

Squirco Logic BOM

Count	Part Name	Value	Description	Size	Part Number	MFR
1	B1	BALUN	Impedance matched Balun for ATMEGARFR2	2mm x 1.25mm	2450BM15A0015E	Johanson
1	B2	BALUN	Impedance matched Balun for CC2541	2mm x 1.25mm	2450BM15A0002E	Johanson
4	C10 C13 C15 C21	12pF	CAP CER 12PF 50V 5% NPO 0402	0402	std	std
2	C8 C12	22pF	CAP CER 22PF 50V 5% NPO 0402	0402	std	std
1	C16	1nF	MLCC - SMD/SMT 0603 1000pF 50V X7R 10%	0603	std	std
1	C6	10nF	MLCC - SMD/SMT 0603 0.01uF 50V X7R 10%	0603	std	std
1	C2	0.1uF	MLCC - SMD/SMT 0603 0.1uF 25V X7R 10%	0603	std	std
4	C1 C7 C14 C20	1uF	MLCC - SMD/SMT 1.0UF 16V 10%	0603	std	std
3	C3 C5 C9	2.2uF	MLCC - SMD/SMT 2.2UF 6.3V 10%	0603	std	std
1	C4	DNI				
1	D1	WS2812B	Addressable RGB LED	5050	WS2812B	Worldsemi
1	LED1*	LED0805	Power indicating LED (red)	0805	std	std
2	R1 R12	0R	OR resistor	0402	std	std
1	R15	2k7	SMD 1/10watt 2.7Kohms 1%	0603	std	std
2	R3 R8	4k7	SMD 1/10watt 4.7Kohms 1%	0603	std	std
1	R14	10k	SMD 1/10watts 10Kohms 1%	0603	std	std
1	R9	56k	SMD 1/10watts 56Kohms 1%	0603	std	std
1	R4*	510	current limiting resistor for LED1	0603	std	std
1	R7	10k NTC	NTC 10K OHM 1%	0402	NCP15XH103F03RC	Murata
4	R2 R10 R11 R13	DNI	Footprints for RF filter passives	0402	std	std
1	IC1	LP2985	LDO Voltage Regulators 150-mA Low-Noise 1.5%	SOT23-5L	LP2985-33DBVR	Texas Instruments
1	U3	ATMEGARFR2	ATMEGA256RFR2	QFN64	ATMEGA256RFR2	Atmel
1	U4	CC2541	CC2541	VQFN40	CC2541	Texas Instruments
1	Y1	16MHz	CRYSTAL 16.0000MHZ 10PF SMD	SMD	ABM10-16.000MHZ-D30-T3	Abracon
1	Y3	32.768kHz	CRYSTAL 32.7680KHZ 12.5PF SMD	SMD	ABS07-32.768KHZ-T	Abracon
1	Y4	32MHz	CRYSTAL 32.0000MHZ 10PF SMD	SMD	FA-20H 32.0000MF20X-K3	Epson
2			3 x 1.27mm pin header	PTH	std	std

Notes:

1. LED1 can be chosen as any colour, or not mounted at all. The reference design uses a red LED
2. Adjust value of R4 to suit LED1 accordingly