

Part	Link	Part Number	Quantity Needed	Unit Price	Ind. Price (\$)	Quantity to Order	Description
Cboot	Digikey	C2012C0G1H822K060AA	1	0.25	0.25	3	Cap: 8.2 nF Total Derated Cap: 8.2 nF VDC: 50 V ESR: 0 Ω Package: 0805
Ccomp	Digikey	CC0805KRX7R9BB821	1	0.15	0.15	3	Cap: 820 pF Total Derated Cap: 820 pF VDC: 50 V ESR: 1 m Ω Package: 0805
Cdthr	Digikey	C0805C104M3RACTU	1	0.1	0.1	3	Cap: 100 nF Total Derated Cap: 100 nF VDC: 25 V ESR: 0 Ω Package: 0805
Chf	Digikey	CC0805JRNPO9BN100	1	0.11	0.11	3	Cap: 10 pF Total Derated Cap: 10 pF VDC: 50 V ESR: 0 Ω Package: 0805
Cin	Digikey	CGA9N3X7S2A106K230KB	1	2.71	2.71	2	Cap: 10uF 100V
Cin1	Digikey	EEE-2AA330P	1	0.62	0.62		Cap: 33 uF VDC 100 V
Cout Cout2 C9	Digikey	355VPF82M	3	1.83	5.49	6	Cap: 82 μ F Total Derated Cap: 160 μ F VDC: 35 V ESR: 20 m Ω Package: 8x12
Cout1	Digikey	C0805C225K3PAC7800	1	0.3	0.3	3	2.2uF, 25v Rating
Cramp	Digikey	CC0805KRX7R9BB471	1	0.11	0.11	3	Cap: 470 pF Total Derated Cap: 470 pF VDC: 50 V ESR: 1 m Ω Package: 0805
Css	Digikey	08055C103KAT2A	1	0.13	0.13	3	Cap: 10 nF Total Derated Cap: 10 nF VDC: 50 V ESR: 78 m Ω Package: 0805
Cvcc	Digikey	C0805C224K5RACTU	1	0.2	0.2	3	Cap: 220 nF Total Derated Cap: 220 nF VDC: 50 V ESR: 46 m Ω Package: 0805
D1	Digikey	SBRD10200TR	1	0.49	0.49	2	Type: Schottky VRRM: 200 V Io: 10 A
L1	Digikey	IHLP6767GZER8R2M01	1	5.87	5.87	2	L: 8.2 μ H DCR: 10.1 m Ω IDC: 18 A
M1	Digikey	CSD18543Q3A	1	0.84	0.84	2	VdsMax: 60 V IdsMax: 35 Amps
Rfbt	Digikey	ERA-6AEB303V	1	0.38	0.38	3	Resistance: 30 k Ω Tolerance: 0.1% Power: 125 mW
Rramp	Digikey	RC0805FR-07200KL	1	0.1	0.1	3	Resistance: 200 k Ω Tolerance: 1.0% Power: 100 mW
Rcomp	Digikey	CRCW060369K8FKEA	1	0.1	0.1	3	Resistance: 69.8 k Ω Tolerance: 1.0% Power: 100 mW
Rsns	Digikey	PRL1632-R009-F-T1	1	0.2	0.2	3	Resistance: 9 m Ω Tolerance: 1.0% Power: 1 W
Rt	Digikey	ERJ-6ENF1072V	1	0.1	0.1	3	Resistance: 10.7 k Ω Tolerance: 1.0% Power: 100 mW
Ruv1	Digikey	ERJ-6ENF4021V	1	0.1	0.1	3	Resistance: 4.02 k Ω Tolerance: 1.0% Power: 125 mW
Ruv2	Digikey	CRCW080549K9FKEA	1	0.1	0.1	3	Resistance: 49.9 k Ω Tolerance: 1.0% Power: 125 mW
R2 R3 R5 R6	Digikey	RC0805FR-0710KL	5	0.1	0.5	10	Resistance: 10 k Ω Tolerance: 1.0% Power: 125 mW
MOS-Short	Digikey	IRL540PBF	1	1.88	1.88	2	N-Channel 100V 28A (Tc) 150W (Tc) Through Hole TO-220AB
Lipo-charge	Digikey	MCP73831T-2ACI/OT	1	0.56	0.56	2	SOT23-5
R1, R7	Digikey	311-2.00KCRCT-ND	2	0.1	0.2	5	2k
LiPocap1 LiPocap	Digikey	399-8012-1-ND	2	0.19	0.38	5	10uF 16V
LEDs	Digikey	LTST-C171GKT	1	0.28	0.28	3	0805 SMD LED
Pmos	Digikey	497-13537-1-ND	1	0.74	0.74	2	STN3P6F6
U1 U2 U4	Digikey	ACS711KLCTR-12AB-T	3	3.04	9.12	5	Current sensor
U\$1	Digikey	LM25088MH-1/NOPB	1	3.5	3.5	2	Buck converter, external switch
TB1	Ebay	Arduino Nano	1	3.95	3.95		
C1 C2 C3 C4 C5 C	Digikey	C0805C104M3RACTU	10	0.1	1	25	Cap: 100 nF Total Derated Cap: 100 nF VDC: 25 V ESR: 0 Ω Package: 0805
Digipot	Digikey	AD5245BRJZ5-RL7	1	2.01	2.01	2	Digital Potentialmeter I2C 5k 256 taps
Rvin2	Digikey	RNCP0805FTD49K9	1	0.1	0.1	3	49.9k 1% 1/4W
Rvin1, Rvout1, R	Digikey	CRG0805F5K1	3	0.1	0.3	8	5.1k 1% 1/8W
Rvout2	Digikey	CRG0805F11K	1	0.1	0.1	3	11k 1% 1/8W
10A Rocker Switc	Digikey	KRE2ANA1BBD	2	2.82	5.64	2	
	Resistore		1		1 N/A		
ExternalTemp	Ebay	DS18B20	1		3.99	2	External for battery temperature measurement

InternalTemp	Digikey	Ds18B20	2	3.34	6.68	4	
5V buck	Ebay		1		5.75	N/A	Power regulator for arduino, sensors, and battery charger
D2	Digikey	B220A-13-F	1	0.46	0.46	3	Value: B220A-13-F Package: B220A-13-F
RF	Digikey	CRCW080510R0FKEAC	1	0.1	0.1	3	Value: 10 Package: 0805
R12, RCSG, RC	Digikey	CRCW0805100RFKEAC	3	0.1	0.3	8	Value: 100 Package: 0805
R10	Digikey	ASC0805-100KF1	1	0.29	0.29	3	Value: 100k Package: 0805
CBOOT1,CBOOT	Digikey	08053C104JAZ2A	2	0.38	0.76	5	Value: 100nF Package: 0805
CSLOPE	Digikey	GRM2165C2A101JA01D	1	0.21	0.21	3	Value: 100pF Package: 0805
R6, R9	Digikey	RC0805FR-0710KL	2	0.1	0.2	5	Value: 10k Package: 0805
RSense	Digikey	PMR100HZPFU10L0	1	0.56	0.56	3	Value: 10m Package: 2512
CIN, CIN_2, CIN	Digikey	C2012X5R1V685K125AC	3	0.77	2.31	7	Value: 10uF Package: 0805
COUTX, COUTX	Digikey	GRM32ER71H106MA12	5	1.06	5.3	12	Value: 10uF Package: 1210
COUTX2, COUT	Digikey	C5750X7S2A106M230KB	3	2.58	7.74	3	Value: 10uF Package: 2220
COUTX3	Digikey	GRM32ER71H106MA12	1	1.06	1.06	3	Value: 10uF Package: 1210
R11	Digikey	RT0805BRD0713KL	1	0.42	0.42	3	Value: 12.99k Package: 0805
C1,C2,C3,CBIAS	Digikey	GMK212B7105KG-T	4	0.24	0.96	10	Value: 1uF Package: 0805
CVCC	Digikey	C0805C105K4RACTU	1	0.15	0.15	3	Value: 1uF Package: 0805
RFBT	Digikey	ERJ-6ENF4753V	1	0.1	0.1	3	Value: 200k Package: 0805
RPG	Digikey	CRCW080520K0FKEAHF	1	0.25	0.25	3	Value: 20k Package: 0805
CF	Digikey	GRM21BR71H224KA01L	1	0.33	0.33	3	Value: 220nF Package: 0805
CSS	Digikey	CGA4J2C0G1H223J125A	1	0.35	0.35	3	Value: 22nF Package: 0805
RUVT	Digikey	CRCW0805249KFKEA	1	0.1	0.1	3	Value: 249k Package: 0805
COUT, COUT_2	Digikey	25SVPF27MX	2	1.02	2.04	5	Value: 27uF Package: custom
RCOMP	Digikey	CRCW080528K0FKEA	1	0.1	0.1	3	Value: 28.7k Package: 0805
R7	Digikey	RC0805FR-072K2L	1	0.1	0.1	3	Value: 2.2K Package: 0805
CCOMP	Digikey	CGA4C2C0G1H392J060A	1	0.25	0.25	3	Value: 3.9nF Package: 0805
R4	Digikey	ERA-6AEB3322V	1	0.36	0.36	3	Value: 33.19k Package: 0805
CCOMP2	Digikey	CL21C330JBANNNC	1	0.1	0.1	3	Value: 33pF Package: 0805
R1	Digikey	RC0805FR-074K7L	1	0.1	0.1	3	Value: 4.71k Package: 0805
R2	Digikey	ERA-6AEB4991V	1	0.36	0.36	3	Value: 4.93k (acutally 4.99k) Package: 0805
RUVB	Digikey	CRCW080541K2FKEA	1	0.1	0.1	3	Value: 41.2k Package: 0805
Ccs	Digikey	GQM2195C1H470JB01D	1	1.18	1.18	3	Value: 47pF Package: 0805
RT	Digikey	CRCW080573K2FKEA	1	0.1	0.1	3	Value: 73.2k Package: 0805
R3	Digikey	RNCF0805BTE8K76	1	0.4	0.4	3	Value: 8.73k (8.76k) Package: 0805
R8	Digikey	ERA-6AEB821V	1	0.36	0.36	3	Value: 820 Package: 0805
RMODE	Digikey	CRCW080593K1FKEA	1		0	3	Value: 93.1k Package: 0805
M1,M4	Digikey	CSD17571Q2	2	0.51	1.02	5	Value: CSD17571Q2 Package: CSD17571Q2
M3, M4	Digikey		2	0.56	1.12	5	Value: CSD17579Q3A Package: CSD17579Q3A
USB C Port (J2)	Digikey	DX07S024JJ3R1300	1	2.52	2.52	2	Value: DX07S024JJ3R1300 Package: DX07S024JJ3R1300
CBULK	Digikey	EEE-FK1E680P	1	0.49	0.49	2	Value: EEE-FK1E680P Package: EEE-FK1E680P

U1	Digikey	LM5175	1	6.69	6.69	2	Value: LM5175 Package: LM5175
Q1,Q2,Q3	Digikey		3	1.5	4.5	7	Value: STL6P3LLH6 Package: STL6P3LLH6
USB PD Controll	Digikey	STUSB4700QTR	1	3.58	3.58	2	Value: STUSB4700QTR Package:
L1	Mouser	XAL7070-332MEB	1	3.14	3.14	2	Value: XAL7070-332MEB Package: 3.3uH
DBOOT1, DBOC	Mouser	XBS053V15R-G	4	0.5	2	10	Value: XBS053V15R-G Package: XBS053V15R-G