

## Overseas Trends

# MEMS Industry Forum Joint Fact-Finding Mission (USA, Canada)

As part of MEMS Industry Forum Global Trends Research Mission activities, a fact-finding mission comprising representatives of MEMS-related organizations and MEMS member businesses visited the United States and Canada from October 9 (Monday) to 13 (Friday), 2006. The mission visited 9 locations with the aim of researching the development of advanced devices vital for the promotion of MEMS industrialization, design support software, foundry service, and industry-academia-government industrialization support systems in North America – the leader in these areas - and thereby contributing to the enhancement of MEMS-related industries in Japan.



### Canada: Edmonton, Alberta

- Micralyne
- NINT (National Institute for Nano Technologies)
- University of Alberta

### USA: Massachusetts

- Analog Devices
- Intellisense
- MicroCHIPS
- MIT : MEMS@MIT
- Boston Univ : Fraunhofer Institute USA CMI

### USA: New York

- Infotonics Technology Center

## Mission Members (alphabetical order, titles omitted)

<b>Junji ADACHI</b>	(Micromachine Center)
<b>Hiroshi FUKUMOTO</b>	(Mitsubishi Electric Corporation)
<b>Kazuhisa KARAKI</b>	(Olympus Corporation)
<b>Atsushi SATO</b>	(Mizuho Information and Research Institute)

## Itinerary Outline

### USA: New York

- Infotonics Technology Center : a center with such capacities as industry-academia-government design collaboration in the MEMS/photronics fields, manufacturing, packaging, testing/evaluation consulting, and foundry.

### USA: Massachusetts

- Analog Devices : One of the world's leading MEMS businesses in the field of acceleration sensor development.
- Intellisense : Business that develops MEMS design software. In collaboration with Infotonics of New York, the company also conducts software training seminars and consultancy services.
- MicroCHIPS : An MIT-related venture business involved in the development of drug delivery devices. Micro cavities are created in devices implanted internally using MEMS technology and drugs are delivered by periodically dissolving the membrane electrothermally.
- MIT : One of the United States' 3 major centers for MEMS research and development together with UC Berkley and Michigan University.
- MEMS@MIT : An MIT-affiliated research center.
- Boston University (BU) : The mission visited the Photonics Center, Fraunhofer USA CMI, which conducts MEMS-related research.

### Canada: Edmonton, Alberta

- Micralyne : A MEMS foundry with sales of \$14 million (4<sup>th</sup> highest in the world) specializing in low-quantity, high added value MEMS.
- NINT (National Institute for Nano Technologies) : Canada's national nanotechnology research base. The research facilities were completed in June 2006. The institute was established with the purpose of promoting the industrialization of university research results.
- University of Alberta : An institution central to MEMS research in Canada. The university has a close collaborative research relationship with Micralyne.

