



Contact:
Deborah Porchivina
Porchivina & Associates Public Relations
Phone: 415-272-0943
Email: deborah@papr.com

Next Gen Interconnect and 100G Projects Seek to Address Growing Pains for 100G and Beyond

Fremont, CA – August 24, 2011 – The Optical Internetworking Forum (OIF) members initiated a Next Generation Interconnect Framework project which explores various applications spaces for high speed optical and/or electrical interconnect and identifies the necessary elements for follow on implementation agreements (IA). The OIF also started a new 100G project to address next generation integrated coherent receiver targeting lower cost, higher density applications as well as a third project addressing multi-link gearbox (MLG) for 100G client side signaling.

“All three of these projects are critical to the industry to support 100G and beyond,” said Rod Smith of TE Connectivity and the OIF’s MA&E co-chair, PLL. “As the industry transitions to 100G and beyond, new agreements are needed to support the higher data rates through smaller form factors and reduced power consumption.”

In the past decade, the industry has developed high-speed electrical interfaces such as the OIF’s CEI-11. New technologies and agreements will be needed to meet next generation interconnect system solutions. These interconnect solutions will be required for a variety of applications including very short reaches within the blade, longer reaches between blades (backplanes) and chassis-to-chassis. These applications will require interoperability between components from different vendors as well as significant investment across the ecosystem.

“Electrical signaling over the required distances within a system is anticipated to be challenging at the higher data rates,” said Jeff Hutchins, OIF board member. “Both vendors as well as users will benefit from agreements that enable interoperability within the various applications spaces.”

The second project, the Generation 2.0 Intradyme Coherence Receiver (Gen-2 ICR), will define a smaller 100G coherent receiver to satisfy the industry needs for size and cost reduction necessary to support the evolving 100G coherent DSP-based module standards. The project follows the OIF’s Gen-1 ICR IA (OIF-DPC-RX-01.0 IA) that successfully enabled long haul applications using line card and large form factor transponder (e.g., MSA-100GLH) implementations.

The third project, the Multi-Link Gearbox (MLG), will enable a variety of applications where a group of 10GBASE-R virtual links are transported by a 4x25G physical link. It will define a 10:4 Mux MLG function to convert multiple (up to 10) independent 10Gb/s links into 4x25G lanes, and a 4:10 DeMux MLG function to convert the 4x25G lanes back to multiple (up to 10) independent 10Gb/s links. In addition, the MLG Project will define in-band coding that preserves 10GBASE-R physical lane-to-lane ordering and in-lane bit ordering to support synchronous and asynchronous 10G lanes.

About the OIF

Launched in 1998, the OIF is the first industry group to unite representatives from data and optical networking disciplines, including many of the world's leading carriers, component manufacturers and system vendors. The OIF promotes the development and deployment of interoperable networking solutions and services through the creation of Implementation Agreements (IAs) for optical, interconnect, network processing, component and networking systems technologies. The OIF actively supports and extends the work of standards bodies and industry forums with the goal of promoting worldwide compatibility of optical internetworking products. Information on the OIF can be found at <http://www.oiforum.com>.