XCE-Q2S24xx

100G QSFP28 to 4x 25G SFP28
Active Optical Cable

Applications

- 100GbE to 4 25GBASE-SR Ethernet
- 40GbE to 4x 10GBase-SR
- InfiniBand QDR, SDR, DDR
- Servers, Switches, storage and host card

Features

- Electrical interface compliant to SFF-8436 and SFF-8431
- 850 nm VCSEL laser and PIN photo-detector
- Maximum link length of 70 m on OM3 MMF and 100 m on OM4 MMF
- Digital diagnostics functions are available via the I2C interface
- Hot pluggable
- RoHS compatible
- Operating temperature range 0 °C to +70 °C (Standard)

Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit
Supply Voltage	Vcc	-0.3	3.6	V
Storage Temperature	T_s	-20	85	℃
Relative Humidity	RH	0	85	%
Case Operating Temperature	TOPC	0	70	℃

Recommended Operating Conditions

Parameter	Symbol	Min	Typical	Max	Unit
Operating Case Temperature	Tc	0	-	+70	℃
Power Supply Voltage	Vcc	3.13	3.3	3.47	V
Supply current (SFP28)	Icc	-	-	300	mA
Supply current (QSFP28)	Icc	-	-	650	mA
Channel Data Rate	Dr	-	25.78125	-	Gbps

Optical and Electrical Specifications

Parameter	Symbol	Min	Typical	Max	Unit
QSFP28 Transmitter					
Centre Wavelength	λc	840	850	860	nm
RMS spectral width	σ			0.65	nm
Average launch power, each lane	PAVG	-7.5	-1	+2.5	dBm
Input differential swing	Vin PP	300		1100	mV
Input differential impedance	Zin	90	100	110	Ω
Extinction Ratio	ER	2.0			dB
SFP28 Transmitter					
Input differential impedance	Zin	90	100	110	Ω
Differential Data Input Swing	Vin PP	300		1100	m V
Transmit Enable Voltage	VEN			0.8	V
Transmit Disable Voltage	VD	2.0			V
Average launch power	PAVG	-7.5	-1	+2.5	dB m
Extinction Ratio	ER	2.0			dB
Centre Wavelength	λc	840	850	860	nm

Note

Measuring condition：Channel Data Rate 25.78125Gbps, VR CCR=3.3V, PRBS31, Case Operating Temperature 0~70℃

Parameter	Symbol	Min	Typical	Max	Unit
QSFP28 Receiver					
Center Wavelength	λc	840	850	860	nm
Bit Error Rate	BER			E-12	
Receiver Overload	PinMAX	2.5			dBm
Output Differential Impedance	Vout PP	500		800	mV
Output Differential Impedance	Zout	90	100	110	Ω
SFP28 Receiver					
Center Wavelength	λc	840	850	860	nm
Differential Data Output Swing	Vout PP	500		800	mV
Bit Error Rate	BER			E-12	
Receiver Overload	PinMAX	2.5			dBm
Output Differential Impedance	Zout	90	100	110	ohm
LOS Fault	VOH	2.4			V
LOS Normal	VOL			0.4	V

Note

Measuring condition: Channel Data Rate 25.78125 Gbps, VRCCR=3.3 V, PRBS31, Case Operating Temperature 0~70℃

Ordering information[1]

Part number	Product Description
XCE-Q2S24xx	100G/40G to 4x 25/10G, 0-70°C, xx: 01 1 m, 02 2 m, 03 3 m, 05 5 m, 07 7 m, 10 10 m

Notes

[1] For accurate order specification please contact XenOpt reseller before placing an order. The content of this document is subject to change without notice. XenOpt does not guarantee errorless or outdated information.
Please specify any compatibility requirements at time of ordering. Standard MSA compatible pluggable components may not work or some function of these components may not be available in devices that require customized compatible devices. Pluggable components compatible with one type of communications equipment may not work in other type of communications equipment.

To find out more, please contact: