OSFP 800G Finned Top 2xVR4 50m

OSFP transceiver (finned top) · 800G · 8 × 100G PAM4 · 850 nm · 30 m OM3 / 50 m OM4 · dual MPO-12/APC

The GLOBALfiber OSFP-800G-F-2VR4 is an 800G OSFP transceiver with finned top housing for multimode links up to 50 m on OM4 and 30 m on OM3. Integrated 850 nm VCSEL and photodetector arrays carry 8 × 106.25 Gb/s PAM4 over two MPO-12/APC connections, and the host interface is 800GAUI-8.

KEY FEATURES

- OSFP form factor, finned top, hot-pluggable
- 800G: 8 × 106.25 Gb/s PAM4 optical and electrical (800GAUI-8)
- Wavelength 850 nm, VCSEL / PD arrays
- Reach 30 m OM3 / 50 m OM4
- Dual MPO-12/APC optical connectors
- Max. power 16 W, single 3.3 V supply, CMIS 5.1
- Case temperature 0 to +70 °C

APPLICATIONS & COMPATIBILITY

- Data centres, cloud and high-performance computing networks over multimode fiber
- Coding available for the major switch and router vendors. Specify the host equipment when ordering.
- Provide equipment model, port configuration and software version so support can be checked. Coding does not confirm compatibility with every model or mode.

KEY SPECIFICATIONS

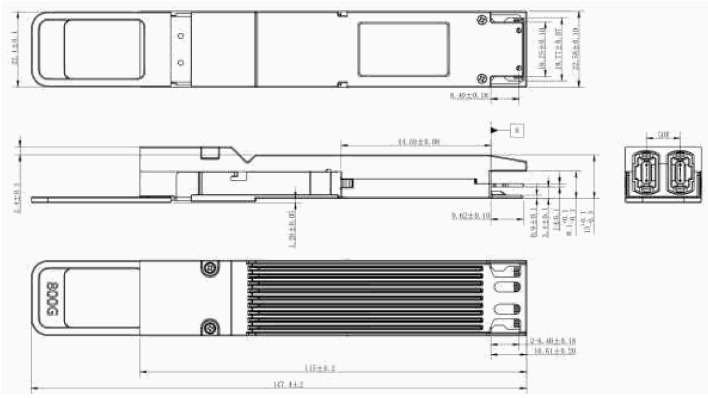
Form factor	OSFP (finned top)
Data rate	800G (2 × 400G)
Optical lanes	8 × 106.25 Gb/s PAM4
Electrical lanes	8 × 106.25 Gb/s PAM4
Wavelength	850 nm
Reach	30 m OM3 / 50 m OM4
Connector	Dual MPO-12/APC
Fiber	Multimode
Max. power	16 W
Case temperature	0 to +70 °C

ORDERING INFORMATION

GLOBALfiber item	Description
OSFP-800G-F-2VR4	OSFP 800G Finned Top 2xVR4 2x400Gbps 50m 850nm Dual MPO-12/APC MM

Other coding on request: salg@globalfiber.no.

MECHANICAL DIMENSIONS



All dimensions in mm. Drawing for reference only.

ABSOLUTE MAXIMUM RATINGS

Parameter	Min	Max	Unit
Supply voltage	0	4	V
Storage temperature	-40	85	°C
Relative humidity (non-condensing)	5	85	%

RECOMMENDED OPERATING CONDITIONS

Parameter	Min	Typ	Max	Unit
Case temperature	0	–	70	°C
Supply voltage	3.135	3.3	3.465	V
Power dissipation	–	–	16	W
Signalling rate per lane (±100 ppm)	–	53.125	–	GBd
Link distance OM3 / OM4	0.5 m	–	30 / 50 m	
Pre-FEC BER	–	–	2.4E-4	

OPTICAL CHARACTERISTICS – TRANSMITTER (PER LANE)

Parameter	Min	Typ	Max	Unit
Center wavelength	–	850	–	nm
RMS spectral width	–	–	0.6	nm
Average launch power per lane	-4.6	–	4	dBm
OMAouter per lane (TDECQ ≤ 1.8 dB)	-2.6	–	3.5	dBm
OMAouter per lane (1.8 < TDECQ ≤ 4.4 dB)	-4.4 + TDECQ	–	3.5	dBm
TDECQ / TECQ	–	–	4.4	dB
Extinction ratio	2.5	–	–	dB
Transmitter excursion	–	–	2	dB
Transition time	–	–	17	ps
Average launch power, TX off	–	–	-30	dBm
RIN12OMA	–	–	-131	dB/Hz
Optical return loss tolerance	–	–	12	dB

OPTICAL CHARACTERISTICS – RECEIVER (PER LANE)

Parameter	Min	Max	Unit
Average receive power per lane	-6.4	4	dBm
Receive OMAouter per lane	–	3.5	dBm
Damage threshold	5	–	dBm
Sensitivity, TECQ ≤ 1.8 dB [1]	–	-4.6	dBm
Sensitivity, 1.8 < TECQ ≤ 4.4 dB [1]	–	-6.4 + TECQ	dBm
Stressed sensitivity (OMAouter)	–	-2	dBm
Receiver reflectance	–	-12	dB

[1] OMAouter. Stress test: SECQ 4.4 dB, aggressor OMAouter 3.5 dBm. Encircled flux ≥ 86 % at 19 µm, ≤ 30 % at 4.5 µm.

MANAGEMENT & DIAGNOSTICS

- CMIS 5.1 over I²C
- DDM accuracy: temperature ±3 °C, supply ±5 %, bias ±10 %, TX/RX power ±3 dB
- Controls: LPWn/PRSn, INT/RSTn

COMPLIANCE

- OSFP MSA 5.0
- 800GBASE-VR8 / 2 × 400GBASE-VR4
- 800GAUI-8 electrical
- CMIS 5.1
- RoHS 2.0 compliant

INSTALLATION NOTES

- Use in OSFP host ports. Confirm host support, port mode, firmware version and FEC before deployment.
- Check host cooling and power budget for a 16 W module.
- Check the optical link budget and fiber loss for the full link (OM3/OM4 multimode, dual MPO-12/APC).
- Keep connectors clean and capped when not in use.

All trademarks are the property of their respective owners. GLOBALfiber products are third-party compatible and are not manufactured or endorsed by the equipment vendors. Specifications are subject to change without notice.