

NoviConnect™ 521 40G QSFP+ PLR4 Transceiver

NoviConnect 521: This MSA compliant QSFP+ transceiver provides 40GBase-PLR4 throughput up to 10km over single-mode fiber (SMF) using a wavelength of 1310nm via an MPO connector. It is built to MSA standards and is uniquely serialized and data-traffic and application tested to ensure that they will integrate into your network seamlessly. Digital optical monitoring (DOM) support is also present to allow access to real-time operating parameters. This transceiver is Trade Agreements Act (TAA) compliant.



All NoviConnect products from NoviFlow are 100% functionally tested to ensure trouble-free installation and operation when used with NoviFlow's [NoviSwitch network products](#). NoviConnect Transceivers are factory programmed with specific configuration data required for seamless networking compliance and for optimal network performance when used with NoviFlow switching products. These transceivers can be mixed and connected to devices with MSA industry standard compliant transceivers, for outstanding network performance.

NoviFlow Inc.™ aims to change the traditional approach to networking by making switching smarter. The company was founded to deliver upon the promise of SDN. Our SDN data plane products combine the benefits of virtualization and programmability with network processors that can handle complex flows, making it possible for data center and network operators to keep up with today's exponentially growing networking demand. In order to ensure the highest levels of network performance, seamless compatibility and trouble-free upgrades with our NoviSwitch products, NoviFlow offers a complete line of high-performance and cost-effective SFP transceiver modules.

Key Features:

- 4 Parallel lanes design
- Compliant with QSFP+MSA
- Management interface specifications per SFF-8436
- 4 channels PIN photo detector
- Up to 11.2Gb/s per channel data links
- Single +3.3V power supply
- Class 1 laser safety certified
- Operating temperature: 0°C to +70°C
- Up to 10km on SMF
- RoHS Compliant

The NoviConnect 521 40G QSFP+ PLR4 Transceiver is 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."

Regulatory Compliance

- ESD to the Electrical PINs: compatible with MIL-STD-883E Method 3015.4
- ESD to the LC Receptacle: compatible with IEC 61000-4-3
- EMI/EMC compatible with FCC Part 15 Subpart B Rules, EN55022:2010
- Laser Eye Safety compatible with FDA 21CFR, EN60950-1& EN (IEC) 60825-1,2
- RoHS compliant with EU RoHS 2.0 directive 2015/863/EU

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Absolute Maximum Ratings

Parameter	Symbol	Min.	Typ.	Max.	Unit
Maximum Supply Voltage	Vcc	-0.5		4.0	V
Storage Temperature	TS	-40		85	°C
Operating Case Temperature	Tc	0		70	°C
Operating Humidity	RH	5		95	%
Damage Threshold	Pol	2.3			dBm
Data Rate, per Channel			10.3125	11.2	Gb/s

Electrical Characteristics

Parameter	Test Point	Min.	Typ.	Max.	Unit	Notes
Power Dissipation	Pd			3500	mW	
Supply Voltage	Vcc	3.135	3.3	3.465	V	
Supply Current	Icc			1100	mA	
Transmitter						
Differential data input swing	Vin,pp	180		900	mVp-p	
Input differential impedance	Zin	80	100	120	Ω	
Receiver						
Differential data output swing	Vout, pp	300		850	mVp-p	
Output differential impedance	Zin	80	100	120	Ω	

Optical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Transmitter						
Launch Optical Power per Lane	Po	-6		+1.5	dBm	1
Optical Extinction Ratio	EX	3.5			dB	2
Optical Wavelength	λ	1260	1310	1355	nm	
Optical Return Loss Tolerance	ORLT			12	dB	
Receiver						
Receiver Sensitivity (OMA)	S			-12.6	dBm	3
Damage Threshold	Pol	2.3			dBm	3
Receiver wavelength	λ	1260		1355	nm	
LOS De-Assert	LOS _D			-15	dBm	
LOS Assert	LOS _A	-30			dBm	
LOS Hysteresis		0.5			dB	

Notes:

- The optical power is launched into SMF.
- Measured with a PRBS 231-1 test pattern @10.3125Gbps.
- Measured with PRBS 231-1 test pattern, 10.3125Gb/s, BER<10⁻¹².

ORDERING INFORMATION

MODEL NUMBER 400000521

FOR MORE INFORMATION


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