

800G OSFP112DD MMF MPO 850nm

Variants

50M -OM4 100M-OM4

Details

800G OSFP112DD SR8 Optical Transceiver

Product Overview

The 800G OSFP112DD SR8 transceiver is an advanced parallel-optics module designed for ultra-high-density data center links. It supports 8x100 Gbps PAM4 channels in each direction, delivering a total bandwidth of 800 Gbps over OM4 multimode fiber. Built on the OSFP112 Double-Density (DD) platform, it provides excellent electrical performance, efficient heat dissipation, and full CMIS compatibility. Ideal for switches, routers, and AI/ML clusters requiring high bandwidth and density.

Main Features

- 800G bandwidth (8x100G PAM4 lanes)
- IEEE 802.3db 800GBASE-SR8 compliant
- 850 nm VCSEL + high-sensitivity PIN receiver
- Dual MTP/MPO-12 optical connectors
- Up to 100 m over OM4 MMF
- Low power consumption ? 16W
- Hot-pluggable OSFP112DD form factor
- CMIS v4/v5 digital diagnostics
- Operating temperature: 0°C to 70°C
- RoHS & IEC Class 1 compliant

Applications

- 800G Ethernet short-reach links

Spine-leaf / TOR data center networks

AI & HPC cluster interconnects

InfiniBand NDR transmission

Cloud & enterprise aggregation

Technical Highlights

Parameter	Description
Form Factor	OSFP112 Double Density
Optical Interface	Dual MPO-12 (SR8)
Transmission Rate	8 × 106.25 Gbps (PAM4)
Wavelength	850 nm
Fiber Type	OM4 / OM5 Multimode
Maximum Reach	50 m / 100 m (OM4)
TX Type	VCSEL Array
RX Type	PIN Array
Power Supply	3.3 V ±5%
Power Consumption	? 16W
Temperature	0°C to 70°C
FEC	RS-(544,514)
Management	CMIS v4/v5 (I ² C)
DDM / DOM	Supported

Optical Characteristics (Per Lane)

Parameter	Min	Typical	Max	Unit
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Central Wavelength	840	850	860	nm
Average Launch Power	-4.6	—	+4.0	dBm
OMA	-2.6	—	+3.5	dBm
Extinction Ratio	2.5	—	—	dB
TDECQ	—	—	4.4	dB
Receiver Sensitivity	—	—	-6.2	dBm
Receiver Overload	—	—	+4.0	dBm