

Part	Name	Digikey PN	Manufacturer PN
U1	Buck/Boost charger LTC4020	LTC4020EUHF#PBF-ND	LTC4020EUHF#PBF
U2	Atmega 328 MCU		
U3	5V regulator	IFX20001MB V50INCT-ND	IFX20001MB V50
U4	Voltage reference 4.096V		
U5	Temp Sensor LM60		
U6	Hall Effect sensor	620-1191-1-ND	ACS712ELCTR-30A-T
L1	10uH inductor	732-2167-1-ND	74435561100
Q1,Q2	N-ch MOSFET	SI7454DDP-T1-GE3CT-ND	SI7454DDP-T1-GE3
Q3,Q4	N-ch MOSFET	SIR422DP-T1-GE3CT-ND	SIR422DP
Q5	P-ch MOSFET	SI7135DP-T1-GE3CT-ND	Si7135DP
D1,D2,D3	Superbarrier diode	SBR0560S1DICT-ND	SBR0560S1-7
D4,D5	Shottkey diode	B360A-E3/61TGICT-ND	B360A-E3/61T
R1,R2,R14	Shunt resistor 4 mOhm	WSLG-.004CT-ND	WSL25124L000FEA
R10	10k NTC	BC2733CT-ND	NTCS0805E3103FLT
C1,C2,C17	CAP CER 4.7UF 50V	399-6785-1-ND	C1210C475K5RACTU
C3,C18	470 uF 35V capacitor	493-3961-1-ND	UCL1V471MNL1GS
C4	10uF capacitor	399-7442-1-ND	C1206C106K3RACTU
C5,C9	1.0 uF capacitor	399-7409-1-ND	C0805C105K5RACTU
C10	0.1 uF capacitor	399-3486-1-ND	C0805C104K1RACTU
C11	100 pF capacitor	399-1122-1-ND	C0805C101J5GACTU
C12	0.01 uF capacitor	399-1158-1-ND	C0805C103K5RACTU
C13	680 pF capacitor	399-1135-1-ND	C0805C681J5GACTU
C14	68 pF capacitor	399-1119-1-ND	C0805C680J5GACTU
C15,C16	0.22 uF capacitor	399-3491-1-ND	C0805C224K5RACTU
C19,C6,C8	2.2 uF capacitor	399-1295-1-ND	C0805C225Z4VACTU
R11,R17,R19	118k 0.1% resistor	P118KDACT-ND	ERA-6AEB1183V
R12,R18,R20	24.9k 0.1% resistor	P24.9KDACT-ND	ERA-6AEB2492V