KMDA-6921-S001

Intel® 10th Gen Comet Lake LGA1200 CPU,
2*LAN, 4*USB3.2, 1*VGA, 1*DP, 1*HDMI,
4*COM, 8bit DIO, 1*mSATA, 1*Mini PCIe,
2*PCIe+2*PCI, 2*SATA3.0, DC 9-36V.

JHCTECH

IoT Computer
Connecting the Dots

4K Ultra HD

Fanless
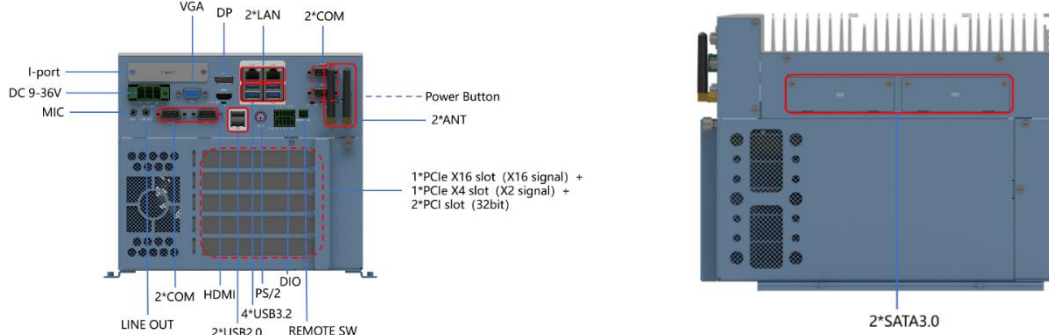
RoHS COMPLIANT 2002/95/EC CE FCC

Key Feature

- Intel® 10th Gen Comet lake LGA1200 CPU
- Intel® H420E PCH
- 2*DDR4 2933MHz SO-DIMM, up to 64GB
- 1*DP, 1*HDMI and 1*VGA three display ports, supporting two independent displays
- 2*LAN, 4*USB3.2, 2*USB2.0, 8bit DIO, 1*MIC+1*LINE OUT, 1*PS/2
- 2*RS232/422/485 and 2*RS232
- 1*mini PCIe full size with SIM card slot, supporting 4G LTE module
- 1*PCIe x16+1*PCIe x4 (X2 signal)+2*PCI Quad expansion
- 2*2.5-inch SATA bay and 1*mSATA
- Wide power input DC 9-36V, with short circuit, over voltage and over current protection

Product Overview

KMDA-6921 is a fanless high-performance box computer with H420E chipset, powered by Intel® 10th Gen Comet lake CPU has complete IO function, dual PCIe plus dual PCI quad expansions, wide voltage DC power supply and moderate size. It is suitable for industrial automation, highway tolling, AI edge computing, security monitoring and environmental detection and other industries and fields.
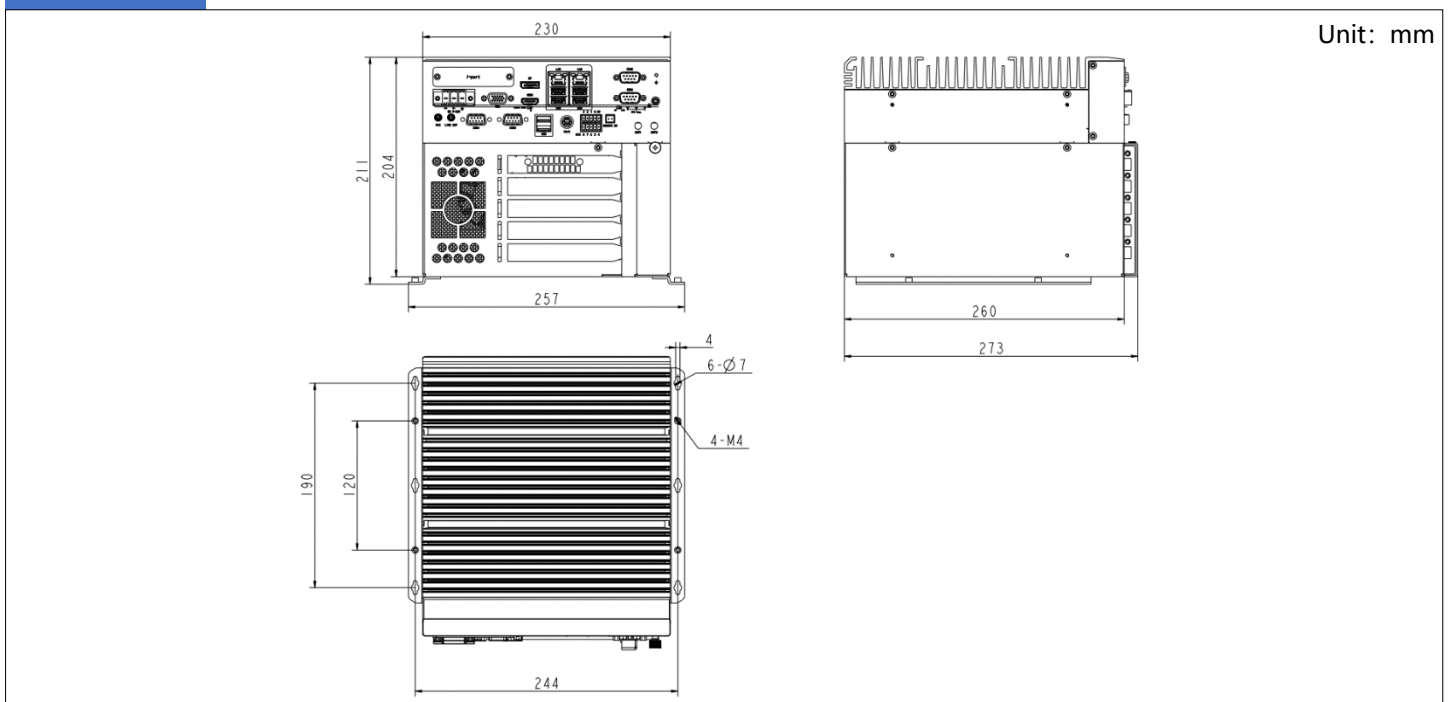
IO Layout

VGA DP 2*LAN 2*COM

I-port
DC 9-36V
MIC
Power Button
2*ANT
1*PCIe X16 slot (X16 signal) +
1*PCIe X4 slot (X2 signal) +
2*PCI slot (32bit)
2*COM HDMI PS/2 DIO
LINE OUT 4*USB3.2 REMOTE SW
2*USB2.0
2*SATA3.0

SPEC.

CPU	Intel® Comet lake 10th Gen Core™ i9/i7/i5/i3/Pentium/Celeron LGA1200 CPU，Intel® H420E PCH
System memory	2*260-Pin SODIMM, dual-channel DDR4 2933MHz, up to 64GB
Expansion	1*PCIe x16 (X16 signal from CPU) gen3.0 and 1*PCIe x4 (X2 signal from PCH) gen3.0, can be inserted the highest power consumption 150W GPU or AI acceleration card (card length is less than 210mm) or other function card (card length is less than 230mm); 2*32bit standard PCI slot; 1*full size mini PCIe with SIM card slot, with PCIeX1 and USB2.0 signal, supports 4G LTE module or PCIe signal function module
Graphics	Intel® UHD Graphics, Supports DirectX 12, OpenGL 4.5, DP max res. 4096*2304@60Hz, HDMI max res. 4096*2160@30Hz, VGA max res. 1900*1200@60Hz, three display interfaces, supporting two independent displays
Audio	Realtek ALC897 controller, 1*Line out and 1*MIC high fidelity Audio, supports 5.1 channel
LAN	1*Intel I226V 2.5G Gigabit network, full PCIe X1 bandwidth, 10M/100M/1000M/2.5Gbps adaptive, supports WOL 1*Intel I219LM Gigabit network, full PCIe X1 bandwidth, 10M/100M/1000Mbps adaptive, supports WOL
Storage	2*2.5" SATA3 easy pluggable SATA bay, support max 6G bit/s transmission rate 1*full size mSATA，with SATA3.0 and USB2.0 signal
I/O Interface	2*RJ45 Gig-LAN; 4*USB3.2 gen1.0 Type A, supports a maximum transmission speed of 5G bit/s; 2*Front USB2.0 Type A, 1*built-in USB2.0 Type A and 1*USB2.0 wafer2.0; 1*PS/2; 1*LPT (2*13pin simple horn interface); 2*RS232/422/485 set through BIOS (DB9 Male), 2*RS232(DB9 male); 8bit non-isolated DIO(2*5pin Phoenix plug) and 16bit non-isolated DIO(2*10 DuPont pin); 1*VGA+1*HDMI+1*DP; 1*Line out+1*Mic (3.5 mm phone jack)
I-port	Support the export of built-in 16bit DIO, USB2.0, LPT or Mini PCIe and other expansion interfaces
DIO	8bit non-isolated DIO, TTL signal, programmable
LED	1*Power LED (on the power button), 1*HDD LED, 3*CPU temp LED (Red is warning , Yellow is high, Green is normal)
Control SW	1*Power SW, 1*Remote SW, 1*AT/ATX SW, 1*Clear CMOS SW
Power supply	DC IN 9-36V, 3-pin Term, 7.62mm，with short circuit, over voltage and over current protection TDP : 60W (i7-10700K CPU/4G DDR4/256G SSD, no accelerator card or function card）
Security	Supports TPM (optional)
Watchdog timer	Watchdog timeout programmable via software 1 to 255 second
OS	Windows 11, Windows 10 IoT Enterprise (64-bit), Windows Server 2019, Ubuntu, SUSE, Redhat Enterprise, Wind River Linux，Yocto Project (64-bit)，Wind River VxWorks 7

Mechanical	Aluminum-magnesium alloy, SGCC frame
Color	Pigeon blue + White aluminum grey
Mounting	Desktop Mounting
Dimension	(L*W*H): 230*273*204mm
Net weight	6.837 kg
Operating temperature	-20～60℃, SSD, air flow -10～55℃,HDD, air flow
Storage temperature	-40℃~85℃
Storage humidity	10~95%@40℃, Non-condensing
Vibration	5grms/5~500Hz/random/in working(SSD); 1grms/5~500Hz/random/in working(HDD)
Shock	50g peak acceleration(11ms duration)(SSD); 20g peak acceleration(11ms duration)(HDD)
EMC/ Certification	CE/FCC Class A

Dimension

Unit: mm

Ordering Info.

Model No.	Introduction	Expansion
KMDA-6921-S001	Fanless box computer, Intel® 10th Gen Cometlake LGA1200 CPU, H420E PCH, 2*DDR4 SO-DIMM, 2*LAN, 4*USB3.2, 2*USB2.0, 1*PS/2, 4*COM, 1*miniPCIe, 1*mSATA, 1*VGA, 1*DP, 1*HDMI, Audio Line out & Mic, 8bit DIO, 1*I-Port, 2*2.5"SATA bay, DC 9-36V.	Standard configuration: ECX-266 four expansion card, 1*PCIe x16 (X16 signal) +1*PCIe x4 (X2 signal) +2*32bit PCI
PA-120DC19	AC/DC power adapter，DC 19V/6.32A, 120W	
PA-220DC24	AC/DC power adapter，DC 24V/9.17A, 220W	
PA-300DC24	AC/DC power adapter，DC 24V/12.5A, 300W	

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