

CAB-S-S-25G-2M-C

Arista Networks® CAB-S-S-25G-2M Compatible TAA Compliant 25GBase-CU SFP28 Direct Attach Cable (Passive Twinax, 2m)

Features

- Up to 25Gb/s bi-directional data links
- Compliant with SFF-8402
- Operating case temperature: 0°C to 70°C
- Single 3.3V supply voltage
- AC coupled inputs and outputs
- Hot pluggable
- 100 Ohm differential impedance
- Enhanced EMI design
- Wire Gauge: 30AWG
- Compliant with IEEE 802.3by
- Compliant with RoHS



Application

- 25GBASE Ethernet

Product Description

This is an Arista Networks® CAB-S-S-25G-2M compatible 25GBase-CU SFP28 to SFP28 direct attach cable that operates over passive copper with a maximum reach of 2.0m (6.6ft). It has been programmed, uniquely serialized, and data-traffic and application tested to ensure it is 100% compliant and functional. This direct attach cable is TAA (Trade Agreements Act) compliant, and is built to comply with MSA (Multi-Source Agreement) standards. We stand behind the quality of our products and proudly offer a limited lifetime warranty.

ProLabs' SFP28 direct attach cables are RoHS compliant and lead-free.

TAA refers to the Trade Agreements Act (19 U.S.C. & 2501-2581), which is intended to foster fair and open international trade. TAA requires that the U.S. Government may acquire only "U.S. – made or designated country end products."



Recommended Operating Conditions

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Notes |
|------------------------------------|--------|------|------|-------------------|------|-------|
| Operating Case Temperature | Tc | 0 | | 70 | degC | |
| Storage Temperature | Ts | -40 | | 85 | degC | |
| Relative Humidity (non-condensing) | RH | 5 | | 85 | % | |
| Input Voltage | Vcc | 3.14 | 3.3 | 3.46 | V | 1 |
| Power Supply Current | ICC | | | 4 | mA | 1 |
| Data Rate | DR | | 25 | | Gb/s | 2 |
| Bit Error Rate | BER | | | 10 ⁻¹² | | |

Notes:

1. For electrical power interface
2. IEEE 802.3by

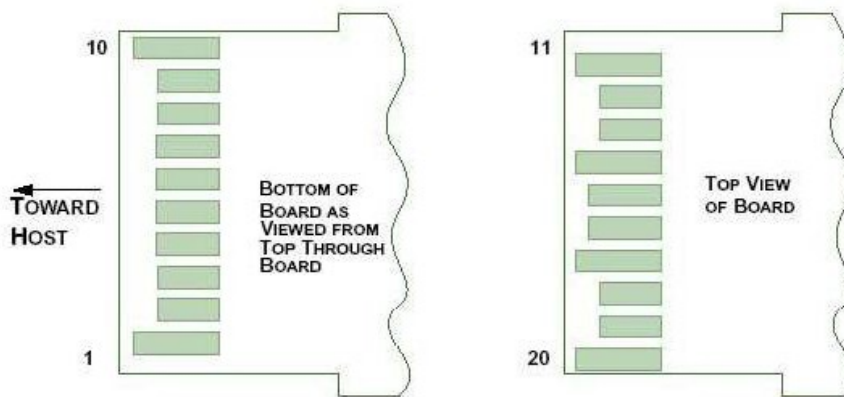
Pin Descriptions

| Pin | Logic | Symbol | Name/Descriptions | Ref. |
|-----|------------|------------|---|------|
| 1 | | VeeT | Module Transmitter Ground | 1 |
| 2 | LVTTTL-O | Tx_Fault | Transmitter Fault | 2 |
| 3 | LVTTTL-I | Tx_Disable | Transmitter Disable | 3 |
| 4 | LVTTTL-I/O | SDA | MOD-DEF2 2-wire serial interface data line | 4 |
| 5 | LVTTTL-I/O | SCL | MOD-DEF1 2-wire serial interface clock line | 4 |
| 6 | | Mod_Abs | Module Absent | 5 |
| 7 | LVTTTL-I | RS0 | Rate Select Zero | |
| 8 | LVTTTL-O | Rx_LOS | Module Receiver Loss of Signal | 2 |
| 9 | LVTTTL-I | RS1 | Rate Select One | |
| 10 | | VeeR | Module Receiver Ground | 1 |
| 11 | | VeeR | Module Receiver Ground | 1 |
| 12 | CML-O | RD- | Receiver Inverted Data Output | |
| 13 | CML-O | RD+ | Receiver Non-Inverted Data Output | |
| 14 | | VeeR | Module Receiver Ground | 1 |
| 15 | | VccR | Module Receiver 3.3V Supply | |
| 16 | | VccT | Module Transmitter 3.3V Supply | |
| 17 | | VeeT | Module Transmitter Ground | 1 |
| 18 | CML-I | TD+ | Transmitter Non-Inverted Data Input | |
| 19 | CML-I | TD- | Transmitter Inverted Data Input | |
| 20 | | VeeT | Module Transmitter Ground | 1 |

Notes:

1. The module signal grounds, VeeR and VeeT, shall be isolated from the module case.
2. This is an open collector/drain output and shall be pulled up with 4.7-10k to Vcc_Host on the host board. Pull ups can be connected to multiple power supplies, however the host board design shall ensure that no module has voltage exceeding module VccT/R + 0.5 V.
3. This is an open collector/drain input and shall be pulled up with 4.7-10k to VccT in the module.
4. See 2-wire electrical specification.
5. This shall be pulled up with 4.7-10k to Vcc_Host on the host board.

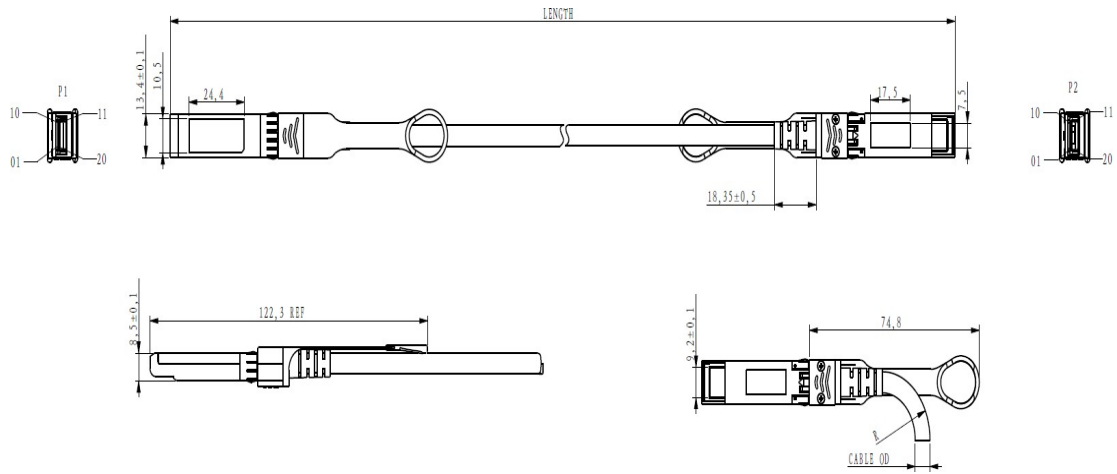
Host Board Connector Pinout for SFP28



Mechanical Specifications

| Parameter | Symbol | Minimum | Typical | Maximum | Unit |
|-----------------------------------|--------|---------|----------|---------|-------|
| Wire Gauge | | 30AWG | | | AWG |
| Cable Impedance | Z | 90 | 100 | 110 | Ohm |
| Cable Diameter OD (30 AWG) | | | 4.6 | | mm |
| Minimum Bending Radius R (30 AWG) | | 26 | | | mm |
| Insertion Loss Level | | | CA-25G-N | | |
| 30AWG Product Weight | GD30 | | 78 | | g/PCS |
| 30AWG Cable Weight | GC30 | | 32 | | g/M |
| Dust Cap Weight | Gs | | 0.80 | | g/PCS |

Mechanical Dimensions



Length Tolerance

| Nominal Length (m) | Tolerance Range ±(cm) |
|--------------------|-----------------------|
| Length ≤ 3 | 2 |
| 3 < Length ≤ 4 | 4 |
| 4 < Length ≤ 5 | 6 |

About ProLabs

Our experience comes as standard; for over 15 years ProLabs has delivered optical connectivity solutions that give our customers freedom and choice through our ability to provide seamless interoperability. At the heart of our company is the ability to provide state-of-the-art optical transport and connectivity solutions that are compatible with over 90 optical switching and transport platforms.

Complete Portfolio of Network Solutions

ProLabs is focused on innovations in optical transport and connectivity. The combination of our knowledge of optics and networking equipment enables ProLabs to be your single source for optical transport and connectivity solutions from 100Mb to 400G while providing innovative solutions that increase network efficiency. We provide the optical connectivity expertise that is compatible with and enhances your switching and transport equipment.

Trusted Partner

Customer service is our number one value. ProLabs has invested in people, labs and manufacturing capacity to ensure that you get immediate answers to your questions and compatible product when needed. With Engineering and Manufacturing offices in the U.K. and U.S. augmented by field offices throughout the U.S., U.K. and Asia, ProLabs is able to be our customers best advocate 24 hours a day.

Contact Information

ProLabs US

Email: sales@prolabs.com

Telephone: 952-852-0252

ProLabs UK

Email: salessupport@prolabs.com

Telephone: +44 1285 719 600