

Bill Of Materials for: ChargeGuard Pro ++ - Team 2									
Last modified: [11.09.2024]									
PCB version: [PCB VERSION 1.0.6]									
BOM revision: Revision 1.1									
		P/NP				P/NP	= Place/Not Place		
Cnt	Part References	P/NP	Mfg	Mfg PN	Description	Dist	Dist Part Number	Cost Ea.	Cost Total
1	External	NP	EC Buying	CC0603KRX5R7BB105	GY-906 MLX90614 Non-Contact IR Infrared Temperature Sensor	Amazon	B0B63K5V7T	\$12.69	\$12.69
2	External	NP	Keystone Electronics	N/A	Cell leaf spring battery contact, Nickel Plating	Digikey	36-1017-1-ND	\$0.22	\$0.44
1	External	NP	LeMotech	N/A	DC 12/24V to 5V/25W Step Down Converter	Amazon	B0CM37DX4Q	\$10.99	\$10.99
1	External	NP	Delta	AFB0312HA	3cm DC 12V 0.15A 3Wire Silent Notebook CPU Cooler Cooling Fan	Amazon	B00LTK5MQ2	\$13.56	\$13.56
2	K1, K2	P	Ningbo Songle	SRD-05VDC-SL-C	Relay SRD-05VDC-SL-C	LCSC	C35449	\$0.31	\$0.63
1	External	NP	BUBQD	DS0420S3V5V	Mini Push Pull Linear Solenoid Electromagnet 3mm Stroke	Amazon	B0BMVCWQWX	\$15.99	\$15.99
1	External	NP	DROK	90581	DC-DC Buck Converter 12V/24V to 5V 5A/25W Regulator	Amazon	B00CE75K0W	\$11.00	\$11.00
1	A1	P	Adafruit	N/A	Adafruit Huzzah ESP32 Module	Adafruit	B01NCRYHDL	\$19.95	\$19.95
1	External	NP	AZDelivery	14269440	0.91-inch OLED Display SSD1306 128x32 Pixels IIC 3.3V 5V	Amazon	B079H2C7WH	\$6.45	\$6.45
4	R1, R2, R5, R12	P	Stackpole Electronics Inc	N/A	4.7K Ohms resistors	Digikey	S4.7KQTR-ND	\$0.10	\$0.40
3	SW1A, SW1B, SW2B	P	Daoki	N/A	four pin push buttons	Amazon	B07X8S99RH	\$0.05	\$0.15
1	Q1	P	Bojack	N/A	NPN BJT Transistor (2N3904)	Amazon	B07T61SY9Y	\$0.03	\$0.03
1	Q3	P	Bojack	N/A	NMOS Transistor (2N7000)	Amazon	B09K3T5LSN	\$0.20	\$0.20
2	D1, D2	P	STMicroelectronics	N/A	1N5819 Schottky Diode	Digikey	497-6610-1-ND	\$0.10	\$0.20
4	J2, J3, J4, J5	P	On Shore Technology Inc	N/A	two pin terminal Blocks	Digikey	ED2580-ND	\$0.50	\$2.00
4	R3, R4, R6, R9	P	Stackpole Electronics Inc	N/A	1k Ohms Resistors	Digikey	RNF14FTD1K00TR-ND	\$0.10	\$0.40
2	R7, R11	P	YAGEO	N/A	2.8k Ohms Resistors	Digikey	MFR25SFRF52-2K8-ND	\$0.10	\$0.20
2	R8, R10	P	Bojack	N/A	26 Ohm Resistor		B08FHPJ5G8	\$0.01	\$0.02
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