

400G OSFP-DD SR8 MPO

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Variants

100M SR8 MPO

Details

400G QSFP-DD SR8 Optical Transceiver

Main Features

No.	Feature
1	8 independent parallel optical channels
2	Each channel data rate up to 26.56GBaud with CDR
3	Hot pluggable QSFP-DD form factor
4	Up to 100m link on OM4 multimode fiber
5	850nm VCSEL / PD array technology
6	CML compatible electrical I/O
7	QSFP-DD MSA compliant
8	MPO / MTP terminated optical interface
9	MPO-16 APC optical receptacle
10	CMIS 4.0 compliant

11	Digital monitoring for VCSEL bias, TX/RX power, module temperature and supply voltage
12	RoHS II compliant
13	Commercial case temperature: 0°C to 70°C

Applications

No.	Application
1	High-performance computing interconnect
2	Data center

Description

QDD-MM85QG-SR8C is a QSFP-DD optical transceiver designed for 8 × 26.56GBaud optical links. It complies with QSFP-DD MSA specifications and supports transmission up to 100m over OM4 multimode fiber.

Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit	Notes
Storage Ambient Temperature	Tstg	-40	+85	°C	Non-condensing
Relative Humidity - Storage	RHS	0	95	%	-
Relative Humidity - Operating	RHO	0	85	%	-

Module Supply Voltage	VCC	-0.5	3.6	V	-
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Recommended Operating Conditions

Parameter	Symbol	Min	Typ	Max	Units
Case Operating Temperature	Tcase	0	+25	+70	°C
Module Supply Voltage	VCC	3.14	3.3	3.46	V
Power Consumption	P	-	-	10	W
Signaling Speed Per Channel	S	-	26.56	-	GBd

Transmitter Electrical Interfaces

Parameter	Symbol	Min	Typ	Max	Units
Tx Differential Input Voltage	VIN	-	-	900	mV
Tx Differential Input Impedance	ZIN	-	100	-	?

Rx Differential Output Voltage	VOUT	-	-	900	mV
Rx Differential Output Impedance	ZOUT	-	100	-	?

Receiver Optical Characteristics

Parameter	Symbol	Min	Typ	Max	Units
Center Wavelength	?	840	850	860	nm
Signaling Rate	SR	-	26.56	-	GBd
Average Receive Power	PIN	-8.4	-	4	dBm
Rx LOS Assert	PA	-24.6	-	-	dBm
Rx LOS De-assert	PD	-	-	-7	dBm

Pin Description

Pin	Symbol	Description	Notes
1	GND	Ground	-
2	Tx2n	Transmitter Inverted Data Input	-

3	Tx2p	Transmitter Non-Inverted Data Input	-
8	ModSelL	Module Select	-
9	ResetL	Module Reset	-
11	SCL	I ² C Serial Clock	-
12	SDA	I ² C Serial Data	-
27	ModPrsL	Module Present	-
28	IntL	Interrupt	-
29	VCC Tx	Transmitter +3.3V Power	-