

Selected Electrical Specification

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Supply Voltage	V_{DD}		1.8	3.3	3.6	V
Frequency Range	$F_{TX/RX}$		283	—	350	MHz
			425	—	525	MHz
			850	—	960	MHz
Current Consumption	$I_{Shutdown}$		—	30	—	nA
	$I_{Standby}$		—	50	—	nA
	I_{RX}		—	10	—	mA
	I_{TX}	+10 dBm output power, 868 MHz	—	18	—	mA
Rx Sensitivity	P_{RX_2}	BER < 0.1%, 2.4 kbps, GFSK, BT = 0.5, ΔF = 25kHz, 114 kHz Rx BW	—	-116	—	dBm
	P_{RX_OOK}	BER < 0.1%, 1 kbps, 185 kHz Rx BW, OOK, PN15 data	—	-113	—	dBm
Selectivity ²	C/I_{1-CH}	±1 Channel Offset	—	-56	—	dB
	C/I_{2-CH}	±2 Channel Offset	—	-59	—	dB
Blocking ²	$200k_{BLOCK}$	200 kHz–1 MHz Offset	—	-58	—	dB
	$1M_{BLOCK}$	1 MHz Offset	—	-61	—	dB
	$8M_{BLOCK}$	8 MHz Offset	—	-79	—	dB
Image Rejection	Im_{REJ}	Rejection at the image frequency $IF=468kHz$	—	-40	—	dB
Data Rate	DR_{FSK}	(G)FSK Modulation	1.0	—	500	kbps
	DR_{OOK}	OOK Modulation	0.5	—	120	kbps
Output Power	P_{TX}		-40	—	+13	dBm

Notes:

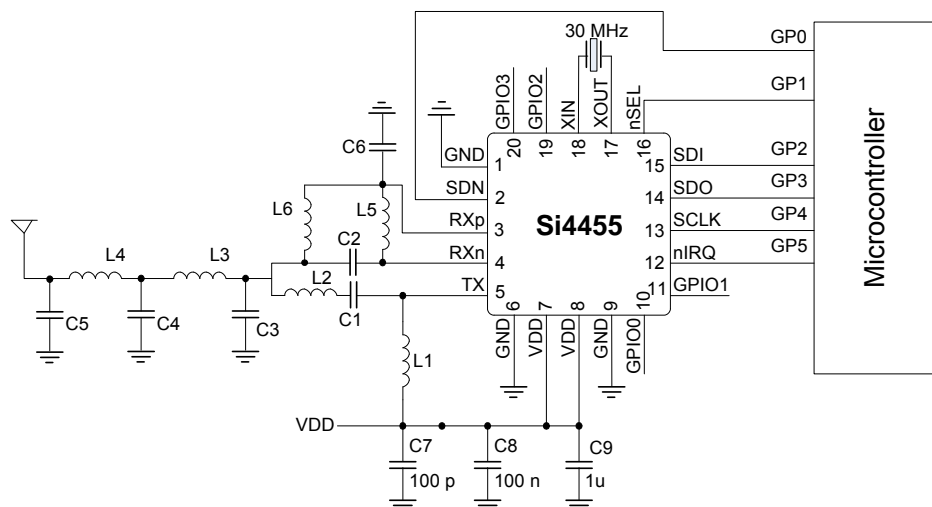
- Test Conditions: 3.3 VDC V_{DD} , 25 °C, external reference signal (X_{IN}) = 1.0 V_{PP} at 30 MHz, centered around 0.8 VDC. Sensitivity measured at 434 MHz.
- Desired reference signal 3 dB above sensitivity, BER<0.1%, Interferer is CW and desired modulation with 1.2 kbps, ΔF = 5.2 kHz, GFSK with BT = 0.5, Rx BW = 58 kHz, 100 kHz channel spacing.

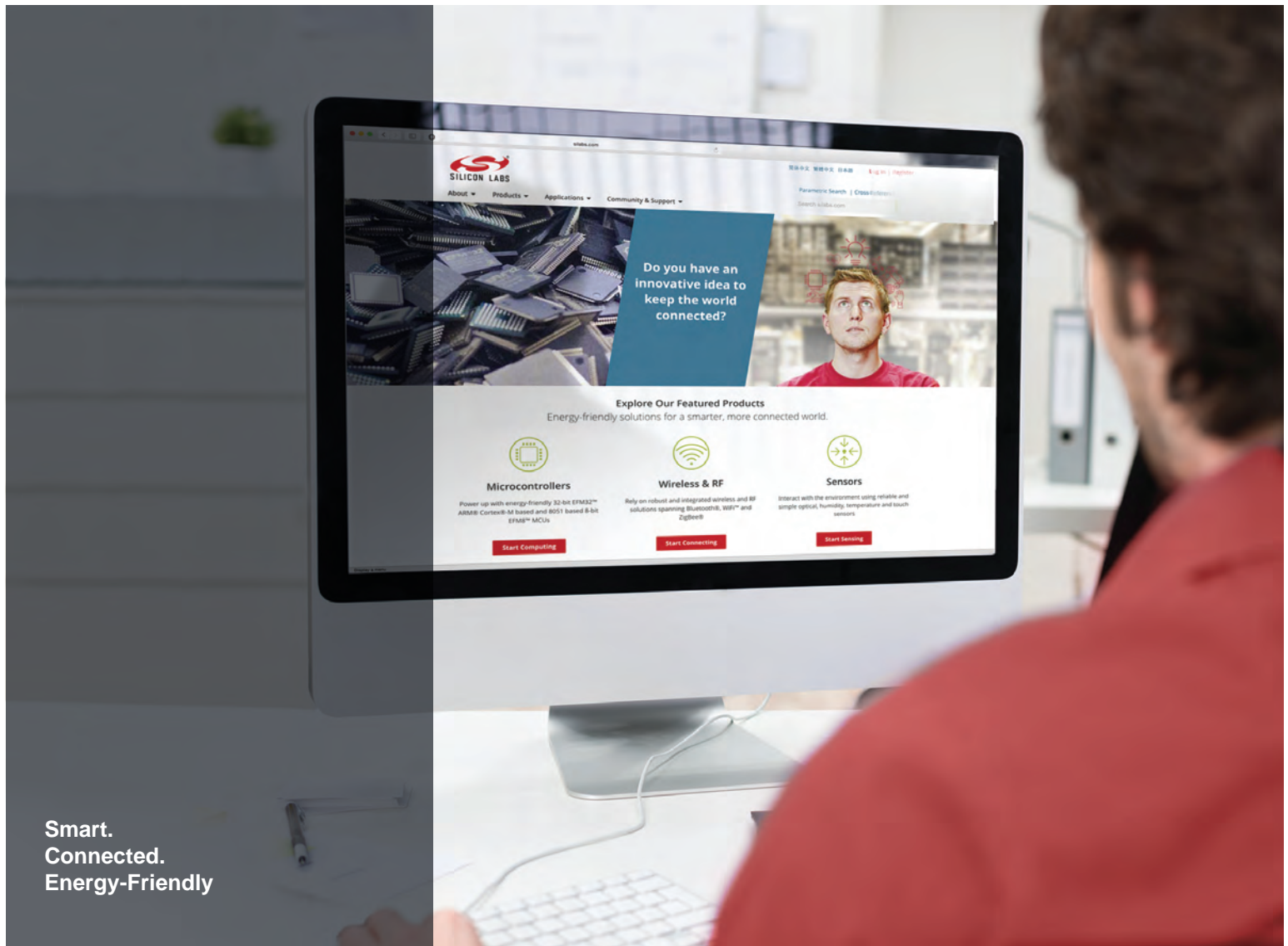
Ordering Guide

Part Number*	Description	Package Type	Operating Temperature
Si4455-B1A-FM	EZRadio Transceiver	3x3 QFN-20 Pb-free	-40 to 85 °C

*Note: Add an "R" at the end of the device part number to denote tape and reel option.

Application Circuit





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Silicon Laboratories Inc.
400 West Cesar Chavez
Austin, TX 78701
USA

<http://www.silabs.com>