



XAUI

Technical Feasibility

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PMD Technical Feasibility

- Demonstrate interoperability
 - At least two vendors for each PMD type
 - BER < 10^{-12}
 - Rated link distance
- Implicit PMA demonstration
- Show a credible path to full compliance

Interoperability

10GEA-sponsored UNH-IOL testing

Four IC vendors and one optic module

- BER $\ll 10^{-12}$ (round trip, long test time)
 - Including 2^{-10} PRBS!
- Link lengths well exceeding 20"
 - 27" PCB, two backplane connectors, 48" coax, four SMA connectors (each way)
 - 20" PCB, two backplane connectors, two optic module connectors, 72" coax, six SMAs, WDM module (both ways)



PMA Functionality

- Implicit in 10GEA and UNH-IOL tests
- System vendor has demonstrated an Ethernet XAUI link between two boxes
 - Multiple IC's
 - Error-free operation
 - Different clock domains
 - Real traffic
 - Tolerated severe link jitter

Compliance Credibility

There is overwhelming agreement on the feasibility of XAUI compliance requirements and specifications among Task Force members who are producing and sampling XAUI components.

- XGMII is demonstrated
- Templates comparable to FC vertically
- Jitter can be relaxed further
- Return loss can be relaxed



Motion

The 803.3ae Task Force agrees that XAUI is technically feasible. We have used the following criteria in this determination:

- Demonstrated interoperability between multiple vendors with BER < 10^{-12} and PCB length > 20”.
- A credible path to full compliance has been shown.

Moved: Dawson Kesling

Seconded: John D'Ambrosia

Passed by unanimous acclamation.