

Solution: Anybus CompactCom
Country: Japan
Company: IAI Corporation
Application: Industrial Robots



Effects:

- Reduced development costs
- Shortened time to market
- Easy to adapt to new networks

“The main reason that we chose Anybus was that it provided a standardized hardware and software interface to our application, independent of the network - a very consistent solution which makes the Anybus Embedded product line unique. Thus, with Anybus our engineering costs and total time of development are reduced. This is especially powerful when we need to change to another network, even to a completely new network.”

Toshihisa Tsukuda

Manager Software Section II,
IAI Corporation

Standardized hardware and software interface saves development cost and time

IAI Corporation has used several different generations of Anybus Embedded products to connect their robot controllers to various industrial networks in factories around the world.

Founded in 1976 in Japan, IAI Corporation is one of the leading industrial manufacturers of electric actuators and industrial robots. IAI products are used in a variety of sectors and industries, such as in the automotive industry, in electronics manufacturing, and in the optical, medical and pharmaceutical industries. For quality reasons, all products are exclusively manufactured in Japan.

Long collaboration between IAI and HMS

“Our first contact with HMS was around 2001 when one of our hardware managers visited the Hannover Messe for exploring the latest technology trends at that time,” says Toshihisa Tsukuda, manager of the Software Section II at IAI, who also designed the application software for their robot controller when IAI implemented Anybus technology for the first time.

“We were not sure how far fieldbuses would penetrate our industry at that time, but now network connectivity is a key to success. Industrial networking became a common practice and the desired networks are different from market to market. With that being the situation, using a standardised modular concept like the Anybus Embedded offering is beneficial to achieve fast time-to-market with our product.”

Starting from Anybus-S, IAI has since then used several different generations of Anybus Embedded products to connect their robot controllers to various industrial networks in factories around the world. And, the most recent generation used by IAI is Anybus CompactCom.

Why Anybus?

IAI had the three main demands for network connectivity. First of all, IAI needed multi-

network connectivity to various fieldbuses and industrial Ethernet networks. Secondly, they wanted a solution that is up-to-date with the latest network specifications. Thirdly, IAI was looking for a way to reduce development time and time to market. The Anybus Embedded technology was able to meet all of these demands.

“The main reason that we chose Anybus was that it provided a standardized hardware and software interface to our application, independent of the network - a very consistent solution which makes the Anybus Embedded product line unique. Thus, with Anybus our engineering costs and total time of development are reduced. This standardized method is especially powerful when we need to implement support for a new network in short time. It is not easy to keep up with all updates to network specifications and new protocols by ourselves at IAI, so using Anybus is a perfect example of the saying “Better leaving it to a specialist - for rice cakes, the rice cake shop,” adds Toshihisa Tsukuda.

Excellent local support

“Another major advantage of using the Anybus solution is that we can get support from HMS Japan office. Needless to say, accurate and prompt technical support in local language helps a lot and makes us feel assured. The support from HMS has been satisfying until now,” continues Toshihisa Tsukuda.

Local support availability can be critical especially when development is ongoing. Device manufacturers like IAI often need to meet customer demands in short time.

High-Performance Network Integrated RCON Controller - Gateway unit



“ In the course of implementing Anybus for the first time, we had lots of questions with regards to TCP/IP connectivity and made enquiries to the third line technical support team at HMS headquarters in Sweden via HMS office in Japan. It is a real strength of HMS that we can ask questions in Japanese and get accurate answers quickly. As delivery date was approaching, we were so grateful for the prompt and detailed answers from HMS. We look forward to further technological advancements in Anybus,” concludes Toshihisa Tsukuda.

The 7 millionth Anybus CompactCom was delivered to IAI Corporation at IIFES 2019



From left to right, Christian Berghdahl, Product Marketing Manager, Anybus, HMS Networks, Bartek S. Candell, General Manager - MU APAC, HMS Networks; Toshihisa Tsukuda, Manager Software Section II at IAI and Kazunobu Maruyama, Specialist Software Section I Development Dept.

