

Optical Module XAUI





Overview

Microsemi® RTG4® FPGA device family provides a fully embedded 10 Gigabit Attachment Unit Interface (XAUI) specialized 10 Gigabit Ethernet optical modules and system backplanes. It supports four SerDes transmit and four SerDes receive channels for 8B/10B encoding. 3ae 10 Gigabit Ethernet Task Force, XAUI delivers 10 Gb/s of data throughput using four differential signal pairs. The TLK10031 is a single-channel multi-rate transceiver intended for use in high-speed bi-directional point-to-point data transmission systems.

AscentOptics` s X2 optical transceivers are compatible with the X2 Multi-Sourcing Agreement (MSA) as well as 10G Ethernet. The X2 products are use in datacom optical links and contain an XAUI electrical interface to the host board - 4 x 3. This XAUI PHY along with a 10GbE media access control (MAC) IP core, enables an Altera FPGA to interface to a 10GbE network through a variety of external devices, including a 10GbE PHY.



Optical Module XAUI

XAUI/RXAUI IP Cores

From May 2020 Xilinx handed over the XAUI/RXAUI IP Cores support and distribution to MLE, offering services of integration and encrypted netlists generation.

TLK10031 data sheet, product information and support , TI

TI's TLK10031 is a Single-channel XAUI/10GBASE-KR transceiver. Find parameters, ordering and quality information.



BCM8724 Product Brief

On-chip clock synthesis is performed by the high-frequency low-jitter phase-locked loops for the PMD and XAUI output retimers. Individual PMD and XAUI clock recovery is performed on the device by

Dell 10GbE Pass Through Module (XAUI) User Manual

Your package should contain the following items:

- o Dell -10GbE Pass Through Module for Blade Servers
- o This User's Manual

The PTM is shipped without optical modules.

XAUI interface

Developed by the IEEE 802.3ae 10 Gigabit Ethernet Task Force, XAUI delivers 10 Gb/s of data throughput using four differential signal pairs in each direction. Its



Design of a High Speed XAUI Based on Dynamic

In this paper, we designed a high speed XAUI (10Gbps Ethernet Attachment Unit Interface) to transparently extend the physical reach of the XGMII.

What We Learned from XAUI and How to Apply it to Ethernet in the

A Typical Backplane Showing Primary and Secondary Reflections XAUI only defines reflections shown in blue for the IC's.

QT2025



It can also interface to optical media including SFP+, SFP and XFP modules or reside inside a XENPAK or X2 module. When designing for SFP+ applications, customers can generate one dual-rate design

XFI-XAUI integrated circuit for use with 10GBASE-LX4 optical

A single chip integrated circuit for use in an optical transceiver for converting and coupling an information containing electrical signal with an optical fiber having an XFI interface for coupling with an external

Design of a High Speed XAUI Based on Dynamic Reconfigurable

System level view of High speed XAUI interface XAUI_LMPI module functions as the second-level microprocessor interface logic, so the related state and control registers of XAUI can be



XAUI PHY FPGA IP , Altera

This XAUI PHY along with a 10GbE media access control (MAC) IP core enables an Altera FPGA to interface to a 10GbE network through a variety of external devices, including a 10GbE PHY device or

XAUI v12.2 LogiCORE IP Product Guide (PG053)

The Xilinx® LogiCORE™ IP eXtended Attachment Unit Interface (XAUI) core is a high-performance, low-pin count 10 Gb/s interface intended to allow physical separation between the data link layer and

10 Gigabit Ethernet and the XAUI interface



The XAUI is the interface for the proposed Ten Gigabit Pluggable optical module definition called the XGP. Integrated XAUI solutions together with the XGP will enable efficient low-cost 10 Gigabit

Xilinx DS266 LogiCORE IP XAUI v9.2, Data Sheet

The XAUI interface consists of four differential transmit and receive pairs plus four low-speed control inputs to indicate the status of an attached optical module.

XAUI v12.2 LogiCORE IP Product Guide (PG053)

XAUI Connecting a 10 Gigabit Ethernet MAC to an Optical Module After its publication, the applications of XAUI have extended beyond 10 Gigabit Ethernet to the backplane and other general high-speed



Xilinx DS266 LogiCORE IP XAUI v10.3, Data Sheet

XAUI Interface The XAUI interface consists of four differential transmit and receive pairs plus four low-speed control inputs to indicate the status of an attached optical module. The differential pairs are

10G X2 Optical Transceiver Modules , AscentOptics

AscentOptics` s X2 optical transceivers are compatible with the X2 Multi-Sourcing Agreement (MSA) as well as 10G Ethernet. The X2 products are use in datacom optical links and contain an XAUI

Dell 10GbE Pass Through Module (XAUI) User Manual

Table 1 - Reference Documents and Web Sites Firmware and Firmware Update Tools Dell



Pass Through Module Software User Manual Latest Supported Cables and Optical Modules

Optical Communication System X2

General Description ETU-Link's 10Gb/s X2 transceiver module EX285X-4SCD03 is a hot pluggable in the Z-direction module that is usable in typical router line card applications, Storage, IP network and

10GbE SFP+ PHYs: Requirements and leading

Since the SFP+ form factor significantly simplifies the functionality of the 10G optical module, such functions as CDR, Electronic Dispersion



40G Ethernet Physical Layer Interfaces , Synopsys IP

Learn about the different interfaces in a 40 Gigabit Ethernet system and how they enable a cost-effective migration to higher bandwidth in data centers.

XAUI 10Gb Ethernet Interface

XAUI is a high-speed interconnect that has the ability to drive up to 20 inches of PCB trace on standard FR-4 material. Each XAUI interface comprises four self-timed 8b/10b encoded serial lanes each

CR0028: RTG4 FPGA XAUI Characterization Report

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XAUI

Each XAUI data path is composed of four serial lanes. All specifications for the XGMII Extender are written assuming conversion from XGMII to XAUI and back to XGMII, but other techniques may be

TIDA-00234 reference design , TI

This reference design features the TLK10232 device which is the most compact Dual-channel XAUI-to-SFI Transceiver with the lowest power consumption in its

BCM8481 Product Brief



The product also includes a pass-through XAUI interface mode to allow optional connectivity to a fiber-optic module. Again, one lane of the pass-through XAUI interface is reserved to support lower speed

Xilinx DS266 XAUI v7.4, Data Sheet

The XAUI interface consists of four differential transmit and receive pairs plus four low-speed control inputs to indicate the status of an attached optical module.

XAUI v12.1 LogiCORE IP Product Guide (PG053)

XAUI Connecting a 10-Gigabit Ethernet MAC to an Optical Module After its publication, the applications of XAUI have extended beyond 10-Gigabit Ethernet to the backplane and other general high-speed



XAUI

For this reason, chip-to-chip, board-to-board and chip-to-optical module applications are not practical with this interface. Consequently, the XGMII bus puts many limitations on the number of ports that

XAUI

SERDES, ASIC, FPGA, and optical module vendors are all introducing products with XAUI interfaces. Industry efforts are underway as "plugfest" events are held to ensure that vendors' offerings are

Contact Us

For datasheets, pricing, or custom optical networking solutions, please visit:
<https://entrenamientointeligente.es>