

Leading AWG Companies Announce A Small Form Factor MSA Reducing Package Footprint By One Third

Tokyo, San Jose July 23rd, 2007 - NEL, Hitachi Cable, Gemfire, Fitel, NEC and NeoPhotonics, leading companies in the planar lightwave circuit (PLC) passive components industry, today announced the addition of a new option within the Multi-Source Agreement For Thermally Stabilized Array Waveguide Grating (AWG) Modules (MSA) for a *Small Form Factor* package configuration. This small form factor module provides a footprint approximately one third smaller than the highly successful AWG MSA first published in December of 2002, depending on the configuration. These standardized AWGs provide multiplexing and demultiplexing for DWDM optical equipment through a common interface allowing equipment manufacturers a choice among several compatible suppliers, simultaneously reducing lead-times and cost. The new small form factor provides all of the benefits of standardization while saving precious board space. Version 2.0 of the MSA, containing descriptions of both the standard and small form factor AWG packages, has now been published. For more information please see the AWG MSA website at www.awgmsa.com.

“As one of the founding members we at NEL have been very pleased with the broad industry acceptance of the initial MSA for thermally stabilized AWGs, and we expect this *Small Form Factor* MSA to be equally successful,” said Haruki Kozawaguchi, Executive Director of NEL corporation. “These MSAs define common mechanical features and electrical interfaces for the AWG Module, including the package dimensions, bolt holes, electrical pin positions and assignments, fiber positions, heater resistance, and firmware. The optical performance parameters, such as insertion loss, crosstalk and passband, are not specified by MSA, but are determined individually by the member companies.”

“AWG technology has advanced greatly since the original AWG MSA was defined in 2002,” explained Seiich Okubo, Chief Technology Officer of Hitachi Cable. “An AWG with the same number of channels and channel spacing can now be put in a package that is only two thirds of the size of the original. This new *Small Form Factor* MSA package will allow equipment manufacturers to utilize this small size while retaining the benefits of a standard mechanical and electrical interface.”

“This new Small Form Factor AWG Agreement is a great simplification over the original MSA by providing a single slim, compact form factor for two choices of input/ output fiber locations while allowing for either internal or external electronic control,” stated Nigel Cockroft, VP of Telecom Products at Gemfire Corporation. “Given the rapidly increasing deployment of AWGs and pressures to minimize system space we expect this new design will be very popular and will allow system integrators to move forward with confidence.”

“It is important that MSA standards keep pace with technology developments,” said G. Ferris Lipscomb, VP Marketing at NeoPhotonics. “This new *Small Form Factor* MSA allows the benefits of this technology development to be utilized by equipment manufacturers. However, we also expect the original MSA to be supported as well, since many systems world wide are based on that standard.”

The thermally stabilized AWG MSA group is an open forum, welcoming applications from AWG manufactures that wish to join. For more information on detailed technical specifications or joining the MSA, please contact the following MSA representatives:

Gemfire Corp., Nigel Cockroft, n.cockroft@gemfire.com

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About Fitel(Furukawa Electric Co., Ltd)

Furukawa Electric Co., Ltd was founded in 1884 and since that time has played a dominant role in the growth of the global marketplace. Since manufacturing the world's first optical fiber cable in 1974, Furukawa has lead the development of optical fibers by establishing a total production system for products ranging from high-performance silica-based optical fibers to a variety of optical components such as optical amplifiers, pump lasers and Planer Lightwave Circuit products manufactured under the brand name "FITEL". For more detailed information, visit our website: <http://www.furukawa.co.jp/>

About Gemfire Corp.

Gemfire is a leading supplier of high performance integrated planar lightwave circuit products for DWDM Telecom applications. The company is headquartered in Fremont, California and has high volume manufacturing facilities in both California and Livingston, Scotland. For more detailed information, visit our web site: <http://www.gemfire.com>

About Hitachi Cable

Hitachi Cable, Ltd., is the solution provider supporting daily global communication needs, by innovating a variety of cabling products from Optical Fiber Cables (Terrestrial and Submarine), Base Transmitting Station Cables and Antennas, FTTH components and Optical Transceivers. Hitachi Cable as an original leading manufacturer of Array Waveguide Gratings filters, Interleaver and Splitter based on Planar Lightwave Circuit technology, supports the key function of DWDM systems since its beginnings. For more detailed information, visit our web site: <http://www.hitachi-cable.co.jp/en/>

About NeoPhotonics

For more detailed information, visit our web site: NeoPhotonics Corporation is a leading developer and vertically integrated manufacturer of advanced integrated optical modules and subsystems designed to improve the performance and lower the costs associated

with backbone and access optical networks. They are at the forefront of the long sought-after integration of active semiconductor, passive PLC and MEMS multi-dimensional switching functions into a single product. This integration is enabled by state-of-the-art integration, nanomaterials and nanoscale design and fabrication technologies. Backed by leading venture capital firms and institutional investors, NeoPhotonics maintains headquarters in San Jose, California and ISO 9001:2000 certified engineering and manufacturing facilities in Silicon Valley and Shenzhen, China. For more detailed information, visit our web site: www.neophotonics.com.

About NTT Electronics Corporation

NTT Electronics Corporation (NEL) is one of the members of NTT (Nippon Telegraph and Telephone Corporation) group. It has been providing the state-of-the-art devices for optical telecommunications networks with collaboration with NTT laboratories, covering a wide range of products such as DWDM lasers, PLC-based passive components, ultra-high-speed electronic devices, digital video processing products, and datacom equipment. For AWGs, in particular, NEL keeps on the first truck in terms of sales and technical performance. For more information, visit NEL web site: www.nel-world.com