

ICOM4121

Industrial 4U Rackmount Xeon/10th Gen System



ICOM4121

PRODUCT HIGHLIGHTS

- ▶ 4U 19" 18.58" Deep Rackmount system
- ▶ Life Cycle Support Until Q2' 34
- ▶ Industrial motherboard based solution
- ▶ Supports Intel Xeon®/10th Gen Intel® Core™ with Intel® W480E chipset
- ▶ 4 DDR4 UDIMM up to 128GB(ECC/Non-ECC)
- ▶ Expansion for 1 PCIe x16, 1 PCIe x4, 1 PCIe x1, 2 PCI, 2 M.2 M key
- ▶ Rich I/O: 2 Intel GbE, 4 USB 3.2 Gen 2, 2 USB 3.2 Gen 1, 6 USB 2.0
- ▶ Front to back cooling with two low noise hot-swap system fans



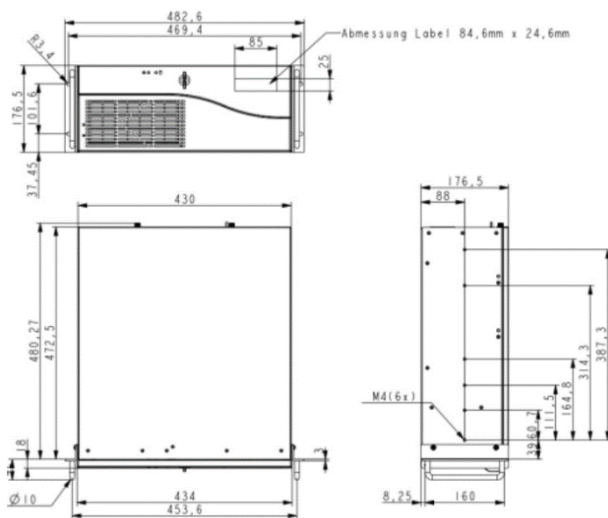
TECHNICAL INFORMATION

PROCESSOR	10th Generation Intel® LGA 1200 Socket Processors, TDP support up to 125W Intel® Xeon® W-1290E (10 Cores, 20M Cache, up to 4.8 GHz, ECC support); 95W Intel® Xeon® W-1290TE (10 Cores, 20M Cache, up to 4.5 GHz, ECC support); 35W Intel® Xeon® W-1270E (8 Cores, 16M Cache, up to 4.8 GHz, ECC support); 80W Intel® Xeon® W-1270TE (8 Cores, 16M Cache, up to 4.4 GHz, ECC support); 35W Intel® Xeon® W-1250E (6 Cores, 12M Cache, up to 4.7 GHz, ECC support); 80W Intel® Xeon® W-1250TE (6 Cores, 12M Cache, up to 3.8 GHz, ECC support); 35W Intel® Core™ i9-10900E (10 Cores, 20M Cache, up to 4.7 GHz); 65W Intel® Core™ i9-10900TE (10 Cores, 20M Cache, up to 4.5 GHz); 35W Intel® Core™ i7-10700E (8 Cores, 16M Cache, up to 4.5 GHz); 65W Intel® Core™ i7-10700TE (8 Cores, 16M Cache, up to 4.4 GHz); 35W Intel® Core™ i5-10500E (6 Cores, 12M Cache, up to 4.2 GHz); 65W Intel® Core™ i5-10500TE (6 Cores, 12M Cache, up to 3.7 GHz); 35W Intel® Core™ i3-10100E (4 Cores, 6M Cache, 3.8 GHz); 65W Intel® Core™ i3-10100TE (4 Cores, 6M Cache, to 3.6 GHz); 35W Intel® Pentium® G6400E (2 Cores, 4M Cache, 3.8 GHz); 58W Intel® Pentium® G6400TE (2 Cores, 4M Cache, 3.2 GHz); 35W Intel® Celeron® G5900E (2 Cores, 2M Cache, 3.2 GHz); 58W Intel® Celeron® G5900TE (2 Cores, 2M Cache, 3.0 GHz); 35W
CHIPSET	Intel® W480E Chipset
MEMORY	Four 288-pin Non-ECC UDIMM up to 128GB (Core™ i5/i7 only support non-ECC) Dual Channel DDR4 2400/2666/2933MHz ECC memory support for Xeon processors
BIOS	SPI 128Mbit
STORAGE	Supports 3x 5.25" SATA drive bays Supports 4 x SATA 3.0, 1 x M.2 2242/2260/2280 M key (PCIe Gen3 x4 NVMe/SATA/Intel® Optane Memory and intel RST support) 1 x M.2 2242/2260/2280 M key (PCIe Gen3 x4 NVMe/Intel® Optane Memory & RST support) 1 x M.2 2230 E key (USB 2.0/PCIe x1 shared with PCIe x1 slot, opt., MOQ required) Supports RAID 0/1/5/10 Optional removable hard disk drives or solid state disks
OPTICAL	DVD±RW (±R DL) / DVD-RAM drive
WATCHDOG TIMER	Programmable via S/W from 1 sec. to 255 sec.
EXPANSION SLOTS	1 x PCIe x16 (Gen 3) (1 x16 signal or 2 x8 signal) 3 x PCIe x4 (Gen 3) (2 x4 signal and 1 x1 signal) 2 x PCI 1 x M.2 2242/2260/2280 M key (PCIe Gen3 x4 NVMe/Intel® Optane Memory & RST support) 1 x M.2 2230 E key (USB 2.0/PCIe x1 shared with PCIe x1 slot, opt., MOQ required)
POWER SUPPLY OPTIONS	400W ~ 600W, 90~250VAC, DC 12~48V, 500W Redundant Power Supplies
AUDIO	Realtek ALC888
ETHERNET	1 x Intel® I211AT PCIe (10/100/1000Mbps) 1 x Intel® I219LM PHY with iAMT12.0 (10/100/1000Mbps) (only Xeon, i7/i5 supports iAMT)
OPERATING SYSTEMS SUPPORTED	Windows 10 IoT Enterprise 64-bit Windows Server 2019 Linux

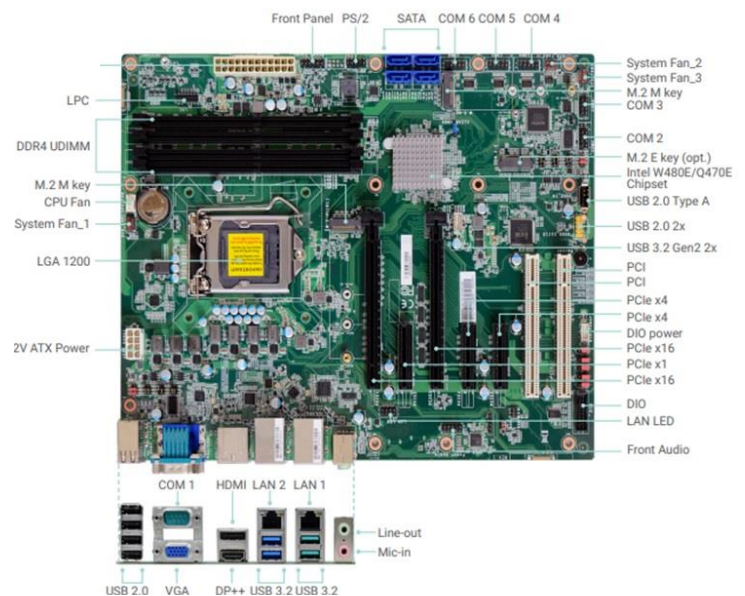
TECHNICAL INFORMATION (CONTINUED)

DISPLAY	1 x VGA, resolution up to 1920x1200 @ 60Hz 1 x DP++, resolution up to 4096x2160 @ 60Hz 1 x HDMI 1.4b, resolution up to 4096x2160 @ 24Hz
MULTI-DISPLAY OUTPUTS	Supports Triple Displays: VGA + DP++ + HDMI
REAR I/O PORTS	2 x GbE (RJ-45) 1 x RS-232/422/485 (RS-232 w/power (DB-9) 2 x USB 3.2 Gen 2, 2 x USB 3.2 Gen 1, 4 x USB 2.0 1 x PS/2 (mini DIN-6) 1 x VGA, 1 x DP++, 1 x HDMI 1 x Line-out, 1 x Mic-in, 1 x Line-in (opt., MOQ required)
OPTIONAL PORT EXPANSION FROM MOTHERBOARD	1 x RS-232/422/485 (RS-232 w/ power) (2.54mm pitch) 4 x RS-232 (2.54mm pitch) 2 x USB 3.2 Gen 1 (Key B 20-pin) 2 x USB 2.0 (2.54mm pitch, Colay vertical Type A, opt.: MOQ required) 1 x USB 2.0 Vertical Type A
FRONT CHASSIS CONNECTORS	2 x USB
DRIVE BAYS	3x 5.25" SATA drive bays, 1x 2.5" / 3.5" SATA drive internal
MOTHERBOARD MTBF	TBD
ENVIRONMENT	Operation Temperature: 0 °C to +50 °C continuous operation Storage Temperature: -20 °C to +70 °C Humidity: 10 % to 93 % @40 °C, non-condensing (Dependent on overall system specification)
VIBRATION	Operating: 10-150 Hz: 1G/3 axis Non-operating: 10-150 Hz: 2G/3 axis
COOLING	Removable air filter, Two low noise hot-swap system cooling fans
COLOUR	Black (all other optional colours are available upon request)
DIMENSIONS:	177 x 482 x 472 mm (4U x 19" x 18.58")

MECHANICAL DRAWING



MOTHERBOARD DETAILS



Company Address

Kontron UK Limited
Units 3, 4, 5, 9 & 10 New Bury Park
Marsh Lane, Easthampnett, UK
TEL: +44 (0) 1243 380780
uksales@kontron.com
www.industrial-computers.com