



Roland van Mark presenting the C6030 at the 2017 SPS IPC Drives show: "The Industrial PCs in the new ultra-compact series feature an outstanding size-to-performance ratio and a broad range of interfaces."

Interview with Roland van Mark, Product & Marketing Management Industrial PC

Consistent expansion of the family of ultra-compact Industrial PCs

The ultra-compact C6015 IPC has been quickly established on the market, particularly in IoT applications. What concrete application examples can you discuss, and why wouldn't companies use their existing PC infrastructure for these tasks?

Roland van Mark: All IoT applications require PC hardware in addition to appropriate software. With PC-based control technology from Beckhoff, these hardware and software components are already integrated, of course, so that the control platform is ideal to support today's applications. We nevertheless see many instances where customers want to separate the actual automation functions from IoT communication. This is particularly true for legacy systems and applications. Some customers prefer to leave an existing application un-

touched and add a kind of gateway PC to transmit IoT data instead. It doesn't matter whether the system is implemented with TwinCAT or another automation platform. With the extensive features already described, the C6015 IPC provides an ideal platform for all these needs.

"Among other things, the C6015 is ideal for use as a gateway PC that enables a separation of automation and IoT communication applications."

The application spectrum of the C6015 extends even to large projects. What applications are these?

Roland van Mark: Basically the same as what I described above. The only difference is whether our customer uses the C6015 as a gateway for all previously installed machines. The latter is becoming more and more common and brings the C6015 to the machine as a universal IoT gateway, either equipped with Beckhoff IoT software (such as TwinCAT OPC UA Server or TwinCAT Data Agent) or with the customer's own IoT software.

What are potential or current applications for the high-end C6030 IPC compared to the applications you already mentioned?

Roland van Mark: Although the C6030 is very similar to the C6015 in terms of appearance, compactness and incredible installation flexibility, it is targeted towards very different applications. The C6030 houses the most powerful industrial Core™ i processors in the smallest space. Never before has Beckhoff offered so much computing power in such a compact format. It also costs much less than all previous models that offer comparable performance. With all these benefits, the C6030 may over the long term become the most important automation computer for PC-based control applications. With its flexible installation options, it is also suitable for applications where space is limited. In addition, its low-cost, entry-level processors make it available for price-sensitive applications, and its many on-board interfaces and optional high-performance processors running at speeds of up to 3.9 GHz per core make it ideal for even the most demanding applications.

You will be adding the C6017 to the series at Hannover Messe 2018. What are this new device's features, and how is it positioned in relation to the other ultra-compact IPCs?

Roland van Mark: Immediately after the introduction of the C6015 we heard from customers who loved the concept but needed additional features. Since we had anticipated such requests, we designed the motherboard with future expandability in mind. We collected these customer requests and are now offering expansion options in the form of the C6017. It still features ultra-compact design and maximum installation flexibility, but offers additional interfaces (2 x RJ45, 2 x USB 2.0) and a 1-second UPS.

How will the family of ultra-compact Industrial PCs be expanded further?

Roland van Mark: As a supplier of Industrial PCs, you must be able to meet your customer's requirements on a continuous basis, because the IPC is at the core of the customer's automation applications. This is why the C60xx series from Beckhoff is strategically designed to meet future requirements regarding miniaturization, installation flexibility, long-term reliability and cost-effectiveness. At the same time, customers also want to have a high degree of application flexibility because not all machines are alike, and new tasks may differ substantially from previous ones. Accordingly, you can expect more interfaces to be added to the C6030 in the future as well.



The C6030 Industrial PC (on the right) combines the ultra-compact design of the C6015 (on the left) with a very high level of computing power.

“In the C6017, we now provide expansion options to our customers that we already anticipated when designing the motherboard with future expandability in mind.”