

Raspberry Pi based controller supports CANopen

Kontron (Germany) has released the KBox A-330-MX6 host controllers. It also can be used as IoT gateway.

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The heart of the shown controller is the i.MX6 dual-core processor by NXP (Photo: Kontron)

The KBox A-330-MX6 is based on the Raspberry Pi Compute Module CM3+ and can therefore use the software pool of the Raspberry Pi community. The host controller with IoT gateway functionality is equipped with an i.MX6 dual-core processor from NXP Broadcom. Optionally the processor runs a CANopen protocol stack.

Both product operates fanless and is designed for industrial control and gateway tasks in control cabinets due to their slim design and the possibility of DIN-rail mounting. Besides the CAN interface, there are two Fast-Ethernet interfaces, serial links (EIA-232 and EIA-485) as well as four I/O ports. A user interface can be operated during commissioning or in the target application via two USB channels and an HDMI connection.

With this device Kontron offers an industrial grade platform. It can serve as a gateway for IoT applications and can integrate sensors and actuators via CANopen. The company also provides CANopen I/O modules with up to 16 galvanic-isolated digital inputs and up to 16 galvanic-isolated digital outputs. Other options include two quad-decoder, two counter inputs, four analog inputs, four analog outputs, and four RTD inputs. Of course, these I/O devices can be configured according to application-requirements.

As operating system Yocto Linux is available. On a project basis, applications are realizable that include advanced security features such as secure authentication and data encryption. In conjunction with the modular Susietec IoT software framework from Kontron's sister company S&T Technologies cloud solutions can used to develop IoT applications.

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