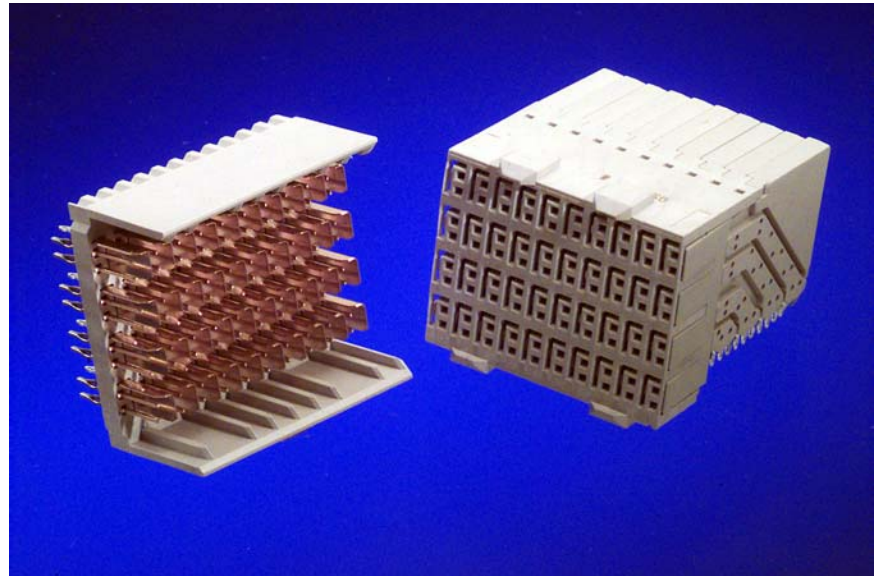


10 Gigabit Ethernet

Positioned as a high-speed, unifying technology for networking applications in LANs, MANs, and WANs, 10 Gigabit Ethernet will provide simple, high bandwidth at relatively low cost. In LAN applications, 10 Gigabit Ethernet will enable organizations to scale their packet-based networks from 10 Mbps to 10,000 Mbps, thereby leveraging their investments in Ethernet. In MAN and WAN applications, 10 Gigabit Ethernet will enable service providers and others to create extremely high-speed links at very low cost.



XAUI HM-Zd Interoperability Platform

- A common platform for interoperability testing supported by members of the 10GEA XAUI Interoperability Group and the 10 Gigabit Ethernet Consortium
- Full duplex link testing
- 3 link lengths
 - 5 inches
 - 20 inches
 - 34 inches
- XAUI signals run in a system-like environment
 - FR-4
 - multi-layer connections
 - 0.200" backplane thickness
 - MDIO / MDC Support

Z-PACK HM-Zd

- Fully modular system- standard size is 25 mm
- Available in two versions:
 - 2 signal pairs per column (20 pairs per 25 mm)
 - 4 signal pairs per column (40 pairs per 25 mm)
- Dual beam contact system with fully encompassing grounds
- Robust mating interface with integral prealignment and mating built-in
- Optimized footprint for improved electrical performance

XAUI Interoperability – Industry Support

The 10 Gigabit Ethernet Alliance has formed a working group, which is chaired by Tyco Electronics, to examine interoperability between different vendors' XAUI implementation. This group selected the Tyco Electronics XAUI HM-Zd Interoperability Platform as a common platform for interoperability testing. The work completed by this group has been adopted by the 10 Gigabit Ethernet Consortium, which will perform future interoperability testing.

Broadcom has tested its BCM8011SerDes transceiver with the XAUI HM-Zd Interoperability Platform, and has successfully run at the XAUI speed of 3.125 Gb/s at the 34" inch link at a bit error rate far exceeding the BER of 10⁻¹² required by the XAUI specification.

Mike Furlong, Product Line Manager, SerDes Products, Broadcom - "Crosstalk in a connector can significantly influence a system's ability to support XAUI. Broadcom has not seen this issue with systems based on Tyco Electronics Z-PACK HM-Zd connector, and has been able to drive them for distances of 34" while exceeding BER requirements specified by XAUI."

For further details regarding the operation of Broadcom products with the XAUI HM-Zd Interoperability Backplane, please contact Mike Furlong at mfurlong@broadcom.com.

Broadcom's Product Offerings

- **BCM8011 Quad 3.125Gb/s XAUI/XGMII Transceiver**
 - Ultra-Low Jitter, < 3.0ps
 - Receive Adaptive Equalization
 - Optional 8b/10b EncDec
 - Low Power @ 2.3W
 - 19mm x 19mm Package
- **BCM8701 10.3Gb/s Serial/XAUI LAN PHY Transceiver**
 - IEEE802.3ae (draft) Compliant
 - Fully integrated CMU, CDR, and SERDES
 - PSC 64B/66B scrambler/descrambler
 - XGXS 8B/10B error detection ENDEC
 - 802.3 Clause 33 Management Interface with Extended Indirect Address
 - Register access
 - Low Power
 - 19mm x 19mm Package

