Intel developer event to discuss 1.6 Tbit/s MXC interconnect breakthrough

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(Phys.org) —The word is out that Intel will present an entirely new optical interconnect technology for servers at the Intel Developer Forum in San Francisco next month. The MXC interconnect is capable of a peak transfer rate of 1.6 terabits per second. In advancing notes of what's on the agenda at the upcoming developer forum, Intel posted a brief description of its MXC presentation scheduled for September 12. Once the posting went up, it did not take long for tech sites to see it and catch the significance. This is something big.

MXC is the result of a two-year collaboration between Intel and Corning Cable Systems. Intel's strength in the work has been its expertise in silicon photonics and Corning worked on the new fiber technology called

Corning ClearCurve LW.

In 1970, three Corning scientists came up with a low-loss optical fiber, described as a hair-thin strand of highly transparent glass able to transmit information by reflecting light through the length of its core. Corning takes pride in its work ever since in fiber optic manufacturing. On the Intel side, the company has been working on its silicon photonics technology, an area of focus for almost ten years, which involves "moving data with silicon and light," in the words of Intel. This is an approach to using photons to move big amounts of data at very high speeds with extremely low power over a thin optical fiber.

According to an Intel website page, the new connector can carry 1.6 terabits of information per second, has fewer moving parts, is less susceptible to dust and costs less than other photonics connectors.

With those features, the interconnect can be a real advancement for data centers. Intel's comments on the IDF website had this to say:.

"Current optical connectors used in data centers are based on a design from the mid 1980s. Two years ago, Intel started working with Corning Cable Systems to design a brand new optical connector called MXC, using silicon photonics and a new fiber technology. MXC can carry up to 1.6 Terabits per second and is smaller than the connectors used today." The IDF item also said the Corning fiber contribution to the MXC is called Corning ClearCurve LW.

Participating in next month's MXC lecture are David Hessong, MXC Product Line Manager and Scott Bickham senior development associate, both of Corning Cable Systems and, from Intel, Victor Krutul, director, of intel's Silicon Photonics Operation.

The topics in this session range from existing optical connector issues,

MXC's design goals, its edge over other optical connectors, and the MXC schedule. The Intel Developer Forum runs from September 10 to 12.

More information: www.intel.com/content/www/us/e … tonics-research.html
www.corning.com/opticalfiber/f … berbasics/index.aspx
intel.activeevents.com/sf13/co … search.ww#loadSearch