



## Broadcom Unveils Industry's Most Comprehensive Dual 100G MACsec PHY with 256-bit AES for Secure Network Infrastructure

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### New MACsec PHY Addresses Security Requirements for 10G/25G/40G/50G/100G Interconnects

SAN JOSE, Calif., March 20, 2017 (GLOBE NEWSWIRE) -- Broadcom Limited (NASDAQ:AVGO), a leading designer, developer and global supplier of a broad range of digital and analog semiconductor connectivity solutions, today announced the industry's most comprehensive dual-port 100GbE PHY device, the BCM82391, supporting the IEEE 802.1AE media access controller security (MACsec) standard for 10GbE, 25GbE, 40GbE, 50GbE and 100GbE interconnects. The device addresses security requirements for various Ethernet data link configurations in modern high-speed, mission-critical network infrastructure that includes federal and enterprise, cloud-scale data center, and service provider networks. Expanding upon previous generation products, the new MACsec PHY integrates the latest 256-bit AES technology with Broadcom's market-proven 25G SerDes core, bolstering data transmission security and signal integrity to secure the critical high-speed data links between servers, switches and routers.

As Ethernet links throughout the network are being upgraded to higher speeds to support the increasing demand for higher bandwidth, security becomes a serious concern across various levels of the network interfaces, especially for the 8x10G, 8x25G, 2x40G, 2x50G and 2x100G configurations which have been widely implemented. The BCM82391 is a comprehensive, highly-integrated MACsec PHY solution designed to protect high-speed data interconnects in critical networking applications from security breaches.

#### BCM82391 Product Highlights

- Dual 100GbE PHY with transmit pre-emphasis and adaptive receive equalization supporting SR4, LR4, CR4 and ER4 applications
- Highly-integrated IEEE 802.1AE 256-bit MACsec supporting 10G, 25G, 40G, 50G and 100G rates
- Long-reach performance capable of compensating for > 35dB of insertion loss @ 25 Gb/s
- Low power 28nm CMOS design

"This latest generation of MACsec PHY enables network operators with secure, encrypted 100G communications links capable of withstanding intrusion attacks, wiretapping and other threats to secure data transmission," said Lorenzo Longo, senior vice president and general manager of the Physical Layer Products Division at Broadcom. "Leveraging our field-proven 25G SerDes technology in a highly-integrated, multi-rate MACsec architecture, Broadcom provides the most comprehensive MACsec PHY solution for 10G/25G/40G/50G/100G Ethernet links."

"MACsec PHY standards that extend to full 256-AES are now expected as a baseline feature in many Ethernet markets," said Loring Wirbel, senior analyst with The Linley Group. "One product running the gamut from 10GbE to 100GbE represents a baseline functionality for tomorrow's secure data center - and for other vertical networking markets requiring security, as well."

Broadcom will showcase multiple MACsec PHY products based on the latest 256-bit AES technology. The demonstration and new product showcase will be in the Broadcom Booth 2873 at the Optical Fiber Communication (OFC) 2017 exhibition in Los Angeles, California from March 21<sup>st</sup> to 23<sup>rd</sup>.

#### Availability

Broadcom has begun shipping the BCM82391 and is currently accepting orders for this product. Broadcom is also sampling the BCM82756, a new quad-port 10GbE MACsec PHY that integrates the IEEE 802.1AE MACsec GCM-AES-256b encryption, IEEE 1588, retimer and EDC equalizer functions supporting 1GbE, 10GbE and 40GbE applications. Please contact your local Broadcom sales representative for samples and pricing.

Further information on Broadcom's latest MACsec PHY products with the 256-bit AES technology is available online at

<https://www.broadcom.com/products/ethernet-connectivity/optical-phy/bcm82391>

<https://www.broadcom.com/products/ethernet-connectivity/optical-phy/bcm82756>

#### About Broadcom Limited

Broadcom Limited is a leading designer, developer and global supplier of a broad range of digital and analog semiconductor connectivity solutions. Broadcom Limited's extensive product portfolio serves four primary end markets: wired infrastructure, wireless communications, enterprise storage and industrial & other. Applications for our products in these end markets include: data center networking, home connectivity, set-top box, broadband access, telecommunications equipment, smartphones and base stations, data center servers and storage, factory automation, power generation and alternative energy systems, and electronic displays. For more information, go to [www.broadcom.com](http://www.broadcom.com).

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Press Contact:

Khanh Lam

Corporate Communications

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

Telephone: +1 408 433 8649



