SV-QSFP-100GT4T3-XXM

Starview QSFP+ 100Gbps to 4 x 25Gbps SFP28 Active Optical Break-out Cable modules, distance up to1m;3m;5m;7m;10m

Features

- QSFP28 and SFP28 MSA compliant
- Four independent full-duplex channels
- Supports 103.1Gb/s aggregate bit rate
- Up to 100m OM4 MMF transmission
- Operating case temperature: 0 to 70 °C
- Single 3.3V power supply
- 4x25G electrical interface (OIF CEI-28G- VSR) for QSFP28 terminal
- 25G electrical interface (OIF CEI-28G-VSR) for SFP28 terminal
- Maximum power consumption of 2.5W for QSFP28 terminal and 1.0W for each SFP28 terminal
- RoHS-6 compliant

Applications

- 100G Ethernet
- Infiniband EDR

Ordering Information

Part number	Description
SV-QSFP-100GT4T3-1M	Starview QSFP+ 100Gbps to 4 x 25Gbps SFP28 Active Optical Break-out Cable modules, distance up to 1m
SV-QSFP-100GT4T3-3M	Starview QSFP+ 100Gbps to 4 x 25Gbps SFP28 Active Optical Break-out Cable modules, distance up to 3m
SV-QSFP-100GT4T3-5M	Starview QSFP+ 100Gbps to 4 x 25Gbps SFP28 Active Optical Break-out Cable modules, distance up to 5m
SV-QSFP-100GT4T3-7M	Starview QSFP+ 100Gbps to 4 x 25Gbps SFP28 Active Optical Break-out Cable modules, distance up to 7m
SV-QSFP-100GT4T3-10M	Starview QSFP+ 100Gbps to 4 x 25Gbps SFP28 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
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	Notes
Operating Case Temperature	TOP	0		70	°C	
Power Supply Voltage	VCC	3.135	3.3	3.465	V	
Data Rate, each Lane (QSFP28)			25.78125			
Data Rate, each Module (SFP28)			25.78125			
Data Rate Accuracy		-100		100	ppm	
Pre-FEC Bit Error Ratio				$5x10^{-5}$		
Post-FEC Bit Error Ratio				$1x10^{-12}$		1
Control Input Voltage High		2		Vcc	V	
Control Input Voltage Low		0		0.8	V	

Notes:

1. FEC provided by host system.

Electrical Characteristics

(QSFP28 Terminal)

Parameter	Test Point	Min	Typical	Max	Units	Notes
Power Consumption				2.5	W	
Supply Current	Icc			757	mA	
Transmitter (each Lane)						
Overload Differential Voltage pk-pk	TP1a	900			mV	
Common Mode Voltage (Vcm)	TP1	-350		2850	mV	1
Differential Termination Resistance Mismatch	TP1			10	%	At 1MHz
Differential Return Loss (SDD11)	TP1			See CEI-28G-VSR Equation 13-19	dB	
Common Mode to Differential conversion and Differential to Common Mode conversion (SDC11, SCD11)	TP1			See CEI-28G-VSR Equation 13-20	dB	

Stressed Input Test	TP1a	See CEI-28G-VSR Section 13.3.11.2.1			
Receiver (each Lane)					
Differential Voltage, pk-pk	TP4		900	mV	
Common Mode Voltage (Vcm)	TP4	-350	2850	mV	1
Common Mode Noise, RMS	TP4		17.5	mV	
Differential Termination Resistance Mismatch	TP4		10	%	At 1MHz
Differential Return Loss (SDD22)	TP4		See CEI-28G-VSR Equation 13-19	dB	
Common Mode to Differential conversion and Differential to Common Mode conversion (SDC22, SCD22)	TP4		See CEI-28G-VSR Equation 13-21	dB	
Common Mode Return Loss (SCC22)	TP4		-2	dB	2
Transition Time, 20 to 80%	TP4	9.5		ps	
Vertical Eye Closure (VEC)	TP4		5.5	dB	
Eye Width at 10^{-15} probability (EW15)	TP4	0.57		UI	
Eye Height at 10^{-15} probability (EH15)	TP4	228		mV	

Notes:

1. Vcm is generated by the host. Specification includes effects of ground offset voltage.
2. From 250MHz to 30GHz.

(SFP28 Terminals)

Parameter	Test Point	Min	Typical	Max	Units	Notes
Power Consumption				1.0	W	1
Supply Current	Icc			300	mA	1
Transmitter						
Overload Differential Voltage pk-pk	TP1a	900			mV	
Common Mode Voltage (Vcm)	TP1	-350		2850	mV	2

Differential Termination Resistance Mismatch	TP1		10	%	At 1MHz
Differential Return Loss (SDD11)	TP1		See CEI-28G-VSR Equation 13-19	dB	
Common Mode to Differential conversion and Differential to Common Mode conversion (SDC11, SCD11)	TP1		See CEI-28G-VSR Equation 13-20	dB	
Stressed Input Test	TP1a	See CEI-28G-VSR Section 13.3.11.2.1			
Receiver					
Differential Voltage, pk-pk	TP4		900	mV	
Common Mode Voltage (Vcm)	TP4	-350	2850	mV	2
Common Mode Noise, RMS	TP4		17.5	mV	
Differential Termination Resistance Mismatch	TP4		10	%	At 1MHz
Differential Return Loss (SDD22)	TP4		See CEI-28G-VSR Equation 13-19	dB	
Common Mode to Differential conversion and Differential to Common Mode conversion (SDC22, SCD22)	TP4		See CEI-28G-VSR Equation 13-21	dB	
Common Mode Return Los (SCC22)	TP4		-2	dB	3
Transition Time, 20 to 80%	TP4	9.5		ps	
Vertical Eye Closure (VEC)	TP4		5.5	dB	
Eye Width at 10^{-15} probability (EW15)	TP4	0.57		UI	
Eye Height at 10^{-15} probability (EH15)	TP4	228		mV	

Notes:

1. Per terminal.
2. Vcm is generated by the host. Specification includes effects of ground offset voltage.
3. From 250MHz to 30GHz.