

Kontron's KBox family offers intelligent gateways for IoT edge applications including fieldbus connectivity. For control, inspection and data collection tasks on the factory floor powerful and maintenance-free Box PCs with a maximum of flexibility and expansion capabilities are provided.

The KBox A-series is designed for a variety of applications in the industrial environment. It comprises intelligent IoT gateways for edge analytics or remote monitoring as well as systems for control and process optimization. All systems feature a fanless design which ensures a significantly prolonged lifespan and high system availability.



KBox A-SERIES

Compact and flexible Embedded Box PC with gateway functions which handle control & process optimization on-site

- ▶ Scalable processor performance
- ▶ Intelligent IoT gateway for edge analytics, data collection, remote monitoring
- ▶ Fieldbus options
- ▶ Fanless design
- ▶ Broad range of interfaces and expansion capabilities
- ▶ Various mounting options (DIN RAIL, wall, desktop, cabinet)
- ▶ Easy customization with proven building blocks

The KBox B-Series is based on Kontron's miniITX motherboard family offering highest performance with desktop CPUs. Kontron's KBox B-Series can be used for various applications such as medical, gaming, process control, wherever high performance is needed.



KBox B-SERIES

High Performance Desktop PC with Wide Extension Capabilities

- ▶ High processing capability: 8th Gen Intel® Core™ i3/i5/i7
- ▶ Low noise design with internal silent fan
- ▶ Small form factor with mITX motherboard
- ▶ Removable 2.5" SSD
- ▶ Various mounting options
- ▶ PCIe expansion slots

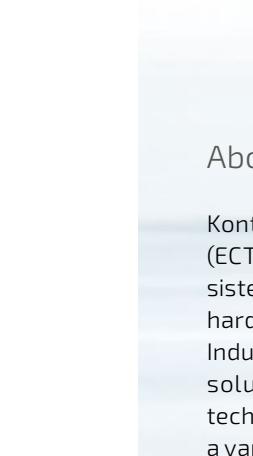
Kontron's KBox C-Series is designed for the industrial control cabinet environment. Based on COMe modules the KBox C-Series is highly scalable and ensures simple upgrades whenever needed. The availability of different housing options guarantees mounting even when space is limited. With its broad range of interfaces, various storage capabilities and expansion slots, the KBox C-Series maximizes flexibility and eases adaptation to the specific application needs.



KBox C-SERIES

Powerful Industrial Box PC for Control, Inspection & Data Collection

- ▶ Processor performance up to 8th/9th Gen Intel® Core™ or Xeon® E for demanding applications
- ▶ Highest system availability: Fanless up to 70 °C, redundant PSU option, recovery button, goldcap backup
- ▶ Optimized for control applications: Fieldbus integration & NVRAM option
- ▶ High flexibility and expandability: Up to 4x PCIe Slots, mPCIe & M.2, 4x GbE, 6x USB, up to 3x DP, ...



WideLink Technology

Enables the operation of visualization systems at up to 100 meters distance from the control computer

- ▶ Independent from OS or any other software
- ▶ Data communication via one single Ethernet cable
- ▶ Data transmission without time lag or quality loss

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KBox Family

IOT GATEWAYS/ EMBEDDED BOX PC



SMART AUTOMATION

Industrial IoT applications, edge & fog computing

MAINTENANCE FREE

Reducing TCO – driving system availability

FOREVER YOUNG

Maximum innovation – minimum investment

KBox FAMILY

IOT GATEWAYS/EMBEDDED BOX PC



KBox	KBox A-330-RPI		KBox A-330-MX6		KBox A-203		KBox A-250		KBox A-103		KBox A-150-APL		KBox A-150-SKL		KBox A-150-KBL		KBox A-230-LS		KBox B-201-CFL		KBox B-202-CFL		KBox C-102 SERIES		KBox C-103-CFL SERIES				
PLATFORM MAINTENANCE-FREE	4.3" SBC 1)	4.3" SBC 1)	4.3" SBC 1)	4.3" SBC 1)	SMARC 1) 2) 4) 6)	Microsoft Azure Certified	pITX 1) 4) 6)	Microsoft Azure Certified	SMARC 1) 2) 4) 6)	Microsoft Azure Certified	Intel Atom® x5-E3930	Intel Atom® x5-E3930/E3940/E3950	Intel Atom® E3815/E3827/E3845	Intel® Pentium® N4200	6th Gen Intel® Core™ i5-6300U	7th Gen Intel® Core™ i5-7300U	NXP Dual Cortex®-A72 LS1028A	8th Gen Intel® Core™ i3-8100/15-8500/17-8700	8th Gen Intel® Core™ i3-8100/15-8500/17-8700	6th Gen Intel® Celeron® G3902E, Core™ i3-6102E/15-6442EQ/17-6820EQ, Xeon® E3-1515M	8th/9th Gen Intel® Celeron® G4930E, Core™ i3-9100HL/15-8400H/17-9850HE, Xeon® E-2276ME								
PROCESSOR SYSTEM	CPU	Broadcom® BCM2837B0 AM-A53	iMX6 Dual Arm® Cortex®-A9	Quad-Core 1.2 GHz	Dual-Core 1 GHz	Integrated	Intel Atom® x5-E3930/E3940/E3950	Quad-Core 1.6/2.0 GHz (Burst)	Quad-Core 1.91 GHz	Integrated	Intel Atom® E3815/E3827/E3845	Quad-Core 1.2/2.5 GHz (Burst)	Dual-Core 2.4/3.0 GHz (Burst)	Intel® Pentium® N4200	6th Gen Intel® Core™ i5-6300U	7th Gen Intel® Core™ i5-7300U	Dual-Core 2.4/3.5 GHz (Burst)	Hexa-Core 3.6 GHz/4.2 GHz (Burst)	Hexa-Core 3.6 GHz/4.2 GHz (Burst)	Quad-Core 2.8 GHz/3.7 GHz (Burst)	Intel® CM236 or QM370								
MEMORY	MEMORY TECHNOLOGY	LPDDR2	DDR3L	Integrated	Integrated	AMi® Aptio V5	AMi® Aptio V5	AMi® Aptio V5	AMi® Aptio V5	Phoenix SecureCore™	DDR3L ECC	DDR3L ECC	DDR4	DDR4	DDR4	DDR4	DDR4	DDR4	DDR4	DDR4	DDR4	DDR4	DDR4	DDR4	DDR4	DDR4	DDR4		
GRAPHICS	GRAPHICS CORE	VideoCore IV OpenGL-ES 1.1/2.0, Full HD 250 MHz	Vivante GC	Intel® HD Graphics 500	Intel® HD Graphics 500	Intel® HD Graphics	Intel® HD Graphics 505	Intel® HD Graphics 520	Intel® HD Graphics 620	Intel® HD Graphics	4096 x 2160	4096 x 2160	4096 x 2160	4096 x 2160	4096 x 2160	4096 x 2160	4096 x 2160	4096 x 2160	4096 x 2160	4096 x 2160	4096 x 2160	4096 x 2160	4096 x 2160	4096 x 2160	4096 x 2160	4096 x 2160			
ETHERNET	HDMI/DVI/DP/VGA	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1/0/0/0	1/0/0/0	1/0/0/0	1/0/0/0	1/0/0/0	4096 x 2160	4096 x 2160	4096 x 2160	4096 x 2160	4096 x 2160	4096 x 2160	4096 x 2160	4096 x 2160	4096 x 2160	4096 x 2160	4096 x 2160	4096 x 2160	4096 x 2160	4096 x 2160	4096 x 2160	4096 x 2160			
FIELDBUS	TEAMING/FAILOVER	-	-	-	-	yes	yes	yes	yes	yes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
MISCELLANEOUS FEATURES	STANDARD	CAN	CAN	CAN	CAN	RS232 / RS422 / RS485	PROFIBUS*	RS232 / RS422 / RS485	RS232 / RS422 / RS485	RS232 / RS422 / RS485	1/0/1	1/0/1	1/0/1	1/0/0	1/0/0	1/0/0	1/0/0	1/0/0	1/0/0	1/0/0	1/0/0	1/0/0	1/0/0	1/0/0	1/0/0	1/0/0	1/0/0	1/0/0	
EXPANSION	USB 3.0/2.0	0/2 (OTG)	0/2	2/0	2/0	2/0	2/0	2/0	2/0	2/0	2/0	2/0	2/0	2/0	2/0	2/0	2/0	2/0	2/0	2/0	2/0	2/0	2/0	2/0	2/0	2/0	2/0	2/0	
STORAGE	AUDIO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SOFTWARE SUPPORT	MICROSOFT WINDOWS	Raspbian	Yocto	Win10	Win10	Win10	Win10	Win10	Win10	Win10	7x Digital I/Os 24 V, 1x Digital Input 24 V	Digital IO 4x In/4x Out TTL	1/0/0	1/0/0	1/0/0	1/0/0	1/0/0	1/0/0	1/0/0	1/0/0	1/0/0	1/0/0	1/0/0	1/0/0	1/0/0	1/0/0	1/0/0	1/0/0	
SECURITY	SECURITY	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
MIDDLEWARE	HYPERVISOR	-	-	on request	on request	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
POWER	INPUT VOLTAGE	24 V DC (9..32 V DC)	24 V DC (9..32 V DC)	24 V DC (+/- 20 %)	24 V DC (+/- 20 %)	24 V DC (+/- 20 %)	24 V DC (+/- 20 %)	24 V DC (+/- 20 %)	24 V DC (+/- 20 %)	24 V DC (+/- 20 %)	24 V DC (9..30 V DC)	24 V DC (9..30 V DC)	24 V DC (9..30 V DC)	24 V DC (9..30 V DC)	24 V DC (9..30 V DC)	24 V DC (9..30 V DC)	24 V DC (9..30 V DC)	24 V DC (9..30 V DC)	24 V DC (9..30 V DC)	24 V DC (9..30 V DC)	24 V DC (9..30 V DC)	24 V DC (9..30 V DC)	24 V DC (9..30 V DC)	24 V DC (9..30 V DC)	24 V DC (9..30 V DC)	24 V DC (9..30 V DC)	24 V DC (9..30 V DC)	24 V DC (9..30 V DC)	
MECHANICAL	MOUNTING	DIN RAIL, Cabinet	DIN RAIL, Cabinet	DIN RAIL, Cabinet, Bookmount	DIN RAIL, Cabinet, Bookmount	DIN RAIL, Desktop, Cabinet, Bookmount	DIN RAIL, Desktop, Cabinet, Bookmount	DIN RAIL, Desktop, Cabinet, Bookmount	DIN RAIL, Desktop, Cabinet, Bookmount	DIN RAIL, Desktop, Cabinet, Bookmount	DIN RAIL, Desktop, Cabinet, Bookmount	DIN RAIL, Desktop, Cabinet, Bookmount	DIN RAIL, Desktop, Cabinet, Bookmount	DIN RAIL, Desktop, Cabinet, Bookmount	DIN RAIL, Desktop, Cabinet, Bookmount	DIN RAIL, Desktop, Cabinet, Bookmount	DIN RAIL, Desktop, Cabinet, Bookmount	DIN RAIL, Desktop, Cabinet, Bookmount	DIN RAIL, Desktop, Cabinet, Bookmount	DIN RAIL, Desktop, Cabinet, Bookmount	DIN RAIL, Desktop, Cabinet, Bookmount	DIN RAIL, Desktop, Cabinet, Bookmount	DIN RAIL, Desktop, Cabinet, Bookmount	DIN RAIL, Desktop, Cabinet, Bookmount	DIN RAIL, Desktop, Cabinet, Bookmount	DIN RAIL, Desktop, Cabinet, Bookmount	DIN RAIL, Desktop, Cabinet, Bookmount	DIN RAIL, Desktop, Cabinet, Bookmount	
ENVIRONMENT	DIMENSION (W x H x D)	111 x 25 x 76 mm	111 x 25 x 76 mm	150 x 57 x 95 mm (5.91" x 2.24" x 3.74")	150 x 58 x 100 mm (5.91" x 2.28" x 3.94")	150 x 58 x 140 mm (5.91" x 2.28" x 5.51")	210 x 65 x 140 mm (8.27" x 2.56" x 5.51")	210 x 65 x 140 mm (8.27" x 2.56" x 5.51")	210 x 65 x 140 mm (8.27" x 2.56" x 5.51")	50 (58 with SSD carrier) x 180 x 134 mm (1.97" x 2.28" x 7.09" x 5.28")	50 (58 with SSD carrier) x 180 x 134 mm (1.97" x 2.28" x 7.09" x 5.28")	50 (58 with SSD carrier) x 180 x 134 mm (1.97" x 2.28" x 7.09" x 5.28")	50 (58 with SSD carrier) x 180 x 134 mm (1.97" x 2.28" x 7.09" x 5.28")	130 x 290 x 210 mm (5.12" x 11.42" x 8.27")	130 x 290 x 210 mm (5.12" x 11.42" x 8.27")	130 x 290 x 210 mm (5.12" x 11.42" x 8.27")	130 x 290 x 2												