

KBox A-103



Scalable Fanless and Compact Industrial Computer Platform for Factory Automation

- ▶ Modular approach - Forever Young
- ▶ Maintenance-free: no moving parts, battery-free
- ▶ Proven building blocks - easy customization
- ▶ IoT ready - simply connected

POSSIBILITIES START HERE

KBox A-103

Scalable Fanless and Compact

With a wide range of functions and interfaces, the KBox A-103 is ready for the Internet of Things (IoT) using the WIFI, GPRS or LTE options via the miniPCIe interface. The KBox A-103 is based on a modular approach that ensures simple upgrades to the next processor generation ("Forever Young") for changing performance

requirements. The maintenance-free design minimizes the total cost of ownership (TCO) while ensuring utmost availability. The KBox A-103 supports 24 V DC input range and can be operated in an extended temperature range from -20 °C to +60 °C.

TECHNICAL INFORMATION

PROCESSOR	CPU MAX. SPEED BIOS	up to Intel® Atom™ E3845 4x 1.91 GHz Phoenix® BIOS
MEMORY	TECHNOLOGY MAX. CAPACITY	DDR3L, with ECC, soldered 4 GByte
INTERFACES	SERIAL PORTS USB GRAPHICS PORTS ETHERNET	1x RS232, optional: 2 nd COM as RS232 or RS422/485, 3 rd COM as RS422/485 1x USB 3.0, 2x USB 2.0 1x Display Port, 1x VGA 2x GbE, IEEE1588 support, WOL support On project request: 2x additional GbE via mPCIe, IEEE802.3 support
STORAGE	SATA FLASH MSATA	Drive Bay to install 1x 2.5" SATA SSD up to 16 GByte onboard flash (eMMC) optional 1x mSATA socket
EXPANSION	miniPCIe	2x miniPCIe sockets for full-size modules (1x for Fieldbus expansion, 1x with SIM Card socket)
OTHERS	CONTROL FIELD BUS DIGITAL IO WATCHDOG TIMER	Power button, 2x LEDs (Power, SSD) Profibus support optional 4x TTL in, 4x TTL out as option 255 levels timer interval, setup by software
SOFTWARE SUPPORT	MICROSOFT WINDOWS® LINUX	Windows® 10, Windows® Embedded 8.1 Industry, Windows® 7, Windows® Embedded Standard 7, Yocto
POWER	INPUT VOLTAGE RANGE	24 VDC (+20 % / -15 %)
POWER CONSUMPTION	TYPICAL	11 W
MECHANICAL	CONSTRUCTION MOUNTING DIMENSIONS (W X H X D) WEIGHT	Aluminum housing DIN RAIL, Desktop, Wall, Cabinet, VESA Mounting 210 x 65 x 140 mm (8.27" x 2.56" x 5.51") max. 2.5 kg (5.51 lb)
ENVIRONMENT	OPERATING TEMPERATURE STORAGE TEMPERATURE RELATIVE HUMIDITY OPERATING VIBRATION OPERATING SHOCK MTBF	-20 °C to +60 °C (-4 °F to 140 °F) -40 °C to +85 °C (-40 °F to 185 °F) 95% @ 40 °C (non-condensing) acc. IEC 60068-2-6, 10-150 Hz, 1G acc. IEC 60068-2-27, half sine, 15 g, 11 ms 120.000 h at 30 °C
APPROVALS	EMC SAFETY CERTIFICATIONS	CE, FCC CB scheme, UL 60950-1, UL 61010-1 & 61010-2-201

ORDERING INFORMATION

ARTICLE	MATERIAL NUMBER	DESCRIPTION
RECOMMENDED CONFIGURATION		
KBox A-103	2-A0DF-2004	SMARC-sXBTi E3827, 2 GByte RAM, 60 GByte SSD, vertical mount
KBox A-103	2-A0DF-2008	SMARC-sXBTi E3845, 4 GByte RAM, 16 GByte eMMC, 60 GByte SSD, Windows® 10 IoT, vertical mount
ACCESSORIES		
AC/DC ADAPTER KBOX A-103	1059-5711	AC/DC Adapter 230 VDC to 24 VDC, 60 W

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