

Features

COMPREHENSIVE WiMAX PRODUCT FAMILY

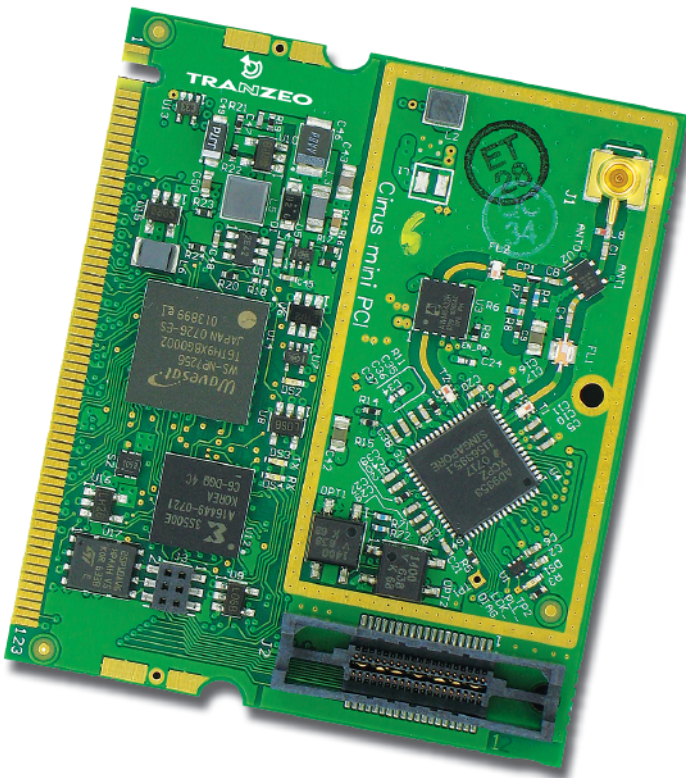
- Full spectrum of WiMAX radios and subscriber unit products for indoor and outdoor installation for residential and enterprise applications

STANDARDS BASED

- Adheres to the IEEE 802.16-2004 standard
- Based on the Wavesat NP7256 chipset for subscriber unit development

LOW COST DESIGN AND THE HIGHEST QUALITY

- Low cost TODAY
- Aggressive cost reductions passed on to the customer
- Backed by a three year warranty



The Tranzeo TR-WMX-5.8-mPCI 5.8GHz Mini-PCI card based on the IEEE802.16-2004 standard is ideal for custom subscriber units and other embedded applications. Tranzeo's family of WiMAX products are based on a WiMAX Forum Certified™ design to ensure seamless interoperability with all WiMAX Certified™ systems.

All Tranzeo TR-WMX products are designed for the best price/performance and manufactured at Tranzeo's state-of-the-art manufacturing facility in British Columbia Canada resulting in the lowest price with the highest quality.

Tranzeo is your one-stop source for all of your WiMAX product needs.



Air Interface Specifications

Standard	IEEE 802.16-2004, HiperMAN/WiMAX		
Modulation	OFDM (BPSK, QPSK, 16-QAM, 64-QAM)		
RF Frequency	5.15-5.925 GHz		
Channel Bandwidth	3.5MHz, 5MHz, 7MHz, 10MHz		
Frequency Resolution	250KHz steps		
Tx Center Average Frequency Tolerance	< +/-2% subcarrier spacing		
Symbol Clock Frequency Tolerance	< +/-5ppm		
Frequency Control	Digital Automatic Frequency Control (DAFC)		
Spectral Mask Requirements	As per IEEE Std 802.16-2004 item 8.5.2		
Spectral Flatness Requirements	Spectral lines from -50 to -1 and +1 to +50	+/-2 dB from the measured energy averaged over all 200 active tones	
	Spectral lines from -100 to -50 and +50 to +100	+2/-4 dB from the measured energy averaged over all 200 active tones	
Adjacent Channel Rejection C/I [dB]	16-QAM 3/4	64-QAM 3/4	
	-11dB	-4dB	
Nonadjacent Channel Rejection C/I [dB]	16-QAM 3/4	64-QAM 3/4	
	-30dB	-23dB	
Duplexing Method	TDD		
Spectral Efficiency	5 bits/sec/Hz (64-QAM unencoded)		
Supported Frame Lengths	[2.5, 4, 5, 8, 10 & 20]ms		
Supported Cyclic Prefix Lengths	1/4, 1/8, 1/16, 1/32		
Tx Maximum Output Power (at antenna connector)	18dBm		
Tx Dynamic Range	40dB		
Relative Tx Constellation Error	Burst Type	Typical [dB]	
	BPSK 1/2	-25.0 @ 18dBm output power	
	QPSK 1/2	-25.0 @ 18dBm output power	
	QPSK 3/4	-25.0 @ 18dBm output power	
	16-QAM 1/2	-25.0 @ 18dBm output power	
	16-QAM 3/4	-25.0 @ 18dBm output power	
	64-QAM 2/3	-30.0 @ 15dBm output power	
	64-QAM 3/4	-30.0 @ 15dBm output power	
Maximum Rx Power (BER <10 ⁻⁶)	-20dBm		
Maximum tolerable Rx Power	0dBm		
Maximum Rx Reciever Sensitivity (BER 10 ⁻⁶)	Burst Type	5MHz	10MHz
	BPSK 1/2	-91.5	-88.5
	QPSK 1/2	-88.5	.85.5
	QPSK 3/4	-86.5	-83.0
	16-QAM 1/2	-83.0	-80.0
	16-QAM 3/4	-79.5	-76.5
	64-QAM 2/3	-80.0	-72.5
	64-QAM 3/4	-73.5	-70.5
Rx Input Dynamic Range	From -20dBm to 6dBm below the sensitivity threshold level		
Power Control	Automatic Gain Control (AGC), Transmit Power Control (TPC)		
DFS	DFS Ready. Radar detection circuitry built-in, frequency control		
Physical Dimensions	2 5/16" x 2" (58.7mm x 50.8mm)		
Operating Voltage	3.3V through miniPCI connector		
Average Power Consumption	3W at 25% duty cycle		
Operating Temperature	-33 to +40C		
Regulatory Compliance	RoHS, CE-Mark (ETSI), FCC		
Warranty	3 years depot, repair or replace		

Tranzeo Wireless Technologies Inc. (TSX:TZT) leads the wireless broadband industry for value, by producing high-performance wireless network equipment with a low cost of ownership and unparalleled service allowing communities and businesses to communicate without boundaries. Since the company's inception in 2000, Tranzeo's optimum cost effectiveness, premium quality and responsive support have attracted a growing and devoted worldwide following of more than 2,465 dealers and 18 distributors. Tranzeo's full spectrum of point-to-point and point-to-multipoint radios, WiMAX equipment, and mesh network solutions are designed for wireless internet service providers, governments, campuses, military, carriers, enterprise customers, and systems integrators around the globe.

