



## Photo Release -- Avago Technologies Introduces Vortex Gearbox Family of 28nm CMOS 100G Ethernet/OTN PHYs

December 12, 2012

### Industry's Longest Reach 10:4 Gearbox Withstanding up to 32dB of Channel Loss Now Being Sampled at Large Networking Equipment OEMs

SAN JOSE, Calif. and SINGAPORE, Dec. 12, 2012 (GLOBE NEWSWIRE) -- Avago Technologies (Nasdaq:AVGO), a leading supplier of analog interface components for wireless, wireline, and industrial applications, today announced its new Vortex Gearbox™ family of Physical Layer Transceiver (PHY) devices supporting Ethernet and Optical Transport Networking (OTN). These devices feature Avago's proven 28nm CMOS SerDes technology that has demonstrated compliance with IEEE CAUI and various Common Electrical Interface (CEI) standards that include CEI-11G-SR, CEI-25G-LR, and CEI-28G-VSR. The Vortex Gearbox devices also incorporate Avago's unique proprietary Decision Feedback Equalization (DFE) architecture providing low overall power consumption, low data latency and best-in-class jitter and crosstalk performance.

A photo accompanying this release is available at <http://www.globenewswire.com/newsroom/prs/?pkgid=16235>

#### *Vortex Gearbox AVSP-1104 Device Production-ready*

The Vortex Gearbox AVSP-1104 is a single-chip PHY IC designed for high-density 100G Ethernet and OTN applications. The device is ideal for driving both backplane and portside applications. Key features include:

- Long reach performance withstanding up to 32dB of channel loss
- Hole-free operation from 1-28 Gbps
- Gearbox functionality for full-duplex conversion of four lanes (4x25 Gbps, 4x28 Gbps) to ten lanes (10x10 Gbps, 10x11 Gbps)
- Option for configuration as a retimer function for full-duplex transmission of ten lanes
- Programmable Tx/Rx equalization of all SerDes interfaces
- Bit Error Rate (BER) of 1e-20
- Easy-to-use diagnostic software for remote debugging



"The wired communications semiconductor market has become increasingly concentrated. On the basis of its proven SerDes technology and broad portfolio of ASICs, ASSPs, IP and optics, Avago enters the PHY ASSP market with instant credibility," said Jag Bolaria, senior analyst at The Linley Group. "The features included in this first member of Avago's new Vortex Gearbox family of customer channel products meet or exceed the requirements in both backplane and portside applications."

"With over 250 million SerDes channels shipped over the past decade, Avago has established a record of developing leading-edge embedded SerDes cores for high performance ASICs," said Frank Ostojic, vice president and general manager of Avago's ASIC Products Division. "Building on this foundation, we now offer the AVSP-1104, the first product in the Vortex Gearbox family. We are delivering 100GbE solutions now and will enable designers to create systems incorporating serial communication at rates greater than 28Gbps in the near future."

#### Availability

Samples of the AVSP-1104 are available now in 320-pin fcBGA package. Contact your local Avago Technologies sales representative for pricing.

Further information on the Avago Vortex Gearbox AVSP-1104 device is available online at <http://www.avagotech.com/pages/en/asics/avsp-1104/>

#### About Avago Technologies

Avago Technologies is a leading supplier of analog interface components for wireless, wireline, and industrial 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 three diverse end markets: wireless communications, wired infrastructure, industrial and automotive electronics. Avago has a global employee presence and heritage of technical innovation dating back 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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