



Luxtera Introduces Industry's Lowest Power 40G AOC

Increases network security with new IDP features while utilizing 30 percent less energy

Carlsbad, Calif. – November 16, 2009 – Luxtera, the worldwide leader in Silicon [CMOS Photonics](#), announced today at [SC09](#) the debut of its low power, 40G Active Optical Cable (AOC), Blazar. Leading the industry as the lowest power AOC on the market, the new Blazar utilizes over 30 percent less energy than competing products, improving overall data center power consumption and thermal efficiency. Low power Blazar also incorporates Intrusion Detection and Protection (IDP) features, which provide data centers with the security necessary to maintain data integrity. Underscoring its new advanced offerings, Blazar was selected to serve as the cabling solution backbone for [SCinet](#), the world's fastest network, at this year's SC09 conference.

Low power Blazar transceivers operate at less than 20mW/Gbps, well below power consumption of traditional multimode VCSEL optics, thus significantly reducing heat dissipation, operating expenses and the carbon footprint of data centers. By combining CMOS Photonics technology and single-mode fiber, low power Blazar maintains a low price point while simultaneously supporting long reach connectivity of over 4,000 meters. Its high level of reliability and design flexibility make the low power AOC an ideal interconnect for High Performance Computing (HPC) clusters and high density applications such as blade servers.

“Our highly-integrated 40Gbps switch systems and switch blades are providing data centers with the computing power and density required for HPC and scaled data center applications, but with density come distance, power consumption and thermal design challenges,” said Shai Rephaeli, vice president of product engineering at Mellanox Technologies. “Low power optical solutions, such as Luxtera’s low power Blazar, solve these challenges by minimizing power consumption while providing benefits in distance, weight and flexibility.”

With the addition of patent pending IDP features, low power Blazar is the first secure optical cable available for HPC deployments. To deliver this feature, the new Blazar takes advantage of Silicon Photonics’ unique optoelectronic integration capability as it utilizes embedded germanium photodetectors with associated receiver logic to detect cable intrusion attempts. Additionally, low power Blazar uses high performance single-mode, bend insensitive fiber to achieve a fiber bent radius of five millimeters with no light escaping, significantly reducing the possibility of cable intrusions. The new Blazar is tested and qualified for interoperability with the market’s first IPD-feature enabled switch, Voltaire’s Quad Data Rate (QDR) InfiniBand Grid Director™ and Unified Fabric Manager™ Software. Luxtera and Voltaire will demonstrate this feature at SC09 conference in Portland, Oregon.

“When it comes to sensitive information and trade secrets, security breaches are a major concern for data centers,” said Asaf Somekh, vice president of marketing for Voltaire.



“Government research facilities, the financial industry and corporations look to leaders in HPC systems to support their infrastructure and maintain information security. With our Grid Director switches and Unified Fabric Manager software we can take advantage of low power Blazar’s unique IDP features to be the first company to deliver a secure, reliable, as well as energy efficient InfiniBand solution for data centers.”

“With the introduction of the industry’s lowest power connectivity option for data centers, we continue to lead the market in innovation and high performance solutions,” said Marek Tlalka, vice president of marketing for Luxtera. “The addition of IDP features to our products emphasizes the advantages of Silicon Photonics optoelectronic integration and its ability to add innovative features without adding cost. Luxtera will continue to enhance our Silicon Photonics technology platform to further reduce interconnect power consumption and expand features to maintain this technological lead.”

Powering SCinet at SC09 demonstrates low power Blazar’s extended reach and low power by connecting exhibitors through the InfiniBand network to enable multiple HPC demonstrations during the conference.

Luxtera is demonstrating low power Blazar and its IDP features this week at SC09 in booth number 2896. Low power Blazar is available under part number LUX5010A and it ships in multiple lengths from one to 4,000 meters. The company is currently taking production orders for low power Blazar.

About Luxtera:

Luxtera, Inc. is the world leader in Silicon CMOS Photonics. It is the first company to overcome the complex technical obstacles involved with integrating high performance optics directly with silicon electronics on a mainstream CMOS chip, bringing direct “fiber to the chip” connectivity to market. With its award-winning Blazar active optical cable and optics on motherboard OptoPHY transceiver family Luxtera is breaking cost barriers associated with traditional multimode optics and offers a roadmap to high performance optical connectivity and copper cost points. Headquartered in Carlsbad, California, Luxtera is a fabless semiconductor company that was founded in 2001 by a team of industry-renowned researchers and technology managers drawn from the communications and semiconductor industries. Luxtera has received funding from leading venture capitalists including August Capital, New Enterprise Associates, Sevin Rosen Funds and Lux Capital. More information can be found on the company's web site: www.luxtera.com.

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