



Designator	Description	Value	Quantity	Supplier 1	Supplier Part Number 1
ANT1	2.4GHz Surface Mount Device (SMD) On Ground Antenna, 50 Ohms		1	RichardsonRFPD	FR05-S1-N-0102B
B1	nrf8001 chip balun		1	Digikey	712-1574-1-ND
B2	Johanson CC253X Balun		1	Digikey	712-1536-1-ND
BC1	2-pin JST-PH 2mm Battery Connector		1	Sparkfun	PRT-08612
C1, C2, C7, C22, C24, C28, C36, C37	Ceramic capacitor, 1 uF, 0402 package	1 uF	8	Digi-Key	445-5000-1-ND
C3	Ceramic capacitor, 10 uF, 0402 package	10 uF	1	Digi-Key	445-8919-1-ND
C4, C5, C9, C10, C12, C13, C14, C15, C16, C18, C19, C20, C21, C32, C35, C38, C40, C41, C42, C43, C44, C45, C46, C47, C48	Ceramic capacitor, 0.1u, 0402 package	0.1 uF	25	Digi-Key	445-1265-1-ND
C6, C8	Ceramic capacitor, 47 pF, 0402 package	47 pF	2	Digi-Key	709-1121-1-ND
C11	Ceramic capacitor, 10 uF, 0603 package	10 uF	1	Digi-Key	445-4112-1-ND
C17, C26, C30	Ceramic capacitor, 1000 pF, 0402 package	1000 pF	3	Digi-Key	445-6846-1-ND
C23, C25	13pF, 50V, 2%, COG, NP0, 0402, ceramic	13 pF	2	Digikey	490-8184-1-ND
C27, C29	15pF, 2%, NP0, 0402	15pF	2	Digikey	490-6201-1-ND
C31	4.7 uF 10% 0402 6.3V X5R ceramic cap		1	Digikey	445-5947-1-ND
C33	33nF 10% 0402 16V X7R ceramic cap		1	Digikey	1276-1177-1-ND
C34	2.2nF 10% 50V X7R ceramic cap		1	Digikey	445-1257-1-ND
C39	Tantalum capacitor, 4.7 uF, 0603 package	4.7 uF	1	Digi-Key	511-1496-1-ND
C49	220pF 5% 50 V COG NP0 0402 ceramic cap	220pF	1	Digikey	490-1293-1-ND
D1	Schottky diode 30 V 0.1 A 0603		1	Digi-Key	641-1282-1-ND
D2	LED, Green, 0402		1	Digi-Key	511-1592-1-ND
FB1	Ferrite Bead, 150 mA, 0402 package		1	Digi-Key	587-1835-1-ND
J1	CONN USB MICRO B RECPT SMT R/A		1	Digi-Key	609-4616-6-ND
L1	15 nH, 5%, 460mOhm, 2.3GHz, 0402 chip inductor	15nH	1	Digikey	587-1521-1-ND
L2	10uH, 10%, 32MHz, 468 mOhm, 0603, chip inductor	10uH	1	Digikey	LBMF1608T100K
Q1	P-CHANNEL ENHANCEMENT MODE MOSFET		1	Digi-Key	DMG1013UW-7DICT-ND
Q2	MOSFET N-CH D-S 20V SC-70-3		1	Digi-Key	S1300BDL-T1-GE3DKR-ND
R1, R3, R5	Chip resistor, 1M, 0402 package	1M	3	Digi-Key	541-1.00MLCT-ND
R2, R4, R6, R21, R22, R23	Chip resistor, 100K, 0402 package	100K	6	Digi-Key	541-100KLCT-ND
R7, R14	Chip resistor, 1.24M, 0402 package	1.24M	2	Digi-Key	541-1.24MLCT-ND
R8, R12	Chip resistor, 37.4K, 0402 package	37.4K	2	Digi-Key	541-37.4KLCT-ND
R9	Chip resistor, 27K, 0402 package	27K	1	Digi-Key	541-27.0KLCT-ND
R10, R13	Chip resistor, 422K, 0402 package	422K	2	Digi-Key	541-422KLCT-ND
R11	Chip resistor, 270K, 0402 package	270K	1	Digi-Key	541-270KLCT-ND
R15, R16	Chip resistor, 10K, 0402 package	10K	2	Digi-Key	541-10.0KLCKR-ND
R17	56 kOhm, 1%, 0603 W, 0402	56 kOhm	1	Digikey	RHM56.0KCDCT-ND
R18	2.2 Ohm, 1%, 063W, 0402	2.2 Ohm	1	Digikey	541-2.20LLCT-ND
R19	22k 1% 063W 0402 resistor	22kOhm	1	Digikey	1276-4143-1-ND
R20	Chip resistor, 1K, 0402 package	1K	1	Digi-Key	541-1.00KLCT-ND
U1	IC REG LDO 3.3V 0.15A TSOT23-5		1	Digi-Key	ADP162AUJZ-3.3R7CT-ND
U2	IC VREF SERIES PREC SOT-23-3		1	Digi-Key	ISL60002DIH310Z-TKCT-ND
U3	IC OPAMP 400KHZ 2.7V ULT LP SC70		1	Digi-Key	576-2932-1-ND
U4	Dual Ultra Low Power Op Amp in SOT23-8		1	Digi-Key	576-2934-1-ND
U5	Ultra Low Power Dual Comparator		1	Digikey	497-14073-1-ND
U6	Single Inverter		1	Digikey	NC7514P5XDKR-ND
U7	IC ANALOG SWITCH SPDT 10XQFN		1	Digi-Key	568-5564-1-ND
U8	IC INVERTER DUAL SCHMTRIG ULLGA6		1	Digi-Key	NLX2G14AMX1T CGOSCT-ND
U9	Temperature and Humidity Sensor		1	Digikey	336-2542-1-ND
U11	Rf Switch		1	Digikey	1465-1373-1-ND
U12	cc2538 MCU/802.15.4 radio		1		
U13	64 Mbit SPI Serial Dual I/O Flash		1	Digi-Key	S5T25VF064C-804I-Q2AE-CT-ND
U14	nrf8001 Bluetooth SPI module		1	Digikey	1490-1026-ND
U15	3 Dual-Input USB/AC Adapter 1-Cell Li+ Battery Chargers		1	Digi-Key	MAX1555EZK+T1R-ND
U16	FT232R USB UART		1	Digi-Key	768-1008-1-ND
UT1	Air Ultrasonic Ceramic Transducers		1	Digi-Key	ED90088-ND
X1	32MHz, 10ppm, 10pF, 60 Ohm	32 MHz	1	Digikey	SER3800CT-ND
X2	3.2x2.5mm 16MHz SMD crystal	16MHz	1	Digikey	SER3628CT-ND
Y1	Real Time Clock Module with I2C Bus		1	Newark	09X0517