February 24, 2025

To: David Law and participants of the IEEE 802.3 Ethernet Working Group
cc: John D'Ambrosia – IEEE P802.3dj Task Force Chair

Subject: OIF High Density Connector project

From: Karl Bois, OIF Technical Committee Chair ([redacted])

Dear Mr. Law and participants of IEEE 802.3 Ethernet Working Group,

The OIF Q1'25 Technical Committee meeting was held February 11-13 in San Diego, CA, USA and approved a new project, the "High Density (HD) Connector project", as summarized below.

Today's dominant optical module electrical connector technology utilizes PCB edge gold fingers. This imposes limitations on the number of signal, power, and control connections, and on Signal Integrity. Advanced high-density, high-pin count z-axis connector technology exists and is used in other applications. The output of the project is an informative requirements document for a high density connector for optical interconnect applications, addressing today's limitations. Example discussion parameters are 12.8T/25.6T total bandwidth, 64 Tx/Rx signal pairs, separate power and control, 224G/448G pin rate, and 2x OSFP size.

We look forward to continuing cooperation with you on this and other topics of mutual interest.

Sincerely,

Karl Bois,
OIF Technical Committee Chair (kbois@nvidia.com)