



## Photo Release -- Avago Technologies Introduces Second Generation PM-QPSK Coherent Receiver for 100G Metro and 200G/400G Long Haul Networks

March 4, 2014

### New Small Form Factor Coherent Receiver Reduces Footprint by 2/3 and Offers More Functionality

SAN JOSE, Calif. and SINGAPORE, March 4, 2014 (GLOBE NEWSWIRE) -- Avago Technologies (Nasdaq:AVGO), a leading supplier of analog interface components for wireless, wireline, and industrial applications, today announced a new Polarization-Multiplexed Quadrature Phase Shift Keying (PM-QPSK) coherent receiver device, the AFCP-ICRX2CC, designed for 100G metropolitan and emerging 200G/400G long haul DWDM transmission systems. The new device is only one-third the size of its previous generation yet offers more functionality to enable smaller size transceiver or optical line card solutions in colorless coherent networks.

A photo accompanying this release is available at <http://www.globenewswire.com/newsroom/prs/?pkgid=23882>

The new coherent receiver features an integrated input monitor photo-detector, variable optical attenuator (VOA), polarization splitters for signal and local oscillator, two matched 90° optical hybrids, four 25G balanced detector pairs, and four differential linear TIAs with manual and automatic gain control in a single compact surface-mount package. The device provides an increased dynamic range and improved optical signal to noise ratio (OSNR) for both single and multi-channel signals. In applications with multiple coincident signals and significantly higher optical input power versus single channel operation, the VOA function provides additional control of the input signal into the TIAs. In conjunction with an external local oscillator it eliminates the need for external optical filters providing flexibility to system operators for future system upgrades and reducing system cost. The receiver conforms to the Optical Internet working Forum (OIF) implementation agreement OIF-DPC-RX-01.2.

#### Product Highlights

- Baud rate up to 32 GBd
- High input dynamic range: THD < 5% at 3 mApp
- 10 dB signal attenuation range
- No active temperature control required.
- Available for C-Band, L-Band and C+L-Band
- Operating temperature: -5 °C to +80 °C



Avago AFCP-ICRX2CC

"Leveraging Avago's in-house InP and Silica-on-Silicon technology platforms and highly automated, sub-micron precision assembly platforms, we have delivered the highest level of integration and smallest footprint for our second generation PM-QPSK coherent receiver," said Stefan Rochus, Director of Optical Components Product Marketing at Avago Technologies. "This demonstrates Avago's continued commitment to advancing our coherent receiver technology to address the 100G metro and emerging 200G/400G long haul network applications."

"100G coherent technology is absolutely the key building block for transport networks-and not just for 100G deployments today but into the future. A very important part of the value of this one technology is that it spans 100G metro to 400G long-haul, and all those applications demand ever smaller size and greater functionality," said Karen Liu, principal analyst at Ovum. "The entire network infrastructure from metro to core is racing to keep up with traffic growth. Avago's receiver addresses a timely need as 100G metro-optimized and 400G long-haul systems come to market this year."

Avago will be showcasing the new coherent receiver in the Avago booth 3160 at the OFC 2014 exhibition in San Francisco, California from March 11<sup>th</sup> to 13<sup>th</sup>.

#### Availability

Samples of the AFCP-ICRX2CC are now available with general product availability targeted for July 2014. Please contact your local Avago Technologies sales representative for pricing.

Further information on the AFCP-ICRX2CC is available online at [http://www.avagotech.com/pages/en/fiber\\_optics/optical\\_components/photonic\\_ic\\_components/afcp-icrx2cc/](http://www.avagotech.com/pages/en/fiber_optics/optical_components/photonic_ic_components/afcp-icrx2cc/)

#### About Avago Technologies

Avago Technologies is a leading designer, developer and global supplier of a broad range of analog, mixed signal and optoelectronics components and subsystems with a focus in III-V compound semiconductor design and processing. Backed by an extensive portfolio of intellectual property, Avago products serve three primary target markets: wireless communications, wired infrastructure, and industrial and other. Avago has a global employee presence and heritage of technical innovation dating back 50 years to its Hewlett-Packard roots. For more information, visit Avago's website: [www.avagotech.com](http://www.avagotech.com).

Follow Avago on Twitter at <http://twitter.com/Avagotech> and on Facebook at [www.facebook.com/Avagotech](http://www.facebook.com/Avagotech).

Avago, Avago Technologies, and the A logo are trademarks of Avago Technologies. All other trademarks are the property of their respective owners.

CONTACT: Corporate Communications

[press.relations@avagotech.com](mailto:press.relations@avagotech.com)

Telephone: +1 408 435 4570

[company logo](#)