

MECHATROLINK News provides Members of the MECHATROLINK Members Association with the latest information on MECHATROLINK.

### Activities in 2005 and Projects for 2006

Three years have passed since the establishment of the MECHATROLINK Members Club, the predecessor of the MECHATROLINK Members Association (MMA).

The number of MMA members increased to 146 companies, and the number of MECHATROLINK-II compliant products increased to 103, including proprietary products.

One of the highlights of 2005 was our participation in the System Control Fair held from November 15 to 18 in Tokyo. At the MMA booth, many people became more familiar with MECHATROLINK and its products.

In the Fiscal Year 2005, MMA was also involved in the following activities.

October 5, 2005	Feature article on the establishment of the MMA in Automation Review.	
November 15 – 18, 2005	Participation in the System Control Fair in Tokyo, Japan.	2005
February 10, 2006	Relaunch of the MMA website.	
February 28, 2006	Second meeting for MECHATROLINK-III specifications formulation.	
March 29, 2006	Start of the MECHATROLINK and SEMI Technical sub-committees.	

Our new and improved MMA homepage will serve as an important tool to transmit information to members as quickly as possible.

The following projects have been planned for the FY2006 to increase awareness of MECHATROLINK and its use.

- 1 Compliance with SEMI standards to provide more adoptable environments in semiconductor and LCD markets.
- 2 Opening of MMA branch offices in the USA., Europe, South Korea, and China for greater promotion of MMA activities worldwide.
- 3 Greater promotion of MECHATROLINK at more seminars and exhibitions.
- 4 Share information about MECHATROLINK with a wider audience through media such as the MMA website, the MMA e-mail newsletter, and the MECHATROLINK News.

We would like to expand our activities that are currently centered on Japan to include the world by opening more and more branch offices of the MMA overseas.

Together with you and all of the MMA members, we will continue our efforts to make MECHATROLINK one of the de-fact standards for motion networks. We appreciate your continued cooperation.

### MECHATROLINK Seminars

On April 4, 2005, two MECHATROLINK seminars were held in Tokyo, Japan.

One seminar introduced the MMA and MECHATROLINK to companies who are interested in adopting MECHATROLINK-II compliant products.

The other seminar provided technical information on MECHATROLINK-II related software and hardware and also explained important points to be careful of when developing MECHATROLINK-II products. Participants included many companies interested in the development of MECHATROLINK-II compliant products.

All participants gained a thorough understanding of MECHATROLINK by attending these seminars, and these seminars will be continued in the future.

The next seminar is planned for the autumn of 2006 in Osaka, Japan. Details will be posted on the MMA website when decided.

MMA website: <http://www.mechatrolink.org>

We are looking forward to seeing many of you at the seminar.



Snap shot of the seminar

## Start of SEMI Standard Task Force

- **New task force established for SEMI E54.XX compliance.**
- **Task force approved by SEMI I&C committee.**

MMA will start a campaign to gain compliance with the SEMI E54.XX Sensor/Actuator Network (SAN) standard to make the architecture of MECHATROLINK more open.

As part of these efforts, a task force was established by the MMA, and this task force was approved unanimously by the SEMI Information and Control Committee on April 7, 2006.

The task force is named the Sensor/Actuator Network Communication Standard for the MECHATROLINK (SANCS-M). SANCS-M aims to gain SEMI E54.XX compliance one year from now.

By complying with SEMI E54.XX, the MECHATROLINK protocol can be included in the Network Communication Standards (NCS) so that MECHATROLINK devices can be used for operations and communications via the SAN in semiconductor manufacturing equipment for Common Device Models (CDM) and Specific Device Models (SDM).

MECHATROLINK can be easily used as a standard network for the handling and driving of semiconductor manufacturing equipment and for the control of I/O devices. Also, the control, driving, and sensing performance of these devices can be greatly improved by using the MECHATROLINK network. A more sophisticated Advanced Process Control (APC) system can also be realized. With MECHATROLINK, synchronicity among highly advanced devices, such as a nanolithography tool using nanotechnology, and mechanical control, including feedback and feed forward, is realized.

We expect that SANCS-M will accomplish its aims and work not only in further developing a more global motion network that is even easier to use but also in expanding the number of users of MECHATROLINK.

## Release of ASIC for Slave Devices

The new JL-052C ASIC for MECHATROLINK-II slaves is now on sale. Until now, only the JL-080B ASIC was available, and it was designed for use with both the MECHATROLINK-II master and slave devices. The new JL-052C ASIC has been developed exclusively for slave devices. The JL-052C is the best ASIC for the development of slave devices because of its low power consumption [50 mA max./3.3 V (at 25°C)], low cost, and compact size.

Furthermore, circuits on the physical layer, such as D/R, pulse transformers, and connectors, can be used with the new JL-052C ASIC in the same way they were used with the JL-080 ASIC. Driver software is also available for the JL-052C ASIC as well as the JL080 ASIC.

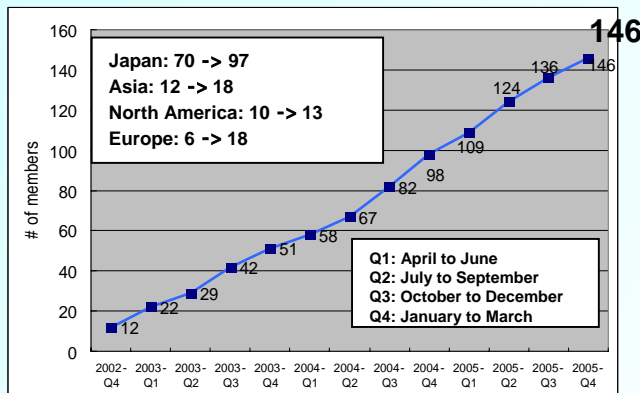
	JL-052C	JL-080B
Host interface	8-bit or 16-bit (multiplexed or a separate bus)	
Clock frequency	15 MHz	40 MHz
Power supply	3.3 V, single supply	5 V, single supply
Package	TQFP (100-pin)	TQFP (144-pin)
Dimensions (mm)	14 × 14	20 × 20
Application	For slave devices	For master and slave devices
RoHS compliance	Yes	Yes

Contact Yaskawa Electric Corporation for details on prices and delivery.

## Increase in MMA Members

**98 companies as of April 2005**  
(Increased by 48 companies)

**146 companies as of March 2006**



### Contact:

If you want to join the MECHATROLINK Members Association or have any inquiries, please contact us at the following numbers or addresses.

### MECHATROLINK Members Association

Tel : +81-4-2962-7920

Fax : +81-4-2962-5913

E-mail : [mma@mechatrolink.org](mailto:mma@mechatrolink.org)

URL : <http://www.mechatrolink.org>

## Upcoming Schedule

- May MECHATROLINK Members Association General Meeting: May 17
- June Opening of MMA overseas branch offices
- September Seminar in Osaka
- November Manufacturing Open Forum 2006: November 29-December 1
- December SEMICON Japan 2006: December 6-8

Publication: May 17, 2006

Publishing office: MECHATROLINK Members Association  
480 Kamifujisawa, Iruma-shi, Saitama 358-8555, Japan  
Tel: +81-4-2962-7920 Fax: +81-4-2962-5913

Editor in chief: Takeshi Tanaka, Secretary of MECHATROLINK Members Association