QSFP56 200G SR4 100m

QSFP56 transceiver · 200G · 850 nm · 100 m OM4 / 70 m OM3 · MPO-12/UPC · NVIDIA compatible

The GLOBALfiber Q200G-SR4-NV is a 200G QSFP56 transceiver for NVIDIA InfiniBand and Ethernet networks. It uses 4 × 50G PAM4 lanes at 850 nm for links up to 100 m OM4 / 70 m OM3 over MPO-12/UPC. The module is coded for NVIDIA equipment and is available with InfiniBand or Ethernet coding.



KEY FEATURES

- QSFP56 form factor
- 200G, 4 × 50G PAM4, 26.5625 GBd
- Wavelength 850 nm
- Reach up to 100 m OM4 / 70 m OM3
- MPO-12/UPC optical connector
- Max. power consumption 5 W
- Digital diagnostics (DDM), hot-pluggable
- Case temperature 0 to +70 °C

APPLICATIONS & COMPATIBILITY

- NVIDIA switches: Quantum QM8700/QM8790
- NVIDIA adapters / systems: ConnectX-6, ConnectX-6 Dx, ConnectX-7 (QSFP112-port), BlueField-2/3
- Replaces NVIDIA 980-9I20T-00V000), MMA1T00-HS, MMA1T00-HS (980-9I17S-00HS00, MMA1T00-VS, MMA1T00-VS (980-9I17S-00HS00

KEY SPECIFICATIONS

Form factor	QSFP56
Data rate	200G
Lanes	4 × 50G PAM4, 26.5625 GBd
Wavelength	850 nm
Reach	100 m OM4 / 70 m OM3
Connector	MPO-12/UPC
Fiber	Multimode
Max. power	5 W
Case temperature	0 to +70 °C
Protocol	InfiniBand or Ethernet (HDR / 200GbE)

ORDERING INFORMATION

GLOBALfiber item	Coding	Replaces NVIDIA	Description
Q200G-SR4-NVI	IB InfiniBand	MMA1T00-HS	QSFP56 200G SR4 100m
Q200G-SR4-NVE	ETH Ethernet	MMA1T00-VS	QSFP56 200G SR4 100m

Choose the coding that matches the host: InfiniBand for NVIDIA Quantum switches, Ethernet for NVIDIA Spectrum switches. Other coding on request: salg@globalfiber.no.

ABSOLUTE MAXIMUM RATINGS

Parameter	Min	Max	Unit
Supply voltage	-0.5	3.6	V
Control input voltage	-0.3	Vcc+0.5	V
Storage temperature	-40	85	°C
Relative humidity (non-condensing)	5	95	%

RECOMMENDED OPERATING CONDITIONS

Parameter	Min	Typ	Max	Unit
Case temperature	0	–	70	°C
Supply voltage	3.135	3.3	3.465	V
Power consumption	–	–	5	W
Link distance	0.5	–	100	m

OPTICAL CHARACTERISTICS – TRANSMITTER (PER LANE)

Parameter	Min	Typ	Max	Unit
Center wavelength	840	850	860	nm
RMS spectral width	–	–	0.6	nm
Average launch power per lane	-2.0	–	3.0	dBm
OMA per lane	-2.0	–	3.0	dBm
Extinction ratio	4.0	–	6.0	dB
Average power with TX off	–	–	-30	dBm

OPTICAL CHARACTERISTICS – RECEIVER (PER LANE)

Parameter	Min	Max	Unit
Damage threshold	5.0	–	dBm
Unstressed sensitivity OMA (BER 1E-6)	–	-5.0	dBm
Stressed sensitivity OMA (BER 1E-4)	–	-3.0	dBm
Receiver reflectance	–	-18	dB
LOS assert	–	-14	dBm

DIGITAL DIAGNOSTICS (DDM)

Parameter	Range	Accuracy
Case temperature	0 to 70 °C	±3 °C
Supply voltage	0 to Vcc	±0.1 V
TX bias per lane	0 to 100 mA	±10 %
TX power per lane	Operating range	±3 dB
RX power per lane	Operating range	±3 dB

COMPLIANCE

- IEEE 802.3cd (200GBASE-SR4)
- QSFP56 MSA
- SFF-8636
- Class 1 laser product
- RoHS compliant

INSTALLATION NOTES

- Use in QSFP56 host ports.
- Confirm host support, port mode, firmware version and FEC before deployment.
- Check the optical link budget and fiber loss for the full link (multimode fiber, MPO-12/UPC).
- Keep connectors clean and capped when not in use.

NVIDIA, Quantum, Spectrum, ConnectX, BlueField and DGX are trademarks of NVIDIA Corporation. GLOBALfiber products are third-party compatible and are not manufactured or endorsed by NVIDIA. Specifications are subject to change without notice.