CVR-X2-SFP10G-C

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."

Rev. 050523

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 10-22KΩ to 1,2V is expected. Logic High: Normal Operation.	1.2V CMOS Open Drain	
10	Reset	Low active Reset Input 10KΩ 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 10KΩ pull-up on Transceiver Logic high = Transmitter active (normal Operation)	1.2V CMOS Open Drain	
13	RESERVED	RESERVED		
14	MOD DETECT	1kΩ 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.		

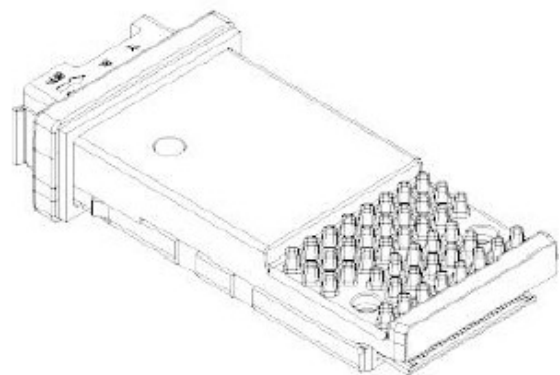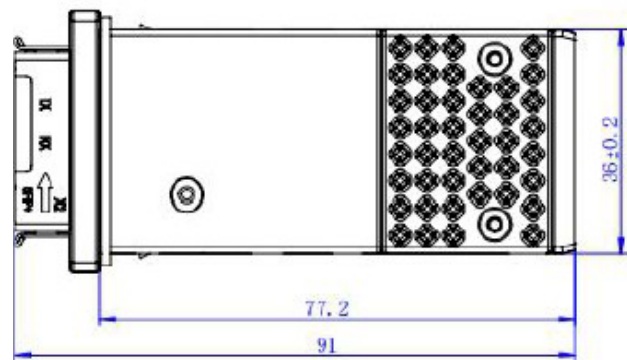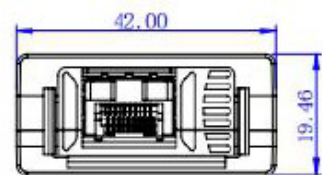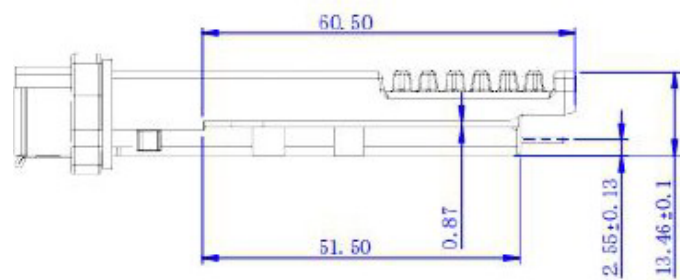| 69 | GND | Electrical Ground. | | 1 |
| 70 | GND | Electrical Ground. | | 1 |

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

Top of Transceiver PCB		Bottom of Transceiver PCB (as view through top)	
70	GND	1	GND
69	GND	2	GND
68	RESERVED	3	GND
67	RESERVED	4	5.0V (Not in USE)
66	GND	5	3.3V
65	TXLANE3-	6	3.3V
64	TXLANE3+	7	APS
63	GND	8	APS
62	TXLANE2-	9	LASI
61	TXLANE2+	10	RESET
60	GND	11	VEND SPECIFIC
59	TXLANE1-	12	TX ON/OFF
58	TXLANE1+	13	RESERVED
57	GND	14	MOD_DET
56	TXLANE0-	15	VEND SPECIFIC
55	TXLANE0+	16	VEND SPECIFIC
54	GND	17	MDIO
53	GND	18	MDC
52	GND	19	PRTAD4
51	RXLANE3-	20	PRTAD3
50	RXLANE3+	21	PRTAD2
49	GND	22	PRTAD1
48	RXLANE2-	23	PRTAD0
47	RXLANE2+	24	VEND SPECIFIC
46	GND	25	APS SET
45	RXLANE1-	26	RESERVED
44	RXLANE1+	27	APS SENSE
43	GND	28	APS
42	RXLANE0-	29	APS
41	RXLANE0+	30	3.3V
40	GND	31	3.3V
39	RESERVED	32	5.0V (Not in USE)
38	RESERVED	33	GND
37	GND	34	GND
36	GND	35	GND

Toward Bezel

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: salessupport@prolabs.com
Telephone: +44 1285 719 600