

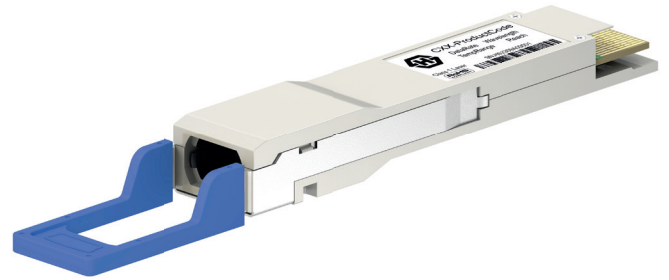
QSFP-DD 400G DR4 TRANSCEIVER

QCM-102A03 PARALLEL TRANSCEIVER

PRODUCT OVERVIEW

Properties

- Data Rate 425 Gbps
- Temperature Range 0 ... 70°C
- Reach up to 500m
- Wavelength 1310nm
- MPO/MTP-12 Adapter
- Singlemode Fibre
- Link Budget At Least 3 dB



General Data

Form Factor	QSFP28
Data Rate Standards	400GBASE-DR4
	4x 100GBASE-DR
Protocol	400G Ethernet and 4x 100G Ethernet
Media Type	SMF28
Supply Current	< 3830 mA
Adapter	MPO/MTP-12 (APC)
Modulation Format	PAM4
CDR	Double
Operation Temperature	0°C ... 70°C
Supply Voltage Typical	3.13 V ... 3.47 V
Power Consumption	< 10 W
Digital Diagnostic Management (DDM)	Built-in
Laser Hazard Level	1

Absolute Maximum Ratings

Maximum Supply Voltage Range	0 V ... 3.6 V
Maximum Storage Temperature Range	-40°C ... 85°C
Maximum Relative Humidity Range	5 % ... 95 %



Transmitter Specifications

Laser Type	Cooled DFB
Operating Wavelength Range	1304.5 nm ... 1317.5nm
Grid	None
Average Launch Power Per Lane	-2.9 dBm ... 4 dBm
Outer Optical Modulation Amplitude (OMA)	-0.8 dBm ... 4.2 dBm
Extinction Ratio	> 3.5 dB
Side Mode Suppression	> 30 dB
Supported Data Rate	425 GB/s
Transmitter and Dispersion Eye Closure for PAM4 (TDECQ)	< 3.4 dB
OMA - TDECQ	-2.2

Receiver Specifications

Receiver Type	PIN
Operating Wavelength Range	1304.5 nm ... 1317.5nm
Receiver Sensitivity (OMA)	< -3.9 dBm
Stressed Receiver Sensitivity (OMA)	< -1.9 dBm
Maximum Optical Input Power per Lane	5 dBm
LOS De-Assert	> -7.4 dBm
Receiver LOS Assert	< -15 dBm
Supported Data Rate	425 GB/s
Average Launch Power Per Lane	-5.9 dBm ... 4 dBm

Ordering Information

Part Code	Compatibility Code Explanation	Wavelength Code Explanation
CQS-102A03xxxx-13	"xxxx" is an alphanumeric string, describing the compatibility. "0000" means no special coding to ensure compatibility with a special switch type.	-13: 1310nm