

X2-CONVERTER-CI

Cisco® CVR-X2-SFP10G Compatible TAA Compliant 10GBase-Converter X2 Transceiver (Converter, N/A, SFP+, DOM)

Features:

- X2 to SFP+ Converter Module
- For 10 Gigabit Ethernet SFP+ port



Applications:

- X2 to SFP+ Converter
- Access and Enterprise

Product Description

This Cisco® CVR-X2-SFP10G compatible X2 to SFP+ converter provides conversion from X2 to SFP+ form factors. It is guaranteed to be 100% compatible with the equivalent Cisco® converter. This easy to install, hot swappable converter has been programmed, uniquely serialized and data-traffic and application tested to ensure that it will initialize and perform identically. Digital optical monitoring (DOM) support is also present to allow access to real-time operating parameters. This converter is Trade Agreements Act (TAA) compliant. We stand behind the quality of our products and proudly offer a limited lifetime warranty.

ProLabs' 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."



Absolute Maximum Ratings

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Notes |
|----------------------------|--------|------|---------|------|------|-------|
| Storage Temperature | Tstg | -40 | | 85 | °C | |
| Operating Case Temperature | Tc | 0 | | 70 | °C | |
| Maximum Supply Voltage | Vcc | -0.5 | | 4.0 | V | |
| Data Rate | | | 10.3125 | | Gbps | |
| Relative Humidity | RH | | | 95 | % | |

SFP+ transceiver Modules that can be plugged into the converter module

| Product Description |
|-------------------------|
| 850nm MM 10G SFP+ |
| 1310nm SM 10G SFP+ 10km |
| 1550nm SM 10G SFP+ 40km |
| 1310nm SM 10G SFP+ 70km |
| CWDM SFP+ 10G |
| DWDM SFP+ 10G |

Pin Descriptions

| Pin | Symbol | Name/Descriptions | Logic | Notes |
|-----|--------------|---|----------------------|-------|
| 1 | GND | Electrical Ground. | 1 | 1 |
| 2 | GND | Electrical Ground. | 3 | 1 |
| 3 | GND | Electrical Ground. | 3 | 1 |
| 4 | 5.0V | Power. | 3 | 2 |
| 5 | 3.3V | Power. | 3 | 2 |
| 6 | 3.3V | Power. | 3 | 2 |
| 7 | APS | Adaptive Power Supply. | 3 | 2 |
| 8 | APS | Adaptive Power Supply. | 3 | 2 |
| 9 | LASI | Link Alarm Status Interrupt, low active, Open Drain Output A pull-up resistor with 10-22K Ω to 1,2V is expected. Logic High: Normal Operation. | 1.2V CMOS Open Drain | |
| 10 | Reset | Low active Reset Input 10K Ω pull-up on Transceiver Logic high = Normal Operation. | 1.2V CMOS Open Drain | |
| 11 | VENDSPECIFIC | Vendor Specific Pin, Leave unconnected. | | 5 |
| 12 | Tx ON/OFF | High active Transmitter Enable Input 10K Ω pull-up on Transceiver Logic high = Transmitter active (normal Operation) | 1.2V CMOS Open Drain | |
| 13 | RESERVED | RESERVED | | |
| 14 | MOD DETECT | 1k Ω to Ground On Transceiver | | |
| 15 | VENDSPECIFIC | Vendor Specific Pin, Leave unconnected when not in use | | 5 |
| 16 | VENDSPECIFIC | Vendor Specific Pin, Leave unconnected when not in use | | 5 |
| 17 | MDIO | Management Data I/O. | 1.2V CMOS Open Drain | 3 |
| 18 | MDC | Management Clock Input | 1.2V CMOS Open Drain | 3 |
| 19 | PRTAD4 | Port Address Bit 4(LOW=0) | | |
| 20 | PRTAD3 | Port Address Bit 3(LOW=0) | | |
| 21 | PRTAD2 | Port Address Bit 2(LOW=0) | | |
| 22 | PRTAD1 | Port Address Bit 1(LOW=0) | | |
| 23 | PRTAD0 | Port Address Bit 0(LOW=0) | | |
| 24 | VENDSPECIFIC | Vendor Specific Pin,, Leave unconnected when not in use | | 5 |
| 25 | APS SET | Feedback Input for APS, Input of APS Setting Resistor | | |
| 26 | RESERVED | Reserved. Avalanche Photodiode Use. | | 5 |
| 27 | APS SENSE | APS Sense Output for APS Control Circuit. | | |
| 28 | APS | Adaptive Power Supply. | | 2 |
| 29 | APS | Adaptive Power Supply. | | 2 |
| 30 | 3.3V | Power. | | 2 |
| 31 | 3.3V | Power. | | 2 |

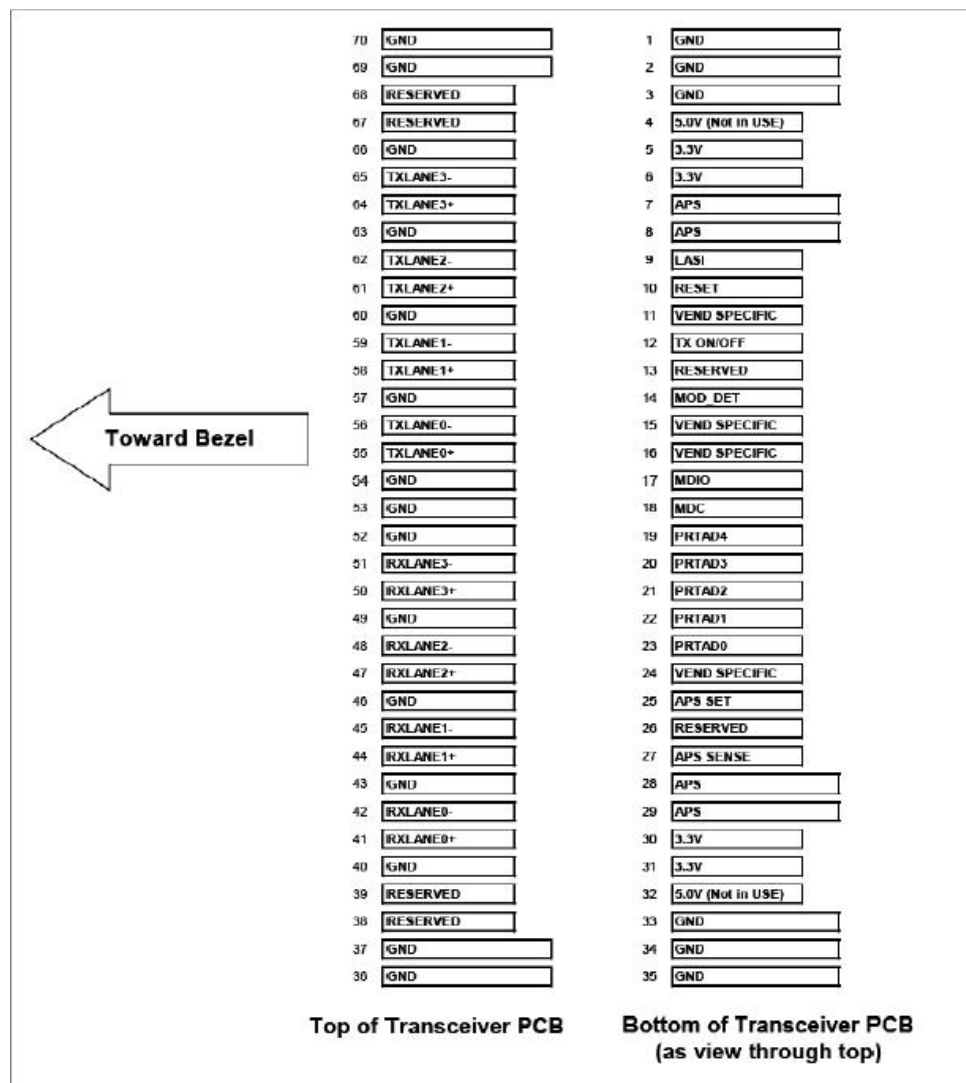
| | | | | |
|----|------------|-----------------------------|--|---|
| 32 | 5.0V | Power. | | 2 |
| 33 | GND | Electrical Ground. | | 1 |
| 34 | GND | Electrical Ground. | | 1 |
| 35 | GND | Electrical Ground. | | 1 |
| 36 | GND | Electrical Ground. | | 1 |
| 37 | GND | Electrical Ground. | | 1 |
| 38 | RESERVED | Reserved. | | |
| 39 | RESERVED | Reserved. | | |
| 40 | GND | Electrical Ground. | | 1 |
| 41 | RX LANE 0+ | Module XAUI Output Lane 0+. | | 4 |
| 42 | RX LANE 0- | Module XAUI Output Lane 0-. | | 4 |
| 43 | GND | Electrical Ground. | | 1 |
| 44 | RX LANE 1+ | Module XAUI Output Lane 1+. | | 4 |
| 45 | RX LANE 1- | Module XAUI Output Lane 1-. | | 4 |
| 46 | GND | Electrical Ground. | | 1 |
| 47 | RX LANE 2+ | Module XAUI Output Lane 2+. | | 4 |
| 48 | RX LANE 2- | Module XAUI Output Lane 2-. | | 4 |
| 49 | GND | Electrical Ground. | | 1 |
| 50 | RX LANE 3+ | Module XAUI Output Lane 2+. | | 4 |
| 51 | RX LANE 3- | Module XAUI Output Lane 2-. | | 4 |
| 52 | GND | Electrical Ground. | | 1 |
| 53 | GND | Electrical Ground. | | 1 |
| 54 | GND | Electrical Ground. | | 1 |
| 55 | RX LANE 0+ | Module XAUI Output Lane 0+. | | 4 |
| 56 | RX LANE 0- | Module XAUI Output Lane 0-. | | 4 |
| 57 | GND | Electrical Ground. | | 1 |
| 58 | TX LANE 1+ | Module XAUI Output Lane 1+. | | 4 |
| 59 | TX LANE 1- | Module XAUI Output Lane 1-. | | 4 |
| 60 | GND | Electrical Ground. | | 1 |
| 61 | TX LANE 2+ | Module XAUI Output Lane 2+. | | 4 |
| 62 | TX LANE 2- | Module XAUI Output Lane 2-. | | 4 |
| 63 | GND | Electrical Ground. | | 1 |
| 64 | TX LANE 3+ | Module XAUI Output Lane 2+. | | 4 |
| 65 | TX LANE 3- | Module XAUI Output Lane 2-. | | 4 |
| 66 | GND | Electrical Ground | | 1 |
| 67 | RESERVED | Reserved. | | |
| 68 | RESERVED | Reserved. | | |

| | | | | |
|----|-----|--------------------|--|---|
| 69 | GND | Electrical Ground. | | 1 |
| 70 | GND | Electrical Ground. | | 1 |

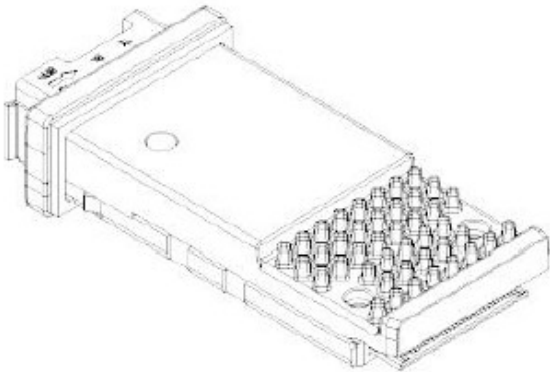
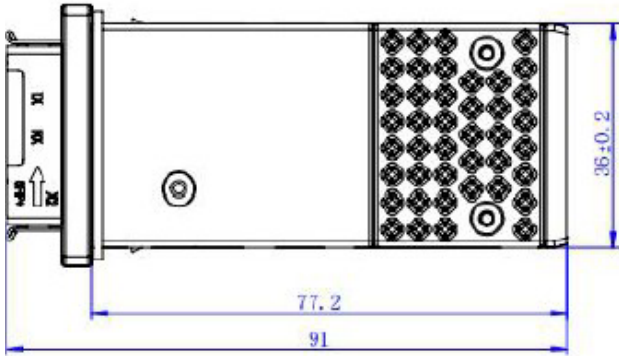
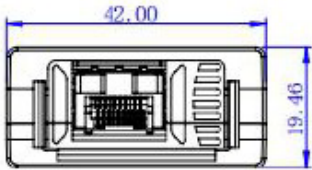
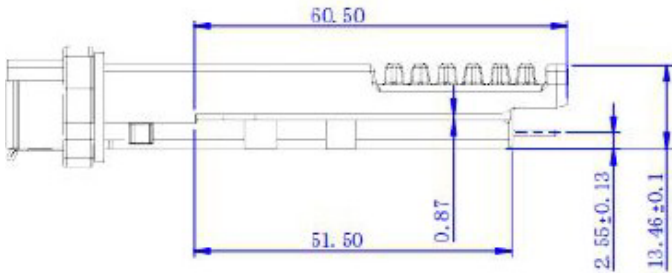
Notes:

1. Ground connections are common for Tx and Rx.
2. Each connector contact is rated at 0.5A.
3. MDIO and MDC timing must comply with IEEE 802.3ae clause 45.3.
4. XAUI output characteristics comply with IEEE 802.3ae clause 47.
5. Transceivers will be MSA compliant when no signals are present on the vendor specific pins.

Electrical Pin-Out Details



Mechanical Specifications



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: salesupport@prolabs.com

Telephone: +44 1285 719 600