

SV-AOC-40GT4T3-xxM

Starview QSFP+ 41.25Gbps to 4 x SFP+ 10.3125Gbps Active Optical Break-out Cable modules, distance up to 1m;3m;5m;7m;10m



Features

- 4 independent full-duplex channels
- Up to 12.5Gbps data rate per channel
- QSFP MSA compliant
- Up to 100m OM3 MMF transmission
- Operating case temperature: 0~70C
- Single 3.3V power supply
- Typical 0.8W operation power each terminal
- RoHS compliant

Applications

- 40G Ethernet
- Infiniband QDR
- 4G/8G/10G Fiber Channel

Ordering Information

Part number	Description
SV-AOC-40GT4T3-1M	Starview QSFP+ 41.25Gbps to 4 x SFP+ 10.3125Gbps Active Optical Break-out Cable modules, distance up to 1m
SV-AOC-40GT4T3-3M	Starview QSFP+ 41.25Gbps to 4 x SFP+ 10.3125Gbps Active Optical Break-out Cable modules, distance up to 3m
SV-AOC-40GT4T3-5M	Starview QSFP+ 41.25Gbps to 4 x SFP+ 10.3125Gbps Active Optical Break-out Cable modules, distance up to 5m
SV-AOC-40GT4T3-7M	Starview QSFP+ 41.25Gbps to 4 x SFP+ 10.3125Gbps Active Optical Break-out Cable modules, distance up to 7m
SV-AOC-40GT4T3-10M	Starview QSFP+ 41.25Gbps to 4 x SFP+ 10.3125Gbps Active Optical Break-out Cable modules, distance up to 10m

Absolute Maximum Ratings

Parameter	Symbol	Min.	Typ.	Max.	Unit
Storage Temperature	Ts	-40		85	°C
Relative Humidity	RH	0		85	%
Operating Case Temperature	Topc	0		70	°C
Supply Voltage	VCC			3.6	V

General Information

Parameter	Value	Unit	Note
Number of Lanes	4 Tx & 4 Rx		
Data Rate, each Lane	10.5	Gb/s	
Maximum Aggregate Data Rate	42.0	Gb/s	
Bit Error Ratio	<10 ⁻¹²		
Interface	Serial, I2C-based		defined by the QSFP+ MSA
Maximum Power Consumption, each Terminal	0.8	W	
Operation Temperature	0-70	°C	

Electrical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Supply Voltage	Vccl, VccTx, VccRx	3.15	3.3	3.45	V	
Supply Current	Icc		250	280	mA	
Transmit Turn-On Time				2000	ms	
Tx(each lane)						
Reference Differential Input Impedance	Z _d		100		Ω	
Termination Mismatch	ΔZ _M			5	%	
Input AC Common Mode Voltage				25	mV (RMS)	
Differential Input S-parameter	SDD11		< -12 + 2 × SQRT(f), with f in GHz.		dB	0.01-4.1GHz

		$< -6.3 + 13 \times \log_{10}(f/5.5)$, with f in GHz	$< -6.3 + 13 \times \log_{10}(f/5.5)$, with f in GHz	dB	4.1-11.1GHz
Reflected Differential to Common Mode Conversion	SCD11		-10	dB	0.01-11.1GHz
Total Jitter			0.40	UI	
Deterministic Jitter			0.15	UI	
Rx(each lane)					
Reference Differential Input Impedance	Z_d		100	Ω	
Termination Mismatch	ΔZ_M		5	%	
Output AC Common Mode Voltage			15	mV (RMS)	
Differential Output S-parameter	SDD22	$< -12 + 2 \times \text{SQRT}(f)$, with f in GHz		dB	0.01-4.1GHz
		$< -6.3 + 13 \times \log_{10}(f/5.5)$, with f in GHz		dB	4.1-11.1GHz
Common Mode Output Reflection Coefficient	SCC22	$< -7 + 1.6 \times f$, with f in GHz.		dB	0.01-2.5GHz
			-3	dB	2.5-11.1GHz
Total Jitter			0.38	UI	
Deterministic Jitter			0.64	UI	