

KBox A-203



Compact Industrial Computer Platform for Gateway Applications

- ▶ Based on Intel Atom® E39xx processor
- ▶ Maintenance-free: no moving parts, battery-free
- ▶ Security Solution Kontron APPROTECT based on WIBU Systems Technology and TPM 2.0
- ▶ IoT ready - simply connected

POSSIBILITIES START HERE



KBOX A-203

Gateway for IoT Edge Applications

Based on the latest Intel Atom® processor of the E3900 series the new maintenance-free, fanless and battery-free KBox A-203 was developed as an intelligent gateway for data intensive IoT edge applications.

The compact KBox A-203 shows a broad range of interfaces which allow a connection on various communication levels. For local data collection, e.g. link to sensor and machine level, it offers up to two serial ports (RS232/485) and an optional fieldbus (e.g. Profibus). On project base the KBox A-203 can also support wireless standards such as LTE (4G), GSM (2G/3G) and the low-power standard LoRa.

The KBox A-203 is one of the first Kontron products which is Microsoft® Azure certified. This means the hardware is tested and verified and can be integrated into Microsoft® Azure IoT Services.

The KBox A-203 supports Security Solution Kontron APPROTECT based on WIBU Systems technology. It combines a software framework with an integrated security chip in addition to the TPM 2.0 (Trusted Platform Module) chip to provide comprehensive protection for the application software.

TECHNICAL INFORMATION

PROCESSOR	CPU SPEED BIOS	Intel Atom® x5-E3930 2x 1.3 GHz (Max. Turbo frequency 2x 1.8 GHz) AMI® Aptio V
MEMORY	TECHNOLOGY MAX. CAPACITY	DDR3L 1600, with ECC, soldered 4 GByte
INTERFACES	GRAPHICS PORTS USB ETHERNET SERIAL PORTS	1x Display Port with DP++ 2x USB 3.0 (front), 4x USB 2.0 (internal) 2x 10/100/1000 Mbit GbE, WOL support 1x RS232/RS485, optional: 2nd COM as RS232
STORAGE	MICRO SD FLASH MSATA SATA	1x mSD socket, accessible from the rear up to 32 GByte onboard flash (eMMC) 1x mSATA socket Drive Bay to install 1x 2.5" SATA SSD
EXPANSION	miniPCIe	Up to 2x miniPCIe sockets for full-size modules (1x with SIM Card socket, 1x for Fieldbus expansion / shared with mSATA)
OTHERS	CONTROL FIELDBUS WATCHDOG TIMER SECURITY	3x LEDs (Power, SSD, GP), Reset switch Profibus support optional Watchdog support TPM 2.0 and APPROTECT on SMARC
SOFTWARE SUPPORT	MICROSOFT WINDOWS® LINUX	Windows® 10 IOT Enterprise Yocto
POWER	INPUT VOLTAGE RANGE	24 VDC (+/- 20 %)
MECHANICAL	CONSTRUCTION MOUNTING DIMENSIONS (W x H x D) WEIGHT	Aluminum housing DIN RAIL, Desktop, Wall, Cabinet 58 x 150 x 100 mm (2.23" x 5.91" x 3.94") Approx. 1.0 kg (2.2 lbs)
ENVIRONMENT	OPERATING TEMPERATURE STORAGE TEMPERATURE RELATIVE HUMIDITY OPERATING VIBRATION OPERATING SHOCK	0 °C to +60 °C (32 °F to 140 °F) -40 °C to +85 °C (-40 °F to 185 °F) 93% @ 40 °C (non-condensing) acc. IEC 60068-2-6, 5-500 Hz, 1G acc. IEC 60068-2-27, half sine, 15 g, 11 ms
APPROVALS	EMC SAFETY CERTIFICATIONS	CE, FCC CB scheme, UL61010-1, UL61010-2-201

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