QSFP-40G-PDAC-xM

40GBase
DAC

Datasheet | product specifications

ESD threshold 1kV for SFI pins and 2kV for all other electrical input pins, tested per MIL-STD-883G, Method 3015.4 /JESD22-A114A (HBM). However, normal ESD precautions are still required during the handling of this module.

Features

- Operating case temperature: 0°C to 70°C
- Supports 10,3125Gbps Data rate
- Passive copper cable
- Up to 7m reach
- Pull-to-release slide latch design

Product may differ from the picture

Applications

- Suitible for 40G Ethernet usage

Compliances

- Compliant with RoHS
- Compliant with SFF- 8436

Overview

Part Number	Data Rate	Cable Length	AWG	Temperature
QSFP-40G-PDAC-0.4M	10,3125Gbps	0,4m	30	0°C to 70°C
QSFP-40G-PDAC-0.5M	10,3125Gbps	0,5m	30	0°C to 70°C
QSFP-40G-PDAC-1M	10,3125Gbps	1m	30	0°C to 70°C
QSFP-40G-PDAC-1.5M	10,3125Gbps	1,5m	30	0°C to 70°C
QSFP-40G-PDAC-2M	10,3125Gbps	2m	30	0°C to 70°C
QSFP-40G-PDAC-2.5M	10,3125Gbps	2,5m	30	0°C to 70°C
QSFP-40G-PDAC-3M	10,3125Gbps	3m	30	0°C to 70°C
QSFP-40G-PDAC-4M	10,3125Gbps	4m	26	0°C to 70°C
QSFP-40G-PDAC-5M	10,3125Gbps	5m	24	0°C to 70°C
QSFP-40G-PDAC-7M	10,3125Gbps	7m	24	0°C to 70°C

Ordering Information

Part Number	Product Description
QSFP-40G-PDAC-XM	40GBase QSFP+ to QSFP+ Passive DAC xm, where x stands for the length of the cable

Recommended Operating Conditions

Parameters	Symbols	Min	Typ	Max	Unit	Notes
Storage Temperature	TS	-40	-	85	°C	
Operating Case Temperature	TOP	0	-	70	°C	
Data Rate per Lane	-	-	10,3125	-	Gbps	per Channel
Power Supply Voltage	Vcc	3.135	3.3	3.465	V	

Nexgen A/S
Gydevang 2A, 3450 Allerød - Denmark
+45 (0)32 72 66 76
www.nexgen.eu | info@nexgen.eu

PIN Description

PIN	Symbol	Name - Description	Notes	PIN	Symbol	Name - Description	Notes
1	GND	Ground		20	GND	Ground	
2	Tx2n	Transmitter Inverted Data Input	1	21	Rx2n	Receiver Inverted Data Output	1
3	Tx2p	Transmitter Non-Inverted Data Input		22	Rx2p	Receiver Non-Inverted Data Output	
4	GND	Ground	1	23	GND	Ground	1
5	Tx4n	Transmitter Inverted Data Input	1	24	Rx4n	Receiver Inverted Data Output	1
6	Tx4p	Transmitter Non-Inverted Data Input	1	25	Rx4p	Receiver Non-Inverted Data Output	1
7	GND	Ground		26	GND	Ground	
8	ModSelL	Module Select		27	ModPrsL	Module Present	
9	ResetL	Module Reset		28	IntL	Interrupt	
10	VccRx	+3.3V Power Supply Receiver		29	VccTx	+3.3V Power Supply Transmitter	
11	SCL	2-wire Serial Interface Clock		30	Vcc1	+3.3V Power Supply	
12	SDA	2-wire Serial Interface Data		31	LPMode	Low Power Mode	
13	GND	Ground		32	GND	Ground	
14	Rx3p	Receiver Non-Inverted Data Output		33	Tx3p	Transmitter Non-Inverted Data Input	
15	Rx3n	Receiver Inverted Data Output		34	Tx3n	Transmitter Inverted Data Input	
16	GND	Ground		35	GND	Ground	
17	Rx1p	Receiver Non-Inverted Data Output		36	Tx1p	Transmitter Non-Inverted Data Input	
18	Rx1n	Receiver Inverted Data Output		37	Tx1n	Transmitter Inverted Data Input	
19	GND	Ground		38	GND	Ground	

Notes:
1. Open collector/drain output, which should be pulled up with a 4.7kΩ to 10kΩ resister on the host board if intended for use.

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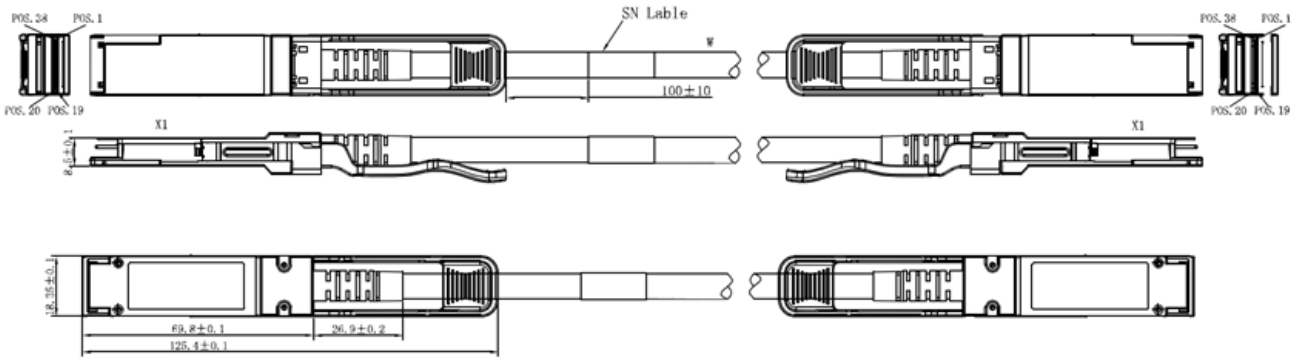
Electrical Characteristics

Parameters	Symbol	Min	Typ	Max	Unit	Notes
Differential Impedance Insertion Loss	Zd	90	100	110	dB	
Common-mode to common mode output return loss	SCCXX		< -7+1.6*f with f in GHz		dB	0.01~2.5GHz
Common-mode to common mode output return loss	SCCXX	-	-	-3	dB	2.5~11.1GHz
Differential Return Loss	SDDXX		<-12+2* SQRT (f) with f in GHz		dB	0.01~4.1GHz
Differential Return Loss	SDDXX		<-6.3+13*Log10/(f/5.5) with f in GHz		dB	4.1~11.1GHz
Difference Waveform Distortion Penalty	dWDPc	-	-	6.75	dB	
VMA Loss	L	-	-	4.4	dB	
VMA Loss to Crosstalk Ratio	VCR	32.5	-	-	dB	

Mechanical Dimensions



Revision History

Revision	Doc. #	Date	Author	Description
Version 1.0	DT000399	10/02/2025	GS	Initial Document

Note: Nexgen A/S reserves the right to change this document without notice.