

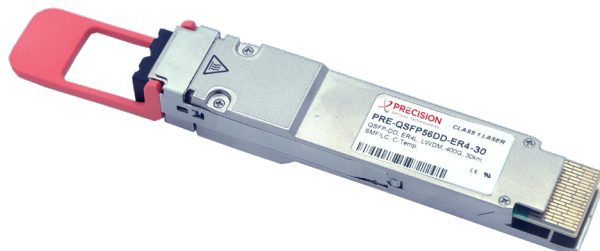
PRE-QSFP56DD-ER4-30

QSFP-DD, ER4-30, nLWDM, 400G, 30km, SMF/LC, C-Temp, DDM



Product Features:

- Single Wave PAM4 Modulation
- EML Transmitters
- Narrow LWDM (nLWDM) Wavelengths
- SMF Transmission Medium
- 425Gbps Max. Data Rate
- 30km Reach with Host based KP4 FEC
- Dual LC/UPC Connector
- C-Temp Rated
- <12W Power Consumption



Product Applications:

- Transport Networks
- Backhaul Networks
- 400G Ethernet

Standards:

- QSFP-DD MSA
- CMIS
- 400G-ER4-30 MSA
- RoHS
- Class 1 Laser

General Specifications:

Parameter	Symbol	Min	Typical	Max	Unit
Case Operating Temperature	T_{op}	0	-	70	°C
Power Consumption	P_w	-	-	12	W
Power Supply Current	I_{cc}	-	-	3.64	A
Power Supply Voltage	V_{cc}	3.135	3.3	3.465	V
Storage Humidity	H_s	15	-	85	%
Storage Temperature	T_s	-40	-	85	°C
Transmission Distance	TD	-	-	30	km
Data Rate (PAM4), per Lane	DR_T	-	53.125	-	Gbps

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Optical Characteristics: Transmitter

Parameter	Symbol	Min	Typical	Max	Unit
Center Wavelength L0	λ_c	1304.06	1304.58	1305.1	nm
Center Wavelength L1	λ_c	1306.33	1306.85	1307.38	nm
Center Wavelength L2	λ_c	1308.61	1309.14	1309.66	nm
Center Wavelength L3	λ_c	1310.9	1311.43	1311.96	nm
Total Average Launch Power	P_t	-	-	11.6	dBm
Transmit Power per Lane (Avg.)	P_{AVG}	0	-	5.6	dBm
Outer OMA, per Lane	OMA_{OUTER}	3	-	6.4	dBm
TDEC for PAM4 per Lane	TDECQ	-	-	3.9	dB
TEC for PAM4, per Lane	TECQ	-	-	3.5	dB
Side Mode Suppression Ratio	SMSR	30	-	-	dB
Transmitter Reflectance	-	-	-	-26	dB
Output Power Off, per Lane	P_{OFF}	-	-	-15	dBm
Optical Return Loss Tolerance	TOL	-	-	15	dB
Extinction Ratio	ER	5	-	-	dB

Optical Characteristics: Receiver

Parameter	Symbol	Min	Typical	Max	Unit
Avg. Receive Power, each Lane	P_{AVG}	-14.7	-	-3.4	dBm
Input Saturation Power	P_{SAT}	-3.4	-	-	dBm
Damage Threshold	P_{THD}	-2.4	-	-	dBm
Receiver Sensitivity	R_{SENS}	-	-	-12.1	dBm
Receiver Reflectance	R_r	-	-	-26	dBm
LOS Assert	LOS_A	-	-	-20	dBm
LOS De-Assert	LOS_D	-	-	-17	dBm
LOS Hysteresis	LOS_H	0.5	-	-	dB

Product Ordering Information

Part Number	Description
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r2_11182025