

Product Brief

Highlights

- Provides high connectivity reliability through rigorous qualification and certification processes.
- Provides scalable connectivity for Brocade X7 Director chassis-to-chassis interconnect.
- Operates over 4-lane parallel multi-mode fiber (MMF) and is QSFP MSA compliant.
- Uses industry-standard MPO-12 UPC connector.
- Supports up to 100m link length over OM4 fiber.
- IEC 60825-1 Class 1/CDRH Class 1 laser, eye-safe.
- RoHS compliant.

Ordering Part Number

XBR-000420 (1-pack)

Brocade[®] Gen 7 ICL QSFP

Optimized, Certified Optical Transceiver for Data Center Network Connectivity

Overview

The Brocade Gen 7 ICL Quad Small Form-Factor Pluggable (QSFP) transceivers, part of the Brocade family of optical transceivers, are optimized for Brocade X7 Director ICL connections. The Brocade Gen 7 ICL QSFP optics are hot-swappable, low-voltage (3.3V) digital diagnostic optical transceivers. This optical transceiver operates over 4-lane parallel multi-mode fiber (MMF), using a nominal wavelength of 850 nm, and a standard SFF-8665 compliant MPO-12 UPC connector.

Diagnostic features per SFF-8636 Diagnostic Monitoring Interface for optical transceivers, providing real-time monitoring of the following:

- Transmitted optical power
- Received optical power
- Laser bias current
- Temperature
- Supply voltage

End-to-End Compatibility and Reliability

The Brocade Gen 7 ICL QSFP modules undergo rigorous qualification and certification testing to guarantee compatibility and ensure highly reliable connectivity in a storage network fabric.

Family of Optical Transceivers

Broadcom offers a comprehensive family of reliable optical transceivers to provide connectivity to Brocade director and switch products.

For additional information, contact a Brocade representative or visit brocade.com/products/fibre-channel-networking/transceiver-modules.

Brocade Gen 7 ICL QSFP Specifications

System	
Performance	4x53.125Gb/s line speed, full duplex
Media	Hot-pluggable, industry-standard Quad Small Form-Factor Pluggable (QSFP), MPO connector
Operating Parameters	Transmit (Tx): <ul style="list-style-type: none"> • Wavelength: 840 nm to 860 nm • Spectral width: 0.50 nm • Average power: -2.0 dBm to +3.0 dBm per channel • Optical return loss: -18 dB max • OMA: -2.0 dBm to +3.0 dBm per channel Receive (Rx): <ul style="list-style-type: none"> • Wavelength: 840 nm to 860 nm • Average power: +5 dBm • Optical return loss: -12 dB min • Unstressed sensitivity: -5 dBm • SRS OMA: -3.0 dBm
Operating Distances	<ul style="list-style-type: none"> • 100m on OM4 multi-mode fiber • 70m on OM3 multi-mode fiber
Mechanical	
Size	Width: 18.35 mm (0.72 in.) Height: 13.25 mm (0.52 in.) Depth: 71.0 mm (2.79 in.)
Environmental	
Storage Temperature	-40°C to 85°C (-40°F to 185°F)
Power	
Power Dissipation	4.5W max
Regulatory and Standards Compliance	
North America	UL/CSA 62368, 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. The QSFP is an ESD sensitivity Class 1 device. It should be handled accordingly.