



MECHATROLINK News "MMA-FLASH" brings the latest MECHATROLINK information.

Feature Article Interview with Oriental Motor Co. Ltd.

Contributing to making MECHATROLINK a world standard open field network, under our corporate philosophy to manufacture motors

We deliver the latest news and information to MMA member companies and MECHATROLINK users in our feature articles.

For this issue, we spoke with Naoe MURAKAMI, Chief of Planning & Development Dept. of Oriental Motor Co. Ltd., to learn about the current status and prospects of MECHATROLINK compatible products.

Q1. Could you tell us about Oriental Motor?

—Oriental Motor has standardized the products to deliver customers just what they need when they need, and is engaged in development and sales of the products under the corporate philosophy of "1 unit each for 100 customers but not 100 units for 1 customer".

Oriental Motors lines up a variety of factory automation products, not limited to stepping motors for control but including AC motors, electric actuators, and fans.

Q2. How you work out to realize your philosophy of "1 unit each for 100 customers"?

—By not only standardizing the manufacturing process by standardizing motor sizes and specifications but also expanding a variety of products, Oriental Motor has such a wide product lineup to meet various needs of customers.

Actually, Oriental Motor lines up over 50,000 basic standard products.

The size of current international standard compact AC motor is determined on the base of our product.

MECHATROLINK Optimum for High-speed Motion Control and Wire-saving Required Applications

Q3. Could you tell us about the current status of your development and sales of MECHATROLINK compliant products?

—With the release of a STEP AS series MECHATROLINK-II compliant closed loop stepping motors in October, 2005 as the start, we released high-efficiency a STEP ARL series stepping motors and MECHATROLINK-II and -III compliant network gateway that can be connected to our motors for control in November, 2009.

The sales volumes of both ARL series motor and gateway are steadily increasing from their release. Both products get high reputation especially among customers who require high-speed motion control and wire saving advantage.

We Recommend MECHATROLINK If You Are Interested in Network-based Control System.

Q4. Oriental Motor has been a MMA board committee company since April, 2010, and participated in various exhibitions displaying its products in MMA booth. What do you think of the importance of listening to customers?

—The MMA has rather quickly started promoting MECHATROLINK as an open high-speed motion network. For the formulation of the profile for our stepping motors, the MMA listened openly to us and developed the profile specifications that are easy-to-use for our customers.

This deepened our relationship with the MMA.



Naoe MURAKAMI
Manager of Planning & Development Dept.,
Sales Div.
Oriental Motor Co., Ltd.

In Japan, the customers who looked for a network for factory automation was so limited ten years ago, but it is not unusual to hear the word "network" from customers now.

In these days, the customers we had contact with at various exhibitions as well as our frequent customers make us recognize the rapid development of network for system control.

As the profile specifications for stepping motors clearly are formulated in MECHATROLINK, it is easy for us to recommend MECHATROLINK to our customers.



Q5. Could you tell us about your future projects?

The market transition from MECHATROLINK-II to -III is in progress. Although we already released a full lineup of MECHATROLINK-III compliant gateways, our standard products are not yet ready to be connected to MECHATROLINK-III.

We estimate that the demand for MECHATROLINK-III will increase as the demand for higher speed control increases. To meet such needs, we will advance the standardization of MECHATROLINK-III compliant products.

We will commit ourselves to developing MECHATROLINK as an international standard motion network as well as to satisfying the needs of our customers.

News & Topics

Exhibitions

Planned design for MMA booth at SEMICON China2012



SEMICON China2012

Event Information

Dates: March 20 (Tues.) – 22 (Thurs.) , 2012
Place: Shanghai New International Expo Centre, Shanghai, China
Booth No.: 4249 in Hall 4

aimex – AUTOMATION WORLD 2012

Event Information

Dates: April 3 (Tues.) - 6 (Fri) , 2012
Place: Hall A and B at COEX Exhibition Center, Seoul, Korea South
Booth No.: C600 in Hall A

MMA Participants:

- ALGOSYSTEM CO., Ltd.
- ANYWIRE CORPORATION
- Digital Electronics Corporation
- KOYO ELECTRONICS INDUSTRIES CO., LTD.
- Micronet Co.
- M-SYSTEMS CO., LTD.
- MYCOM INC.
- NIKKI DENSO Co., Ltd.
- ORIENTAL MOTOR CO., Ltd.
- Sankyo Seisakusho Co.
- TIETECH CO., LTD.
- YASKAWA ELECTRIC CORP.
- YOKOGAWA ELECTRIC CORP.
- Googol Technology (Shenzhen) Ltd. (SEMICON China2012 only)
- AJINEXTEK Inc. (aimex2012 only)
- Comizoa Co., Ltd. (aimex2012 only)
- Delta Tau Data Systems, Inc. (aimex2012 only)
- Fastech Inc. (aimex2012 only)
- SAMWON ACT Co., Ltd. (aimex2012 only)

Hot Chinese Open Field Network Market

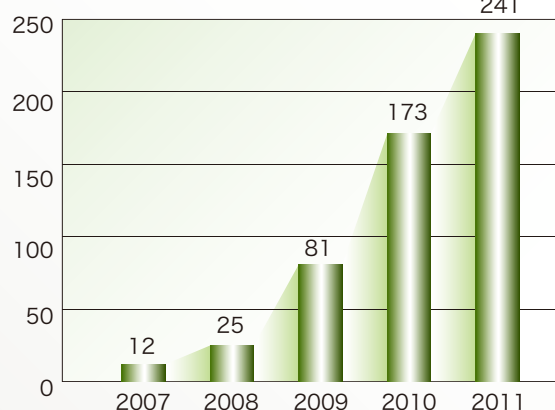
In China, the expansion of open field network market is remarkable as the demand for open field network is getting large. We actually feel it through exhibitions and seminars. Until last year, Korea had the second biggest MMA membership next to Japan. However, China took place of Korea this year.

While organizing various events, the MMA will aggressively promote MECHATROLINK in Chinese market.

MMA Membership by Country as of Feb. 29, 2012

Total : 969
Japan, Taiwan, India : 410
Europe : 62
North America : 60
Korea : 196
China : 241

MMA Membership in China



International IEC Standardization of MECHATROLINK

The Japanese National Committee of IEC/TC65/SC65C continues working to make MECHATROLINK an international IEC standard. Following to the approval of the NP (New Proposal) for MECHATROLINK in February 2011, the CDV (Committee Draft for Vote) was submitted

to all National Committees. MECHATROLINK can be finally approved as an IEC standard at the end of 2013.

We will let you know the progress.

PC Engineering Group in MMA

The MMA has organized the PC Engineering Group to study the availability of MECHATROLINK for PC (personal computer)-based FA device control system.

The demand for the use of PC as a master to control FA devices is increasing. Additionally, the environment for PC-based FA device control, including tools to use a PC for FA device, is getting well

arranged.

To meet such trends, the PC Engineering Group started working to integrate a PC into MECHATROLINK network.

The MMA will actively promote introduction of PC technology into FA device control, through the PC Engineering Group.

Marketing Group Activity Report – Customer Visits Visit to NISSAN MOTOR Co., Ltd.

On Feb. 24, 2012, NISSAN MOInquiries, Ltd. graciously invited the MMA marketing group to visit its company location in Zama, Kanagawa, Japan. The Customer Visits is an information exchange event to understand customer needs as well as promote products. The visit started with the MMA seminar, followed by introduction of the MMA and MECHATROLINK technology. In the meeting room, MECHATROLINK compliant



Opinion exchange session

products by MMA member companies and a MECHATROLINK network system for demonstration were displayed. The network system attracted many participants.

The visit ended with the opinion exchange session, during which animated discussions continued. We spend a useful time together with customers.

Participants:

- ALGOSYSTEM Co., Ltd.
- Digital Electronics Corporation
- KOYO ELECTRONICS INDUSTRIES CO., LTD.
- Micronet Co.
- M-System Co., Ltd.
- NIKKI DENSO Co., Ltd.
- Sankyo Seisakusho Co.
- YASKAWA ELECTRIC CORP.
- YASKAWA INFORMATION SYSTEMS CORP.
- YOKOGAWA ELECTRIC CORP

MECHATROLINK Members Association



Successful product display tables

New MECHATROLINK Products

KOYO ELECTRONICS INDUSTRIES CO., LTD.

MECHATROLINK Module D2-MLINK for DL205 Series PLCs

Features

- Compact PLC for motion control
- Mounting a D2-MLINK on a DL205 allows easy connection with servomotors and stepping motors, which realizes a wire-saving motion system
- One single D2-MLINK controls up to 15 axes.
- Up to four D2-MLINK modules can be mounted to one system
- Applicable for both linear and circular interpolation motions
- Easy setup by setting parameters in the data registers of PLC
- Various commands are supported to respond flexibly to various controls
- Performance grade up together with a D2-265 CPU module



D2-MLINK

Inquiries

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YASKAWA ELECTRIC CORPORATION
Integrated Machine Controller MP3200

Features

- Integrated with the motion, vision, and robot systems that are indispensable to machine control to achieve ideal control of machine systems
- High-speed application processing of up to 125 μ s realizes a quantum increase in productivity.
- CPU unit with a variety of functions including MECHATROLINK-III port, Ethernet port, and USB port
- Vision unit directly connected to CPU unit over a high-speed bus to eliminate the communications delay between machine image processing and motion control, which allows high-speed high-accuracy motions.
- Connecting a FS100 Robot Controller to the MP3200 Machine Controller through the built-in Ethernet port allows you to start a job and monitor operation status.



Inquiries

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2012 MMA Annual General Meeting in Japan

The 2012 MMA annual general meeting will be held as shown below.
 The meeting is free to all MMA members. All participants are requested to register in advance. The detailed information of the meeting will be published on the website. We are looking forward to seeing many MMA members at the meeting.



General meeting

2012 MMA Annual General Meeting
Dates: From 13:00 on June 1 (Fri.) , 2012
Place: UDX Conference (2-minute walk from JR Akihabara station)
<http://udx.jp/conference/index.html>
Participants: MMA members only

Column **MECHATROLINK-III Standard Servo Profile Commands**

To change the acceleration, deceleration, torque limit to execute a positioning

One MECHATROLINK-III standard servo profile command can include multiple parameters. Thereby, each command can be executed with desired parameter settings so that the master can quickly send a command to a slave to execute a task even for a complex motion.

Before sending a positioning command, the acceleration, deceleration, and torque limit parameters need to be changed. Therefore, it will take 4 scans to start positioning.

Complicated and slow

Networks of other companies	MECHATROLINK-III standard servo profile command
Required commands Command to change parameter settings Change Acceleration Change Deceleration Change Torque Limit + Positioning command Target position, Target speed	Required commands Positioning command (POSING) only Target position, Target speed, Acceleration, Deceleration, Torque limit

Acceleration, deceleration, and torque limit can be specified in the positioning command. It will take only 1 scan to start positioning.

Simple and quick

For details on MECHATROLINK-III standard servo profile commands, refer to the technical document published on the MMA website.

Editor's Comment

The fiscal year 2011 is closed to the end. Looking back on the year 2011, we are satisfied with the promotional activities we carried out in various styles. The number of MMA member companies is steadily increasing and the MMA will soon become an association of over 1000 member companies. In the year 2012, we will continue our promotional activities, such as participation in exhibitions and organization of events, to deepen and widen the MECHATROLINK connection with MMA members and customers. Written by Hiranuma.

Inquiries

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

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