

Designator	Value	Description	Footprint
C1, C2	2.2 $\mu$ F	Capacitor, X6T, $\pm 20\%$ , 2.5 V	0201
C3	10 $\mu$ F	Capacitor, X6S, $\pm 20\%$ , 6.3 V	0402
C4, C7, C8, C10	100 nF	Capacitor, X7R, $\pm 10\%$	0201
C5	2.2 nF	Capacitor, X7R, $\pm 10\%$ , 10V	0201
C6	1.5 pF	Capacitor, NPO, $\pm 0.05$ pF, 25 V, High Q	0201
C9	2.0 pF	Capacitor, NPO, $\pm 0.05$ pF, 25 V	0201
C11	0.3 pF	Capacitor, COG, $\pm 0.1$ pF, 50 V	0201
C12	10 nF	Capacitor, X7R, 6.3 V	0201
C13	3.9 pF	Capacitor, COG, $\pm 0.25$ pF, 50 V	0201
FB1	120 $\Omega$	Ferrite bead, 120 $\Omega$ at 100 MHz, 200 mA, 500 m $\Omega$ Max	0201
L1	4.7 $\mu$ H	Inductor, 120 mA, $\pm 20\%$ , 650 m $\Omega$	0603
L2	2.7 nH	Inductor, 600 mA, $\pm 0.1$ nH, 120 m $\Omega$	0201
L3, L4	3.5 nH	Inductor, 500 mA, $\pm 0.1$ nH, 170 m $\Omega$	0201
R1	1 k $\Omega$	Resistor, $\pm 1\%$ , 0.05 W	0201
U1	nRF54L15-QFAA	Multiprotocol Bluetooth Low Energy, IEEE 802.15.4, and 2.4GHz proprietary System on Chip	QFN-48
X1	32.768 kHz	Crystal SMD 2012, 32.768 kHz, Cl = 9 pF, Total tol: $\pm 20$ ppm	XTAL_2012
X2	32 MHz	Crystal SMD 2016, 32 MHz, Cl = 8 pF, Total Tol: $\pm 40$ ppm. For frequency tolerance requirements, see <a href="#">32 MHz crystal oscillator (HFXO)</a> on page 902.	XTAL_2016

Table 87: Bill of material for circuit configuration 1

**Note:** The antenna filtering components are subject to change.

### 10.3.2 Circuit configuration 1 for CSP47 (CAAA)

Config no.	Supply configuration	Enabled features
	VDD	
Config 1	DCDC: supplied by battery or external supply	No

Table 88: Circuit configurations