\$ 2.48	
12	ATMEGA328	uController IC	1	1		digkey.com		\$ 3.51	\$ 2.08	\$ 3.51	
13	DRV8839DSSR	H-Bridge IC	2	1		digkey.com		\$ 1.62	\$ 0.88	\$ 3.24	
14	ERJ-2GEJ103X	10k Resistor	3	1		digkey.com		\$ 0.10	\$ 0.01	\$ 0.30	
15	ERJ-3EKF6042V	60.4k Resistor	1	1		digkey.com		\$ 0.10	\$ 0.01	\$ 0.10	
16	ERJ-3EKF6651V	6.65k Resistor	1	1		digkey.com		\$ 0.10	\$ 0.01	\$ 0.10	
17	ERJ-3EKF7683V	768k Resistor	1	1		digkey.com		\$ 0.10	\$ 0.01	\$ 0.10	
18	ERJ-3EKF2433V	243k Resistor	1	1		digkey.com		\$ 0.10	\$ 0.01	\$ 0.10	
19	ERJ-3GEYJ105V	1M Resistor	1	1		digkey.com		\$ 0.10	\$ 0.01	\$ 0.10	
20	ERJ-2GEJ102X	1k Resistor	5	1		digkey.com		\$ 0.10	\$ 0.01	\$ 0.50	
21	744042004	4.7u Inductor	1	1		digkey.com		\$ 1.63	\$ 1.24	\$ 1.63	
22	NLV25T-1R5J-PF	1.5u Inductor	1	1		digkey.com		\$ 0.27	\$ 0.15	\$ 0.27	
23	08056D475KAT2A	4.7u Capacitor	1	1		digkey.com		\$ 0.18	\$ 0.05	\$ 0.18	

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24	1206YD106KAT2A	10u Capacitor	2	1		digkey.com		\$ 0.48	\$ 0.15	\$ 0.96		
25	6R3R15X226KV4E	22u Capacitor	1	1		digkey.com		\$ 0.88	\$ 0.33	\$ 0.88		
26	0201ZA101JAT2A	100p Capacitor	1	1		digkey.com		\$ 0.40	\$ 0.13	\$ 0.40		
27	C1608X8R1E104K080AA	0.1u Capacitor	7	1		digkey.com		\$ 0.15	\$ 0.04	\$ 1.05		
28	598-8070-107F	LED	1	1		digkey.com		\$ 0.45	\$ 0.11	\$ 0.45		
29	571-1981568-1	MicroUSB port	1	1		mouser.com		\$ 1.63	\$ 1.16	\$ 1.63		
30	HG4020R-50-4	Collapsible Graphite Cane	1	1		Ambutech	1 wk.	\$ 32.00	\$ 23.29	\$ 32.00	\$10.00	
31	L112012MS02Q	Switch	1			digkey.com		\$ 2.94	\$ 1.92	\$ 2.94		
32	http://www.mcmaster.com/#91251A135	4-40 1/8"	1	50	 Full Threads	McMaster-Carr		\$ 10.60		\$ 10.60		
33	MBR0520L	Schottky Diode	1	1		digkey.com		\$ 0.36	\$ 0.10	\$ 0.36		
Total			49							\$191.87	\$ 209.83	