

# SV-AOC-100GT4T4-XXM

Starview QSFP28 100Gbps Active Optical Cable module, distance up to 1m;3m;5m;7m;10m



## Features

- 4 independent full-duplex channels
- Up to 28Gb/s data rate per channel
- QSFP MSA compliant
- Up to 100m OM4 MMF transmission
- Operating case temperature: 0 to 70 °C
- Single 3.3V power supply
- Maximum power consumption 3.5W each terminal
- RoHS-6 compliant

## Applications

- 100G Ethernet
- Infiniband EDR

## Ordering Information

Part number	Description
<b>SV-AOC-100GT4T4-1M</b>	Starview QSFP28 100Gbps Active Optical Cable module, distance up to 1m
<b>SV-AOC-100GT4T4-3M</b>	Starview QSFP28 100Gbps Active Optical Cable module, distance up to 3m
<b>SV-AOC-100GT4T4-5M</b>	Starview QSFP28 100Gbps Active Optical Cable module, distance up to 5m
<b>SV-AOC-100GT4T4-7M</b>	Starview QSFP28 100Gbps Active Optical Cable module, distance up to 7m
<b>SV-AOC-100GT4T4-10M</b>	Starview QSFP28 100Gbps Active Optical Cable module, distance up to 10m

## Absolute Maximum Ratings

Parameter	Symbol	Min.	Typ.	Max.	Unit
Storage Temperature	TS	-40		85	°C
Operating Case Temperature	TOP	0		70	°C
Power Supply Voltage	VCC	-0.5		3.6	V
Relative Humidity (non-condensation)	RH	0		85	%

## Recommended Operating Conditions and Power Supply Requirements

Parameter	Symbol	Min.	Typ.	Max.	Unit
Operating Case Temperature	TOP	0		70	°C
Power Supply Voltage	VCC	3.135	3.3	3.465	V
Data Rate, each Lane			25.78125	28.05	Gb/s
Control Input Voltage High		2		Vcc	V
Control Input Voltage Low		0		0.8	V

## Electrical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Power Consumption, each Terminal				3.5	W	
Supply Current, each Terminal	Icc			1060	mA	
Transceiver Power-on Initialization Time				2000	ms	1
Transceiver ( each lane)						
Single Ended Input Voltage Tolerance (Note 2)		-0.3		3.6	V	
AC Common Mode Input Voltage Tolerance		15			mV	RMS
Differential Input Voltage Swing Threshold		50			mVpp	LOSA Threshold
Differential Input Voltage Swing	Vin,pp	180		1000	mVpp	
Differential Input Impedance	Zin	90	100	110	Ohm	
Total Jitter				0.40	UI	
Deterministic Jitter				0.15	UI	
Rx(each lane)						
Single Ended Output Voltage		-0.3		4	V	
AC Common Mode Output Voltage				7.5	mV	RMS
Differential Output Voltage Swing	Vout,pp	300		1000	mVpp	
Differential Output Impedance	Zout	90	100	110	Ohm	
Total Jitter				0.3	UI	
Deterministic Jitter				0.15	UI	

Note(1): Power-on Initialization Time is the time from when the power supply voltages reach

and remain above the minimum recommended  
operating supply voltages to the time when the module is fully functional.

Note(2): The single ended input voltage tolerance is the allowable range of the instantaneous  
input signals.