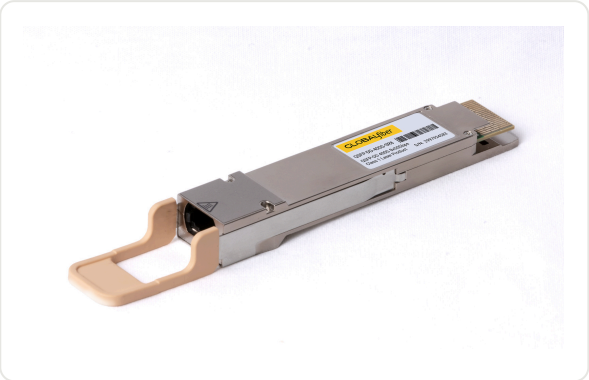
QSFP-DD 400G SR8 100m

QSFP-DD transceiver · 400G · 850 nm · 100 m OM4 / 70 m OM3 · MPO-16/APC · NVIDIA compatible

The GLOBALfiber QDD400G-SR8-NVE is a 400G QSFP-DD transceiver for NVIDIA Ethernet networks. It uses 8 × 50G PAM4 lanes at 850 nm for links up to 100 m OM4 / 70 m OM3 over MPO-16/APC. The module is coded for NVIDIA equipment and is available with Ethernet coding.



KEY FEATURES

- QSFP-DD form factor
- 400G, 8 × 50G PAM4, 26.5625 GBd
- Wavelength 850 nm
- Reach up to 100 m OM4 / 70 m OM3
- MPO-16/APC optical connector
- Max. power consumption 10 W
- Digital diagnostics (DDM), hot-pluggable
- Case temperature 0 to +70 °C

APPLICATIONS & COMPATIBILITY

- NVIDIA switches: Spectrum-3 SN4700, Spectrum-4 SN5400
- Replaces NVIDIA T-DQ8FNS-N00-M

KEY SPECIFICATIONS

Form factor	QSFP-DD
Data rate	400G
Lanes	8 × 50G PAM4, 26.5625 GBd
Wavelength	850 nm
Reach	100 m OM4 / 70 m OM3
Connector	MPO-16/APC
Fiber	Multimode
Max. power	10 W
Case temperature	0 to +70 °C
Protocol	Ethernet (400GbE)

ORDERING INFORMATION

GLOBALfiber item	Coding	Replaces NVIDIA	Description
QDD400G-SR8-NVE	ETH Ethernet	T-DQ8FNS-N00-M	QSFP-DD 400G SR8 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	–	–	10	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	-6.5	–	4.0	dBm
OMA outer per lane	-4.0	–	3.0	dBm
Launch OMA outer minus TDECQ	-5.9	–	–	dBm
TDECQ	–	–	4.9	dB
Extinction ratio	3.0	–	–	dB
Average power with TX off	–	–	-30	dBm

OPTICAL CHARACTERISTICS – RECEIVER (PER LANE)

Parameter	Min	Max	Unit
Damage threshold	5	–	dBm
Average receive power per lane	-8.4	4.0	dBm
Receive power OMA outer	–	3.0	dBm
Stressed sensitivity OMA outer	–	-3.0	dBm
Receiver reflectance	–	-12	dB

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 802.3cm (400GBASE-SR8)
- QSFP-DD MSA
- CMIS 4.0
- Class 1 laser product
- RoHS compliant

INSTALLATION NOTES

- Use in QSFP-DD 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-16/APC).
- Keep connectors clean and capped when not in use.

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