Product Brief



XE1203F

Wideband High Performance Multi-Channel Low Power Transceiver



Industry's Leading Low Power Wideband Transceiver

High Link-budget BiCMOS FSK transceiver 433 MHz / 868 MHz / 915 MHz

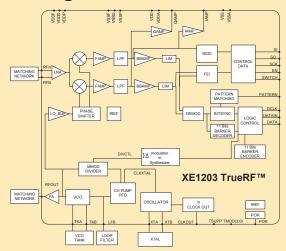
Key Product Features:

- Semtech's True RF[™] technology
- Typical link budget of 129 dB @ 0.1% BER
 No need for external LNA or PA
- RX sensitivity -114 dBm (typical) @ 4.8 kbit/s, 0.1% BER
- TX output power + 15 dBm (typical)
- Data rates from 1.2 to 152.34 kbit/s
- KONNEX[™] compatible
- Built-in 11-bit Barker encoder/decoder for robust transmission/reception
- · Bit synchronizer for data recovery
- Digital RSSI
- Built-in Frequency Error Indicator for AFC
- 500 Hz frequency resolution
- 150 μ S Transmitter wake up time
- Pre-certified reference designs for 433, 868 and 915 MHz bands
- Satisfies ETSI EN 300 220-1 and FCC Part 15.247 regulations WITHOUT requiring an external SAW filter
- Complies with FCC Digital Modulation System requirements

Applications:

- Automated Meter Reading
- Wireless Intercom Systems and Voice over RF Links
- Security and Alarm Systems
- Secure Communications with Data Whitening
- Long-Range Bidirectional Remote Control
- High Performance Telemetry
- Home and Building Automation
- KONNEX[™] Systems
- Industrial Monitoring and Control

Block Diagram:

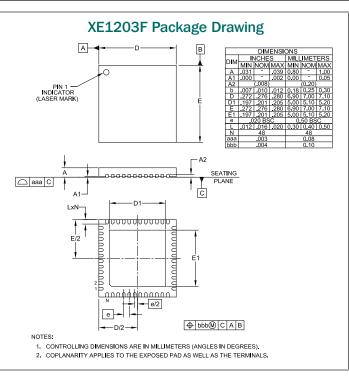


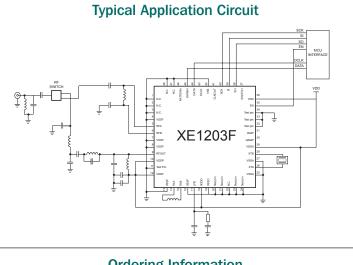


Product Brief

XE1203F - Wideband High Performance Multi-Channel UHF-band Transceiver

Characteristics					
Parameter	Min	Тур	Max	Unit	Condition
Operating Conditions					
Operating temperature range	-40		+85	°C	
Current Consumption					
Current consumption, sleep mode		200		nA	
Current consumption R _X		14		mA	
Current consumption T _X		33		mA	+5 dBm
		62		mA	+15 dBm
RF Characteristics					
	435		435	MHz	
Frequency range (Frequencies 160 - 1000 MHz with external component changes)	863		870	MHz	500 Hz resolution
(Frequencies 190 1900 HTZ man oxedital compensite stranges)	902		928	MHz	
T _X Output power (Programmable)	0		15	dBm	
R _X sensitivity		-114		dBm	4.8 kbits/s





Ordering Information

Part Number	Temperature Range	Package			
XE1203F1063TRLF	-40 °C to +85 °C	VQFN48			
Note: 2500 pcs Tape & Reel					

Visit our website to locate the most current product specifications, datasheets and contact information for your local Semtech Field Applications Engineer.

