

## **MECHATROLINK Members Association Launches Low-Priced MECHATROLINK-III Compatible Slave ASICs**

Achieves size and cost reduction;  
aims to accelerate standardization of MECHATROLINK network, especially in Asia

**Tokyo, Japan, July 16, 2010**—The Iruma, Saitama Prefecture-based MECHATROLINK Members Association (MMA) announced today that it will launch a low-cost slave ASIC (for servo, I/O, an other similar uses) compatible with MECHATROLINK-III specifications on July 20. The new ASICs will be the first low-priced MECHATROLINK-III compatible slave ASICs to be made available, making them a valuable addition to the MECHATROLINK range for enabling compact, low-priced systems and reducing the cost of members' products. The MMA will be working to leverage the advantages of the new ASICs to accelerate the growth of MECHATROLINK membership, especially in Asia, with the aim of becoming the industry standard for network communications.

MECHATROLINK is an open network communication system for motion control advanced by the MMA that is used for connecting controllers to servo motors, inverters, stepping motors, and other components in factory automation (FA) systems. MECHATROLINK assures high-speed communication and synchronization to achieve a high-performance and high reliability system; makes the system smaller and more expandable; and reduces wiring requirements. Products accredited by the MMA totaling approximately 1.7 million nodes for semiconductor and LCD production equipment, food wrapping equipment, and light-emitting diode (LED) production equipment have shipped and are operating in Japan as well as other countries.

MECHATROLINK-III is the latest standard for high-speed communication. It features a data transfer speed of 100Mbps over Ethernet cabling, a cycle time of 31.25 $\mu$ s–64ms, and connection of up to 62 nodes. Node control can be fully synchronized. Previous development of MECHATROLINK-III-compliant systems used ASICs for the master/slave configuration, but the association commercialized a low-priced ASIC dedicated to slave systems in response to strong member requests.

Two slave ASIC products will go on sale—the JL-102A and the JL-103A . They are priced at ¥600 yen each, much lower than the master/slave ASIC at ¥1,600 yen a piece, because they have a smaller die size due to the smaller number of gates required as a result of removing the master function. They also produce less heat, save power, and facilitate embedded development.

The JL-102A is a 144-pin fine-pitch ball grid array (FBGA) package measuring 12 × 12mm with heat resistance of 43°C/w (0m/s). Pins are compatible with the master/slave ASIC JL-100. The JL-103A is a 100-pin low-profile quad flat package (LQFP) measuring 14 × 14mm with heat resistance of 46°C/w (0m/s).

MECHATROLINK-III slave ASIC sample kits will also be available beginning July 20. The two kits (JL-102 and JL-103) each contain five main components used in the physical layer for trial development—the ASIC, Ethernet PHY, pulse transformer, oscillator, and connector. Kits are

priced at ¥25,700 yen. The slave ASICs will be sold by YASKAWA Electric Corporation, and the sample kits by YASKAWA CONTROLS CO., LTD.

“These new compact, low-cost ASICs complete the low-end MECHATROLINK-II and high-speed MECHATROLINK-III ASIC range. We expect them to accelerate the development of products compatible with the MECHATROLINK standard,” said MECHATROLINK Members Association General Secretary Takeshi Tanaka.

### **Pricing and availability**

To inquire about MECHATROLINK-III slave ASIC products, contact East Sales Department, Motion Control Division, Tokyo Office, YASKAWA Electric Corporation (tel: +81-3-5402-4503). For information about MECHATROLINK-III slave ASIC sample kits, contact East Sales Department, YASKAWA CONTROLS CO., LTD. (tel: +81-3-3263-5611).

### **About the MECHATROLINK Members Association**

The MECHATROLINK Members Association (MMA) was formed in 2003. As of March 2010 there were 626 member companies around the world; the association is targeting membership of over 1,000. Members consist of MECHATROLINK product developers and MECHATROLINK users. MMA has a head office in Japan and branch offices in the U.S., Germany, South Korea, and China. MMA is strengthening its overseas offices with a view to worldwide proliferation of MECHATROLINK. The association is actively working toward building a field network MECHATROLINK “family.” For further information, visit: <http://www.mechatrolink.org> .

Note: MECHATROLINK is a registered trademark of the MECHATROLINK Members Association.

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