



Product Brief

Intel® TXN31015

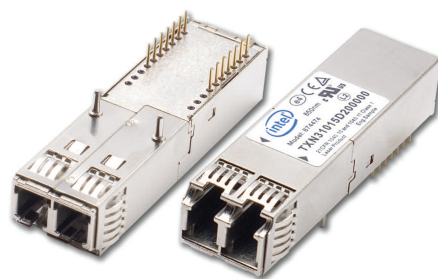
Quad-Rate Small Form Factor (SFF) Optical Transceiver

Optical Enterprise and Storage Solutions

Intel® TXN31015

Quad-Rate Small Form Factor (SFF) Optical Transceiver

Intel® optical components are modular building blocks that enable networking equipment manufacturers to create standards-based products with shorter time to market and reduced development costs. Developers can use these opto-electronic components to build optical network solutions to meet a variety of high-bandwidth requirements in SONET/SDH, Optical Transport Network, Storage, or Ethernet networks.



The Intel® TXN31015 Optical Transceiver uses an 850 nanometer wavelength light source that supports link distances up to 150 meters. This SFF module has an LC Duplex receptacle interface compatible with the industry-standard LC optical connector. This 4/2/1G module is Class 1 laser product compliant with FDA Radiation Performance Standards (21 CFR Subchapter J) and international safety standard IEC 60825 and IEC 60950.

Product Overview

The Intel® TXN31015 Quad-Rate Small Form Factor (SFF) Optical Transceiver is Multi-Source Agreement (MSA) compatible. It provides integrated duplex data links for bi-directional communication over multimode optical fiber. The transceiver module is designed for high-speed Fibre Channel data links supporting up to 4.25Gbps (4X Fibre Channel rate). This rate-agile transceiver module can also operate at the 1X and 2X Fibre Channel rates (1.0625Gbps and 2.125Gbps) and the Gigabit Ethernet rate (1.25Gbps) without the use of a rate-select pin.

Intel Advantage

The Intel® 4/2/1Gbps Optical Transceiver family is the newest addition to Intel's extensive product line of optical transceivers for enterprise and storage applications. Intel's worldwide manufacturing operation provides a reliable, high-volume supply of quality products with excellent performance.

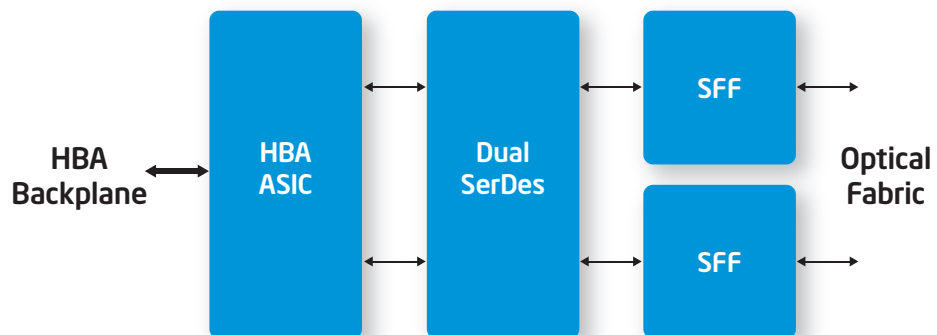
Product Highlights

- Compliant with Fibre Channel FC-PI standard
- 4.25/2.125/1.0625Gbps Fibre Channel compliant and 1.25Gbps Ethernet compatible
- Compatible with the SFF MSA specification
- Digital Diagnostics Monitoring support (SFF-8472)
- 850nm VCSEL
- TTL Loss of Signal (LOS) Output
- Transmitter Disable Input
- AC-coupled CML electrical Input/Output interface
- Class 1 Laser Safety product
- IEC 60825 and IEC 60950 safety certified
- Single +3.3V power supply
- 2x7 pin-out supports Digital Diagnostics
- Designed and verified as RoHS compliant

Key Applications

- Fibre Channel Host Bus Adapters (HBAs)

Dual-Port Host Bus Adapter Block Diagram



Features

Multi-rate support for 4/2/1 G FC and GbE standards

Advanced EMI performance

Extended operating temperature range

Advanced ESD protection

Benefits

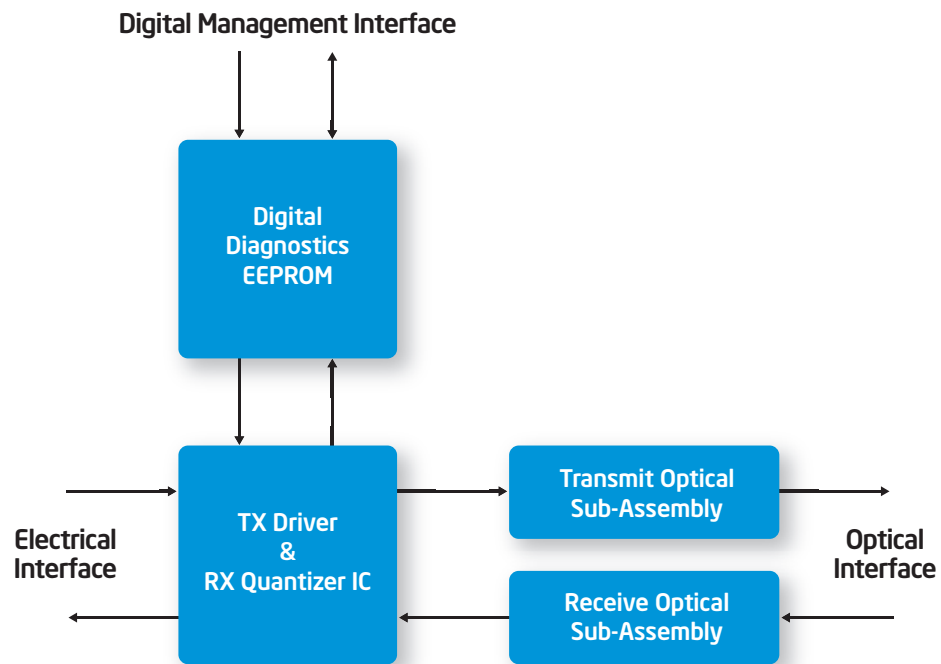
Streamline the module supply chain through the use of a single module to cover all FC data rates. Compatible with 1 GbE link.

Reduce overall system noise in high-port-density configurations

Meets stringent operating temperature requirements of Fibre Channel applications

Avoid ESD damage due to mishandling

SFF Optical Transceiver Internal Block Diagram



Support Collateral and Tools

The following documents are available only subject to NDA

Item	Description	Order Number
Evaluation Board	Intel® TXNEB31015 Evaluation Board and User Guide	Contact Local Sales Representative

Available Products

Part Number	Data Rate	Fiber Mode	Laser Wavelength	Link Distance	Operating Temperature
TXN31015D200000	Fibre Channel 4/2/1Gbps	Multimode	850nm	150m	-20 to 85°C

Intel Access

Hardware Design Resource Center	http://developer.intel.com
Networking Components Home Page	http://www.intel.com/netcomms/index.htm
Literature Ordering Center	http://www.intel.com/design/literature.com (800) 548-4725 7am - 7pm CST (USA and Canada) International Locations please call your local sales office.
General Information Hotline	(800) 628-8686 or (916) 356-3104 5am - 5pm PS

For more information, visit the Intel Web site at: developer.intel.com

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