

## PRODUCT BRIEF

# 40GB/S OPTICAL TRANSPONDER

## Small Form Factor NRZ

### FEATURES

- ▶ Provides NRZ modulation for bit-rates from 39.8Gb/s to 43.1Gb/s
- ▶ Compact EML design saves space while lowering power
- ▶ Available in a small form factor with a standard 300 PIN interface
- ▶ OIF, SFI-5 compliant interface that provides 16 differential 2.5Gb/s lines
- ▶ Supports OC-768, STM-256, OTU-3, G.693, G.709 and ITU-T, VSR2000-3R2 standards
- ▶ Provides proprietary control and monitoring of sub-modules
- ▶ Allows for adjustable thresholds and sampling phase control on receiver
- ▶ Compliant with ITU jitter specifications
- ▶ Provides both direct input and PLL (jitter reduction circuit) reference clock options
- ▶ Uses standard un-sequencing supply voltages
- ▶ Provides I<sup>2</sup>C interface for controlling and monitoring

### OVERVIEW

The 40Gb/s Small Form Factor (SFF) Non-Return to Zero (NRZ) optical module from Finisar is the most compact 40Gb/s short-reach transponder in the industry. It is offered in a cost-effective, small (3.5" x 4.5") form factor with a standard 300-PIN MSA interface.

By utilizing the latest chip set technology with proprietary integration techniques, this 40Gb/s transponder sets a new standard in price, size and performance, while offering the latest features and protocols.

The advanced mixed-signal chip sets support bit-rates from 39.8Gb/s to 43.1Gb/s, which allows the transponder to support a wide variety of networking applications including OC-768, STM-256 and OTU-3. This product is also OIF, SFI-5 compliant and supports a number of advanced control and monitoring features.

The SFF NRZ provides the industry's smallest form factor for a 40Gb/s transponder. This compact, EML-based design not only saves space, it also provides for very low power consumption.

This transponder supports a wide variety of 40Gb/s client-side interconnection applications, which includes optical support for DWDM transmission systems (including OADM's), cross-connects, optical routers/switches and SONET/SDH transmission systems.



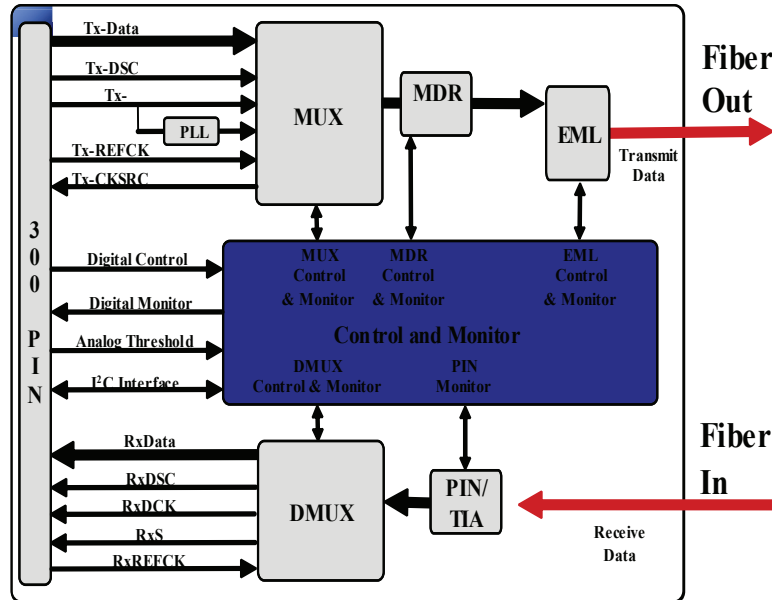
*Finisar*<sup>®</sup>

## TARGET SPECIFICATIONS

Technical Specifications	Min	Typ	Max	Units
Bit Rate	39.8		43.1	Gb/s
Optical Reach (Span CD of 40ps/nm)	2			km
Wavelength		1550		nm
Transmitter Optical Power	0		3	dBm
Extinction Ratio	8.2	10		dB
Side Mode Suppression Ration	35			
Receiver Sensitivity			-6	dBm
Receiver Overload	3			dBm
Power Penalty			2	dB
Power Dissipation			14.5	W

Physical Specifications	Min	Typ	Max	Units
Operating Case Temperature	-5		70	°C
Storage Case Temperature	-40		85	°C
Operating Relative Humidity	0		85	%RH
Dimensions (L x W x H)	3.5 x 4.5 x 0.53			inch
Communications Port	I <sup>2</sup> C			
Software Interface	GUI			

\* Preliminary specifications subject to change. Additional information is available upon request.



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