

## JOINT PRESS RELEASE

### IME AND FUJIKURA FORGE PARTNERSHIP TO DEVELOP NEXT-GENERATION OPTICAL MODULATOR DEVICES

**Singapore, 29 September 2010** - The Institute of Microelectronics (IME), a research institute under the Agency for Science, Technology and Research (A\*STAR), and Fujikura Limited in Japan, have announced a research collaboration agreement to jointly develop next-generation silicon optical modulators for future optical communication networks. The partnership aims to commercialise and launch the new silicon optical device for the emerging optical communications market in Japan.

2. Under the agreement, Fujikura will tap on IME's design expertise and established silicon-based process infrastructure to build an integrated optical device with high aggregate data rate. Fujikura is a leading manufacturer of world-class optical fibre communication cables, with involvement in the development of optical components and instruments, electronic and automotive components, as well as in other new technologies.

3. "We envision our strategic partnership to accelerate our vision of a low-cost and high-yield 'plug-and-play' solution to connect multiple devices to PCs with fibre optic lines. IME's proximity to the other supply chain providers in Singapore is also an added incentive to the collaboration," said Mr Takamasa Kato, Executive Vice president of Fujikura Limited.

4. Mr Kato added, "IME is one of the few organisations in the world to offer advanced CMOS research facilities and silicon photonics prototyping service on a cost-sharing platform. The application of silicon-on-insulator wafers and fully CMOS-compatible processes in IME's solutions will offset the costly equipment investments commonly associated with technology transition."

5. Professor Dim-Lee Kwong, Executive Director of IME, said "We are excited to participate in Fujikura's mission to bring optical technology to the masses. The optical components market is an untapped one and demand for these components is expected to grow exponentially, driven by consumers' demand for faster data communications."

6. He added, "We foresee optical devices that deploy Dense Wavelength Division Multiplexing (DWDM) and fibre-optic based techniques to make up a considerable portion of the market share. Silicon is a widely-used material in semiconductor fabrication processes and IME has made possible the fabrication of optical devices on existing silicon-based process infrastructure. This will undoubtedly help to position the industry players for the emerging optoelectronics market."

---

### **About the Institute of Microelectronics (IME)**

The Institute of Microelectronics (IME) is a research institute of the Science and Engineering Research Council of the Agency for Science, Technology and Research (A\*STAR). Positioned to bridge the R&D between academia and industry, IME's mission is to add value to Singapore's semiconductor industry by developing strategic competencies, innovative technologies and intellectual property; enabling enterprises to be technologically competitive; and cultivating a technology talent pool to inject new knowledge to the industry. Its key research areas are in integrated circuits design, advanced packaging, bioelectronics and medical devices, MEMS, nanoelectronics, and photonics. For more information, visit IME on the Internet: <http://www.ime.a-star.edu.sg>.

### **About the Agency for Science, Technology and Research (A\*STAR)**

The Agency for Science, Technology and Research (A\*STAR) is the lead agency for fostering world-class scientific research and talent for a vibrant knowledge-based and innovation-driven Singapore. A\*STAR oversees 14 biomedical sciences, and physical sciences and engineering research institutes, and seven consortia & centre, which are located in Biopolis and Fusionopolis, as well as their immediate vicinity.

A\*STAR supports Singapore's key economic clusters by providing intellectual, human and industrial capital to its partners in industry. It also supports extramural research in the universities, hospitals, research centres, and with other local and international partners.

For more information about A\*STAR, please visit [www.a-star.edu.sg](http://www.a-star.edu.sg).

### **About Fujikura Limited**

Fujikura is a 126 year old multinational company based in Tokyo, Japan, with businesses in Optical transmission systems, telecommunications network systems, electronics materials, power systems, coated wires, magnetic wires, electronic materials for equipment, and metallic materials. Its annual revenue as of last fiscal year stands at about US\$6 B. ([www.fujikura.co.jp](http://www.fujikura.co.jp))

### ***For media enquiries, please contact:***

Song Shin Miin  
Industry Development  
Institute of Microelectronics  
DID: +65-6770 5317  
Email: [songsm@ime.a-star.edu.sg](mailto:songsm@ime.a-star.edu.sg)

Akira Yutani  
Corporate Strategy Planning Division  
Fujikura Limited  
DID: +81-3-5606-1112  
Email: [wwwadmin@fujikura.co.jp](mailto:wwwadmin@fujikura.co.jp)