Perfect fit for challenging and rough environments

➤ High Performance Computing High processing capability and graphics power

▶ Easy Customization Modular and flexible concept

> Designed in Germany High reliability and long term availability

Industrial Rackmount PC/Workstations

for Industrial Applications & Embedded Cloud Solutions

Kontron's Industrial Rackmount PCs and Workstations are designed and tested for challenging environments and are therefore the perfect fit for high temperature and mechanical stress conditions.

All Kontron Industrial Rackmount PCs and Workstations are ideally suited even for





▶ Industrial Rackmount PC KISS Series Scalable Industrial Rackmount PC for challenging and noise sensitive environments

- Industrial grade for challenging environments: robust, reliable and sustainable
- Maximum performance up to 12th/13th Gen Intel® Core™ i9/i7/i5/i3 or Intel® Xeon® processors
- ➤ Low noise level. 24/7 operation
- ▶ Modular and flexible concept for easy customization
- > Various formats available: 1U, 2U, 4U and short versions
- ➤ Long-term availability (7+ years)
- ➤ Tool-free replacement of fans, filter mats, or hard disk drives in the removable tray
- ➤ TSN functionality optionally





Kontron is a global leader in IoT/Embedded Computing Technology (ECT) and offers individual solutions in the areas of Internet of Things (IoT) and Industry 4.0 through a combined portfolio of hardware, software and services. With its standard and customized products based on highly reliable state-of-the-art technologies, Kontron provides secure and innovative applications for a wide variety of industries. As a result, customers benefit from accelerated time-to-market, lower total cost of ownership, extended product lifecycles and the best fully integrated

For more information, please visit: www.kontron.com

About the Intel® Partner Alliance

From modular components to market-ready systems, Intel and the over 1,000+ global member companies of the Intel® Partner Alliance provide scalable, interoperable solutions that accelerate deployment of intelligent devices and end-to-end analytics. Close collaboration with Intel and each other enables Alliance members to innovate with the latest IoT technologies, helping developers deliver first-in-

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www.kontron.com





complex computing tasks as 'Artificial Intelligence' (AI) and Machine Learning based on processing and analytics of a huge amount of data. Efficient thermal concepts, maintenance-free and customizable designs (in-house), high performance computing and graphics power enable 24/7 operation and long-term deployment.





➤ Industrial Workstation KWS 3000-ADL High-performance Industrial Workstation in a compact and rugged midi-tower format

- **>** Powerful Workstation with 13th Gen Intel® Core™ i processors for Machine Learning, AI workflows and graphics-hungry applications
- ▶ Industrial-grade: shock/vibration resistant, 24/7, long-term availability
- ▶ Free selectable graphics cards and GPUs
- **▶** Easy customization
- **>** Compact size: 380 x 190 x 380 mm (H x W x D)



Industrial Rackmount PC/Workstations

for Industrial Applications & High Performance Computing

















	4 ADL

KISS 1U Short V3 CFL

Windows 10 64 Bit LTSC

others on request

К	ISS	2U	V4	ADL
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KISS 2U V3 PCI763

KISS	4111	/3 /	ADI
1/177	70	v -> ,	(DC

KISS 4U V3 CFL

KISS 4U V3 PCI763

CHIPSET	Intel® Q670E	Intel® C246
PROCESSOR	12th/13th Gen Intel® Core™ i9/i7/i5/i3	8th/9th Gen Intel® Core™ i7/i5/i3
MEMORY	4x DIMM DDR5-4800 up to 128 GByte ECC support optional	4x DIMM DDR4-2666 up to 64 GByte
STANDARD IOS	Front: 2x USB 3.2 Gen 1 Rear: 3x USB 3.2 Gen2 Type A, 2x USB 3.2 Gen 1, 1x USB 3.2 Gen 2 (Type-C), 2x USB 2.0, 1x 2.5 GB LAN, 1x GB LAN 4x DP, 1x RS232, 1x Audio	Front: 2x USB 2.0, opt. 2x USB 3.0 Rear: 4x USB 3.1, 4x USB 2.0, 2x GbE LAN, 1x DVI-D, 2x DP 1x RS232, 1x Mouse, 1x Kbd, 1x Aud
EXPANSION SLOTS	1 slot (low profile) PCIe internal USB-A	1 slot PCIe (Low Profile)
EXPANSION CARDS	2x GbE LAN, 2x 10GbE LAN, NVIDIA T1000, others on request	2x GbE LAN, 4x GbE LAN, 2x 10GbE LAN, NVIDIA T1000 others on request
PSU	100-240 V AC	100-240 V AC
DRIVE OPTIONS	1x 3.5" SATA drive bay 1x M.2 2280 Key M PCIe drive 1x M.2 2230 Key E RAID support	1x DVD R/W slim 1x 3.5" drive bay 1x M.2 2280 PCIe drive RAID support
DIMENSIONS	44 x 482 x 430 mm (1U x 19" x 16.93")	44 x 482 x 350 mm (1U x 19" x 13.7
WEIGHT	app. 6 kg	app. 6 kg
MOUNTING	Rackmount, Desktop	Rackmount, Desktop
CERTIFICATIONS	CE, FCC, TÜV NRTL	CE, FCC, TÜV NRTL
OPERATING TEMP.	0 °C to +50 °C	0 °C to +50 °C
SHOCK (EN 60068-2-27)	Operating: 15 G 11 ms duration Non-operating: 30 G 11 ms duration	Operating: 15 G 11 ms duration Non-operating: 30 G 11 ms duration
VIBRATION (EN 60068-2-6)	Operating: 10-150 Hz: 1G/3 axis Non-operating: 10-150 Hz: 2G/3 axis	Operating: 10-150 Hz: 1G/3 axis Non-operating: 10-150 Hz: 2G/3 a
ALTITUDE	5000 m	5000 m

Windows 10 64 Bit LTSC Linux

others on request

VERIFIED OS

Intel® R680E	Intel® C246	Intel® Q170
12th/13th Gen Intel® Core™ i9/i7/i5/i3	8th/9th Gen Intel® Core™ i7/i5/i3 or Intel® Xeon® E-22xx series	7th Gen Intel® Core™ i7/i5/i3
4x DIMM DDR5-4800 up to 128 GByte ECC support optional	4x DIMM DDR4-2666 up to 64 GByte ECC support optional	2x DIMM DDR4-2400 up to 32 GByte ECC support
Front: 2x USB 3.2 Gen 1 Rear: 4x USB 3.2 Gen1, 2x USB 3.2 Gen 2, 1x USB 3.2 Gen 2 (Type-C) 2x 2.5GbE LAN, 1x GbE, 4x DP 1x RS232, 1x Audio	Front: 2x USB 2.0, opt. 2x USB 3.0 Rear: 4x USB 3.1, 4x USB 2.0, 2x GbE LAN, 1x DVI-D, 2x DP 1x RS232, 1x Mouse, 1x Kbd, 1x Audio	Front: 2x USB 2.0, opt. 2x USB 3.0 Rear: 2x USB 3.0, 2x GbE LAN, 1x DVI-I 2x RS232 on Slotbracket
7 slots (low profile): 6x PCIe, 1x PCI or 2 slots PCIe (Full Heigh) internal USB-A	4 slots PCIe (Low Profile) or 3 slots PCIe (Full High)	12 Slots PCI (Full High): 5x PCIe (Gen 2), 7x
2x GbE LAN, 2x 10GbE LAN, NVIDIA T1000, others on request	2x GbE LAN, 4x GbE LAN, 2x 10GbE LAN, NVIDIA T1000 others on request	2x GbE LAN, 4x GbE LAN, 2x 10GbE LAN, NVIDIA P620 V2 others on request
100-240 V AC	100-240 V AC, single or redundant	100-240 V AC
1x 3.5" SATA drive bay 1x 2.5"/3.5" SATA drive internal 2x M.2 2230/2242/2280 Key M with NVMe support, 1x M.2 2230 Key E, RAID support	1x DVD R/W slim 1x 3.5" SATA drive bay 1x 2.5"/3.5" SATA drive internal 1x M.2 2280 PCIe drive RAID support	3x 5.25" SATA drive bays 1x 2.5"/3.5" SATA drive internal RAID support
88 x 482 x 430 mm (2U x 19" x 16.93")	88 x 482 x 472 mm (2U x 19" x 18.58")	177 x 482 x 472 mm (4U x 19" x 18.58")
app. 8 kg	app. 8 kg	app. 18 kg
Rackmount, Desktop	Rackmount, Desktop	Rackmount, Desktop
CE, FCC, TÜV NRTL	CE, FCC, TÜV NRTL	CE, FCC, TÜV NRTL
0 °C to +50 °C	0 °C to +50 °C	0 °C to +50 °C
Operating: 15 G 11 ms duration Non-operating: 30 G 11 ms duration	Operating: 15 G 11 ms duration Non-operating: 30 G 11 ms duration	Operating: 15 G 11 ms duration Non-operating: 30 G 11 ms duration
Operating: 10-150 Hz: 1G/3 axis Non-operating: 10-150 Hz: 2G/3 axis	Operating: 10-150 Hz: 1G/3 axis Non-operating: 10-150 Hz: 2G/3 axis	Operating: 10-150 Hz: 1G/3 axis Non-operating: 10-150 Hz: 2G/3 axis
5000 m	5000 m	5000 m
Windows 10 64 Bit LTSC Linux others on request	Windows 10 64 Bit LTSC Linux others on request	Windows 10 64 Bit LTSC Linux others on request

KISS 2U V3 CFL

	Intel® R6
	12th/13t
	4x DIMM up to 128 ECC supp
3.0	Front: 2x Rear: 4x 2, 1x USE 2x 2.5 Gt 1x RS232
	7 slots (finternal
	2x GbE L 2x 10GbB NVIDIA T others o
	100-240
L	1x 3.5" SA 1x 2.5"/3 2x M.2 2 NVMe su RAID sup
× 18.58")	177 x 482
	app. 18 k
	Rackmou
	CE, FCC,
	0 °C to +
ation	Operatin Non-ope
s '3 axis	Operatin Non-ope
	5000 m
	Window Linux others o

tel® R680E	Intel® C246	Intel® Q170
th/13th Gen Intel® Core™ i9/i7/i5/i3	8th/9th Gen Intel® Core™ i7/i5/i3 or Intel® Xeon® E-22xx series	7th Gen Intel® Core™ i7/i5/i3
k DIMM DDR5-4800 o to 128 GByte CC support optional	4x DIMM DDR4-2666 up to 64 GByte ECC support optional	2x DIMM DDR4-2400 up to 32 GByte ECC support
ont: 2x USB 3.2 Gen 1 ear: 4x USB 3.2 Gen1, 2x USB 3.2 Gen 1x USB 3.2 Gen 2 (Type-C) < 2.5 GbE LAN, 1x GbE, 4x DP RS232, 1x Audio	Front: 2x USB 2.0, opt. 2x USB 3.0 Rear: 4x USB 3.1, 4x USB 2.0, 2x GbE LAN, 1x DVI-D, 2x DP 1x RS232, 1x Mouse, 1x Kbd, 1x Audio	Front: 2x USB 2.0, opt. 2x USB 3.0 Rear: 2x USB 3.0, 2x GbE LAN, 1x DVI-I 2x RS232 on Slotbracket
slots (Full Height): 6x PCIe, 1x PCI ternal USB-A	7 slots (Full High): 5x PCIe, 2x PCI	5 Slots (Full High): 1x PCIe x16, 3x PCIe x4, 1x PCIe x8
k GbE LAN, k 10GbE LAN, VIDIA T1000, thers on request	2x GbE LAN, 4x GbE LAN, 2x 10GbE LAN, NVIDIA T1000 others on request	2x GbE LAN, 4x GbE LAN, 2x 10GbE LAN, NVIDIA T1000, others on request
00-240 V AC	100-240 V AC, single or redundant	100-240 V AC
3.5" SATA drive bay 2.5"/3.5" SATA drive internal (M.2 2230/2242/2280 Key M with VMe support, 1x M.2 2230 Key E, AID support	3x 5.25" SATA drive bays 1x 2.5"/3.5" SATA drive internal 1x M.2 2280 PCIe drive RAID support	1x DVD R/W slim 1x 5.25" SATA drive bay 1x 2.5"/3.5" SATA drive internal RAID support
7 x 482 x 472 mm (4U x 19" x 18.58")	177 x 482 x 472 mm (4U x 19" x 18.58")	88 x 482 x 472 mm (2U x 19" x 18.58"
рр. 18 kg	app. 18 kg	app. 8 kg
ackmount, Desktop	Rackmount, Desktop	Rackmount, Desktop
E, FCC, TÜV NRTL	CE, FCC, TÜV NRTL	CE, FCC, TÜV NRTL
°C to +50 °C	0 °C to +50 °C	0 °C to +50 °C
perating: 15 G 11 ms duration on-operating: 30 G 11 ms duration	Operating: 15 G 11 ms duration Non-operating: 30 G 11 ms duration	Operating: 15 G 11 ms duration Non-operating: 30 G 11 ms duration
perating: 10-150 Hz: 1G/3 axis on-operating: 10-150 Hz: 2G/3 axis	Operating: 10-150 Hz: 1G/3 axis Non-operating: 10-150 Hz: 2G/3 axis	Operating: 10-150 Hz: 1G/3 axis Non-operating: 10-150 Hz: 2G/3 axis
000 m	5000 m	5000 m
lindows 10 64 Bit LTSC nux Hers on request	Windows 10 64 Bit LTSC Linux others on request	Windows 10 64 Bit LTSC Linux others on request

KWS 3000-ADL

Intel® Q670E	
13th Gen Intel® Core™ i9/i7/i5/i3	
4x UDIMM DDR5-4800 up to 128 GByte ECC support	
Front: 2x USB 3.0 Rear: 4x USB 3.2 Gen 1, 2x USB 3.0 Gen 2, 1x USB-C 2x 2.5 GbE LAN, 1x GbE 4x DP1.4a 1x RS232 Line-in, Line-out, MIC-in	
PCIe x16: 1x 16 lanes, Gen5/1x 4 lanes, Gen4 PCIe x1: 1x Gen3, "open slot"/1x Gen4, "closed slot"	
2x GbE LAN, 4x GbE LAN, 2x 10GbE LAN, NVIDIA T1000, RTX 30xx, RAID Contoller, others on reques	
100-240 V AC 400 W/750 W, 100-240 V AC redundant 700 W	
up to 4 x 3.5" SATA drive bays hot swap or internal, optional 1x SLIM DVD	

up to 4 x 3.5" SATA drive bays hot swap or internal, optional 1x SLIM DVD 2x M.2 2230/2242/2280 (Key-M, PCIe/NVME SSD modules), incl. NVME RAID support 1x M.2 2230 (Key-E, WLAN/Bluetooth modules, incl. CNVi support) RAID support 0/1/5/10

RAID support 0/1/5/10

380 x 190 x 380 mm (14.96" x 7.48" x 14.96")

appr. 14 kg

Desktop or Tower

CE, FCC, NRTL (UL 62368-1), CB (IEC 62368-1)

0 °C to +45 °C

Operating: 10 G 11 ms duration Non-operating: 20 G 11 ms duration

Operating: 10-150 Hz: 0.5G/3 axis Non-operating: 10-150 Hz: 1G/3 axis

5000 m

Windows 10 64 bit LTSC