



## Avago Technologies Introduces Market's First WiMAX Coexistence Front-End Module for Simplified Design of Mobile Electronics

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### Highly-Integrated, Small-Footprint Module Delivers Best-in-Class Noise Rejection; Provides Complete RF Front-End Solution for Streamlined Time to Market

SAN JOSE, Calif. & SINGAPORE, Jun 01, 2011 (BUSINESS WIRE) -- Avago Technologies (Nasdaq:[AVGO](#)), a leading supplier of analog interface components for communications, industrial and consumer applications, today announced a complete RF front-end module (FEM) for WiMAX radios in mobile handset or portable PC applications. The new [AFEM-S257](#) module is designed specifically for coexistence operation of WiMAX with other cellular and WiFi radios in the same device. The module features two receive ports and a single transmit port in a small 5 by 7 by 1 mm package that is ideal for space-constrained mobile applications in the 2.5 to 2.7 GHz frequency range - providing up to 25 percent space savings over discrete WiMAX solutions.

The AFEM-S257 module integrates multiple high-performance technologies to reduce PCB board footprint, while simplifying design and manufacturing and shortening time to market. Utilizing Avago proprietary 0.25-um GaAs enhancement-mode pHEMT process and leading-edge Film Bulk Acoustic Resonator (FBAR) filtering technologies, the module delivers superior performance across voltage and temperature levels. FBAR technology delivers steep roll-off and low insertion loss, resulting in extended battery life and talk time and better signal quality. With high noise rejection of 35 dBc, the module enables fewer interference issues between IEEE 802.16 WiMAX and other radios. The AFEM-S257 module achieves 24 dBm of WiMAX-compliant output power, while maintaining an error vector magnitude (EVM) of 2.5 percent at 16 quadrature amplitude modulation (QAM).

Avago will have a live demonstration of the AFEM-S257 module, and will exhibit its complete RF and Microwave portfolio, at the 2011 IEEE Microwave Theory & Techniques Society International Microwave Symposium in booth number 1602 at the Baltimore Convention Center from June 7-9.

"The AFEM-S257 front-end module provides a complete, compact solution that can be easily and quickly designed in to mobile WiMAX applications, which is demonstrated in the top three reference designs addressing this market," said James Wilson, senior director of marketing for wireless products at Avago. "With Avago FBAR filtering technology delivering unparalleled out-of-band rejection, the module offers the performance major smartphone makers demand."

#### Additional AFEM-S257 Product Features

- 18 percent power added efficiency (PAE)
- All RF ports matched to 50 ohms for simplified design
- 3 to 5V power supply for TX path
- TX gain of 34 dB
- 3.5 dB Noise Figure from ANT to RX
- 25 dB of TX/RX isolation and RX1/RX2 isolation

#### U.S. Pricing and Availability

The AFEM-S257 WiMAX coexistence front-end module is available in a 28-lead MCOB package and is priced at \$9.50 each in 10,000 piece quantities. Samples and production quantities are available now through the Avago direct sales channel and via worldwide distribution partners.

#### About Avago Technologies

Avago Technologies is a leading supplier of analog interface components for communications, industrial and consumer applications. By leveraging its core competencies in III-V compound and silicon semiconductor design and processing, the company provides an extensive range of analog, mixed signal and optoelectronics components and subsystems to approximately 40,000 end customers. Backed by strong customer service support, the company's products serve four diverse end markets: wireless communications, wired infrastructure, industrial and automotive electronics, and consumer and computing peripherals. Avago has a global employee presence and heritage of technical innovation dating back nearly 50 years to its Hewlett-Packard roots. Information about Avago is available on the Web at [www.avagotech.com](http://www.avagotech.com).

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