25GbE SR SFP28 MMF Optical Transceiver

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MMA2P00-AS | MMA2P00-ASHT

Mellanox® MMA2P00-AS/MMA2P00-ASHT is a pluggable SFP28 optical transceiver designed for use in 25GbE Ethernet. It incorporates Mellanox integrated circuit technology in order to provide high performance at low power. The transceiver operates over a pair of multi-mode fibers (MMF), using a nominal wavelength of 850nm, and is SFF-8402 compliant.

MMA2P00-AS/MMA2P00-ASHT has a standard SFP28 connector on the electrical side towards the host system supporting IEEE 802.3bm. The optical interface is composed of two optical channels/fibers, one in each direction, intended for a multi-mode optical cable connected via standard LC connectors. Each channel/fiber operates at signaling rates up to 25.78125GBd.

The transceiver offers selectable retiming for both its optical transmitter and receiver for the 25Gb/s rate, and it also supports lower bit rates without. The transmitter has programmable input equalizers and input squelch function, while the receiver has programmable output amplitude and pre-emphasis.

Rigorous production testing ensures the best out-of-the-box installation experience, performance, and durability.

HIGHLIGHTS

– Selectable retiming for both Tx and Rx

– Programmable Rx output emphasis

– Programmable Tx input equalizer

– SFF-8402 compliant SFP28

– 3.3V power supply

– SFP28 power level 1

– 0.7W power dissipation (typ., with retiming)

– BER better than 1E-15

– 0°C-85°C extended operating case temperature range (MMA2P00-ASHT only)

– Class 1 laser safety

– Up to 100m on OM4 and 70m on OM3 multimode fiber at 25Gb/s

– Up to 100m on OM3 at 10Gb/s

– Hot pluggable

– RoHS compliant

– IEEE 802.3 25GBASE-SR compliant

– IEEE 802.3 10GBASE-SR compliant

– SFF-8472 compliant I²C management interface

– 25G to 10G rate selection by turning off CDR

Table 1 - Absolute Maximum Ratings
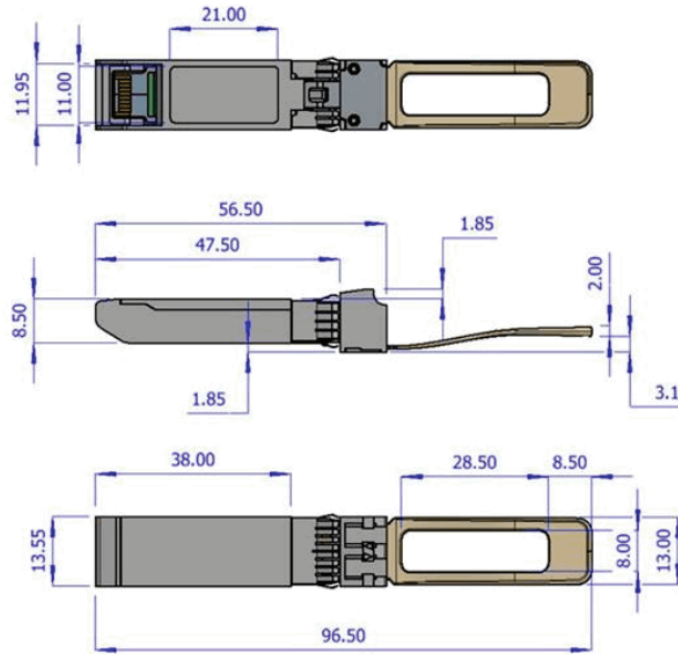
Parameter	Minimum	Maximum	Units
Supply voltage	-0.3	3.6	V
Data input voltage	-0.3	3.465	V
Control input voltage	-0.3	4	V
Damage threshold	3.4	---	dBm
Storage temperature	-40	85	°C

Table 2 - Operational Module Information

Parameter	Minimum	Typical	Maximum	Units
Supply voltage	3.135	3.3	3.465	V
Power dissipation (no retiming)	---	0.45	0.5	W
Power dissipation (retiming)	---	0.7	0.8	W
Supply noise tolerance (10Hz-10MHz)	---	---	66	mVpp
Operating case temperature of MMA2P00-AS	0	---	70 [1]	°C
Operating case temperature of MMA2P00-ASHT	0	---	85 [2]	°C
Operating relative humidity	5	---	85	%

Notes: 1. Internal temperature readout through DDMI of up to 75°C is allowed. 2. Internal temperature readout through DDMI of up to 90°C is allowed.

†For illustration only. Actual products may vary.

Mechanical Schematics

Table 3 - Part Number and Description

OPN	Description
MMA2P00-AS	Mellanox® transceiver, 25GbE, SFP28, LC-LC, 850nm, up to 100m
MMA2P00-ASHT	Mellanox® transceiver, 25GbE, SFP28, LC-LC, 850nm, SR, 85C, up to 100m

Warranty Information

Mellanox LinkX optical transceivers include a 1-year limited hardware warranty, which covers parts repair or replacement.

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单击下面可查看定价，库存，交付和生命周期等信息

>>Mellanox(迈络思)