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Product Brief

Brocade® 100 Gb/s SR4 QSFP28 Optical Transceiver

Highlights

- Provides high system reliability based on rigorous qualification and certification testing
- Leverages unique design parameters to provide the highest performance with industry-leading Brocade solutions to support business continuity and disaster recovery
- Complies with 100GBASE-SR4 (IEEE 802.3bm) optical specifications, helping to ensure compatibility with other standards-compliant optics
- Helps eliminate issues resulting from unexpected design changes, providing ongoing end-to-end compatibility
- Optimizes connectivity with Brocade platforms to enable maximum cable distance

Key Features

- Hot-swappable, low-voltage (3.3V) digital diagnostic Ethernet optical transceiver that supports high-speed serial links over 1×12 multimode fiber at a signaling rate of 4×25.8 Gb/s
- 4×25.8 Gb/s 850 nm lasers
- Optical interface specifications per IEEE 802.3bm 100GBASE-SR4
- Diagnostic features per QSFP28 MSA that provide real-time monitoring of:
  - Transmitted optical power
  - Received optical power
  - Laser bias current
  - Temperature
  - Supply voltage

Optimized, Certified Optical Transceivers for Extending Service Provider and Data Center Networks

Overview

Today's service provider networking environments and enterprise data centers are undergoing an infrastructure transformation, requiring higher speeds, greater scalability, and higher levels of performance and reliability to better meet the demands of business. As speed and performance needs increase, optical transceivers have become an integral part of overall system design. However, optical transceiver design margins and parameters vary widely, and can be the difference between an optimized, highly reliable fabric and incompatibility issues that drive up support costs.

The Brocade® 100 Gb/s SR4 QSFP28 optical transceivers provide state-of-the-art performance o help IT organizations achieve new levels of infrastructure consolidation while expanding the capabilities of their applications and services.

End-to-End Compatibility and Reliability

The Brocade 100 Gb/s SR4 QSFP28 supports highly reliable operations in service provider and data center networks. It undergoes rigorous qualification and certification testing to provide an end-to-end solution that is easier to maintain—helping improve the availability of data center networks supporting mission-critical applications.

Family of Optical Transceivers

Brocade offers a comprehensive family of reliable optical transceivers to provide highly compatible, high-performance connectivity to Brocade director and switch products.

For additional ordering information, contact a Brocade representative or visit www.brocade.com.

Maximizing Investments

To help optimize technology investments, Brocade, a Broadcom Limited Company, and its partners offer complete solutions that include professional services, technical support, and education. For additional information, contact a Brocade sales partner or visit www.brocade.com.

Key Features (con't)

- Industry-standard MPO 1×12 connector
- 70m link length OM3 multimode fiber, 100m link length on OM4 multimode fiber
- IEC 60825-1 Class 1/CDRH Class 1 laser, eye-safe
- Compliance with the Restriction on Hazardous Substances (RoHS) directive

Ordering Part Number

- 100G-SR4-0288

Regulatory and Standards Compliance

- North America: UL/CSA 60950, CDRH Class 1
- European Union: EN 60950, EN 60825 Class 1

Caution

- Do not look through the optical ports, as it is a potential eye hazard.
- SFP is an ESD sensitivity Class 2 device. It should be handled accordingly.

System Specifications	
Parameter	**Description**
Performance	4×25.8 Gb/s line speed, full duplex
Media	Hot-pluggable, industry-standard QSFP28, MPO 1×12 Required cable: 12-fiber MPO female-to-female MMF (70m on OM3 fiber, 100m on OM4 fiber)
Operating Parameters	Transmit (Tx): • Wavelength: 10 channels, 840 to 860 nm • Average power: −9.1 to +2.4 dBm per channel • RIN: −128 dB/Hz max. • Optical return loss: 12 dB max. • OMA: −7.1 to +3.0 dBm per channel Receive (Rx): • Wavelength: 4 channels, 840 to 860 nm • Average power per lane: −11.0 to +2.4 dBm per channel • Optical return loss: −12 dB max. • SRS OMA: −5.6 dBm max. per channel
Mechanical Specifications	
Size	Width: 41.65 mm (1.64 inches) Height: 17.40 mm (0.69 inches) Depth: 107.50 mm (4.23 inches)
Environmental Specifications	
Storage Temperature	−40°C to +85°C (−40°F to +185°F)
Power Specifications	
Power Dissipation	2.5W max.

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For product information and a complete list of distributors, please visit our website at: brocade.com

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