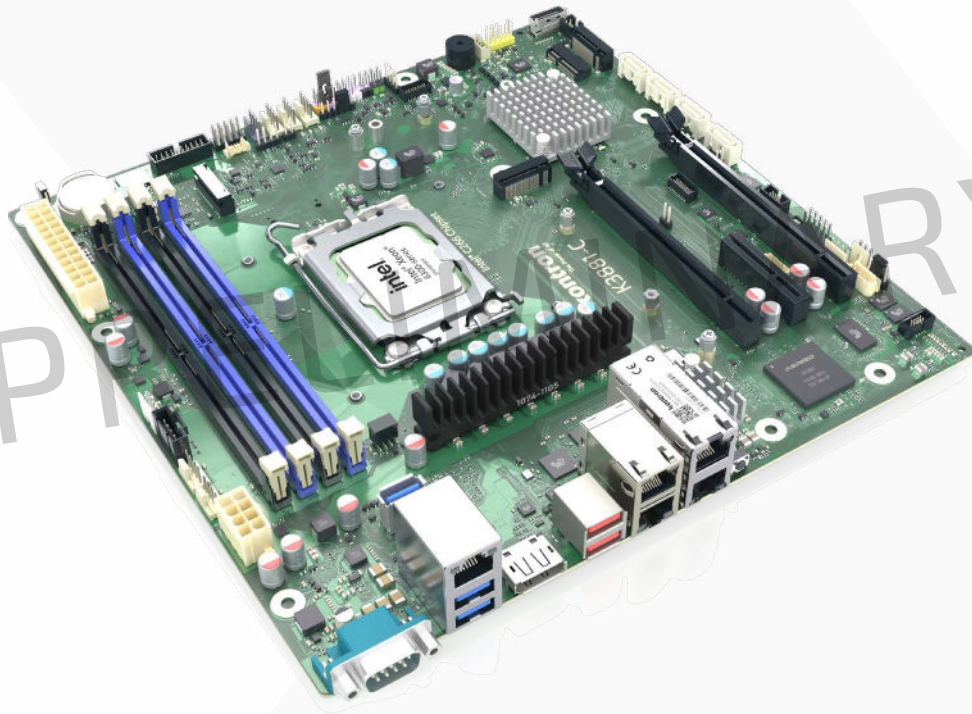


K3881-C μ ATX

Industrial Server



Intel® C266 Chipset and
Intel® XEON® 6300 series Processors
Intel® XEON® E-2400 series Processors
Pentium® Gold G7400T / G7400 Processors

- Latest DDR5 memory technology for best-in-class system performance
- ECC support
- Display Port ASPEED 2600
- Remote Management
- 10GbE Dual Lan
- Prepared for 5G

STORAGE & EXPANSION	SATA SATA / PCIE PCIE/M.2 SLOTS	4x Serial ATA III 600 Interface (up to 6Gbit/s), NCQ, AHCI, VROC 4x Serial ATA III 600 Interface (up to 6Gbit/s), NCQ, AHCI, VROC or 1x 4x PCIe Gen 4 1x M.2 2230/2280/22110 (Key-M, PCIe x4 Gen4/NVMe SSD modules) 1x M.2 2280/22110 (Key-M, PCIe x4 Gen4/NVMe SSD modules) 1x M.2 3052/2260/2280 (Key-B, PCIe x1 Gen4 USB 3.2 Gen1) 1x M.2 2230 (Key-E, WLAN/Bluetooth modules, PCIe) 1x PCIe x16 Gen5 PEG, bifurcation support 1x PCIe x1 Gen 4 (open slot) 1x PCIe x4 Gen 4 (mechanical x16)
POWER	CONNECTOR	ATX (Multirail) plus 8-pin socket (12V for CPU)
FIRMWARE	BIOS	AMI Aptio 5.x (UEFI) BIOS modified and adapted by Kontron; Recovery BIOS, SM-BIOS (DMI), BIOS and CPU Microcode Update, Quick Boot, Logo Boot, Quiet Boot, Plug & Play, Automatic DRAM and PCIe Configuration, BIOS Support for S.M.A.R.T., No legacy OS support, no MBR installation (UEFI only)
	WATCHDOG REAL TIME CLOCK TPM	BMC Hardware Watchdog Integrated TPM Module Header for Infineon TPM
SYSTEM CONTROL	FP HEADER	1x Header for Reset button, HDD LED, Power button, Power LED, Unit ID switch and LED, Fault LED, LAN activity, SMBus
	SECURITY	Recovery BIOS, System and BIOS Password, Boot Sequence Control, Serial-/USB-Port Access Protection, Write Protection for Flash BIOS, EraseDisk (BIOS Feature),
SYSTEM Management		ASPEED A2600, Kontron Open BMC, Redfish and IPMI support
COOLING	FAN	6x PWM fan (CPU/System)
SOFTWARE	OS SUPPORT	Windows Server 2022, Windows Server 2025, Linux-64 No legacy OS support, no MBR installation (UEFI only)
MECHANICAL	DIMENSION (L x W)	µATX: 9.6" x 9.6" (243.8 x 243.8 mm)
ENVIRONMENTAL	OPERATION TEMPERATURE	0 °C - 60 °C
CERTIFICATION	EMC + SAFETY	Planned: cTUVus acc. IEC62368-1, CE Class B incl. Industrial Immunity, UKCA, FCC-B verified

*) actual memory Speed depends on CPU

PRELIMINARY

Power Supply Requirements

SOURCE	VOLTAGE	MIN. PS LOAD	MAX. VOLTAGE TOLERANCE	MOTHERBOARD CAPACITIVE LOAD	MOTHERBOARD MAX. CURRENT (continous)*
Main Power Supply	+12V	0 A	± 5 %	TBD	TBD
	-12V	n.a.	n.a.	TBD	TBD
	+5V	0 A	± 5 %	TBD	TBD
	3.3V	0 A	± 5 %	TBD	TBD

See TechNotes document for detailed power requirements

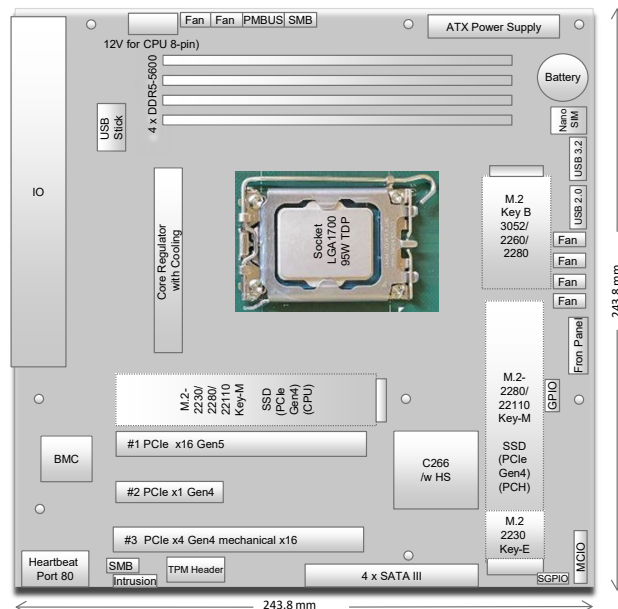
FEATURES		
FEATURES	Chipset DP / HDMI / LVDS / eDP Stereo Audio / 5.1 Multichannel Audio / Front Panel Audio Buzzer / int. Speaker Support (stereo)* GbE LAN / Dual GbE LAN / 2.5GbE LAN / 10GbE LAN Out of Band Remote Management WoL / PXE / LAN Teaming / TSN SATA / SATA RAID / M.2 (SATA) / M.2 (PCIe/NVME) USB 2.0 / USB 3.2 (Gen1) / USB 3.2 (Gen2) / USB 3.2 (Gen2) Type-C FAN monitored & controlled CPU Thermal Zone / Board Thermal Zone TEMP monitored CPU / onboard sensors / external sensor**	Intel® C266 + / - / - / - - / - / - + / - + / + / - / + + + / + / + / - + / + / - / + + / + / + / - + / + + / + / +
SPECIAL FEATURES	Silent Fan / System Guard Recovery BIOS / Flash Update / Multi Boot HDD Password / EraseDisk / TPM V2.0 onboard / optional TPM module BIOS POST- / BIOS Boot- / OS- HW Watchdog Operating Mode 24-7 / 8-5 (hrs per day - days per week) BMC Heartbeat / Port 80 / Fault LED Motherboard operating temperature range (chassis inside)***	+ / - + / + / + + / + / - / + + / + / + + / - + / + / + 0 °C ... +60 °C
INTERNAL CONNECTORS	DIMM Sockets (DDR5 5600) / ECC Support PCI Express® x16: 16lanes-Gen5 / PCI Express® x16: 4lanes-Gen4 PCI Express® x1: Gen1-"open" SATA-III / M.2 Key-M SSD / M.2 Key-B M.2 4x (SATA orPCIe Gen4) SGPIO / SCSI Drive Activity Connector M.2 2230 (Key-E, PCIe & USB2.0 for WLAN/Bluetooth) Front Panel Audio (9-Pin, HD Audio) / S-PDIF Out (Digital Audio) USB 2.0 pin header (2 port) / USB 2.0 single port header / USB Stick socket USB 3.2 Gen1 pin header (2 ports) / USB 3.2 Gen2 Type A header Serial COM header / CCTalk header ⁷ / Parallel Port header LVDS / LVDS Backlight / Embedded DisplayPort @ 4 lanes FAN PWM Intrusion (Case Open) / GPIO (8 Bit) / SMBus PMBus Stereo Speaker header / Digital Mic header Front Panel / Server extension header nano SIM Card SATA Drive Power Connector (5 V/12 V) / DC-In Connector 8-34 V (4 pin)	4 / + 1 / 1 1 upto 8 / 2 / 1 1 1 / 1 1 - / - 1 / - / 1 1 / - - / - / - - / - / - 6 1 / 1 / 3 1 1 / - 1 / 1 1 - / -
EXTERNAL CONNECTORS	DisplayPort V1.1a / HDMI / DVI / VGA Audio Mic. In / Line in / Line out (or driver configuration) LAN (RJ-45) USB 2.0 / USB 3.2 Gen1 / USB 3.2 Gen2 Multirail PSU (24 pin + 8 pin) / Single 12 V PSU Serial COM interface	1 / - / - / - - / - / - 5 0 / 2 / 2 1 / - 1

*) Stereo speaker support: 2 W @4Ω

**) SMBus Type

***) Forced cooling required for high operating temperature range. See TechNotes document for details

Connector/Socket Diagram



ARTICLE	PART NO.	DESCRIPTION
K3881-C1 μ ATX	F5110-V261	K3881-C1 Industrial Motherboard Intel® C266 Chipset
K3882-C1 μ ATX	F5110-V262	K3882-C1 Industrial Motherboard Intel® C262 Chipset

Accessories

TPM-MODULE	S26361-F5000-R012	Infineon SLB9670, TPM V2.0 (TCG compliant)
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PRELIMINARY

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