DSFP-100GB-AOC2M-AR-AO

Arista Networks Compatible TAA 100GBase-AOC DSFP Active Optical Cable (850nm, MMF, 2m, CMIS 4.0)

Features

- Compliant with IEEE 802.3-2018
- Compliant to the DSFP MSA Transceiver Specifications
- 2x26.5625GBD PAM4 Active Optical Cable
- Hot-Pluggable
- Operating Temperature: 0 to 70 Celsius
- Low Power Dissipation: 2.5W Per Cable End
- RoHS Compliant and Lead-Free

Applications

- 100GBase Ethernet

Product Description

This Arista Networks® compatible DSFP to DSFP transceiver provides 100GBase-AOC throughput up to over 2.0m (6.6ft) Fiber using a wavelength of 850nm via a DSFP connector. Our transceiver is built to meet or exceed OEM specifications and is guaranteed to be 100% compatible with Arista Networks®. It has been programmed, uniquely serialized, and tested for data-traffic and application to ensure that it will initialize and perform identically. All of our transceivers comply with Multi-Source Agreement (MSA) standards to provide seamless network integration. This transceiver is Trade Agreements Act (TAA) 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.")

TAA COMPLIANT

Absolute Maximum Ratings

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Supply Voltage	Vcc	-0.5		3.6	V	
Storage Temperature	Tstg	-40		85	°C	
Operating Case Temperature	Tc	0		70	°C	
Relative Humidity	RH	15		85	%	
Data Rate	DR		26.5625		GBd	±100ppm
Bit Error Rate	BER				$1E^{-8}$	

Electrical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Power Dissipation	P_{DISS}			2.5	W	
Module Supply Voltage	Vcc	3.13	3.3	3.47	V	
Supply Current	Icc			796	mA	
Receiver						
AC Common-Mode Input Voltage				17.5	mV	RMS
Differential Peak-to-Peak Input Voltage				900	mV	
FEC Symbol Error				5		

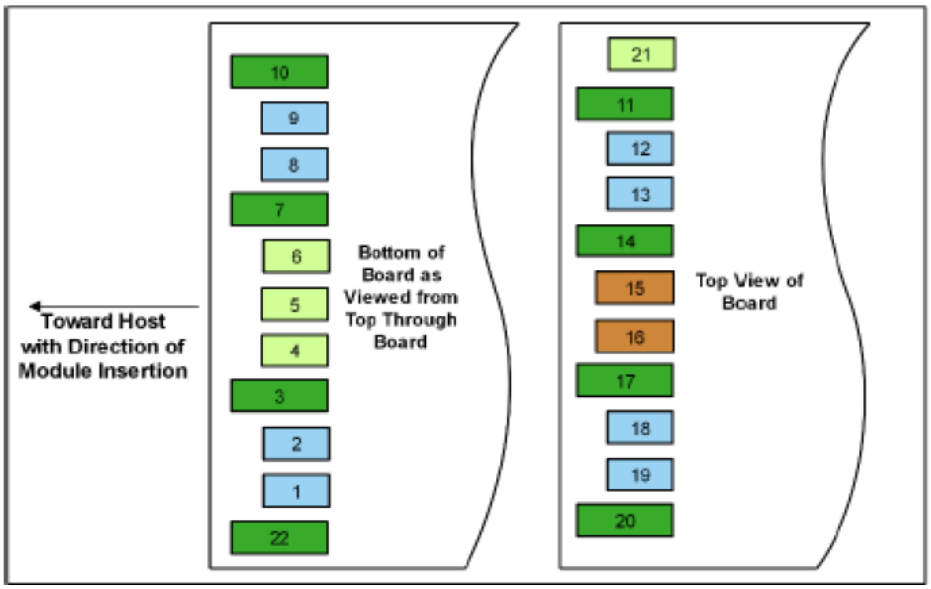
Optical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Transmitter						
Center Wavelength	λC	840		860	nm	
Optical Power Output	PO	-6.5		4	dBm	
Spectral Width	Δλ20			0.6	nm	
Extinction Ratio	ER	3			dB	
Receiver						
Near-End ESMW	EW		0.265		UI	
Near-End Eye Height	EH	70		mV		
Far-End ESMW			0.2			
Far-End Eye Height		30		UI		
Far-End Pre-Cursor ISI Ratio		-4.5		3.5	%	

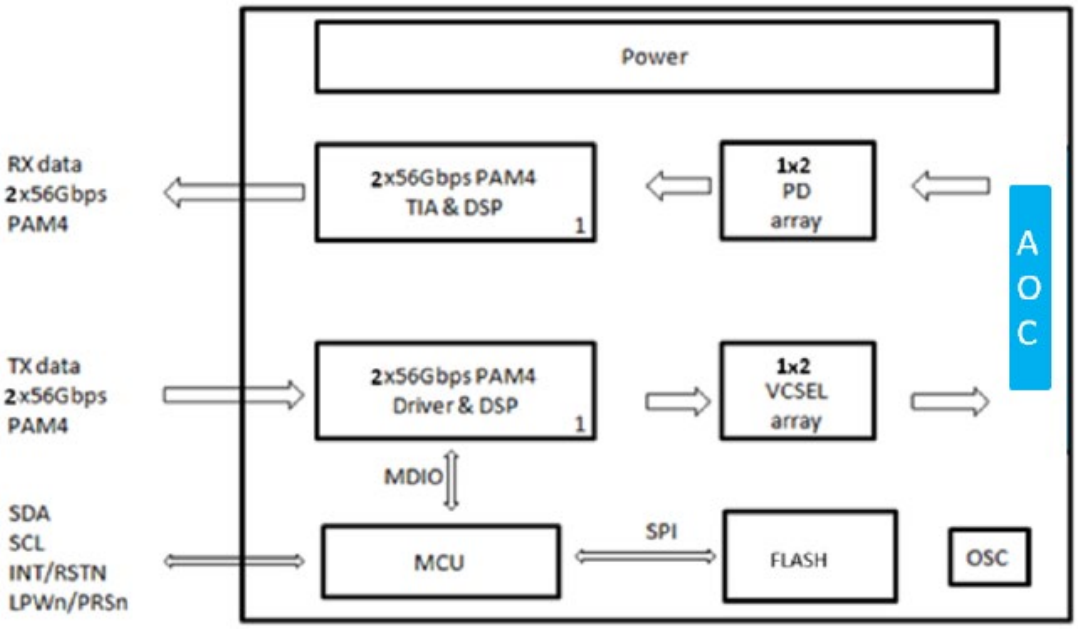
Pin Descriptions

Pin	Logic	Symbol	Sequence	Name/Description	Notes
1	CML-I	TD2-	3	Transmitter Inverted Data Input Lane 2.	
2	CML-I	TD2+	3	Transmitter Non-Inverted Data Input Lane 2.	
3		GND	1	Module Ground.	
4	LVTTL-I/O	SDA	3	2-Wire Serial Interface Data.	
5	LVTTL-I/O	SCL	3	2-Wire Serial Interface Clock.	
6	Multi-Level-I/O	LPWn/PRSn	3	Low-Power Mode/Module Present (MOD_ABS).	
7		GND	1	Module Ground.	
8	CML-O	RD2+	3	Receiver Non-Inverted Data Output Lane 2.	
9	CML-O	RD2-	3	Receiver Inverted Data Output Lane 2.	
10		GND	1	Module Ground.	
11		GND	1	Module Ground.	
12	CML-O	RD1-	3	Receiver Inverted Data Output Lane 1.	
13	CML-O	RD1+	3	Receiver Non-Inverted Data Output Lane 1.	
14		GND	1	Module Ground.	
15		Vcc	2	Module +3.3V Power Supply.	
16		Vcc	2	Module +3.3V Power Supply.	
17		GND	1	Module Ground.	
18		TD1+	3	Transmitter Non-Inverted Data Input Lane 1.	
19		TD1-	3	Transmitter Inverted Data Input Lane 1.	
20		GND	1	Module Ground.	
21	Multi-Level-I/O	INT/RSTn	3	Dual-Function Module Interrupt and Reset Pin.	
22		GND	1	Module Ground.	

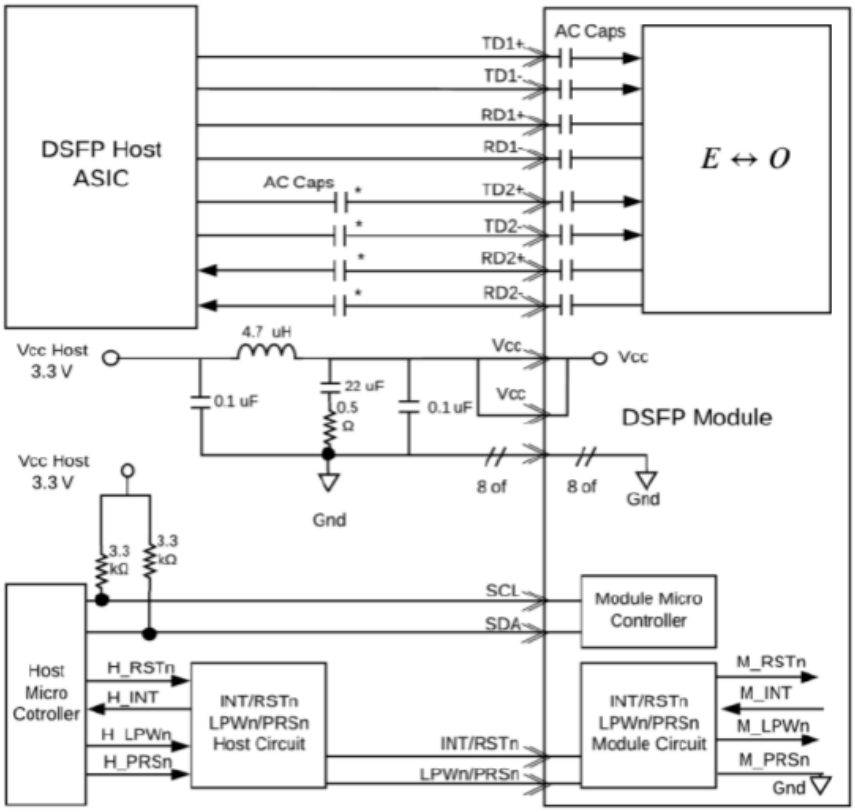
Electrical Pin-Out Details



Block Diagram

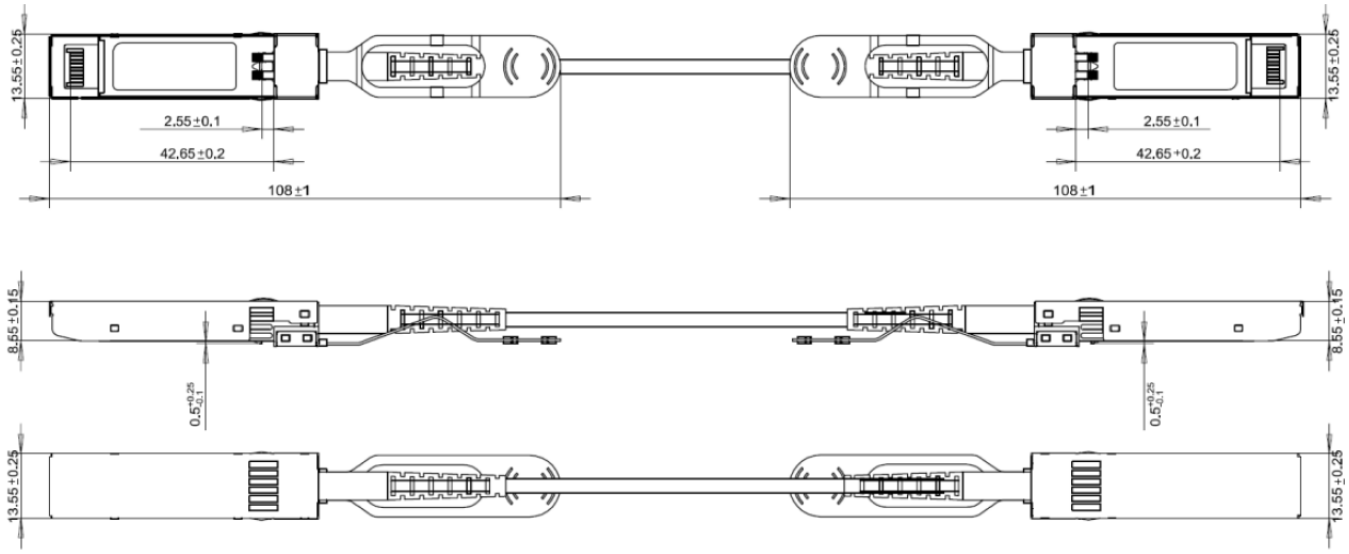


Recommended Interface Circuit



Notes: Host AC caps allow SFP+ backward compatibility. If SFP+ modules will never be plugged in, the host AC caps can be omitted.

Mechanical Specifications



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 in engrained 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 from ranging from NEBS Level 3 to ISO 9001:2005 with every new development while maintaining the signature reliability of its products.

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