SKYLANE® **optics**

DAPSSxxx2500 – SFP28 Passive Direct Attached Copper Cable
50cm to 3m /25x Gigabit Ethernet

For your product safety, please read the following information carefully before any manipulation of the cable:

CE RoHS TÜVRheinland

ESD
This cable is specified as ESD threshold 1kV for SFI pins and 2kV for all others electrical input pins, tested per MIL-STD-883G, Method 3015.4 /JESD22-A114-A (HBM). However, normal ESD precautions are still required during the handling of this module.

1. Overview

DAPSSxxx2500 is a high performance SFP28 passive direct attached cable for full duplex 25Gbps data links. The device supports communication over up to 3m copper cable.

This Passive Direct Attached Cable is compliant with the Small Form-factor Pluggable (SFP) Multisource Agreement (MSA) and hot pluggable. Always contact Skylane Optics commercial agents for compatibility with different equipment platforms.

2. Features

- SFP28 Multi-Source Agreement compliant (SFF-8431 and SFF-8432)
- Serial ID functionality supported according to SFF-8472
- Lengths up to 3m
- Very low power consumption <0.1W
- 30 AWG Cable (<3m) / 26 AWG Cable (≥3m)
- Operating Case Temperature Range 0°C to 70°C
- RoHS Compliant

3. Applications

- 25GBase Ethernet
- Data centre
- Intra-Racks connection

Figure 1. Cable
(non-binding illustration)

4. Technical parameters

4.1. Recommended Operating Conditions					
Parameter	**Min**	**Typ**	**Max**	**Unit**	**Notes**
Storage temperature	-40		85	°C	
Operating Case Temperature	0		70	°C	
Relative Humidity	8		80	%	Non-condensing
Power Supply Voltage	3.14	3.3	3.46	V	
Power Supply Current			30	mA	

4.2. General Specifications					
Parameter	**Min**	**Typ**	**Max**	**Unit**	**Notes**
Data Rate		25.78125		Gbps	

4.3. High-speed Electrical Interface, Host to SFP28					
Parameter	**Min**	**Typ**	**Max**	**Unit**	**Notes**
Tx Input Impedance	90	100	110	Ω	Differential
Rx Output Impedance	90	100	100	Ω	Differential

5. Transceiver Electrical Pad Layout
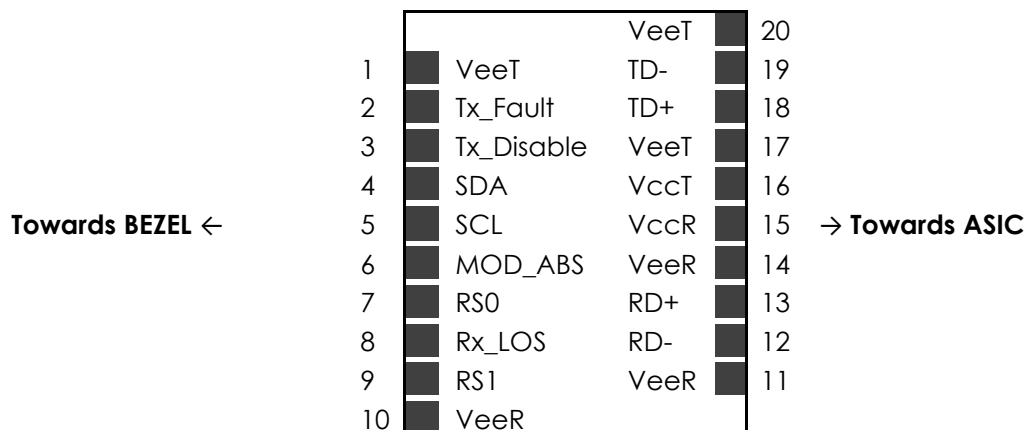
Figure 2. Transceiver Electrical Pad Layout

6. Pin Functions Definitions

MSA (SFF-8431)

Pin Number	Name	Function
1	VeeT	Transmitter Ground
2	TX_Fault	Transmitter Fault Indication
3	TX_ Disable	Transmitter Disable
4	SDA	2-Wire Serial Interface Data (SDA)
5	SCL	2-Wire Serial Interface Clock (SCL)
6	MOD_ABS	Function Not available
7	RS0	Rate Select 0 grounded
8	Rx_LOS	Loss of signal
9	RS1	Rate select 1 grounded
10	VeeR	Receiver Ground
11	VeeR	Receiver Ground
12	RD-	Inverted received data output
13	RD+	Received data output
14	VeeR	Receiver Ground
15	VccR	Receiver Power
16	VccT	Transmitter Power
17	VeeT	Transmitter Ground
18	TD+	Transmit data input
19	TD-	Inverted transmit data input
20	VeeT	Transmitter Ground

7. EEPROM

MSA (SFF-8472)

2 wire address 1010000x

```
0
        Serial ID Defined by
        SFP MSA (96 bytes)

95
        Vendor Specifics
        (32 bytes)
127
        Reserved
        (128 bytes)
255
```

A0h
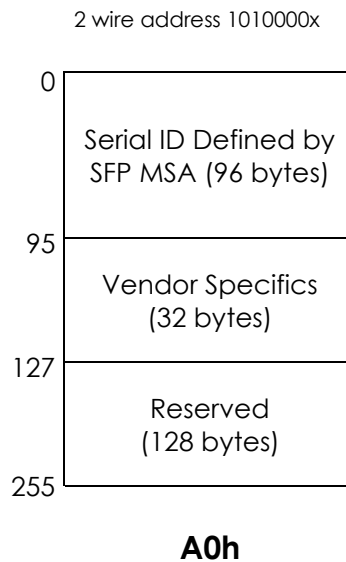
Figure 3. EEPROM of a SFP28

8. Ordering information

Part Number	Description
DAPSSC502500	SFP28 to SFP28 Passive Attached Copper Cable, 25x Gigabit Ethernet, Length: **50cm, 0 to 70°C**
DAPSSM012500	SFP28 to SFP28 Passive Attached Copper Cable, 25x Gigabit Ethernet, Length: **1m, 0 to 70°C**
DAPSSM022500	SFP28 to SFP28 Passive Attached Copper Cable, 25x Gigabit Ethernet, Length: **2m, 0 to 70°C**
DAPSSM032500	SFP28 to SFP28 Passive Attached Copper Cable, 25x Gigabit Ethernet, Length: **3m, 0 to 70°C**

9. Document Revision Information

Revision	Description
A	Initial release

Skylane Optics® supplies a broad range of optical transceivers. Our engineers work closely with our customers to find the best solutions for every application. We are committed to provide high quality products and services to our customers.

For questions on this product please contact:
support@skylaneoptics.com

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