**ADD-S28INS28MX-P3M**

Intel® XXVDACBL3M to NVIDIA® MCP2M00-A003 Compatible TAA Compliant 25GBase-CU SFP28 to SFP28 Direct Attach Cable (Passive Twinax, 3m)

**Features:**

- Up to 25Gbps bi-directional data links
- Hot-pluggable
- Compliant with SFF-8402
- 100 Ohm differential impedance
- Enhanced EMI design
- AC coupled inputs and outputs
- Operating Temperature: 0 to 70 Celsius
- Single power supply 3.3V
- RoHS Compliant and Lead-Free



**Applications:**

- 25GBase Ethernet

**Product Description**

This Intel® XXVDACBL3M to NVIDIA® MCP2M00-A003 dual OEM compatible 25GBase-CU SFP28 to SFP28 passive direct attach cable has a maximum reach of 3.0m (9.8ft). It is 100% Intel® to NVIDIA® compatible and has been programmed, uniquely serialized, data-traffic and application tested to ensure that it is compliant and functional. This direct attach cable will initialize and perform identically to Intel® to NVIDIA®s individual cables and is built to meet or exceed Intel® to NVIDIA®s specifications. This product complies with MSA (Multi-Source Agreement) standards and is TAA (Trade Acts Agreement) compliant. We stand behind the quality of our products and proudly offer a limited lifetime warranty.

AddOn's transceivers 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."

**General Specifications**

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Notes |
|---|---|---|---|---|---|---|
| **Data Rate** | DR | | 25 | | Gbps | 1 |
| **Bit Error Rate** | BER | | | $10^{-12}$ | | |
| **Operating Temperature** | Tc | 0 | | 70 | °C | 2 |
| **Storage Temperature** | Tstg | -40 | | 85 | °C | 3 |
| **Supply Current** | Icc | | | 4 | mA | 4 |
| **Input Voltage** | Vcc | 3.14 | 3.3 | 3.46 | V | 4 |
| **Cable Impedance** | Z | 90 | 100 | 110 | Ω | |
| **Product Weight** | GD | | 84 | | g/PCS | 5 |
| **Cable Weight** | GC | | 38 | | G/M | |
| **Dust Cap Weight** | GS | | 0.80 | | g/PCS | |

**Notes:**

1. IEEE 802.3by.
2. Case temperature.
3. Ambient temperature.
4. For electrical power interface.

**Cable Dimensions and Insertion Loss Level**

| Length | Standard Wire Gauge AWG | Cable Diameter OD (mm) | Minimum Bending Radius R (mm) | Insertion Loss Level (Note 1) | Tolerance Range (±cm) |
|---|---|---|---|---|---|
| **3m** | 28AWG | 5.0 | 28 | CA-25G-N | 4 |

**Notes:**

1. Cable insertion loss classification standard IEEE 802.3by 110-10.

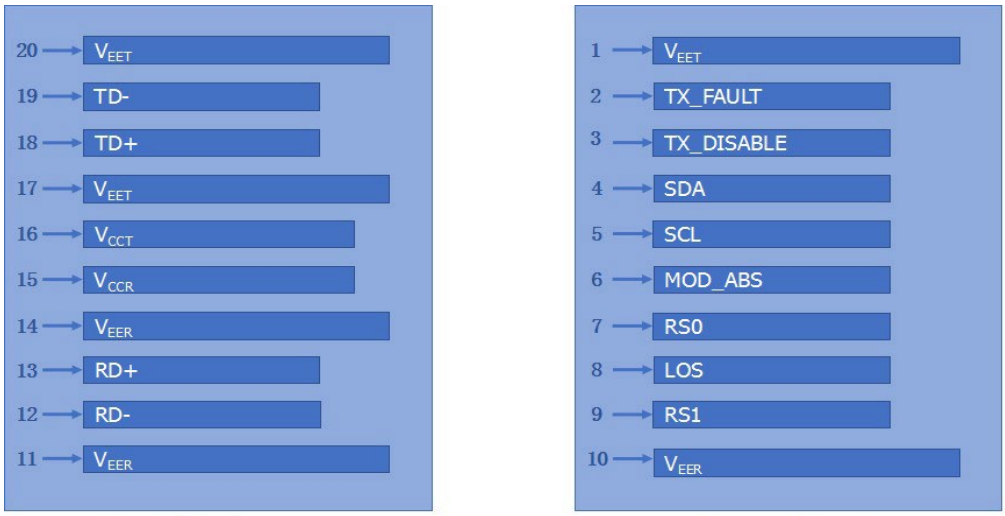
**Pin Descriptions**

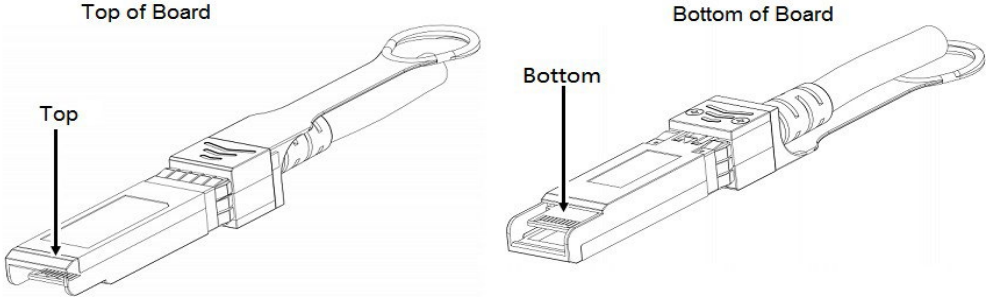
| Pin | Symbol | Name/Description | Notes |
|---|---|---|---|
| **1** | VeeT | Transmitter Ground (Common with Receiver Ground). | 1 |
| **2** | Tx_Fault | Transmitter Failure Alarm. Not Used. | |
| **3** | Tx_Disable | Not Used. The signal turns off the module transmitter when it is “high” or “open.” | |
| **4** | SDA | Data Line for Serial ID. | 2 |
| **5** | SCL | Clock Line for Serial ID. | 2 |
| **6** | MOD_ABS | Module Absent. Grounded within the module. | 2 |
| **7** | RS0 | No Connection Required. | |
| **8** | LOS | Loss of Signal Indication. “Logic 0” indicates normal operation. | |
| **9** | RS1 | No Connection Required. | |
| **10** | VeeR | Receiver Ground (Common with Transmitter Ground). | 1 |
| **11** | VeeR | Receiver Ground (Common with Transmitter Ground). | 1 |
| **12** | RD- | Receiver Inverted Data Out. AC Coupled. | |
| **13** | RD+ | Receiver Non-Inverted Data Out. AC Coupled. | |
| **14** | VeeR | Receiver Ground (Common with Transmitter Ground). | 1 |
| **15** | VccR | Receiver Power Supply. | |
| **16** | VccT | Transmitter Power Supply. | |
| **17** | VeeT | Transmitter Ground (Common with Receiver Ground). | 1 |
| **18** | TD+ | Transmitter Non-Inverted Data In. AC Coupled. | |
| **19** | TD- | Transmitter Inverted Data In. AC Coupled. | |
| **20** | VeeT | Transmitter Ground (Common with Receiver Ground). | 1 |

**Notes:**

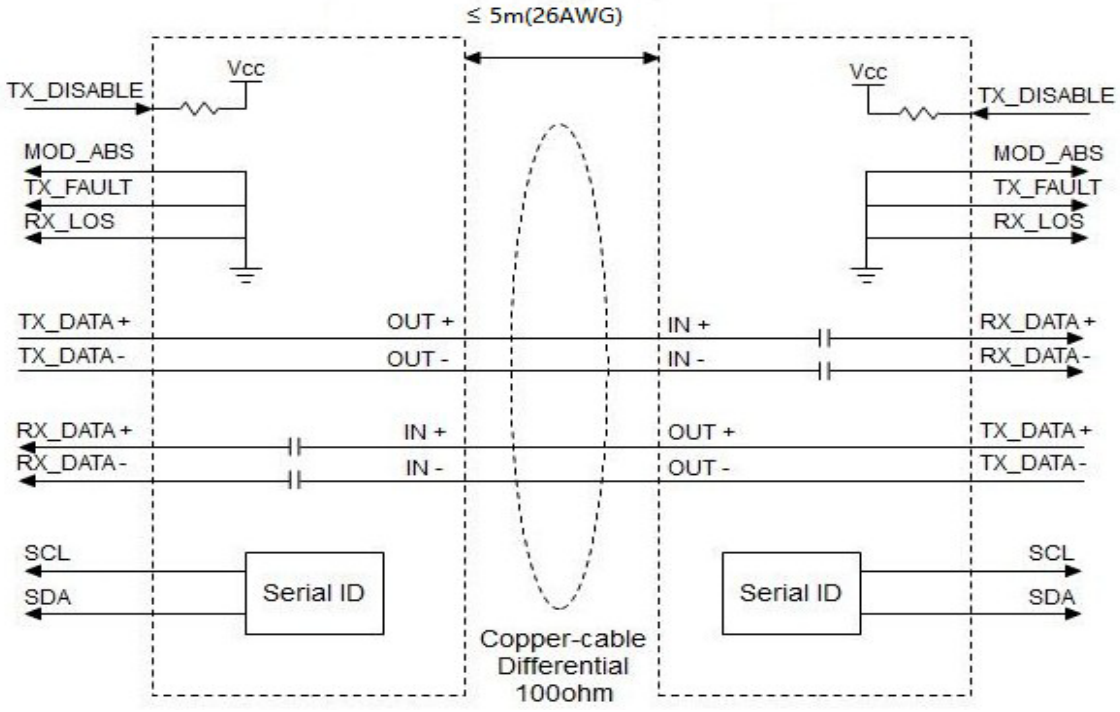
1. The circuit ground is isolated from the chassis ground.
2. Should be pulled up with 4.7kΩ to 10kΩ on the host board to a voltage between 2V and 3.6V.

**Electrical Pad Layout**

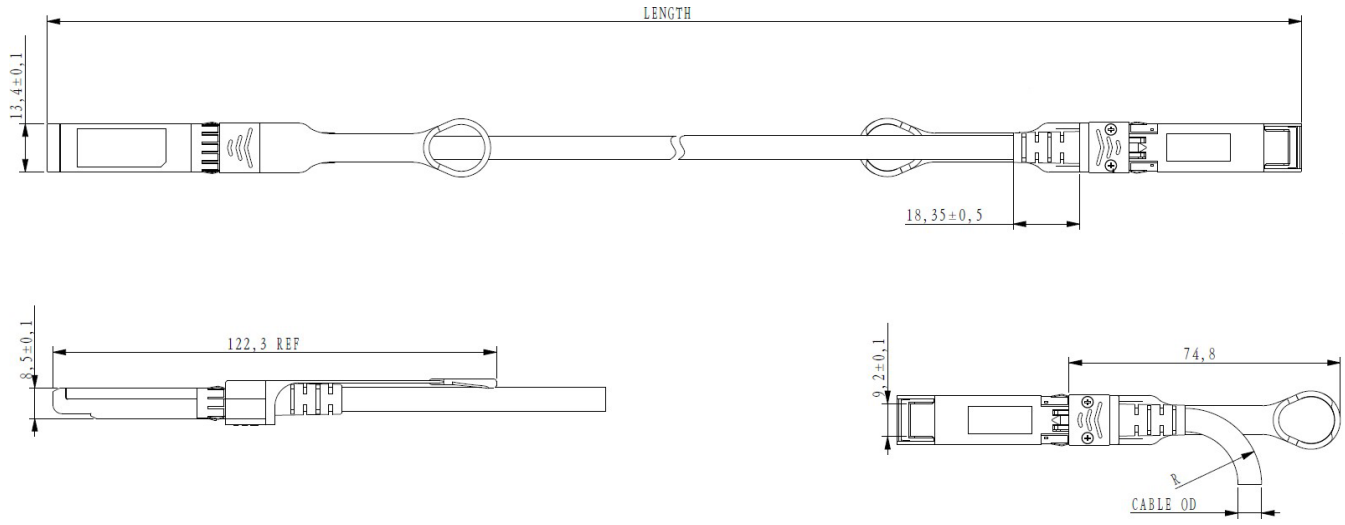



**Block Diagram of Transceiver**



**Mechanical Specifications**




Unmarked Tolerance ±0.2
Unit: mm

**About AddOn Networks**

In 1999, AddOn Networks entered the market with a single product. Our founders fulfilled a severe shortage for compatible, cost-effective optical transceivers that compete at the same performance levels as leading OEM manufacturers. Adhering to the idea of redefining service and product quality not previously had in the fiber optic networking industry, AddOn invested resources in solution design, production, fulfillment, and global support.

Combining one of the most extensive and stringent testing processes in the industry, an exceptional free tech support center, and a consistent roll-out of innovative technologies, AddOn has continually set industry standards of quality and reliability throughout its history.

Reliability is the cornerstone of any optical fiber network and is ingrained in AddOn's DNA. It has played a key role in nurturing the long-term relationships developed over the years with customers. AddOn remains committed to exceeding industry standards with certifications ranging from NEBS Level 3 to ISO 9001:2015 with every new development while maintaining the signature reliability of its products.




**U.S. Headquarters**

Email: sales@addonnetworks.com

Telephone: +1 877.292.1701

Fax: 949.266.9273

**Europe Headquarters**

Email: salesemea@addonnetworks.com

Telephone: +44 1285 842070