



### **DSFP-100GB-AOC15M-AR-OPC**

Arista Networks Compatible TAA 100GBase-AOC DSFP Active Optical Cable (850nm, MMF, 15m, CMIS 4.0)

#### **Features**

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

OptioConnect's transceivers are RoHS compliant and lead-free.

## Absolute Maximum Ratings

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Supply Voltage	V <sub>CC</sub>	-0.5		3.6	V	
Storage Temperature	T <sub>stg</sub>	-40		85	°C	
Operating Case Temperature	T <sub>c</sub>	0		70	°C	
Relative Humidity	RH	15		85	%	
Data Rate	DR		26.5625		GBd	±100ppm
Bit Error Rate	BER				1E <sup>-8</sup>	

## Electrical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Power Dissipation	P <sub>DISS</sub>			2.5	W	
Module Supply Voltage	V <sub>CC</sub>	3.13	3.3	3.47	V	
Supply Current	I <sub>CC</sub>			796	mA	
Receiver						
AC Common-Mode Input Voltage				17.5	mV	RMS
Differential Peak-to-Peak Input Voltage				900	mV	
FEC Symbol Error				5		

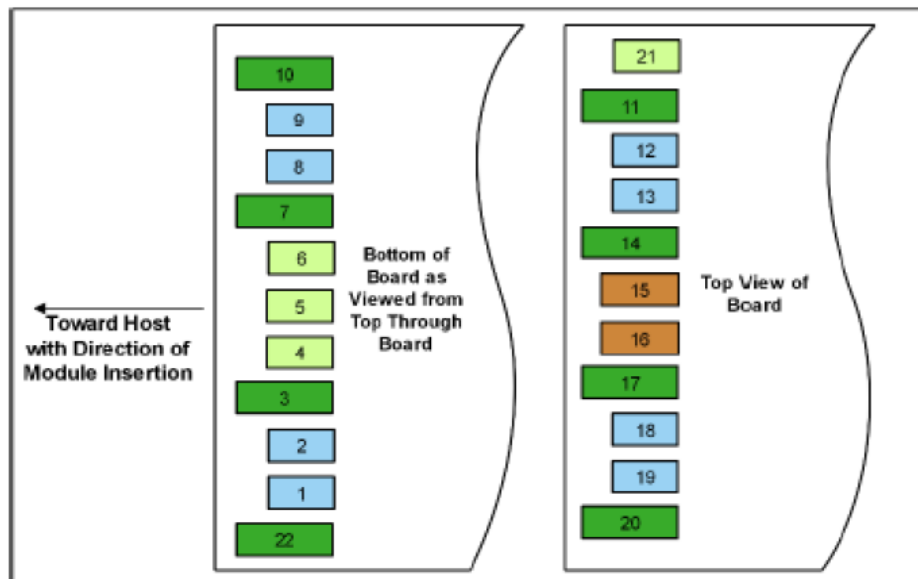
## Optical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Transmitter						
Center Wavelength	λ <sub>C</sub>	840		860	nm	
Optical Power Output	P <sub>O</sub>	-6.5		4	dBm	
Spectral Width	Δλ <sub>20</sub>			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	%	

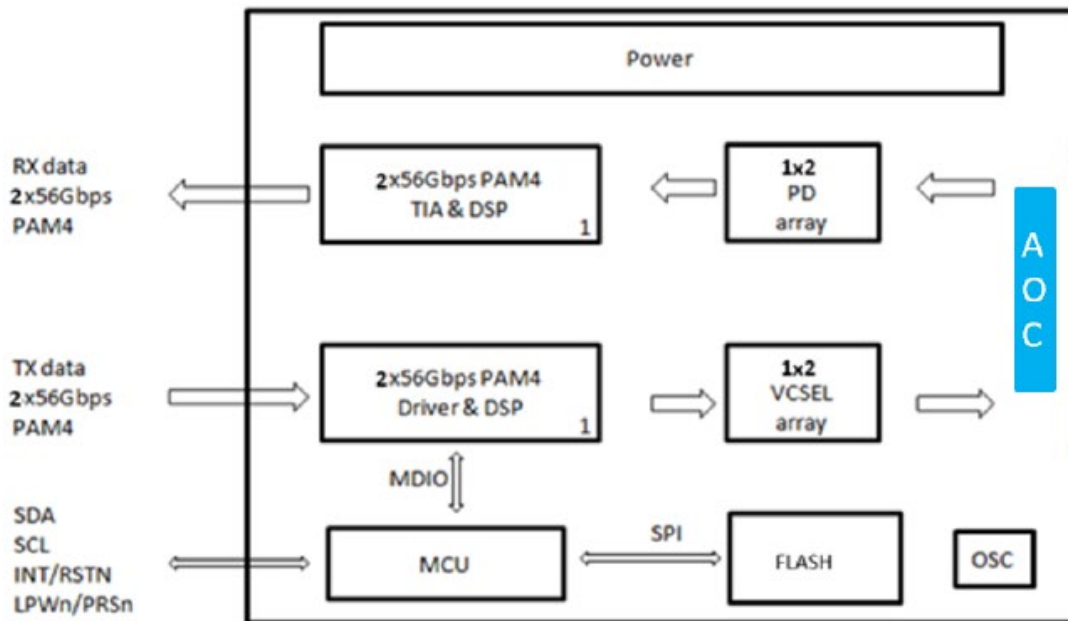
## Pin Descriptions

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.	

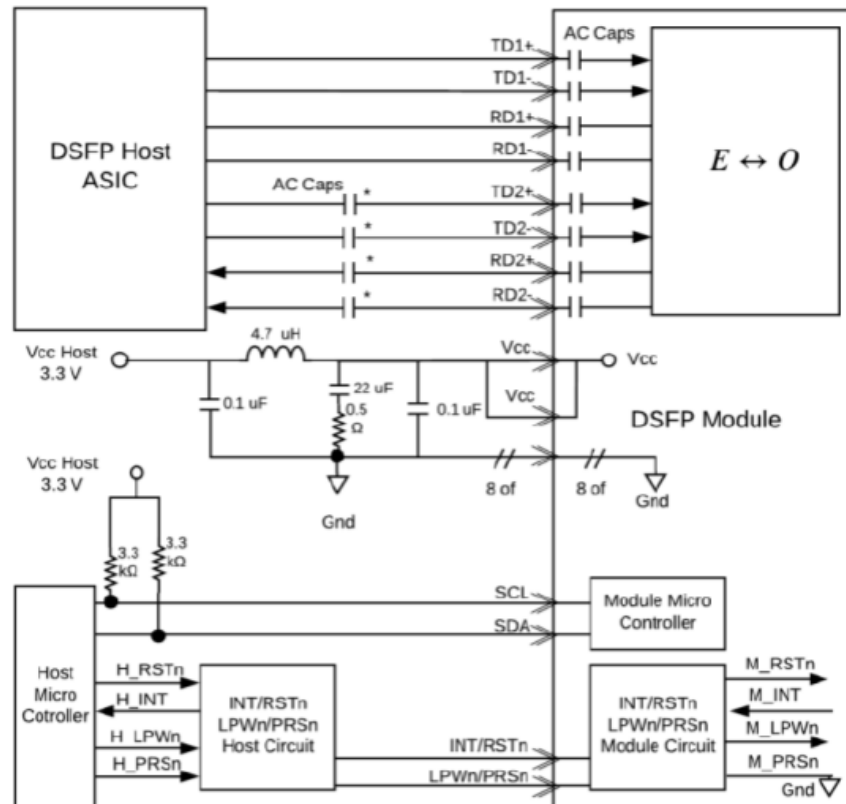
## Electrical Pin-Out Details



## Block Diagram

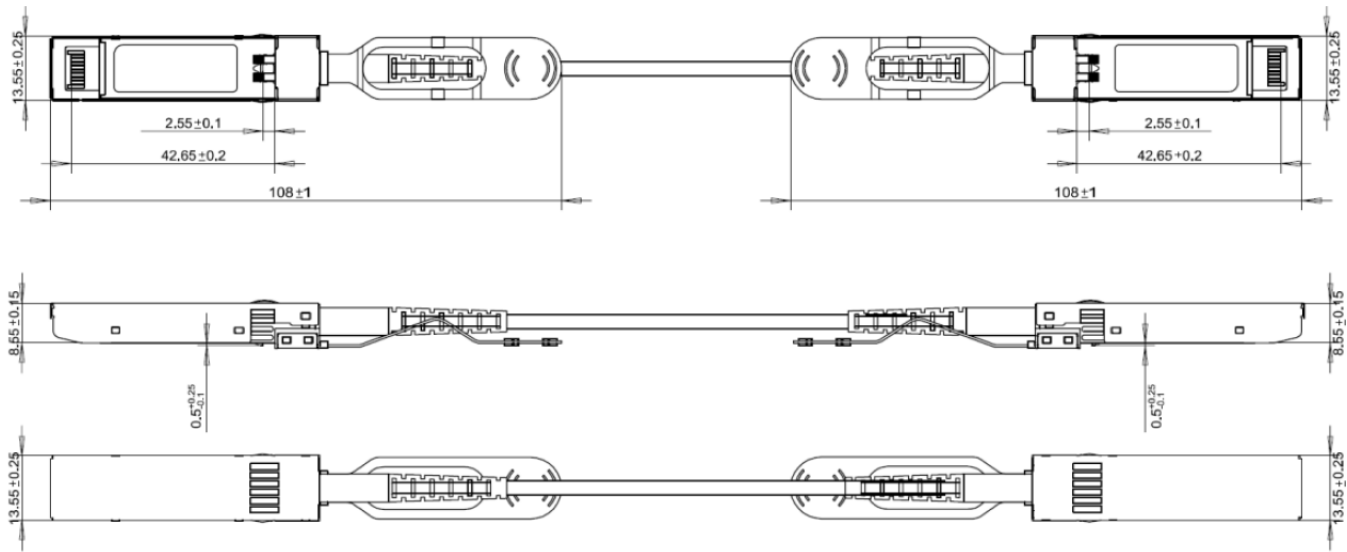


## Recommended Interface Circuit



**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



## **OptioConnect**

### **Innovation for the Future of High-Speed Networking**

#### **Who We Are**

OptioConnect is reshaping the landscape of communication and high-speed networking through intelligent technology. With a core focus on cutting edge technology, we deliver smarter fiber optic solutions for enterprise networks, data centers, and next-gen telecom infrastructures.

#### **What We Do**

At OptioConnect, we fuse advanced engineering with intelligent automation to drive the future of networking. Our AI-integrated solutions are designed to optimize performance and streamline operations with:

- Superior Performance
- Network and traffic optimization
- Intelligent energy management
- Seamless OEM compatibility
- Scalable cost-efficiency

#### **Smarter Networks by Design**

Innovation isn't just a goal—it's our process. We embed AI and machine learning across our R&D and product lines, enabling adaptive performance, automated tuning, and faster deployment cycles. The result? Networks that don't just work—they learn, evolve, and outperform.

#### **Our Team**

Our engineers, data scientists, and network architects bring decades of experience and a future-focused mindset. We provide hands-on support with intelligent insights that turn complex challenges into simple solutions.

#### **Our Mission**

To deliver AI-enhanced connectivity that reduces cost, increases speed, and maximizes efficiency—empowering our partners to operate at the forefront of a rapidly evolving digital world.

#### **Let's Connect**

Discover how OptioConnect's intelligent infrastructure solutions can power your network's next leap forward.

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