

Index	Name	Description (optional)	Designator	Manufacturer	Model #	Vendor	Part #	Footprint	Units	Cost/uni	Cost/robc	Is here, in a box, in correct qty?
1	Inductor	3.3uH	L1	Coilcraft	LPS4018-332MLB	Coilcraft	LPS4018-332MLB	IndPow	1	\$0.89	\$0.89	yes, reel
2	Inductor	2.2uH	L2	Coilcraft	LPS4018-222MLB	Coilcraft	LPS4018-222MLB	IndPow	1	\$0.89	\$0.89	yes, reel
3	Charge LED	Green	D1	Lite-On	LTST-C191GKT	Mouser	859-LTST-C191GKT	603	1	\$0.08	\$0.08	yes, reel
4	Power LED	Red LED	D2	OSRAM	LS Q976-NR-1	Digikey	475-2512-1-ND	603	1	\$0.09	\$0.09	yes
5	Battery Connector		J3	JST Sales America Inc	B2B-PH-K-S(LF)(SN)	Digikey	455-1704-ND	BatteryConnJST	1	\$0.08	\$0.08	yes
6	Motor encoder	2MM slot sensor	M1, M2	OSRAM	EE-SX1131	Digikey	OR628CT-ND	motorEncoder_V7b	2	\$1.04	\$2.08	yes
7	NPN	Mosfet	Q1	Diodes Inc	DMG3420U-7	Digikey	DMG3420U-7DICT-ND	SOT-23	1	\$0.48	\$0.48	yes
8	Coprocessor	msp430	U1	TI	MSP430	Digikey	296-23368-1-ND	32-QFN	1	\$3.30	\$3.30	yes
9	Reg	3.3V main power	U2	Linear	LTC3566	Digikey	LTC3566EUF#PBF-ND	QFN-24	1	\$4.53	\$4.53	yes, stick case
10	Schmitt trigger	SCHMIT TRIG SC706	U4, U6	TI	SN74LVC2G17-Q1	Digikey	296-18297-1-ND	CDK(R-PDSO-C6)	2	\$0.46	\$0.92	yes
11	Motor	Motor controller	U5	Allegro	MOTOR-A3906	Digikey	620-1288-1-ND	QFN-20	1	\$1.57	\$1.57	yes
12	Cliff	Cliff Sensor	Not Populated	Sharp	GP2S27TJ000F	Digikey	425-2051-1-ND	GP2S27J0000F	1	\$0.57	\$0.57	yes
13	Gyro	Programmed via SPI	U8	ST	L3G4200D	Digikey	497-10666-ND	L3G2004D	1	\$10.03	\$10.03	yes
14	Accelerometer		U9	Freescale	MMA8452Q	Digikey	MMA8452QT-ND	MMA8452Q	1	\$0.87	\$0.87	yes
15	Bump sensor	Contains IR emit/rx	U10, U11, U12, U13, U14, U15, U16, U17	Osram	SFH9240-Z	Digikey	475-1239-1-ND	SFH9240-Z	8	\$1.23	\$9.80	yes, reel
16	Inductor	Ferrite chip	L3	TDK	MMZ2012R102A	Digikey	445-1555-1-ND	805	1	\$0.13	\$0.13	yes
17	Header for motorboard conn		J1	Samtec	SHF-113-01-L-D-SM-LC	Samtec	SHF-113-01-L-D-SM-LC	HeaderSM 13x2	1	\$2.33	\$2.33	no--pending sudden samples
18	Capacitor	1.5 nF	C11	Murata	GRM155R71H152KA01D	Digikey	490-3245-1-ND	402	1	\$0.02	\$0.02	yes
19	Capacitor	.01 uF	C8, C12	TDK	810-C1005X7R1E103K	Mouser	C1005X7R1E103KT	402	1	\$0.01	\$0.01	yes, reel
20	Capacitor	0.1uF	C1, C2, C3, C4, C13, C14, C15, C16, C17, C18, C19, C20, C21, C23, C24, C25, C26, C28	TDK	C1005X7R1C104KT	Mouser	810-C1005X7R1C104K	402	17	\$0.01	\$0.17	yes, reel
21	Capacitor	0.47 uF	C22	Murata	GRM155F51C474ZA01D	Digikey	490-3274-1-ND	402	1	\$0.04	\$0.04	yes
22	Capacitor	1 uF	C9, C10	TDK	C1608Y5V1C105Z	Mouser	810-C1608Y5V1C105Z	603	2	\$0.01	\$0.02	yes, reel
23	Capacitor	4.7 uF	C6, C27	Taiyo Yuden	JMK107BJ475KA-T	Digikey	587-1785-1-ND	603	3	\$0.11	\$0.33	yes
24	Capacitor	10 uF	C8, C12, C5	TDK	C1608X5R0J106M	Digikey	445-4112-2-ND	603	3	\$0.11	\$0.33	yes, reel
25	Resistor	0.1	R10, R11	Panasonic	ERJ-3RSJR10V	Digikey	P.10AHCT-ND	603	2	\$0.13	\$0.26	yes, reel
26	Resistor	470	R13, R16			Digikey	P470GCT-ND	603	2	\$0.01	\$0.02	yes
27	Resistor	100	R31, R32, R33, R34, R35, R36, R37, R38, R40	Bourns	CR0603-JW-331GLF	Mouser	652-CR0603-JW-331GLF	603	1	\$0.01	\$0.01	yes, reel
28	Resistor	2K	R22	Stackpole	RMCF0603JT2K00	Digikey	RMCF1/162KJRCT-ND	603	1	\$0.01	\$0.01	yes
29	Resistor	2.2K	R20, R26	Panasonic	ERJ-3GEYJ222V	Mouser	667-ERJ-3GEYJ222V	603	2	\$0.01	\$0.02	yes, reel
30	Resistor	3.01K	R21	Stackpole	RMCF0603FT3K01	Digikey	RMCF1/163.01KFRCT-ND	603	1	\$0.01	\$0.01	yes
31	Resistor	3.9K	R29	Bourns	CR0603-JW-392GLF	Mouser	652-CR0603-JW-392GLF	603	1	\$0.01	\$0.01	yes--have on hand
32	Resistor	4.7K	R1, R2	Bourns	652-CR0603-JW-104GLF	Mouser	652-CR0603-JW-472GLF	603	2	\$0.02	\$0.04	yes, reel
33	Resistor	18K	R12, R14, R15, R17	Bourns	CR0603-JW-183ELF	Mouser	652-CR0603JW-183ELF	603	4	\$0.01	\$0.04	yes, reel
34	Resistor	100K	R19, R3, R4	Bourns	CR0603-JW-104GLF	Mouser	652-CR0603-JW-104GLF	603	3	\$0.01	\$0.03	yes, reel
35	Resistor	105K	R24	Stackpole	RMCF0603FT105K	Digikey	RMCF1/16105KFRCT-ND	603	1	\$0.01	\$0.01	yes
36	Resistor	324K	R23	Yageo	RC0603FR-07324KL	Digikey	RC0603FR-07324KL	603	1	\$0.01	\$0.01	yes
37	Resistor	10K	R6, R7, R8, R9, R18, R27, R28	Vishay	CRCW060310K0FKEA	Mouser	71-CRCW0603-10K-E3	603	15	\$0.01	\$0.15	yes, reel
38	Resistor	1M	R17, R42, R41, R44	Bourns	CR0603-JW-105ELF	Mouser	652-CR0603-JW-105ELF	603	3	\$0.01	\$0.03	yes, reel
39	Fuse	resetable fuse 2A	R25	Bourns	MF-NSMF200-2	Digikey	MF-NSMF200-2CT-ND	1206	1	\$0.77	\$0.77	yes
40		resistor network	R5			Digikey	Y6000CT-ND					
41	Mosfet P-CH		Q2		DMG2301U-7	Digikey						small quantity
	Low Quantity	Green = REELS								Total	\$40.09	