# intel

# Intel<sup>®</sup> TXN31115

4/2/1Gbps Small Form Factor Pluggable Optical Transceivers

Intel<sup>®</sup> 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 or Ethernet networks.

# **Product Overview**

The Intel® TXN31115 4/2/1Gbps Small Form Factor Pluggable (SFP) Optical Transceivers are Multi-Source Agreement (MSA) compliant and provide high performance integrated duplex data links for bi-directional communication over multimode optical fiber. This module is designed for high-speed Fibre Channel data links at 4.25Gbps (4X Fibre Channel rate). The module is rate agile and can also work at the 1X and 2X Fibre Channel rates (1.0625Gbps and 2.125Gbps) and the Gigabit Ethernet rate (1.25Gbps).

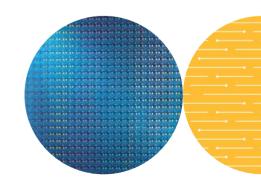
The Intel TXN31115 optical transceiver is provided with an LC receptacle compatible with the industry standard LC optical connector. The SFP 850nm transceivers use a single 3.3V supply.

This opto-electronic transceiver module is a class 1 laser product compliant with FDA Radiation Performance Standards, 21 CFR Subchapter J. This device is also class 1 laser compliant according to International Safety Standard IEC-825-1.



# **Intel Advantage**

The Intel TXN31115 4/2/1Gbps Small Form Factor Pluggable Optical Transceiver family is the newest addition to Intel's extensive product line of optical transceivers for enterprise and telecom applications. Intel's worldwide manufacturing operation provides a reliable, high volume supply of quality products with excellent performance.

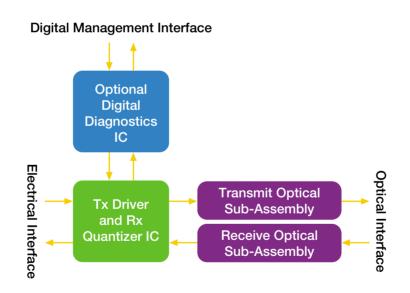


# **Product Highlights**

- Compliant with Fibre Channel FC-PI standard
- Compliant with Ethernet 802.3z standard
- Compliant with SFP MSA
- Hot Pluggable
- Bale latch design
- 850nm VCSEL emitter
- 4.25/2.125/1.0625Gbps Fibre Channel Performance
- 1.25Gbps Gigabit Ethernet Performance

- Rate agile
- Digital diagnostics
- TTL Signal Detect Output
- Transmitter Disable Input
- AC-coupled CML level Inputs/Outputs
- Single +3.3V Power Supply
- Class 1 Laser Safety Compliant
- UL 60950 Approved

# Intel® TXN31115 Small Form Factor Pluggable Block Diagram



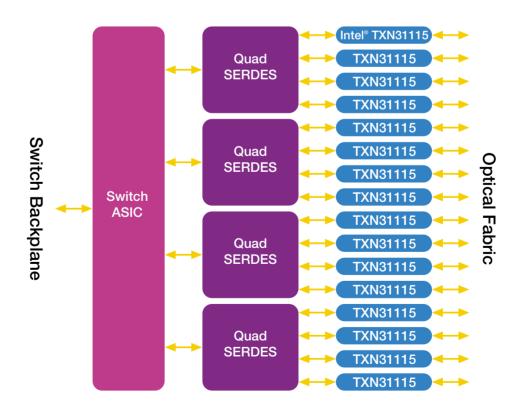
# **Key Applications**

- Fibre Channel Switches
- Fibre Channel target adapters

- 1Gbps Ethernet performance for use in Gigabit Ethernet switches
- Fibre Channel Host Bus Adapters (HBAs)

Features	Benefits	
4Gbps data rate	Removes capacity blockage by matching disk and server bus speeds	
SFP MSA compliant	Easy to design in	
Hot pluggable	Enables the system designer to install and change transceivers during manufacturing and in the field for design flexibility and reduced inventory cost	
Rate agile to 2Gbps and 1Gbps	Backwards compatibility with installed legacy systems	
Digital diagnostics	Provide remote link monitoring capability	

# Intel® TXN31115 Small Form Factor Pluggable System Diagram



16 Port Switch Line Card Storage Area or Local Area Network Switch Application

# **Support Collateral and Tools**

Item	Description	Order Number
Eval Board	TXNEB3111x Evaluation Board and User Guide	Contact Local Sales Rep

### **Intel Access**

Developer Web Site

Networking Components Home Page

Intel® Technical Documentation Center

http://developer.intel.com

http://developer.intel.com/design/network

http://intel.com/go/techdoc (800) 548-4725 7am - 7pm CST (USA and Canada) International Locations please call your local sales office.

(800) 628-8686 or (916) 356-3104 5am - 5pm PST

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

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