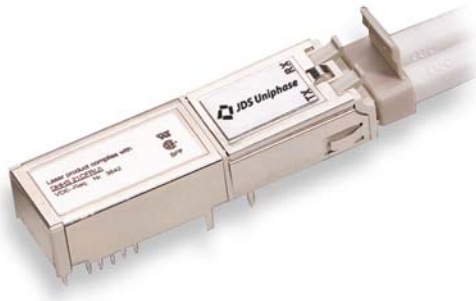


Product Bulletin



The JDS Uniphase dual mode optical transceiver provides Gigabit Ethernet and Fibre Channel performance capabilities in a single component. The integrated fiber optic transceiver conforms to Institute of Electrical and Electronics Engineers (IEEE 802.3) specifications at 1.25 Gb/s and Fibre Channel specifications at 1.0625 Gb/s. These transceivers are offered in Small Form Factor (SFF) and Gigabit Interface Converter (GBIC) versions for short wavelength (SW) or long wavelength (LW) operation.

Small Form Factor Dual Application Transceivers

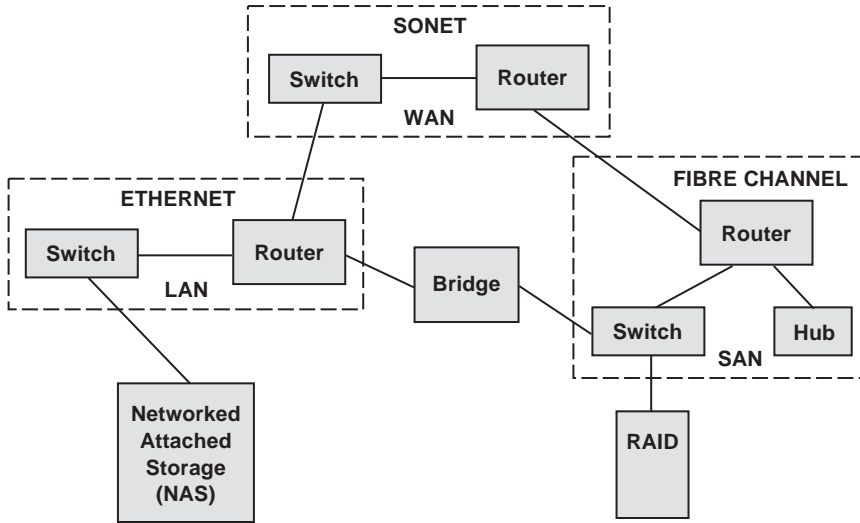
Key Features

- Gigabit Ethernet and Fibre Channel performance capabilities in a single component
- Short (850 nm) and long (1310 nm) wavelength operation
- Single 3.3 V power supply (150 mA typical)
- High reliability
- Low bit error rate

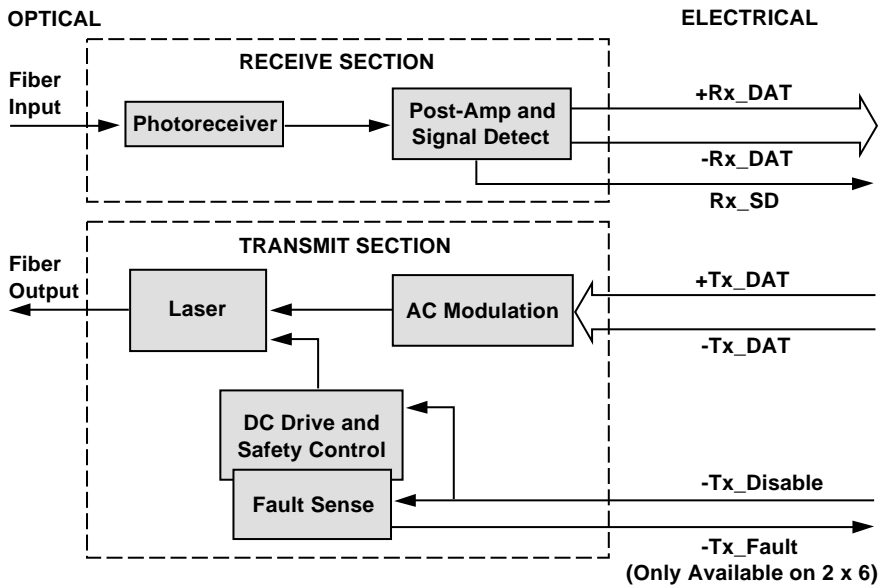
Applications

- Fibre Channel and Gigabit Ethernet
- Client/server environments
- Distributed multiprocessing
- Fault tolerant applications
- Visualization, real-time video, collaboration, channel extenders, data storage, archiving data acquisition

Segment Architecture



Small Form Factor Transceiver Block Diagram



Specifications

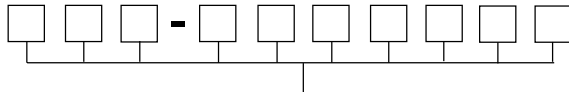
Parameter	Specification
Electrical Interface	
Transmit signal input differential swing	400 to 2000 mV _{p-p}
Transmit signal input differential impedance	100 Ω nominal
Receive signal output differential swing	600 to 1000 mV _{p-p}
Receive signal output differential impedance	100 Ω nominal
Control I/O signals	TTL
Optical	
Data rate	1.0625 to 2.125 Gb/s
Short wavelength	850 to 860 nm
Long wavelength	1310 nm
Maximum launch power into fiber (average)	-4.0 dBm
Minimum launch power into fiber (average)	-10.0 dBm
Receiver optical modulation amplitude (OMA)—1.0625 Gb/s	31 to 2000 μW _{p-p}
Receiver optical modulation amplitude (OMA)—2.125 Gb/s	49 to 2000 μW _{p-p}
Power	
Voltage	3.3 V ± 5%
Current	200 mA maximum
Environmental	
Operating temperature	0 to 70 °C
Operating humidity	8 to 80% RH
Storage temperature	-40 to 85 °C
Mechanical	
Short wavelength 50/125 μm optical fiber distance	
1.0625 Gb/s	2 to 500 m
1.25 Gb/s	2 to 550 m
2.125 Gb/s	2 to 300 m
Short wavelength 62.5/125 μm optical fiber distance	
1.0625 Gb/s	2 to 300 m
1.2 Gb/s	2 to 275 m
2.125 Gb/s	2 to 150 m
Long wavelength 9/125 μm optical fiber distance	
1.0625 Gb/s	2 to 10,000 m
1.25 Gb/s	2 to 5,000 m
2.150 Gb/s	2 to 10,000 m
Dimensions (W x D x H)	
Pin through hole (PTH)	13.5 x 49.5 x 9.8 mm
Hot pluggable	13.5 x 56.5 x 8.6 mm
Form factor	Small form factor, LC connector, 2x5 or 2x6 pin through hole (PTH) and hot-pluggable (SFP) configuration
Laser Safety (Class I) and Certificaton	
US	DHHS 21 CFR(J) conformant and UL
International	IEC 825-1 conformant and CSA
Reliability	
Average failure rate (AFR)	<0.01%/1,000 hours (50 °C)
Maximum bit error rate at minimum receiver sensitivity	<10 ⁻¹²

Small Form Factor Dual Application Transceivers | 4

Ordering Information

For more information on this or other products and their availability, please contact your local JDS Uniphase account manager or JDS Uniphase directly at 1-800-498-JDSU (5378) in North America and +800-5378-JDSU worldwide or via e-mail at sales@jdsu.com.

Sample: JSF-1XS0AA1



Product Code	Description
JSF-1XS0AA1	SW Gigabit Ethernet/Fibre Channel Small Form Factor PTH Transceiver
JSF-1XL0AA1	LW Gigabit Ethernet/Fibre Channel Small Form Factor PTH Transceiver
JSP-1XS0AA1	SW Gigabit Ethernet/Fibre Channel Small Form Factor Hot-Pluggable Transceiver
JSP-1XL0AA1	LW Gigabit Ethernet/Fibre Channel Small Form Factor Hot-Pluggable Transceiver



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