# MECHATROLINK News

**Vol.18**
**June.2010**

## MECHATROLINK News brings the latest MECHATROLINK information to our members.

## 2010 Annual General Meeting

### ■ Annual General Meeting followed by Lectures and Reception

The next MMA annual general meeting will be held soon. The date, time, and location are shown below. The meeting will be followed by lectures and a reception.

The meeting, lectures, and reception are free to all MMA members, and we are looking forward to seeing many members there.

All participants are requested to register in advance by sending an email to the MMA.

### ● Date, Time, and Place

Date: 1:00 p.m. to 5:10 p.m., Friday June 18, 2010
Place: Mita NN Hall ( http://www.mita-nn-hall.com/)
Address: Mita NN Bldg. B1, 4-1-23 Shiba, Minato-ku, Tokyo
Transportation:
A 5-minute walk from JR Tamachi Station or Toei Mita Line, Mita Station (Exit A9 is directly connected to the building). Or a 3-minute walk from Toei Asakusa Line, Mita Station
Participants: MMA members only
Participation fee: Free

Registration for Participation
All participants are requested to register in advance by sending an email to the MMA stating the company name and names of participants.

### Program

◆ Annual General Meeting: 1:00 p.m. to 1:40 p.m.
◆ Lectures, Introduction of New MECHATROLINK Products, and Annual Plans: 1:40 p.m. to 5:10 p.m.

Special Guest Lecture 1
"Marketing Strategies and Manufacturing for Developing Chinese and Asian Regions"
Delivered by Mr. Tomofumi AMANO, Associate Professor, MMRC of Faculty of Economics, University of Tokyo

Special Guest Lecture 2
"Integrated System for Drug Testing and Its Market Trends"
by Mr. Takahiro NAKAYAMA. Manager, Control Design Sec. of Sankyo Seisakusho Co.

Introduction of New MECHATROLINK Products
・ MECHATROLINK-III IP Core Solution
  by TOKYO ELECTRON DEVICE LIMITED
・ MECHATROLINK-III compatible Servo Driver VCII
  by NIKKIDENSO Co., Ltd.
・ Network Converter for Stepping Driver
  by ORIENTAL MOTOR Co., Ltd.
・ MECHATROLINK compatible RTOS QNX
  by Forks Inc.
・ MECHATROLINK-III compatible Bit Distributed I/O Terminal
  by Anywire Corporation

◆ Reception: 5:30 p.m. to 6:50 p.m.
  Free to all MMA members.

## AIMEX 2010 Participation Report (Korea)

The MECHATROLINK Members Association (MMA) participated in AIMEX 2010 (The Industrial Automation, Instrumentation & Measurement Exhibition 2010) held in Seoul, Korea, March 3 to 6 (Wed. - Sat.), 2010.
Fully 16 new MECHATROLINK-III compliant products were connected in a network for demonstration, and existing MECHATROLINK-II compliant products also attracted the attention of many visitors.
A large number of visitors representing various factory automation industries learned about the MECHATROLINK open network.
During the exhibition, 47 companies became MMA members.



The MMA booth attracted many visitors



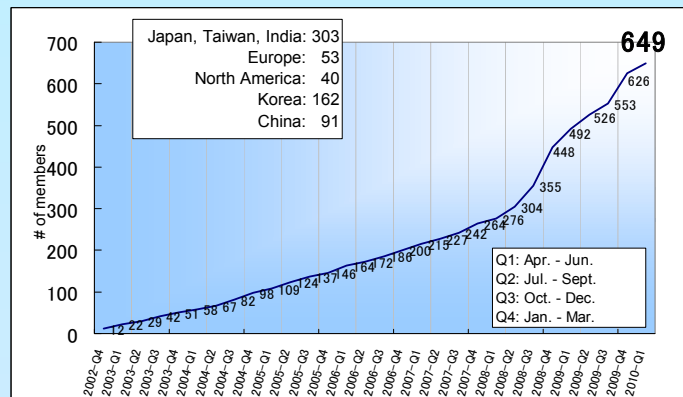A scene from the seminar organized by the local MMA staff

## Increase in MMA Members

**560 companies (Jan., 2010)⇒**
**649 companies (May, 2010)**
**89 new member companies!**



Japan, Taiwan, India: 303
Europe: 53
North America: 40
Korea: 162
China: 91

Q1: Apr. - Jun.
Q2: Jul. - Sept.
Q3: Oct. - Dec.
Q4: Jan. - Mar.

# MECHATROLINK One-Point Lesson
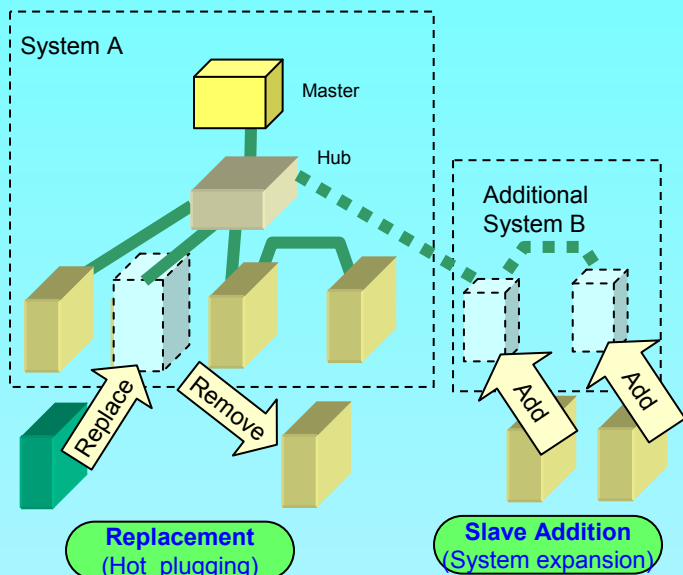## MECHATROLINK-III Hot Plugging

One useful MECHATROLINK-III function is explained here.

Hot plugging is the adding or removing of slave stations while the system is running.  It is also called hot swapping.

This allows you to **exchange a slave** or **add a slave** to the network **while operating the system online**.

MECHATROLINK-III makes it possible to connect slaves to the master via a hub in start topology. By connecting slaves to the hub, hot plugging can be effectively used for a system that needs slaves to be replaced or added.

### Example of Hot Plugging

System A

Master

Hub

Additional System B

Replace

Remove

Add

Add

**Replacement**
(Hot  plugging)

A faulty slave station can be replaced without shutting off the system.
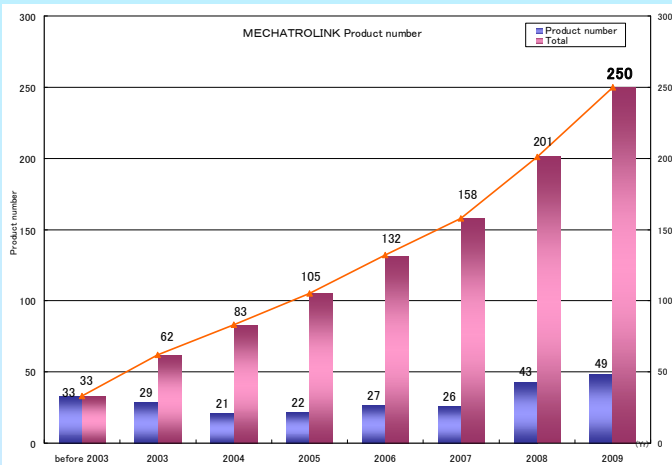
**Slave Addition**
(System expansion)

Slave stations can be added as required to expand the system.

# Increase in MECHATROLINK Products

From 201 in 2008 to 250 in 2009

A total of 49 new products were introduced in one year!

New products will continue to be introduced to the market as MECHATROLINK grows.

MECHATROLINK Product number

- Product number
- Total

| | before 2003 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|---|---|---|---|---|---|---|---|
| Product number | 33 | 29 | 21 | 22 | 27 | 26 | 43 | 49 |
| Total | 33 | 62 | 83 | 105 | 132 | 158 | 201 | 250 |

# New MECHATROLINK Products

## Forks Inc.

**Product name: MECHATROLINK-III for QNX**
**Features：**

***MECHATROLINK-III for QNX*** is a driver software for QNX Realtime Operating System (RTOS) that supports MECHATROLINK-III communications ASICs  JL-101* and JL-100*, and JAPMC-NT112A-E*.
*: Manufactured by Yaskawa Electric Corporation

**Compatible OS:** QNX6.x

QNX6.x

・ Microkernel-based OS
  Process level memory protection
  Multi-process/Multi-thread
  POSIX compliant
  Stability in response to interrupt events
  Multi-core supported
・ Supports AMP, SMP, and BMP
  Feature-rich middleware
・ Windows-like GUI mounted as standard
 Display and input method both support Japanese, Korean, Chinese and more.
・ TCP/IP (IPv4, IPv6)
・ File system:
  POSIX, FAT/FAT32, NAND/NOR flash, NIFS, CIFS, etc.

**Supported ASIC:** JL-101, JL-100
**Supported board:** JAPMC-NT112A-E

**Inquiries:**
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Email: sales@yaya.forks.co.jp

# New MMA Members

Analog Devices, Inc., Clevertech Co., Ltd., Evernet Electronics Co., Ltd. EZER Laboratory, Hyundai & Kia Machine Corporation, IAE (Institute for Advanced Engineering), KTURBO Inc., MDSI Venture, LLC, MPI Corporation, No. 2 WenLing Electrical Insulating Materials Factory, SAMJUNG TECH, SAMSUNG SDI Co., Ltd., Shenyuekong Autocontrol Co., Ltd., Standard Microsystems Corporation, TECHMAC, Yokogawa China Co., Ltd.
(Only those companies that gave us disclosure permission are listed here.)

# Future Events

June 18, 2010: MMA annual general meeting
Aug. 4 to 7, 2010: Taipei International Automation Technology Exhibition

**Inquiries:**
For questions about joining the MECHATROLINK Members Association and other inquiries, please contact the MMA.