

KBox A-151-EKL

Embedded Box PC



Industrial Computer Platform for Control & Process Optimization

- Low-Power Intel Atom® x6000 or Celeron® processors
- Broad range of interfaces with WIFI and LTE/5G option
- Flexible system expansion via I/O door
- Passive cooling concept, option for extended temperature range
- Optional: Hardened and secure Linux®-based KontronOS operating system, KontronGrid fleet management solution

PROCESSOR	CPU MAX. SPEED SYSTEM CHIPSET BIOS	Intel Atom® x6212RE/x6425RE, x6214RE/x6416RE* or Celeron® J6413 Quad-Core up to 1.9 GHz Integrated AMI® Aptio V5
MEMORY	TECHNOLOGY MAX. CAPACITY SOCKET	DDR4 3200MHz Up to 32 GByte 2x SODIMM
GRAPHICS	GRAPHICS CORE MAX. RESOLUTION	Intel® UHD Graphics for 10th Gen Intel® Core™ Processors 4096 x 2160 @ 60Hz
INTERFACES	GRAPHICS PORTS USB ETHERNET SERIAL PORTS BUTTONS/LED	2x DisplayPort 2x USB 3.2 and 2x USB 2.0 2x 2.5GbE: 2x Intel® I225-IT 2x COM ports RS232/422/485 Power Button & LED, Standby LED
OPTIONAL INTERFACES	WIRELESS TECHNOLOGY EXPANSION VIA I/O DOOR	Option for WIFI 6 or LTE/5G Option for Ethercat, Dual CAN, additional GbE and DisplayPort, COM ports, 8x GPIO/DIO or Audio
STORAGE	M.2 SSD	Up to 1 TByte SATA via M.2 Key M
EXPANSION SLOTS	M.2	1x M.2 Key M 2280 socket, used for storage 1x M.2 Key E 2230 socket 1x M.2 Key B 2242/2280 socket, with SIM card socket
SOFTWARE SUPPORT	OPERATING SYSTEM	Windows® 10 IoT Enterprise LTSC 2019 pre-installed Linux Yocto (on request) KontronOS** KontronGrid***
	TOOLSET	
POWER	INPUT VOLTAGE RANGE	24 VDC (9...30 VDC)
MECHANICAL	CONSTRUCTION MOUNTING DIMENSIONS (W x H x D) WEIGHT	Steel DIN RAIL, Bookmount 180 x 70 x 123 mm (7.09" x 2.76" x 4.84") approx 2.0 kg (4.41 lbs)
ENVIRONMENT	COOLING OPERATING TEMPERATURE	Fanless 0 °C to +60 °C (32 °F to 140 °F) standard -40 °C to +60 °C (-40 °F to 140°F) extended
	RELATIVE HUMIDITY	93 % RH at 40 °C, non-condensing
APPROVALS	CERTIFICATIONS	CE, UL 61010, CB, FCC

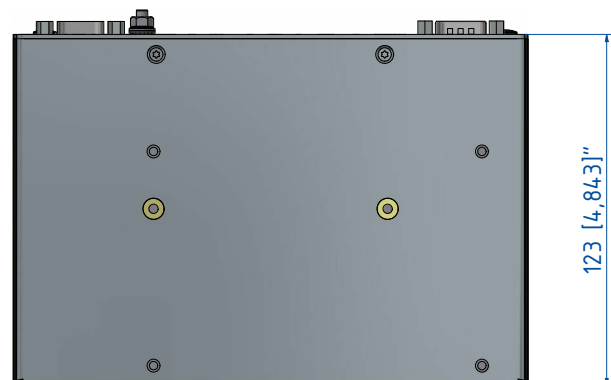
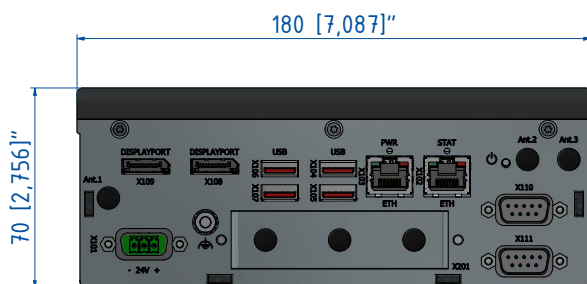
*) on request

**) KontronOS: Hardened Linux based operating system for the reliable operation of customer applications on edge devices

***) KontronGrid: Complete fleet management solution for edge devices and container based applications

More information: <https://www.susietec.com/en/solutions/software>

Dimensions



ARTICLE	PART NO.	DESCRIPTION
HOUSING	EK1 EK1 EKA EKA	KBox A-151-EKL Housing (X6xxxRE) KBox A-151-EKL Housing (J6413) KBox A-151-EKL w. Automotive Battery (X6xxxRE) KBox A-151-EKL w. Automotive Battery (J6413)
3.5" SBC	Cel x62 x64	Elkhart Lake Celeron J6413, 4x 1.8/3.0 GHz Elkhart Lake x6212RE, 2x 1.2 GHz, Industrial Temp. Elkhart Lake x6425RE, 4x 1.9 GHz, Industrial Temp.
MEMORY	-04 -04 -08 -08 -16 -16 -32 -32	4 GByte SODIMM DDR4 4 GByte SODIMM DDR4 Ind. Temp. 8 GByte SODIMM DDR4 8 GByte SODIMM DDR4 Ind. Temp. 16 GByte SODIMM DDR4 16 GByte SODIMM DDR4 Ind.Temp. 32 GByte SODIMM DDR4 32 GByte SODIMM DDR4 Ind. Temp.
M.2 #1 (KEY M)	-000 -128 -256 -512 -01T	empty M.2 128 GByte M.2 SATA 256 GByte M.2 SATA 512 GByte M.2 SATA 1 TByte M.2 SATA
M.2 #2 (KEY B)	-0 -L -5	empty M.2 LTE/4G module for Europe 5G Module for Europe
M.2 #3 (KEY E)	-0 -W -D	empty M.2 Wifi6 only (w/o LTE, Dual CAN, Ethercat or Dual LAN) Wifi6 with additional M.2 (LTE, Dual CAN, Ethercat or Dual LAN)
EXPANSION SLOT	-0 -G -R -A -C -E -D -N -B	No Expansion 8x channel DIO/GPIO Module (via USB) 2x Additional RS232 (via USB to COM Adapter) Audio Line-Out (via audio header) Dual CAN (occupies M.2 #2, can't be used together w. LTE or 5G module) EtherCAT via Hilscher (occupies M.2 #2, can't be used together w. LTE or 5G module) Dual LAN EGPL-G201 (occupies M.2 #2, can't be used together w. LTE or 5G module) Antenna break-outs (only needed if > 3x antennas will be attached) CAN-Bus
MOUNTING	-0 -1 -2 -3	No Din-Rail DIN Rail Rear (Bookmount/Vertical orientation) DIN Rail on Bottom Plate (wiring up/down only) Bookmount, via adapter plate
SOFTWARE	-00 -WE -LI	No OS Windows 10 IoT LTSC 2021 Linux

Accessories

AC/DC ADAPTER	ER40-100001-01	AC/DC Adapter, external, 50 W/24 VDC
POWERCORD	840-0059 840-0115 840-0405/0-0064-4317	Powercord EU Powercord UK Powercord US
PHOENIX CONNECTOR	EE04-100001-01	Phoenix connector 3pol. incl. Housing, without PSU

Global Headquarters

Kontron Europe GmbH

Gutenbergstraße 2
85737 Ismaning, Germany
Tel.: + 49 821 4086-0
info@kontron.com

www.kontron.com