Avago Technologies FBAR Filter Technology Speeds Design of 4G WiMAX/LTE Handsets with Simultaneous WiFi/Bluetooth Operation

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No Compromise in Either Voice or Data Quality of Service

SAN JOSE, Calif. & SINGAPORE, Aug 12, 2010 (BUSINESS WIRE) --Avago Technologies (Nasdaq: AVGO), a leading supplier of analog interface components for communications, industrial and consumer applications, today announced two advanced Film Bulk Acoustic Resonator (FBAR) technology-based bandpass filters for next generation 4G WiMAX/LTE handsets, data cards and access points. The Avago ACPF-7024 and ACPF-7025 are a pair of highly selective bandpass filters that enable cellular phones to offer simultaneous operation of next generation 4G WiMAX/LTE voice communications and WiFi/Bluetooth data networks without compromising either voice or data quality of service.

The ACPF-7024 solves the design problem of enabling concurrent operation of WiFi and/or Bluetooth(R) standards with other wireless standards - such as 2.5 GHz WiMAX, PCS, and LTE Bands 7 and 40 - without performance degradation due to adjacent radio interference. The ACPF-7024 is a 2400-2482 MHz WiFi/Bluetooth bandpass filter designed for use in the 2.4 GHz ISM[1] band and features over 40 dB of attenuation to interfering signals.

Avago's ACPF-7025 is a miniature 2496 - 2690 MHz WiMAX bandpass filter. The ACPF-7025 allows a WiMAX transceiver to coexist and operate alongside WiFi and/or Bluetooth transmitters. Cell band rejection is 60 dB typical; PCS band rejection is 43 dB typical; and WiFi/WLAN/Bluetooth rejection is 43 dB typical.

Both the ACPF-7024 and ACPF-7025 use Avago Technologies' proprietary Film Bulk Acoustic Resonator (FBAR) technology that makes ultra-small, high-Q filters possible at a fraction of their usual size. By utilizing Avago's advanced Microcap bonded-wafer chip-scale packaging and proprietary FBAR filter technologies, the ACPF-7024 and ACPF-7025 are assembled into molded chip-on-board modules with a compact size of 2.5 x 2.5 mm and 2.0 x 1.6 mm respectively.

Applications for the ACPF-7024 and ACPF-7025 include 4G/LTE cellular and 802.11 b/g/n WiLAN/WiFi and Bluetooth data communications in handsets and portable communication devices such as laptops, netbooks and tablet devices

ACPF-7024 ISM Bandpass Features

- Low insertion loss
  - 1.2 dB typical , 2401 - 2480 MHz
- High rejection of received interfering signals
  - 800 - 2300 MHz band: 33 dB typical
  - LTE Band 40: 37 dB typical
  - WiMAX 2496 - 2502 MHz: 30 dB typical
  - WiMAX / LTE B7 2502 - 2690 MHz: 45 dB typical
- High transmit power rating: +27 dBm
- FBAR filter technology for ultra-small, high-Q filters
- No external matching required: 50 â" input and output
- Miniature size: 1.6 mm x 2.0 mm and 0.95 mm height
- Wide operating temperature range: -30 to 85° C

ACPF-7025 WiMAX Bandpass Features

- Low insertion loss
  - 2.4 dB typical , 2496.5 - 2502 MHz
  - 2.3 dB typical, 2502 - 2689.25 MHz
- High rejection of received interfering signals
  - Cell band: 60 dB typical
  - PCS band: 43 dB typical
  - WLAN/WiFi/Bluetooth band: 43 dB typical

- High transmit power rating: +33 dBm
- FBAR filter technology for ultra-small, high-Q filters
- 50 â" input and output
- Miniature size: 2.5 mm x 2.5 mm and 1.15 mm height
- Wide operating temperature range: -20 to 85° C (30 dBm transmit power)

Packaging and Environmental Processing

The ACPF-7024 and ACPF-7025 are available in molded chip-on-board packages with a 1.6 mm x 2.0 mm footprint and 0.95 mm height for the ACPF-7024 and 2.5 mm x 2.5 mm footprint and 1.15 mm height for the ACPF-7025. Both devices are RoHS 6 compliant, halogen free and TBBPA (Tetrabromobisphenol A) free.

U.S. Pricing and Availability

In 10,000 piece quantities, the Avago ACPF-7024 is priced at $1.68 each and the ACPF-7025 is priced at $1.88 each.

Samples and production quantities are available now through Avago's direct sales channel and worldwide distribution partners. More information about Avago's RF products can be found at http://cts.businesswire.com/ct/CT?id=smartlink&url=http%3A%2F%2Fwww.avagotechwireless.com%2F&esheet=6394706&lan=en-US&anchor=http%3A%2F%2Fwww.avagotechwireless.com%2F&index=2&md5=f7257167eeca2bd4903219f6c6fb1a44.

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 http://cts.businesswire.com/ct/CT?id=smartlink&url=http%3A%2F%2Fwww.avagotech.com%2F&esheet=6394706&lan=en-US&anchor=www.avagotech.com&index=3&md5=441137b255f3d38eea5676ecf5dbb52e

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Note

1. ISM: Industrial, Scientific and Medical

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