



*Press Release May 17th, 2006*

## **10Gbps Full tunable Transponder**

SIGMA-LINKS INC. released 10Gbit/s full tunable transponder products comprising wavelength variable function. Engineering samples are available upon request.

This product is based on 300pin MSA (Multi Source Agreement), and transmission to single mode fiber 80km is possible. A bit rate works to 9.95 - 11.3Gbit/s.

Because the conventional product adopted laser diode of a fixed wavelength, for a wavelength division multiplex (WDM) system, it was necessary for a wavelength to prepare for several kinds of transponders equipped with different laser diode, but plural wavelengths were able to change without changing hardware configuration by integrating tunable laser diode. In other word, this technology can contribute to the flexible system configuration and much reduction of total system cost since the system provider can set define and determine wavelength easily not only before system installation but also after, even though the service provider usually spend time to define necessary wavelength specification.

This product family supports C-band (1,528.773 to 1563.455nm) as well as L-band (1,570.416 to 1607.416nm) wavelength. The eighty eight different wavelengths can be set with 50GHz (0.4nm) division unit. In addition, this product has feature of built-in wavelength locker, high wavelength precision of  $\pm 20\text{pm}$ . Therefore, this product should be most suitable for a high-density wavelength division multiplex (DWDM) system application. The receiver can support both of avalanche photodiode (APD) and PIN photodiode (PIN-PD).

For remote control, an I2C communication function is built in it, and, a change of a wavelength, reading of alarm, reading of an analog monitor and the other several setting are enabled.

SIGMA-LINKS expects to ship over 2,000 units in this year applied for a DWDM system as well as for ROADM system.

### **About Sigma-Links**

Sigma-Links, Inc., a joint venture company between Fujikura Ltd. and Oki Electric Industry Co.,Ltd., which was established in April 2001. Utilizing the technologies and products from both companies, Sigma-Links is producing a variety of optical Link products to the telecommunication industry.

Sigma-Links provides optical link products with the highest level quality and worldwide customer service. Visit Sigma-Links web site <http://www.sigma-links.com>.

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## **SIGMA-LINKS INC.**

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## OC-192 Full Tunable Transceiver for DWDM

# OAT1049xT-V6 Series

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### Features:

- 300pin MSA Compliant
- Full C-band or L-band Tunable for 50GHz Spacing
- Wavelength Stability:  $\leq \pm 20\text{pm}$  (with Wavelength Locker)
- SONET/SDH 9.95328Gbit/s Operation
- Support 10.3Gbit/s (10GbE), 10.66Gbit/s (FEC), 10.7Gbit/s (OTN) and 11.1Gbit/s Rate
- Minimum Sensitivity:  $< -24\text{dBm}$
- Optical Output Power;
  - C-band: +4 to +7dBm
  - L-band: +2 to +5dBm
- Transmission Distance: 80km(1600ps/nm)
- Dispersion Penalty:  $< 2\text{dB}$
- 16-Bit Parallel 622.08Mbit/s (Equivalent FEC Rate) LVDS Data Interface
- SERDES Timing Compliant with OIF1999.102.8 SFI-4 Interface
- Jitter Filter Built-in (Except for Multi-Rate Type)
- Compact Size:  $88.9 \times 114.3 \times 12.0$  (mm)
- Supply Voltage: +3.3V and -5.2V
- Low Power Consumption:  $< 12\text{W}$  max.
- I2C Compatible Bus

### Applications:

- Dense WDM Systems
- Metro Network SONET/SDH Systems
- 10 Gigabit Ethernet Systems
- Forward Error Correction Systems
- Optical Transport Network (OTN) Systems

