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**Leading Optical Chip and Module Manufacturers Release Common Specifications for the 10 Gbit/s Solution with a Miniature Device (XMD) MSA for XFP TOSA and ROSA**

MSA specifications designed to enable use of optical devices for multiple suppliers

Tokyo, Japan, June 7, 2004 -- Eudyna Devices Inc., Mitsubishi Electric Corp., Oki Electric Industry Co., Ltd., Opnext, Inc. and Sumitomo Electric Industries, Ltd., today announced the release of the common specifications for optical devices based on a 10 Gbit/s Miniature Device Multi-Source Agreement (XMD-MSA). The defined specifications are intended for optical devices capable of transmission over a distance of 20 km or more.

The XMD-MSA enables the use of optical devices from multiple suppliers. The XMD-MSA has been created to establish compatible sources of 10 Gbit/s Transmitter Optical Sub-Assembly (TOSA) and Receiver Optical Sub-Assembly (ROSA) devices embedded into the 10 Gbit/s XFP MSA module. The XFP module has been designed for use in large-capacity network and storage systems. This XMD-MSA covers optical devices that comply with 10 Gbit/s interface standards such as 10 Gigabit Ethernet, 10 Gigabit Fiber Channel and SONET OC-192.

The use of flexible printed circuits (FPC) absorbs TOSA/ROSA package design differences among suppliers. This results in the same XFP-housing structure and printed circuit board (PCB) for multi-supplier's TOSA/ROSA.

The newly available XMD-MSA specifications detail the direct-modulation Distributed-Feed-back (DFB) or Fabry-Perot (FP) laser TOSA, and the PIN

Photodiode - Trans-Impedance Amplifier (PIN-TIA) ROSA. These specifications for interchangeable TOSA/ROSA devices include:

- Mechanical Dimensions including optical connector interface that determines the design of the XFP optical head
- Electrical Interface using a flexible printed circuit (FPC)
- Optical and electrical characteristics

The specifications are now available from any member of the XMD-MSA.

The XMD-MSA committee will continue to discuss the specifications for the semiconductor-based external modulator TOSA and Avalanche Photo-Diode Trans-Impedance Amplifier (APD-TIA) ROSA.

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### **About MSA members**

#### **About Eudyna Devices Inc.**

Founded in 2004, Eudyna Devices Inc. is the worldwide leader in compound semiconductor device businesses. Eudyna Devices Inc. carries out every step involved in the development, manufacture and sale of optical semiconductors, microwave semiconductors, -all based on state-of-the-art technology.

Eudyna Devices Inc. will continuously support its former customers of Fujitsu Quantum Devices Ltd. (FQD) and Electron Device Department of Sumitomo Electric Industries Ltd. (SEI-EDD) in terms of the products which have been supplied by those organizations. Furthermore, we will provide new devices and components which can contribute to a bright, prosperous, and healthy future society, especially in expanding the broadband network community, as a result of integration of both companies' technological capabilities.

More information about Eudyna Devices Inc. can be found at:

<http://www.eudyna.com>

#### **About Mitsubishi Electric Corp.**

With over 80 years of experience in providing reliable, high-quality products to both corporate clients and general consumers all over the world, Mitsubishi

Electric Corporation (TSE: 6503) is a recognized world leader in the manufacture, marketing and sales of electrical and electronic equipment used in information processing and communications, space development and satellite communications, consumer electronics, industrial technology, energy, transportation and building equipment. The company recorded consolidated group sales of 3,309 billion yen (US\$31.2 billion\*) in the year ended March 31, 2004. For more information visit <http://global.mitsubishielectric.com>

\*At an exchange rate of 106 yen to the US dollar, the rate given by the Tokyo Foreign Exchange Market on March 31, 2004.

### **About Oki Electric Industry Co., Ltd.**

Founded more than a century ago in 1881, Oki Electric Industry Co., Ltd. (TSE:6703) is Japan's first telecommunications manufacturer, with its headquarter in Tokyo, Japan. With the corporate vision, "Oki, Network Solutions for a Global Society," Oki Electric provides top-quality products, technologies and solutions to its customers through its telecommunications systems, information systems and electronic devices segments. All three segments are integrated into one effective organization that functions as a collective force to create exciting new products and technologies, including information and telecom converged solutions. Through its business activities, Oki Electric satisfies a spectrum of customer needs in various markets. Visit Oki's global web site at <http://www.oki.com/>.

### **About Opnext, Inc.**

Opnext, Inc., is a global leader in high-performance optical components, including high power lasers, laser diode and EA-DFB modules, optical transmitters receivers and transceivers, SFP's, 300-pin MSA transponders (SerDes transceivers), XENPAK, X2 and XFP modules. Formed out of Hitachi, Opnext brings over 30 years experience to the design, development and manufacture of high-performance components and subsystems that power today's access communications, backbone, metro, information and industrial markets. Opnext provides world-class customer service, and has been

recognized with service awards from Cisco and CIENA. For additional information, see the Opnext web site at <http://www.opnext.com/>.

### **About Sumitomo Electric Industries, Ltd.**

Sumitomo Electric Industries, Ltd. (TSE: 5802) designs, manufactures and sells optical fiber, cable and components, advanced electronic devices, and automotive parts. Through a successful strategy of research and diversification, SEI has become one of the world's leading companies at the forefront of the revolution in information and communications. The company has operations around the world in more than 25 countries and employs 80,000 people. SEI reported group net sales of 1,489 billion yen for the year ended March 2003. [www.sei.co.jp](http://www.sei.co.jp)

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