



IEEE 802.3 Ethernet Working Group Liaison Communication

Source: IEEE 802.3 Working Group¹

To: Lyndon Ong, OIF Technical Committee Chair (lyong@ciena.com)

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Subject: Liaison to OIF regarding OIF CEI-28G-VSR Liaisons (dated Feb 12, 2010 and March 15, 2010) from IEEE 802.3,

From: David Law – Chair, IEEE 802.3 Ethernet Working Group (David_Law@3Com.com)

Approval: Agreed to at IEEE 802.3 Plenary meeting, Orlando, FL, March 18, 2010

Dear Lyndon,

The IEEE 802.3 Working Group thanks the Optical Internetworking Forum for their kind liaisons, dated February 12, 2010 and March 15, 2010, regarding the CEI-28G-VSR project and OIF document oif2010.092.03.pdf.

Given the prior expressed interest in 25 Gb/s electrical signaling for 100 Gigabit Ethernet, the review of these liaisons and document was assigned to the IEEE P802.3ba Task Force. The following feedback has been provided –

- The initial thoughts on the OIF CEI-28G-VSR project, provided in oif2010.092.03, are of such fundamental importance to this effort that participants need additional time to assess the full implications of any input they would provide.
- The IEEE 802.3 Working Group feels that communications regarding development activities related to 25 Gb/s electrical signaling are beneficial to the industry as a whole, and applauds the Optical Internetworking Forum's initiative.
- The table describing the starting point for the OIF-28G-VSR channel budget seems similar in nature to the budget used in the development of the nPPI interface developed for 40Gb/s and 100Gb/s Ethernet. Therefore, there is a comfort level with the specific budget items called out, while the actual magnitudes cited will require further investigation.

¹ This document solely represents the views of the IEEE 802.3 Working Group, and does not necessarily represent a position of the IEEE, the IEEE Standards Association, or IEEE 802.

- For connectors targeting the chip-to-module application space, there is an inherent value to the industry in the use of common electrical connectors and the development of common electrical specifications, including crosstalk requirements. While there is familiarity and support for the ICN specification methodology, the values proposed by the OIF will need further consideration.
- The potential impact of the OIF CEI-28G-VSR on a future direct-attach copper cabling solution is clearly illustrated in oif2010.092.03. This issue highlights the need for communications between the various standards bodies and efforts, as there is a tight linkage between optical and electrical solutions, due to their inclusion on a host PCB and sharing a common port.

Based on the input provided by our participants, an ad hoc will be formed to provide a more detailed response to the technical points raised in oif2010.092.03. This feedback will be provided after the IEEE 802 July Plenary, which will be held the week of July 11 – 16, 2010.

Given the need for 25 Gb/s electrical signaling we encourage the OIF to continue its development efforts on the CEI-28G-VSR project and look forward to future communications.

Sincerely,

David J. Law
Chair, IEEE 802.3 Ethernet Working Group
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