

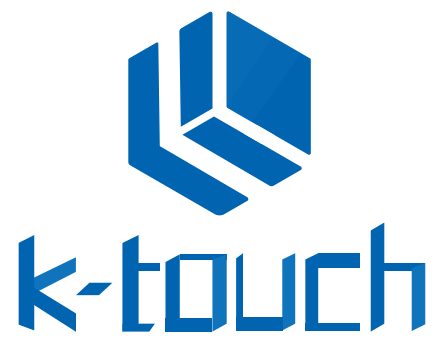
Shenzhen Ktouch Technology Co.,Ltd

Email:info@ktouchtech.com

Website:www.ktouchtech.com

Company Address:27F,#B building,Phase 1,Lily Xingcheng,Baige road No.363,
Longgang district,Shenzhen,China

Factory Address:7/F,Bldg #6,Evergrande Fashion Vally,Henglang Community,
Dalang street,Longgang district,Shenzhen,China



INDUSTRIAL COMPUTER PRODUCT CATALOGUT

Shenzhen Ktouch Technology Co.,Ltd

Company Profile

Shenzhen Ktouch Technology Co.,LTD is established in 2009, as an intelligent embedded computing provider integrating R & D, production, sales and service, relying on years of industry experience and strong scientific research background, we have been adhering to the strategy 'IoT Computer, Connecting the Dots ' and kept focusing on the research, development, and production. Especially the ODM team of the company, can provide customers with fast, high-quality and flexible OEM & ODM services for customized products. We have diversified products and services such as industrial panel computer, industrial touch displays, embedded box computers, rugged tablets, and customized solutions for intelligent IoT market.

With its focus on delivering these core values to better serve customers, Ktouch integrates its capabilities and operates global businesses, which are IoT Automation Solutions , intelligent transportation (ITS, Smart factory, Intelligent Platform @ Smart City, Intelligent Platform @ Smart City (IPS), Mobile Computing Solutions , energy and environmental protection, HMI etc. This strategic deployment enables Ktouch to offer time-to-market, time-to-solution products and service without compromising cost.

Adhering to the business philosophy of win-win cooperation and morality first, we can provide customers with high-quality products and services and enhance customer value, strict control of the company's design, production of product quality, quality control and after-sales service system, strict implementation of ISO9001 management. Ktouch strives to achieve the ultimate aim of IoT and AI, and to create comfortable and convenient living spaces for human beings by using advanced technologies. Being honest and responsible. Let Smart Life within Easy Reach!



Why Choose us?



Company Advantage

1. YEARS OF TECHNOLOGY ACCUMULATION-----

14 years of industry exploring&developing

2. A FULL RANGE OF PRODUCTS-----

Full coverage of multiple appearances& sizes&platforms

PROFESSIONAL PRODUCTION LINE-----

15000m² of manufacturing workshop, with an annual capacity of more than 5000K

3. HIGH QUALITY SUPPLIER CHAIN-----

Long-term and stable strategic cooperative relations with original manufacturers

4. STABILITY AND RELIABILITY INSURANCE-----

1000 square meters of laboratory, hundreds of laboratory apparatus

5. CUSTOMAZATION CAPABILITY-----

Customazation design & development & production & support from excellent ODM team

R&D & MANUFACTURING



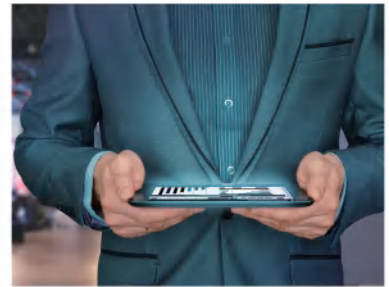
Experience

Specialized in Embedded Motherboard
& Industrial Computer solution for 13 years



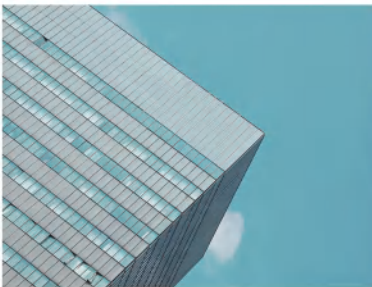
Technology

With industry's top R & D team,
leading technology, excellent quality



Authority

Factory passed ISO9001,
Products certificated with 3C, CE etc



Scale

15000m² of advanced manufacturing center,
monthly production capacity of more than 150K



Equipment

Advanced manufacturing equipment,
keep improving the technological level



Attitude

Quality & Efficiency
& Innovation & Service

ODM Service

Our Advantage:

- System & Software Integrated Design Capability
- Experienced Project Management
- Certificated & Traceable Manufacturing & QA system
- Global Logistics
- Reliable Supply Chain Management
- Responsiveness to Market & Technology Trend

OEM/ODM services including:

ID and Mechanical Customization

PCB placement Layout Assembly

Fingerprint, camera, infrared sensor, magnetic stripe reader card, NFC, RFID, GPS, 4G, CAN, aviation plug, 2D and etc

Customized Multi IO Ports, Brightness, Resolution

Certification Support



Appearance customization



GPS



Fingerprint



ID card



2D



NFC



3G/4G



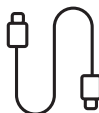
RFID



Maganetic stripe card reader module



GPIO



Custom interface



Scanning module



Camera



WIFI

Aim to be Industry's leading quasi-system solution supplier

Provide clients with quality products and best services

Smart Gateway

Machine Vision

Edge Computer

New Smart Retail

Smart Medical

Industrial Automation

Smart Education

Smart Factory

AI



PRODUCT CATALOGUE



Heavy Industrial Panel PC

KT-HPC1011

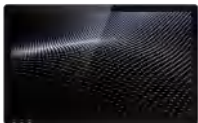
KT-HPC1211

KT-HPC1511

KT-HPC1512

KT-HPC1711

KT-HPC1712



Light Industrial Panel PC

KT-PPC1011

KT-PPC1211

KT-PPC1511

KT-PPC1711

KT-PPC1911

KT-PPC2111



Android Industrial Panel PC

KT-PPC1021

KT-PPC1521

KT-PPC2121



Mini Box PC

KT-BOX1012

KT-BOX1211

KT-BOX1212

KT-BOX1711



Fanless Embedded Computer

KT-EPC2311

KT-EPC3511

KT-EPC1211



Industrial Protocol Gateways

KT-NWS1241

KT-NWS1261



Rackmount IPC

KT-IPC8411

Application



Mining Automation



Marine System Solution



Warehouse Automation



Solar Power Management



Kiosk



Signage



Smart Transportation



Food and Beverage Automation

Application



Logistic



Factory Automation



IOT Automation Solution



Machine Vision



Intelligent Energy&Power Management



Smart Manufacturing



Smart City



Smart MES



KT-HPC1011

- Support Intel® Bay Trail, Gemini lake, Elkhart Lake 6th generation Sky Lake & 7th Kaby Lake, 8th Whiskeylake & 10th Cometlake-U Processor
- Support SO-DIMM, M-SATA, M.2 Sata, M.2 NVME storage
- Industrial-grade 10.4" TFT LCD, resistive touch screen, support dual display
- Standard dual LAN ports, partial support Intel encrypt TPM2.0, 8*GPIO
- Support 1*Mini-PCIE(for WIFI), 1*SIM, 3G, 4G, 5G module
- Support VESA, embedded, wall mount, desktop installation
- 12~24V Wide Voltage input, Sealed dustproof & Robustness design
- Applied for industrial automation, environment monitoring, wind power generation, 3D machine vision etc



Specification

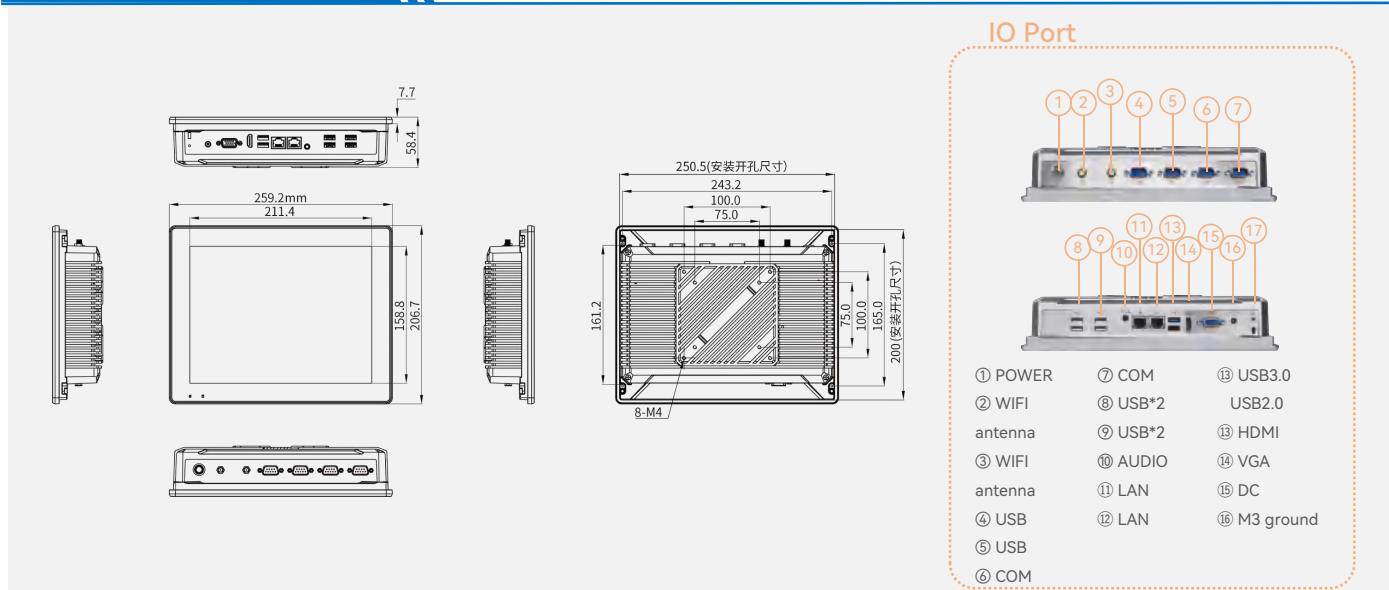
Model.No	KT-HPC1011	Indicator Light	Power and Hard disk reserved	Dimension	259x207x58mm
Display	10.4" inch	Loudspeaker	2*4Ω 3W	Weight	< 2.8kg
Touch	Resistive touch	Heat dissipation	Fanless	Color	Grey
Resolution	1024*768	Power Consumption	< 17W (screen 3.2W)	Material	Aluminum alloy die-casting
Brightness	300cd/m ²	Installation	Embedded, wall-mount, desktop		

Processor	Baytrail	Gemini Lake	Elkhart Lake	Sky Lake (6-7 th)	Whiskey Lake (8-10 th)
BIOS	AMI BIOS	AMI BIOS	AMI BIOS	AMI BIOS	AMI BIOS
Chipset	Intel® SOC	Intel® SOC	Intel® SOC	Intel® SOC	Intel® SOC
Graphics	Intel® HD Graphics	Intel® HD Graphics	Intel® Graphics	Intel® HD Graphics	Intel® HD Graphics
Network	2*Intel 82583V	2*RTL8111H/8111G	2*Intel I226-V gigabit	2*Intel I211 gigabit	Intel I219+ I211 gigabit
Audio	Realtek ALC662HD	Realtek ALC662HD	Realtek ALC269HD	Realtek ALC662HD	Realtek ALC662HD
RAM	DDR3L 1333MHz Max 8G	DDR4 2400MHz Max 16G	DDR4 3200MHz Max 16G	DDR4 2133 MHz Max 16G	DDR4 2400MHz Max 16G
ROM	M-SATA 128G	M.2 2280 Sata 128GB	M.2 2280 NVME128GB	M-SATA 128G	M.2 2280 NVME128GB
Function	Support WiFi, BT, 4G, watchdog, diskless booting, wake on LAN, self-booting with power	Support WiFi, BT, 4G, watchdog, diskless booting, wake on LAN, self-booting with power	Support WiFi, BT, 4G, watchdog, diskless booting, wake on LAN, self-booting with power	Support WiFi, BT, 4G, watchdog, diskless booting, wake on LAN, self-booting with power	Support WiFi, BT, 4G, watchdog, diskless booting, wake on LAN, self-booting with power
Front I/O	1*Power on/off 2*Antenna 4*COM	1*Power on/off 2*Antenna 4*COM	1*Power on/off 2*Antenna 4*COM	1*Power on/off 2*Antenna 4*COM	1*Power on/off 2*Antenna 4*COM
Rear I/O	1*Audio 2*LAN 1*USB2.0 1*USB3.0 1*HDMI 1*VGA 1*DC IN 4*USB 1*M3 ground screw hole	1*Audio 1*DP 1*HDMI 4*USB3.2 2*LAN 1*DC IN 4*USB 1*M3 ground screw hole 1*CMOS button Support 8*GPIO	1*Audio 1*DP 1*HDMI 1*USB2.0 3*USB3.1 2*LAN 1*DC IN 4*USB 1*M3 ground screw hole 1*CMOS button Support 8*GPIO	1*Audio 2*LAN 2*USB3.0 1*HDMI 1*VGA 1*DC IN 4*USB 1*M3 ground screw hole	1*Audio 1*DP 1*HDMI 4*USB3.2 2*LAN 1*DC IN 4*USB 1*M3 ground screw hole 1*CMOS button Support 8*GPIO
Power	DC 12V~24V wide voltage Input	DC12V ~24V wide voltage Input	DC 12V~24V wide voltage Input	DC12V ~24V wide voltage Input	DC12V ~24V wide voltage Input
OS	Windows 7 / Windows 10 / Linux				
Certificate	CE				

Environment

	National Standard	Parameters
EMC	GB/T 9254.1-2021 Radio disturbance limits and methods of measurement for information technology equipment	Radiation disturbance (B) grade Conduction disturbance (B) grade
	GB/T 17618-2015 Immunity limits and measurement methods for information technology equipment	Meet the requirements of 6KV contact discharge and 12KV air discharge
Safety Standard	GB 4943.1-2011 Information technology equipment security - Part 1: General requirements	Ground Resistance: $\leq 0.1\Omega$ Electrical strength: limited leakage current 10mA, for class I equipment, the primary circuit on the housing withstand voltage $\geq 1.5KV$ AC or 2.2KV DC; For Class II equipment, the primary circuit withstand voltage of the housing $\geq 3.0KV$ AC or 4.3KV DC Insulation Resistance: $\geq 100M\Omega$ Drain current: current to the floor drains $\leq 3.5mA$
Environment	GB/T 9813.4-2017 General specification for computers - Part 4: Microcomputers for industrial applications GB/T 2423 Environment Test	Operating Temperature: $-10^{\circ}C \sim 60^{\circ}C$ Storage Temperature: $-20^{\circ}C \sim 70^{\circ}C$ Humidity: $40^{\circ}C$ 95%RH Panel protection class: IP65 Fall in packaging: the machine is packed at a height of 1 meter, 8 edges and 6 sides fall once each Vibration: 5 ~ 5.5Hz, displacement 25.4mm; 5.5 ~ 200Hz/ acceleration 1.0g, working direction; The duration of the test is 1 cycle Impact: half sine pulse, peak acceleration 10g, pulse width 11ms, 3 times of impact in the working direction Noise: (0) dB

I/O Ports & Dimension



Order Information

Product Model NO.	Description	Remarks
KT-HPC1011	10.4"inch /Resistive Touch/J1900/DDR3L 1333MHz 4GB/M-SATA 128GB	
KT-HPC1011G	10.4"inch/Resistive Touch/J4125 /DDR4 2133/2400MHz 4GB/M.2 2280 Sata 128GB	
KT-HPC1011E	10.4"inch/Resistive Touch/J6412/DDR4 3200MHz 4GB/M.2 2280 NVME128GB	
KT-HPC1011S	10.4"inch/Resistive Touch/6200U/DDR4 2133MHz 8GB/M-SATA 128G	
KT-HPC1011W	10.4"inch/Resistive Touch/8265U/DDR4 2666MHz 8GB/M.2 2280 NVME 128GB	

KT-HPC1211



- Support Intel® Bay Trail, Gemini lake, Elkhart Lake 6th generation Sky Lake & 7th Kaby Lake, 8th Whiskey Lake & 10th Cometlake-U Processor
- Support SO-DIMM, M-SATA, M.2 SATA, M.2 NVME storage
- Industrial-grade 12.1" TFT LCD, resistive touch screen, support dual display
- Standard dual LAN ports, partial support Intel encrypt TPM2.0, 8*GPIO
- Support 1*Mini-PCIE (for WIFI), 1*SIM, 3G, 4G, 5G module
- Support VESA, embedded, wall mount, desktop installation
- 12~24V Wide Voltage input, Sealed dustproof & Robustness design
- Applied for industrial automation, environment monitoring, wind power generation, 3D machine vision etc



Specification

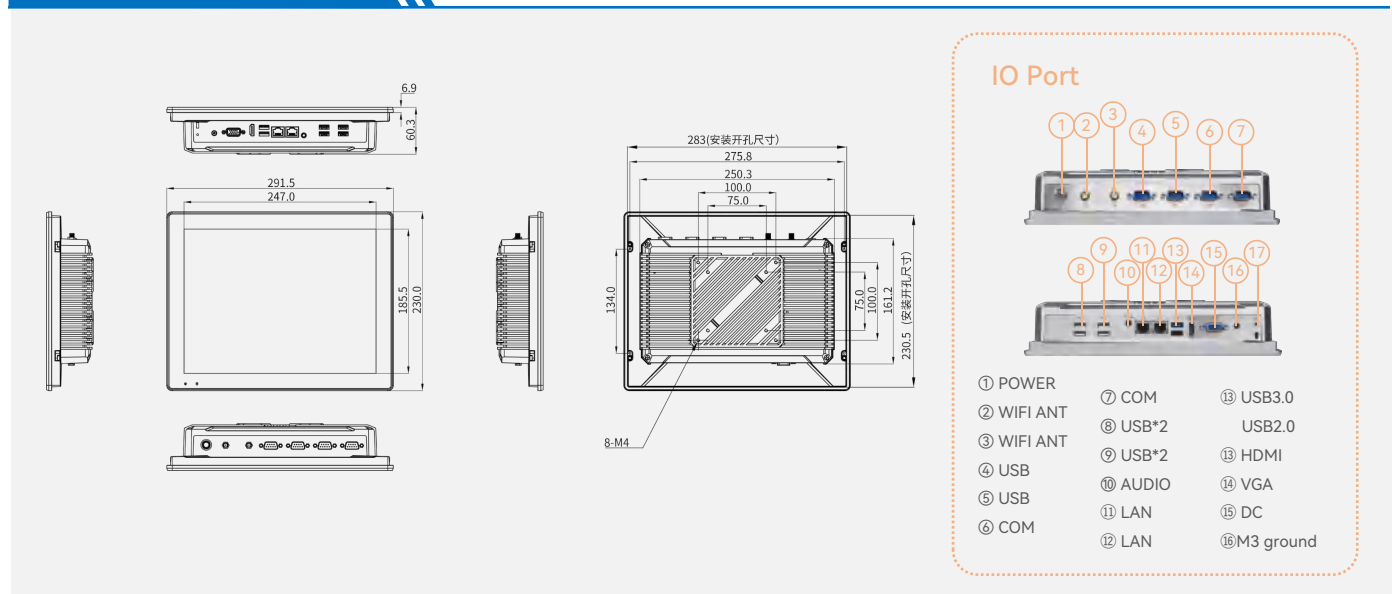
Model No.	KT-HPC1211	Indicator Light	Power and Hard disk reserved	Dimension	292x230x60mm
Display	12.1" inch	Loudspeaker	2* 4Ω 3W	Weight	< 3.0kg
Touch	Resistive touch	Heat dissipation	Fanless	Color	Grey
Resolution	1024*768	Power Consumption	< 18W (screen 4W)	Material	Aluminum alloy die-casting
Brightness	300cd/m²	Installation	Embedded, wall-mount, desktop		

Processor	Baytrail	Gemini Lake	Elkhart Lake	Sky Lake (6-7th)	Whiskey Lake (8-10th)
BIOS	AMI BIOS	AMI BIOS	AMI BIOS	AMI BIOS	AMI BIOS
Chipset	Intel® SOC	Intel® SOC	Intel® SOC	Intel® SOC	Intel® SOC
Graphics	Intel® HD Graphics	Intel® HD Graphics	Intel® Graphics	Intel® HD Graphics	Intel® HD Graphics
Network	2*Intel 82583V	2*RTL8111H/8111G	2*Intel I226-V gigabit	2*Intel I211 gigabit	Intel I219+ I211 gigabit
Audio	Realtek ALC662HD	Realtek ALC662HD	Realtek ALC269HD	Realtek ALC662HD	Realtek ALC662HD
RAM	DDR3L 1333MHz Max 8G	DDR4 2400MHz Max 16G	DDR4 3200MHz Max 16G	DDR4 2133 MHz Max 16G	DDR4 2400MHz Max 16G
ROM	M-SATA 128G	M.2 2280 Sata 128GB	M.2 2280 NVME128GB	M-SATA 128G	M.2 2280 NVME128GB
Function	Support WiFi, BT, 4G, watchdog, diskless booting, wake on LAN, self-booting with power	Support WiFi, BT, 4G, watchdog, diskless booting, wake on LAN, self-booting with power	Support WiFi, BT, 4G, watchdog, diskless booting, wake on LAN, self-booting with power	Support WiFi, BT, 4G, watchdog, diskless booting, wake on LAN, self-booting with power	Support WiFi, BT, 4G, watchdog, diskless booting, wake on LAN, self-booting with power
Front I/O	1*Power ON/OFF 2*Antenna 4*COM	1*Power ON/OFF 2*Antenna 4*COM	1*Power ON/OFF 2*Antenna 4*COM	1*Power ON/OFF 2*Antenna 4*COM	1*Power ON/OFF 2*Antenna 4*COM
Rear I/O	1*Audio 2*LAN 1*USB2.0 1*USB3.0 1*HDMI 1*VGA 1*DC IN 4*USB 1*M3 ground screw hole	1*Audio 1*DP 1*HDMI 4*USB3.2 2*LAN 1*DC IN 4*USB 1*M3 ground screw hole 1*CMOS button Support 8*GPIO	1*Audio 1*DP 1*HDMI 1*USB2.0 1*USB3.1 2*LAN 1*DC IN 4*USB 1*M3 ground screw hole 1*CMOS button Support 8*GPIO	1*Audio 2*LAN 2*USB3.0 1*HDMI 1*VGA 1*DC IN 4*USB 1*M3 ground screw hole	1*Audio 1*DP 1*HDMI 4*USB3.2 2*LAN 1*DC IN 4*USB 1*M3 ground screw hole 1*CMOS button Support 8*GPIO
Power	DC 12V~24V wide voltage Input	DC12V ~24V wide voltage Input	DC 12V~24V wide voltage Input	DC12V ~24V wide voltage Input	DC12V ~24V wide voltage Input
OS	Windows 7 / Windows 10 / Linux				
Certificate	CE				

Environment

	National Standard	Parameters
EMC	GB/T 9254.1-2021 Radio disturbance limits and methods of measurement for information technology equipment	Radiation disturbance (B) grade Conduction disturbance (B) grade
	GB/T 17618-2015 Immunity limits and measurement methods for information technology equipment	Meet the requirements of 6KV contact discharge and 12KV air discharge
Safety Standard	GB 4943.1-2011 Information technology equipment security - Part 1: General requirements	Ground Resistance: $\leq 0.1\Omega$ Electrical strength: limited leakage current 10mA, for class I equipment, the primary circuit on the housing withstand voltage $\geq 1.5KV$ AC or 2.2KV DC; For Class II equipment, the primary circuit withstand voltage of the housing $\geq 3.0KV$ AC or 4.3KV DC Insulation Resistance: $\geq 100M\Omega$ Drain current: current to the floor $\leq 3.5mA$
Environment	GB/T 9813.4-2017 General specification for computers - Part 4: Microcomputers for industrial applications GB/T 2423 Environment Test	Operating Temperature: $-10^{\circ}C \sim 60^{\circ}C$ Storage Temperature: $-20^{\circ}C \sim 70^{\circ}C$ Humidity: $40^{\circ}C$ 95%RH Panel protection class: IP65 Fall in packaging: the machine is packed at a height of 1 meter, 8 edges and 6 sides fall once each Vibration: 5 ~ 5.5Hz, displacement 25.4mm; 5.5 ~ 200Hz/ acceleration 1.0g, working direction; The duration of the test is 1 cycle Impact: half sine pulse, peak acceleration 10g, pulse width 11ms, 3 times of impact in the working direction Noise: (0) dB

I/O Ports & Dimension



Order Information

Product Model NO.	Description	Remarks
KT-HPC1211	12.1"inch/Resistive Touch/J1900/DDR3L 1333MHz 4GB/M-SATA 128GB	
KT-HPC1211G	12.1"inch/Resistive Touch/J4125 /DDR4 2133/2400MHz 4GB/M.2 2280 Sata 128GB	
KT-HPC1211E	12.1"inch/Resistive Touch/J6412/DDR4 3200MHz 4GB/M.2 2280 NVME128GB	
KT-HPC1211S	12.1"inch/Resistive Touch/I6200U/DDR4 2133MHz 8GB/M-SATA 128G	
KT-HPC1211W	12.1"inch/Resistive Touch/I8145U/DDR4 2666MHz 8GB/M.2 2280 NVME 128GB	

KT-HPC1511



- Support Intel® Bay Trail, Gemini lake, Elkhart Lake 6th generation Sky Lake & 7th Kaby Lake, 8th Whiskeylake & 10th Cometlake-U Processor
- Support SO-DIMM, M-SATA, M.2 Sata, M.2 NVME storage
- Industrial-grade 15" TFT LCD, resistive touch screen, support dual display
- Standard dual LAN ports, partial support Intel encrypt TPM2.0, 8*GPIO
- Support 1*Mini-PCIE (for WIFI), 1*SIM, 3G, 4G, 5G module
- Support VESA, embedded, wall mount, desktop installation
- 12~24V Wide Voltage input, Sealed dustproof & Robustness design
- Applied for industrial automation, environment monitoring, wind power generation, 3D machine vision etc



Specification

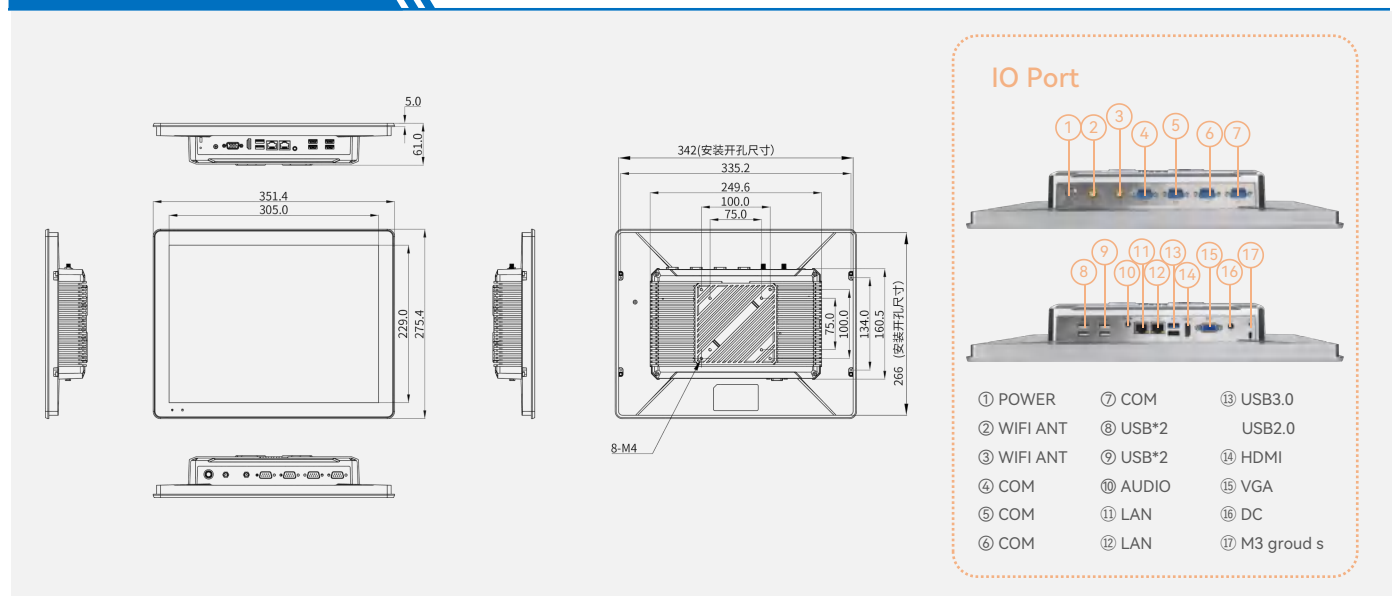
Model No.	KT-HPC1511	Indicator Light	Power and Hard disk reserved	Dimension	351x275x61mm
Display	15" inch	Loudspeaker	2*4Ω 3W	Weight	< 3.8kg
Touch	Resistive Touch	Heat dissipation	Fanless	Color	Grey
Resolution	1024*768	Consumption	< 25W (screen 7.4W)	Material	Aluminum alloy die-casting
Brightness	300cd/m²	Installation	Embedded, wall-mount, desktop		

Processor	Baytrail	Gemini Lake	Elkhart Lake	Sky Lake (6-7th)	Whiskey Lake (8-10th)
BIOS	AMI BIOS	AMI BIOS	AMI BIOS	AMI BIOS	AMI BIOS
Chipset	Intel® SOC	Intel® SOC	Intel® SOC	Intel® SOC	Intel® SOC
Graphics	Intel® HD Graphics	Intel® HD Graphics	Intel® Graphics	Intel® HD Graphics	Intel® HD Graphics
Network	2*Intel 82583V	2*RTL8111H/8111G	2*Intel I226-V gigabit	2*Intel I211 gigabit	Intel I219+ I211 gigabit
Audio	Realtek ALC662HD	Realtek ALC662HD	Realtek ALC269HD	Realtek ALC662HD	Realtek ALC662HD
RAM	DDR3L 1333MHz Max 8G	DDR4 2400MHz Max 16G	DDR4 3200MHz Max 16G	DDR4 2133 MHz Max 16G	DDR4 2400MHz Max 16G
ROM	M-SATA 128G	M.2 2280 Sata 128GB	M.2 2280 NVME128GB	M-SATA 128G	M.2 2280 NVME128GB
Function	Support WiFi, BT, 4G, watchdog, diskless booting, wake on LAN, self-booting with power	Support WiFi, BT, 4G, watchdog, diskless booting, wake on LAN, self-booting with power	Support WiFi, BT, 4G, watchdog, diskless booting, wake on LAN, self-booting with power	Support WiFi, BT, 4G, watchdog, diskless booting, wake on LAN, self-booting with power	Support WiFi, BT, 4G, watchdog, diskless booting, wake on LAN, self-booting with power
Front I/O	1*Power ON/OFF 2*Antenna 4*COM	1*Power ON/OFF 2*Antenna 4*COM	1*Power ON/OFF 2*Antenna 4*COM	1*Power ON/OFF 2*Antenna 4*COM	1*Power ON/OFF 2*Antenna 4*COM
Rear I/O	1*Audio 2*LAN 1*USB2.0 1*USB3.0 1*HDMI 1*VGA 1*DC IN 4*USB 1*M3 ground screw hole	1*Audio 1*DP 1*HDMI 4*USB3.2 2*LAN 1*DC IN 4*USB 1*M3 ground screw hole 1*CMOS button Support 8*GPIO	1*Audio 1*DP 1*HDMI 1*USB2.0 3*USB3.1 2*LAN 1*DC IN 4*USB 1*M3 ground screw hole 1*CMOS button Support 8*GPIO	1*Audio 2*LAN 2*USB3.0 1*HDMI 1*VGA 1*DC IN 4*USB 1*M3 ground screw hole	1*Audio 1*DP 1*HDMI 4*USB3.2 2*LAN 1*DC IN 4*USB 1*M3 ground screw hole 1*CMOS button Support 8*GPIO
Power	DC 12V~24V wide voltage Input	DC12V ~24V wide voltage Input	DC 12V~24V wide voltage Input	DC12V ~24V wide voltage Input	DC12V ~24V wide voltage Input
OS	Windows 7 / Windows 10 / Linux				
Certificate	CE				

Environment

	National Standard	Parameters
EMC	GB/T 9254.1-2021 Radio disturbance limits and methods of measurement for information technology equipment	Radiation disturbance (B) grade Conduction disturbance (B) grade
	GB/T 17618-2015 Immunity limits and measurement methods for information technology equipment	Meet the requirements of 6KV contact discharge and 12KV air discharge
Safety Standard	GB 4943.1-2011 Information technology equipment security - Part 1: General requirements	Ground Resistance: $\leq 0.1\Omega$ Electrical strength: limited leakage current 10mA, for class I equipment, the primary circuit on the housing withstand voltage $\geq 1.5KV$ AC or 2.2KV DC; For Class II equipment, the primary circuit withstand voltage of the housing $\geq 3.0KV$ AC or 4.3KV DC Insulation Resistance: $\geq 100M\Omega$ Drain current: current to the floor drain $\leq 3.5mA$
Environment	GB/T 9813.4-2017 General specification for computers - Part 4: Microcomputers for industrial applications GB/T 2423 Environment Test	Operating Temperature: $-10^{\circ}C \sim 60^{\circ}C$ Storage Temperature: $-20^{\circ}C \sim 70^{\circ}C$ Humidity: $40^{\circ}C$ 95%RH Panel protection class: IP65 Fall in packaging: the machine is packed at a height of 1 meter, 8 edges and 6 sides fall once each Vibration: 5 ~ 5.5Hz, displacement 25.4mm; 5.5 ~ 200Hz/ acceleration 1.0g, working direction; The duration of the test is 1 cycle Impact: half sine pulse, peak acceleration 10g, pulse width 11ms, 3 times of impact in the working direction Noise: (0) dB

I/O Ports & Dimension



Order Information

Product Model No.	Description	Remarks
KT-HPC1511	15"inch/Resistive Touch/J1900/DDR3L 1333MHz 4GB/M-SATA 128GB	
KT-HPC1511G	15"inch/Resistive Touch/J4125 /DDR4 2133/2400MHz 4GB/M.2 2280 Sata 128GB	
KT-HPC1511E	15"inch/Resistive Touch/J6412/DDR4 3200MHz 4GB/M.2 2280 NVME128GB	
KT-HPC1511S	15"inch/Resistive Touch/6200U/DDR4 2133MHz 8GB/M-SATA 128G	
KT-HPC1511W	15"inch/Resistive Touch/8145U/DDR4 2666MHz 8GB/M.2 2280 NVME 128GB	

KT-HPC1512



- Support Intel® 8th Whiskeylake &10th generation Cometlake-U Processor
- Support SO-DIMM,M-SATA,M.2 Sata,M.2 NVME storage
- Industrial-grade 15" TFT LCD,resistive touch screen,support dual display
- Standard dual LAN ports,partial support Intel encrypt TPM2.0,8*GPIO
- Support1*Mini-PCIE(for WIFI),1*SIM,3G、 4G、 5G module
- Support VESA,embedded,wall mount,desktop installation
- 12~24V Wide Voltage input,Sealed dustproof&Robustness design
- Applied for industrial automation, environment monitoring,wind power generation,3D machine vision etc



Specification

Model No.	KT-HPC1512	Indicator Light	Power and Hard disk reserved	Dimension	351x275x60mm
Display	15''inch	Loudspeaker	2* 4Ω 3W	Weight	< 3.8kg
Touch	Resistive Touch	Heat dissipation	Fanless	Color	Grey
Resolution	1024*768	Consumption	< 25W (screen 7.4W)	Material	Aluminum alloy die-casting
Brightness	300cd/m ²	Installation	Embedded,wall-mount,desktop		

Processor	Intel Whiskey Lake Series i3/ i5/ i7 Processors
BIOS	AMI (256M)
Chipset	Intel® SOC
Graphics	Intel® UHD Graphics
Network	Intel i226-AT + I219-LM
Audio	HS-100B
RAM	DDR4 2400MHz Max 32G
ROM	M.2 2280 NVME128GB, support SATA 3.0 2.5''inch HDD expansion
Function	Support WiFi,BT,3G/4G/5G modules, diskless booting,wake on LAN,self-booting with power

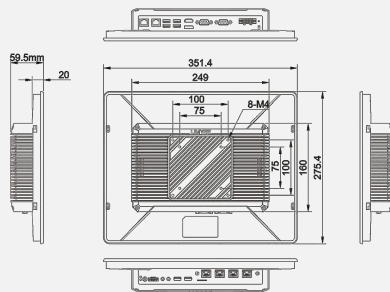
Front I/O	1*Power ON/OFF (LED) 2*LED (HDD&WiFi) 1*SW, 2pin Phoenix terminal 1*Mic_in 1*Line_out 2*USB2.0 1*SIM Slot 2*RS232+8 *GPIO or up to 16 *GPIO 2*Antenna	Rear I/O	2*LAN 4*USB3.1 2*HDMI 2*COM 1*DC IN,4pinPhoenix terminal 1*M3 ground screw hole 4*Antenna 1*RST button,In shutdown mode, hold down for at least 3s to clear BIOS configurations.When the device is powered on, press 0.5 to 1s to restart 1*REC button,system recovery
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Power Input	12~19V DC IN (9~36V Wide Voltage Input Optional)
Expansion I/O	Basic configuration, GPIO extension, WiF module,12~19V DC input 4*LAN expansion, GPIO expansion,12~19V DC input POE 4*LAN expansion, GPIO expansion, 2 to 19V DC input 6*COM expansion, WiF module,9~36V wide voltage power module 14 *USB extension, 4G module, GPIO extension, 12~19V DC input
OS	Windows 7 / Windows 10 / Linux
Certificate	CE

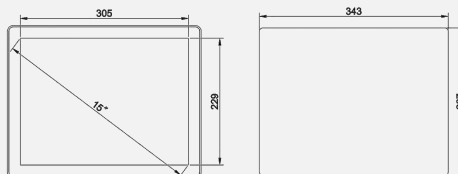
Environment

	National Standard	Parameters
EMC	GB/T 9254.1-2021 Radio disturbance limits and methods of measurement for information technology equipment	Radiation disturbance (B) grade Conduction disturbance (B) grade
	GB/T 17618-2015 Immunity limits and measurement methods for information technology equipment	Meet the requirements of 6KV contact discharge and 12KV air discharge
Safety Standard	GB 4943.1-2011 Information technology equipment security - Part 1: General requirements	Ground Resistance: $\leq 0.1\Omega$ Electrical strength: limited leakage current 10mA, for class I equipment, the primary circuit on the housing withstand voltage $\geq 1.5KV$ AC or 2.2KV DC; For Class II equipment, the primary circuit withstand voltage of the housing $\geq 3.0KV$ AC or 4.3KV DC Insulation Resistance: $\geq 100M\Omega$ Drain current: current to the floor drain $\leq 3.5mA$
Environment	GB/T 9813.4-2017 General specification for computers - Part 4: Microcomputers for industrial applications GB/T 2423 Environment Test	Operating Temperature: $-10^{\circ}C \sim 60^{\circ}C$ Storage Temperature: $-20^{\circ}C \sim 70^{\circ}C$ Humidity: $40^{\circ}C$ 95%RH Panel protection class: IP65 Fall in packaging: the machine is packed at a height of 1 meter, 8 edges and 6 sides fall once each Vibration: 5 ~ 5.5Hz, displacement 25.4mm; 5.5 ~ 200Hz/ acceleration 1.0g, working direction; The duration of the test is 1 cycle Impact: half sine pulse, peak acceleration 10g, pulse width 11ms, 3 times of impact in the working direction Noise: (0) dB

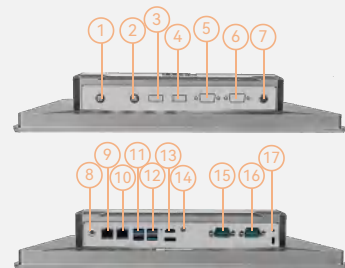
I/O Ports & Dimension



Cut Size



IO Port



- | | | |
|------------|----------|-------------|
| ① WIFI ANT | ⑦ POWER | ⑫ USB3.0*2 |
| ② WIFI ANT | ⑧ DC IN | ⑬ HDMI+DP |
| ③ USB(RES) | ⑨ LAN | ⑭ AUDIO |
| ④ COM(RES) | ⑩ LAN | ⑮ COM |
| ⑤ COM(RES) | ⑪ USB3.0 | ⑯ COM |
| | ⑫ USB2.0 | ⑰ M3 ground |

Order Information

Product Model No.	Description	Remarks
KT-HPC1512	15"inch/Resistive Touch/Intel 8365U/DDR4 2400MHz 8GB/M.2 2280 SATA 128GB/WiFi/sub card ZIC-DB-PWRGP ZO010	
KT-HPC1512-4L	15"inch/Resistive Touch/Intel 8365U/DDR4 2400MHz 8GB/M.2 2280 SATA 128GB/sub card EIO-4L ZO020/sub card ZIC-DB-PWRGP ZO010	
KT-HPC1512-POE4L	15"inch/Resistive Touch/Intel 8365U/DDR4 2400MHz 8GB/M.2 2280 SATA 128GB/EIO-4LP ZO020/sub card ZIC-DB-PWRGP ZO010	
KT-HPC1512-6C	15"inch/Resistive Touch/Intel 8365U/DDR4 2400MHz 8GB/M.2 2280 SATA 128GB/WiFi/WiFi/EIO-4L4LP4UGP ZO010/ZIC-DB-PWR2 ZO020	
KT-HPC1512-14U	15"inch/Resistive Touch/Intel 8365U/DDR4 2400MHz 8GB/M.2 2280 SATA 256GB/Sata3.0 256GB/4G/EIO-4L4LP4UGP ZO010/sub card ZIC-DB-PWRGP ZO010	

KT-HPC1711



- Support Intel® Bay Trail, Gemini lake, Elkhart Lake 6th generation Sky Lake & 7th Kaby Lake, 8th Whiskeylake & 10th Cometlake-U Processor
- Support SO-DIMM, M-SATA, M.2 Sata, M.2 NVME storage
- Industrial-grade 17" TFT LCD, resistive touch screen, support dual display
- Standard dual LAN ports, partial support Intel encrypt TPM2.0, 8*GPIO
- Support 1*Mini-PCIE (for WIFI), 1*SIM, 3G, 4G, 5G module
- Support VESA, embedded, wall mount, desktop installation
- 12~24V Wide Voltage input, Sealed dustproof & Robustness design
- Applied for industrial automation, environment monitoring, wind power generation, 3D machine vision etc



Specification

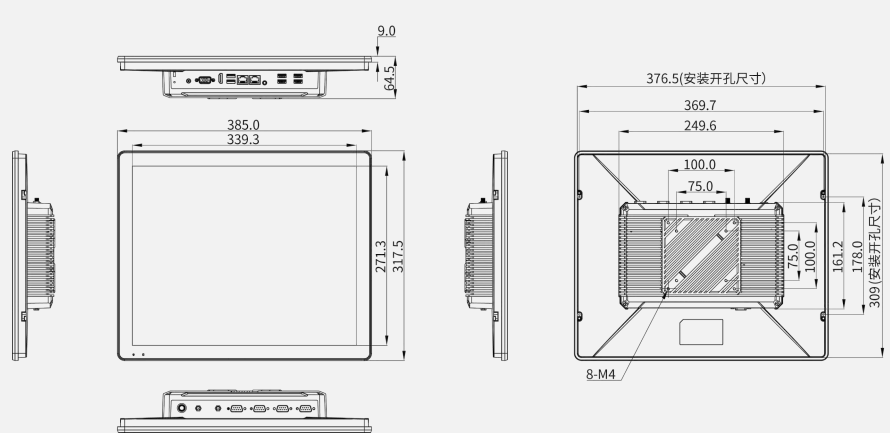
Model No.	KT-HPC1711	Indicator Light	Power and Hard disk reserved	Dimension	385x318x65mm
Display	17" inch	Loudspeaker	2* 4Ω 3W	Weight	< 4.0kg
Touch	Resistive	Heat dissipation	Fanless	Color	Grey
Resolution	1280*1024	Consumption	< 25W (screen 7.5W)	Material	Aluminum alloy die-casting
Brightness	300cd/m ²	Installation	Embedded, wall-mount, desktop		

Processor	Baytrail	Gemini Lake	Elkhart Lake	Sky Lake (6-7th)	Whiskey Lake (8-10th)
BIOS	AMI BIOS	AMI BIOS	AMI BIOS	AMI BIOS	AMI BIOS
Chipset	Intel® SOC	Intel® SOC	Intel® SOC	Intel® SOC	Intel® SOC
Graphics	Intel® HD Graphics	Intel® HD Graphics	Intel® Graphics	Intel® HD Graphics	Intel® HD Graphics
Network	2*Intel 82583V	2*RTL8111H/8111G	2*Intel I226-V gigabit	2*Intel I211 gigabit	Intel I219+ I211
Audio	Realtek ALC662HD	Realtek ALC662HD	Realtek ALC269HD	Realtek ALC662HD	Realtek ALC662HD
RAM	DDR3L 1333MHz Max 8G	DDR4 2400MHz Max 16G	DDR4 3200MHz Max 16G	DDR4 2133 MHz Max 16G	DDR4 2400MHz Max 16G
ROM	M-SATA 128G	M.2 2280 Sata 128GB	M.2 2280 NVME128GB	M-SATA 128G	M.2 2280 NVME128GB
Function	Support WiFi, BT, 4G, watchdog, diskless booting, wake on LAN, self-booting with power	Support WiFi, BT, 4G, watchdog, diskless booting, wake on LAN, self-booting with power	Support WiFi, BT, 4G, watchdog, diskless booting, wake on LAN, self-booting with power	Support WiFi, BT, 4G, watchdog, diskless booting, wake on LAN, self-booting with power	Support WiFi, BT, 4G, watchdog, diskless booting, wake on LAN, self-booting with power
Front I/O	1*Power ON/OFF 2*Antenna 4*COM	1*Power ON/OFF 2*Antenna 4*COM	1*Power ON/OFF 2*Antenna 4*COM	1*Power ON/OFF 2*Antenna 4*COM	1*Power ON/OFF 2*Antenna 4*COM
Rear I/O	1*Audio 2*LAN 1*USB2.0 1*USB3.0 1*HDMI 1*VGA 1*DC IN 4*USB 1*M3 ground screw hole	1*Audio 1*DP 1*HDMI 4*USB3.2 2*LAN 1*DC IN 4*USB 1*M3 ground screw hole 1*CMOS button Support 8*GPIO	1*Audio 1*DP 1*HDMI 1*USB2.0 3*USB3.1 2*LAN 1*DC IN 4*USB 1*M3 ground screw hole 1*CMOS button Support 8*GPIO	1*Audio 2*LAN 2*USB3.0 1*HDMI 1*VGA 1*DC IN 4*USB 1*M3 ground screw hole	1*Audio 1*DP 1*HDMI 4*USB3.2 2*LAN 1*DC IN 4*USB 1*M3 ground screw hole 1*CMOS button Support 8*GPIO
Power	DC 12V~24V wide voltage Input	DC12V -24V wide voltage Input	DC 12V~24V wide voltage Input	DC12V -24V wide voltage Input	DC12V -24V wide voltage Input
OS	Windows 7 / Windows 10 / Linux				
Certificate	CE				

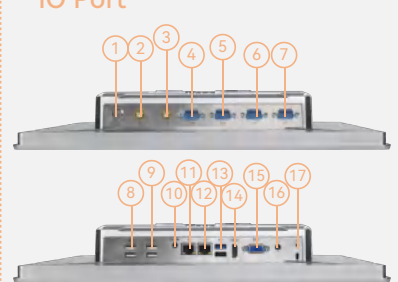
Environment

	National Standard	Parameters
EMC	GB/T 9254.1-2021 Radio disturbance limits and methods of measurement for information technology equipment	Radiation disturbance (B) grade Conduction disturbance (B) grade
	GB/T 17618-2015 Immunity limits and measurement methods for information technology equipment	Meet the requirements of 6KV contact discharge and 12KV air discharge
Safety Standard	GB 4943.1-2011 Information technology equipment security - Part 1: General requirements	Ground Resistance: $\leq 0.1\Omega$ Electrical strength: limited leakage current 10mA, for class I equipment, the primary circuit on the housing withstand voltage $\geq 1.5KV$ AC or 2.2KV DC; For Class II equipment, the primary circuit withstand voltage of the housing $\geq 3.0KV$ AC or 4.3KV DC Insulation Resistance: $\geq 100M\Omega$ Drain current: current to the floor $\leq 3.5mA$
Environment	GB/T 9813.4-2017 General specification for computers - Part 4: Microcomputers for industrial applications GB/T 2423 Environment Test	Operating Temperature: $-10^{\circ}C \sim 60^{\circ}C$ Storage Temperature: $-20^{\circ}C \sim 70^{\circ}C$ Humidity: $40^{\circ}C$ 95%RH Panel protection class: IP65 Fall in packaging: the machine is packed at a height of 1 meter, 8 edges and 6 sides fall once each Vibration: 5 ~ 5.5Hz, displacement 25.4mm; 5.5 ~ 200Hz/ acceleration 1.0g, working direction; The duration of the test is 1 cycle Impact: half sine pulse, peak acceleration 10g, pulse width 11ms, 3 times of impact in the working direction Noise: (0) dB

I/O Ports & Dimension



IO Port



① POWER	⑦ COM	⑬ USB3.0
② WIFI ANT	⑧ USB*2	⑭ USB2.0
③ WIFI ANT	⑨ USB*2	⑮ HDMI
④ COM	⑩ AUDIO	⑯ VGA
⑤ COM	⑪ LAN	⑰ DC
⑥ COM	⑫ LAN	⑱ M3 ground

Order Information

Product Model No.	Description	Remarks
KT-HPC1711	17"inch/Resistive Touch/J1900/DDR3L 1333MHz 4GB/M-SATA 128GB	
KT-HPC1711G	17"inch/Resistive Touch/J4125 /DDR4 2133/2400MHz 4GB/M.2 2280 Sata 128GB	
KT-HPC1711E	17"inch/Resistive Touch/J6412/DDR4 3200MHz 4GB/M.2 2280 NVME128GB	
KT-HPC1711S	17"inch/Resistive Touch/6200U/DDR4 2133MHz 8GB/M-SATA 128G	
KT-HPC1711W	17"inch/Resistive Touch/8145U/DDR4 2666MHz 8GB/M.2 2280 NVME 128GB	



KT-HPC1712

- Support Intel® 8th Whiskeylake &10th generation Cometlake-U Processor
- Support SO-DIMM,M-SATA,M.2 Sata,M.2 NVME storage
- Industrial-grade 17" TFT LCD,resistive touch screen,support dual display
- Standard dual LAN ports,partial support Intel encrypt TPM2.0,8*GPIO
- Support1*Mini-PCIE(for WIFI),1*SIM,3G、 4G、 5G module
- Support VESA,embedded,wall mount,desktop installation
- 12~24V Wide Voltage input,Sealed dustproof&Robustness design
- Applied for industrial automation, environment monitoring,wind power generation,3D machine vision etc



Specification

Model No.	KT-HPC1712	Indicator Light	Power and Hard disk reserved	Dimension	386x318x60mm
Display	17"inch	Loudspeaker	2*4Ω 3W	Weight	< 4.0kg
Touch	Resistive Touch	Heat dissipation	Fanless	Color	Grey
Resolution	1280*1024	Consumption	< 25W (screen 7.5W)	Material	Aluminum alloy die-casting
Brightness	300cd/m²	Installation	Embedded,wall-mount,desktop		

Processor	Intel Whiskey Lake Series i3/ i5/ i7 Processors				
BIOS	AMI (256M)				
Chipset	Intel® SOC				
Graphics	Intel® UHD Graphics				
Network	Intel i226-AT + I219-LM				
Audio	HS-100B				
RAM	DDR4 2400MHz Max 32G				
ROM	M.2 2280 NVME128GB,support SATA 3.0 2.5 寸 HDD expansion				
Function	Support WiFi,BT,3G/4G/5G modules, diskless booting,wake on LAN,self-booting with power				

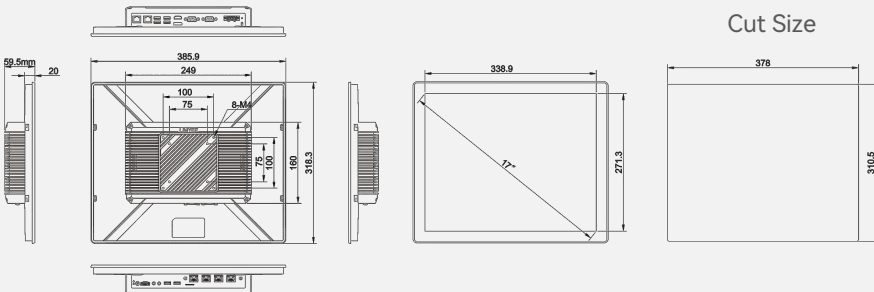
Front I/O	1*Power ON/OFF (LED) 2*LED (HDD&WiFi) 1*SW, 2pin Phoenix terminal 1*Mic_in 1*Line_out 2*USB2.0 1*SIM Slot 2*RS232+8*GPIO or up to 16*GPIO 2*Antenna	Rear I/O	2*LAN 4*USB3.1 2*HDMI 2*COM 1*DC IN, 4pin Phoenix terminal 1*M3 ground screw hole 4*Antenna 1*RST button,In shutdown mode, hold down for at least 3s to clear BIOS configurations.When the device is powered on, press 0.5 to 1s to restart 1*REC button,system recovery
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Power Input	12~19V DC IN (9~36V Wide Voltage Input Optional)
Expansion I/O	Basic configuration, GPIO extension, WiF module,12~19V DC input 4*LAN expansion, GPIO expansion,12~19V DC input POE 4*LAN expansion, GPIO expansion, 2 to 19V DC input 6*COM expansion, WiF module,9~36V wide voltage power module 14 *USB extension, 4G module, GPIO extension, 12~19V DC input
OS	Windows 7 / Windows 10 / Linux
Certificate	CE

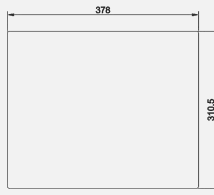
Environment

	National Standard	Parameters
EMC	GB/T 9254.1-2021 Radio disturbance limits and methods of measurement for information technology equipment	Radiation disturbance (B) grade Conduction disturbance (B) grade
	GB/T 17618-2015 Immunity limits and measurement methods for information technology equipment	Meet the requirements of 6KV contact discharge and 12KV air discharge
Safety Standard	GB 4943.1-2011 Information technology equipment security - Part 1: General requirements	Ground Resistance: $\leq 0.1\Omega$ Electrical strength: limited leakage current 10mA, for class I equipment, the primary circuit on the housing withstand voltage $\geq 1.5KV$ AC or 2.2KV DC; For Class II equipment, the primary circuit withstand voltage of the housing $\geq 3.0KV$ AC or 4.3KV DC Insulation Resistance: $\geq 100M\Omega$ Drain current: current to the floor drain $\leq 3.5mA$
Environment	GB/T 9813.4-2017 General specification for computers - Part 4: Microcomputers for industrial applications GB/T 2423 Environment Test	Operating Temperature: $-10^{\circ}C \sim 60^{\circ}C$ Storage Temperature: $-20^{\circ}C \sim 70^{\circ}C$ Humidity: $40^{\circ}C$ 95%RH Panel protection class: IP65 Fall in packaging: the machine is packed at a height of 1 meter, 8 edges and 6 sides fall once each Vibration: 5 ~ 5.5Hz, displacement 25.4mm; 5.5 ~ 200Hz/ acceleration 1.0g, working direction; The duration of the test is 1 cycle Impact: half sine pulse, peak acceleration 10g, pulse width 11ms, 3 times of impact in the working direction Noise: (0) dB

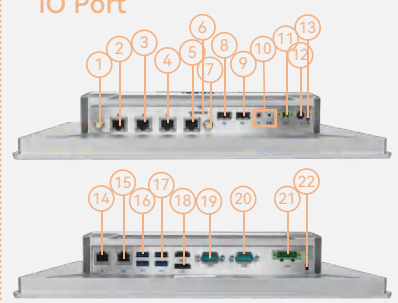
I/O Ports & Dimension



Cut Size



I/O Port



① WIFI ANT	⑨ USB	⑬ USB3.0*2
② LAN	⑩ AUDIO	⑭ USB3.0*2
③ LAN	⑪ SW	⑮ HDMI+DP
④ LAN	⑫ POWER	⑯ COM
⑤ LAN	⑬ LED	⑰ COM
⑥ SIM	⑭ LAN	⑱ DC
⑦ WIFI ANT	⑮ LAN	⑳ M3
⑧ USB		ground

Order Information

Product Model No.	Description	Remarks
KT-HPC1712	17"inch/Resistive Touch/Intel 8365U/DDR4 2400MHz 8GB/M.2 2280 SATA 128GB/WiFi module/sub card ZIC-DB-PWRGP ZO010	
KT-HPC1712-4L	17"inch/Resistive Touch/Intel 8365U/DDR4 2400MHz 8GB/M.2 2280 SATA 128GB/sub card EIO-4L ZO020/sub card ZIC-DB-PWRGP ZO010	
KT-HPC1712-POE4L	17"inch/Resistive Touch/Intel 8365U/DDR4 2400MHz 8GB/M.2 2280 SATA 128GB/EIO-4LP ZO020/sub card ZIC-DB-PWRGP ZO010	
KT-HPC1712-6C	17"inch/Resistive Touch/Intel 8365U/DDR4 2400MHz 8GB/M.2 2280 SATA 128GB/WiFi module/WiFi module/EIO-4L4LP4UGP ZO010/ZIC-DB-PWR2 ZO020	
KT-HPC1712-14U	17"inch/Resistive Touch/Intel 8365U/DDR4 2400MHz 8GB/M.2 2280 SATA 256GB/Sata3.0 256GB/4Gmodule /EIO-4L4LP4UGP ZO010/sub card ZIC-DB-PWRGP ZO010	



KT-PPC1011

- Support Baytrail J1900/J1800/N2807 Processor
- Support DDR3L standard 4GB,M-SATA standard128G
- Industrial-grade 10.1" TFT LCD, capacitive touch,support tribrid display
- Standard 4USB,1LAN,2COM,support GPIO expansion
- Support 1*MINI-PCIE(for WIFI)、1*SIM
- Support VESA, wall mounted,desktop installation
- Fanelss&Patent industrial modeling Slim design
- Applied for MES,store display,self-service terminal etc



Specification

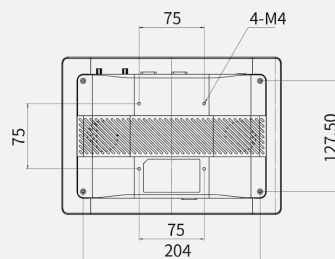
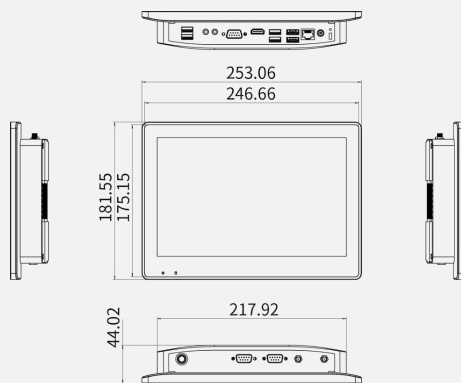
Model No	KT-PPC1011	Indicator Light	Power status indicator reserved	Dimension	253x182x44mm
Display	10.1"inch	Loudspeaker	2*4Ω 3W	Weight	< 1.8kg
Touch	Capacitive touch	Heat dissipation	Fanless	Color	Grey
Resolution	1280*800	Consumption	< 17W (screen 3.5W)	Material	Aluminum alloy die-casting
Brightness	300cd/m²	Installation	Embedded,wall-mount,desktop		

Processor	Baytrail	Gemini Lake
BIOS	AMI BIOS	AMI BIOS
Chipset	Intel® SOC	Intel® SOC
Graphics	Intel® HD Graphics	Intel® UHD Graphics 600
Network	Realtek RLT 8111H/8111G gigabit	Realtek RLT 8111H/8111G gigabit
Audio	ALC897 HD Audio decoding controller	ALC897 Audio decoding controller
RAM	DDR3L 1333MHz Max 8G	DDR4 2933MHz Max32GB
ROM	1*Sata,1*Mini-Sata	1*Mini-Sata
Function	Support 1*Mini-PCIE(Wifi/4G module),watchdog,wake on LAN,self-booting with power	1*mPCIE,support WIFI/BT modules expansion
Up I/O	1*Power ON/OFF 2*Antenna 2*COM	1*Power ON/OFF 2*Antenna 2*COM
Down I/O	1*DC IN 1*LAN 4*USB3.0 1*SIM Slot 1*VGA 1*LINE-OUT 1*MIC-IN 2*USB2.0 1*M3 ground screw hole	1*DC IN 1*LAN 4*USB3.0 1*HDMI 1*COM 1*LINE-OUT 1*MIC-INc 2*USB2.0 1*M3 ground screw hole
Power	DC 12V Input	DC 12V Input
OS	Windows 7 / Windows 10 / Linux	
Certificate	CE	

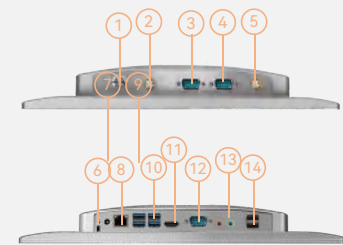
Environment

	National Standard	Parameters
EMC	GB/T 9254.1-2021 Radio disturbance limits and methods of measurement for information technology equipment	Radiation disturbance (B) grade Conduction disturbance (B) grade
	GB/T 17618-2015 Immunity limits and measurement methods for information technology equipment	Meet the requirements of 6KV contact discharge and 12KV air discharge
Safety Standard	GB 4943.1-2011 Information technology equipment security - Part 1: General requirements	Ground Resistance: $\leq 0.1\Omega$ Electrical strength: limited leakage current 10mA, for class I equipment, the primary circuit on the housing withstand voltage $\geq 1.5KV$ AC or 2.2KV DC; For Class II equipment, the primary circuit withstand voltage of the housing $\geq 3.0KV$ AC or 4.3KV DC Insulation Resistance: $\geq 100M\Omega$ Drain current: current to the floor drain $\leq 3.5mA$
Environment	GB/T 9813.4-2017 General specification for computers - Part 4: Microcomputers for industrial applications GB/T 2423 Environment Test	Operating Temperature: $0^{\circ}C \sim 50^{\circ}C$ Storage Temperature: $-20^{\circ}C \sim 70^{\circ}C$ Humidity: $40^{\circ}C$ 95%RH Panel protection class: IP65 Fall in packaging: the machine is packed at a height of 1 meter, 8 edges and 6 sides fall once each Vibration: $5 \sim 5.5Hz$, displacement 25.4mm; $5.5 \sim 200Hz$ / acceleration 1.0g, working direction; The duration of the test is 1 cycle Impact: half sine pulse, peak acceleration 10g, pulse width 11ms, 3 times of impact in the working direction Noise: (0) dB

I/O Ports & Dimension



IO Port



- | | | |
|------------|------------|------------|
| ① POWER | ⑥ M3 | ⑪ HDMI |
| ② WIFI ANT | ⑦ ground | ⑫ VGA |
| ③ COM | ⑧ DC IN | ⑬ AUDIO |
| ④ COM | ⑨ LAN | ⑭ USB2.0*2 |
| ⑤ WIFI ANT | ⑩ USB3.0*2 | |
| | ⑪ USB3.0*2 | |

Order Information

Product Model No.	Description	Remarks
KT-PPC1011	10.1"inch /Capacitive Touch/J1900/DDR3L 1333MHz 4GB/M-SATA 128GB	
KT-PPC1011G	10.1"inch /Capacitive Touch/J4125 /DDR4 2133/2400MHz 4GB/M.2 2280 Sata 128GB	



KT-PPC1211

- Support Baytrail J1900/J1800/N2807 Processor
- Support DDR3L standard 4GB,M-SATA standard128G
- Industrial-grade 11.6" TFT LCD, capacitive touch,support tribrid display
- Standard 4USB,1LAN,2COM,support GPIO expansion
- Support 1*MINI-PCIE(for WIFI)、1*SIM
- Support VESA, wall mounted,desktop installation
- Fanelss&Patent industrial modeling Slim design
- Applied for MES,store display,self-service terminal etc



Specification

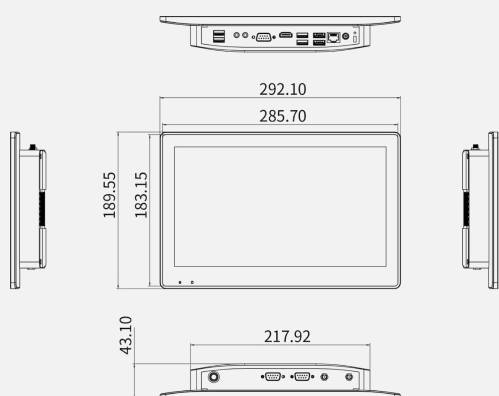
Model No.	KT-PPC1211	Indicator Light	Power status indicator reserved	Dimension	292x190x43mm
Display	11.6"inch	Loudspeaker	2*4Ω 3W	Weight	< 2.0kg
Touch	Capacitive touch	Heat dissipation	Fanless	Color	Material
Resolution	1366*768/1920*1080	Consumption	< 18W (screen 4W)	Material	Aluminum alloy die-casting
Brightness	300cd/m²	Installation	Embedded,Wall-mount,Desktop		

Processor	Baytrail	Gemini Lake
BIOS	AMI BIOS	AMI BIOS
Chipset	Intel® SOC	Intel® SOC
Graphics	Intel® HD Graphics	Intel® UHD Graphics 600
Network	Realtek RLT 8111H/8111G gigabit	Realtek RLT 8111H/8111G gigabit
Audio	ALC897 HD Audio decoding controller	ALC897 Audio decoding controller
RAM	DDR3L 1333MHz Max 8G	DDR4 2933MHz Max32GB
ROM	1*Sata,1*Mini-Sata	1*Mini-Sata
Function	Support 1*Mini-PCIE(Wifi/4G module),watchdog,wake on LAN,self-booting with power	1*mPCIE,support WIFI/BT modules expansion
Up I/O	1*Power ON/OFF 2*Antenna 2*COM	1*Power ON/OFF 2*Antenna 2*COM
Down I/O	1*DC IN 1*LAN 4*USB3.0 1*SIM Slot 1*VGA 1*LINE-OUT 1*MIC-IN 2*USB2.0 1*M3 ground screw hole	1*DC IN 1*LAN 4*USB3.0 1*HDMI 1*COM 1*LINE-OUT 1*MIC-IN 2*USB2.0 1*M3 ground screw hole
Power	DC 12V Input	DC 12V Input
OS	Windows 7 / Windows 10 / Linux	
Certificate	CE	

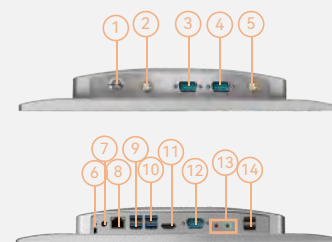
Environment

	National Standard	Parameters
EMC	GB/T 9254.1-2021 Radio disturbance limits and methods of measurement for information technology equipment	Radiation disturbance (B) grade Conduction disturbance (B) grade
	GB/T 17618-2015 Immunity limits and measurement methods for information technology equipment	Meet the requirements of 6KV contact discharge and 12KV air discharge
Safety Standard	GB 4943.1-2011 Information technology equipment security - Part 1: General requirements	Ground Resistance: $\leq 0.1\Omega$ Electrical strength: limited leakage current 10mA, for class I equipment, the primary circuit on the housing withstand voltage $\geq 1.5KV$ AC or 2.2KV DC; For Class II equipment, the primary circuit withstand voltage of the housing $\geq 3.0KV$ AC or 4.3KV DC Insulation Resistance: $\geq 100M\Omega$ Drain current: current to the floor drain $\leq 3.5mA$
Environment	GB/T 9813.4-2017 General specification for computers - Part 4: Microcomputers for industrial applications GB/T 2423 Environment Test	Operating Temperature: $0^{\circ}C \sim 50^{\circ}C$ Storage Temperature: $-20^{\circ}C \sim 70^{\circ}C$ Humidity: $40^{\circ}C$ 95%RH Panel protection class: IP65 Fall in packaging: the machine is packed at a height of 1 meter, 8 edges and 6 sides fall once each Vibration: 5 ~ 5.5Hz, displacement 25.4mm; 5.5 ~ 200Hz/ acceleration 1.0g, working direction; The duration of the test is 1 cycle Impact: half sine pulse, peak acceleration 10g, pulse width 11ms, 3 times of impact in the working direction Noise: (0) dB

I/O Ports & Dimension



IO Port



- | | | |
|------------|------------|------------|
| ① POWER | ⑥ M3 | ⑪ HDMI |
| ② WIFI ANT | ⑦ DC IN | ⑫ VGA |
| ③ COM | ⑧ LAN | ⑬ AUDIO |
| ④ COM | ⑨ USB3.0*2 | ⑭ USB2.0*2 |
| ⑤ WIFI ANT | ⑩ USB3.0*2 | |

Order Information

Product Model No.	Description	Remarks
KT-PPC1211	11.6"inch /Capacitive Touch/J1900/DDR3L 1333MHz 4GB/M-SATA 128GB	
KT-PPC1211G	11.6"inch /Capacitive Touch/J4125 /DDR4 2133/2400MHz 4GB/M.2 2280 Sata 128GB	

KT-PPC1511



- Support Intel® Bay Trail、Gemini lake、Elkhart Lake、6th Sky Lake & 7th Kaby Lake、8th Whiskeylake & 10th Cometlake-U Processor
- Support SO-DIMM ,M-SATA,M.2 Sata,M.2 NVME storage
- Industrial-grade 15.6" TFT LCD, capacitive touch,support tribrid display
- Standard 4USB,1LAN,support 2USB or multi COM ports expansion
- Support 1*MINI-PCIE(for WIFI),1*SIM, 3G,4G,5G modules
- Support VESA, wall mounted,desktop installation
- Fanelss&Patent industrial modeling Slim design
- Applied for MES,store display,self-service terminal etc



Specification

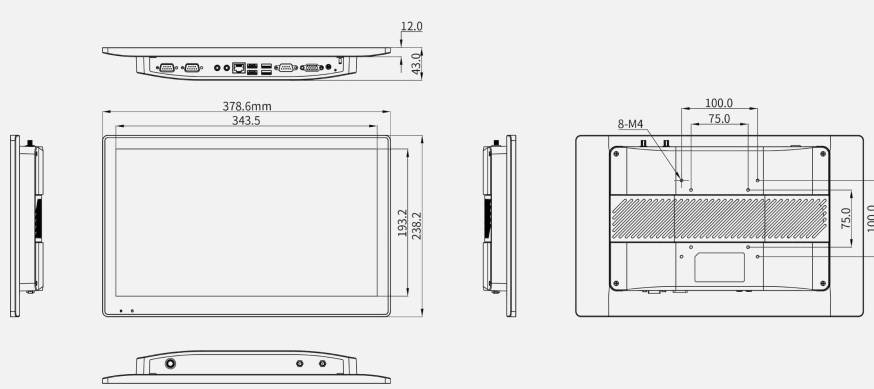
Model No.	KT-PPC1511	Indicator Light	Power status indicator reserved	Dimension	379x238x43mm
Display	15.6"inch	Loudspeaker	2*4Ω 3W	Weight	< 2.5kg
Touch	Capacitive touch	Heat dissipation	Fanless	Color	Grey
Resolution	1920*1080	Consumption	< 19W(screen5.5W),6-10th higher	Material	Aluminum alloy die-casting
Brightness	300cd/m ²	Installation	Embedded,Wall-mount,Desktop		

Processor	Intel® Bay Trail J1900	Intel® Gemini lake J4125/J4105/N4000	Intel® Elkhart Lake J6412/J6413	Intel®Kaby Lake & Sky Lake (6-7th)	Intel®8th Whiskeylake & 10th Cometlake-U
BIOS	AMI BIOS	AMI BIOS	AMI BIOS	AMI BIOS	AMI BIOS
Chipset	Intel® SOC	Intel® SOC	Intel® SOC	Intel® SOC	Intel® SOC
Graphics	Intel®HD Graphics	Intel UHD Graphics 600	Intel® UHD Graphics	Intel® Graphics 610	Intel® UHD Graphics
Network	Realtek RTL8111	RTL8111H/RTL8111G	Realtek 8111H/8111G	Realtek RTL8111H/8111G	Realtek RLT8111H/8111G
Audio	Realtek ALC269HD	Realtek ALC269HD	Realtek ALC269HD	HS-100B Audio decoding controller	HS-100B USB Audio decoding controller
RAM	DDR3L 1333MHz Max 8G	DDR4 2133/2400MHz Max 8G	DDR4 3200MHz Max 32G	DDR4 2133MHz Max 32G	DDR4 2666MHz Max 32G
ROM	M-SATA 128G	M-SATA 128GB	M.2 2280 Sata 128GB	M.2 2280 NVME 256GB	M.2 2280 NVME 256GB
Function	Support WiFi,BT,4G,watchdog	Support WiFi,BT,4G,watchdog	Support WiFi,BT,4G,5G modules	Support WiFi,BT,4G modules	Support WiFi,BT,3G/4G,5G,self-booting with power, Hardware monitoring,wake on LAN
Up I/O	1*Power ON/OFF (LED) 2*Antenna 2*USB/2*COM (Reserved)	1*Power ON/OFF (LED) 2*Antenna 2*USB/2*COM (Reserved)	1*Power ON/OFF (LED) 2*Antenna 2*USB/2*COM (Reserved)	1*Power ON/OFF (LED) 2*Antenna 2*USB/2*COM (Reserved)	1*Power ON/OFF (LED) 2*Antenna 2*USB/2*COM (Reserved)
Down I/O	1*LINE-OUT 1*MIC-IN 1*LAN 3*USB2.0 1*USB3.0 1*HDMI 1*VGA 1*DC 2*COM232 1*M3 ground screw hole	1*LINE-OUT 1*MIC-IN 1*LAN 2*USB2.0 2*USB3.0 1*VGA 1*HDMI 1*DC 2*COM232 1*M3 ground screw hole	1*LINE-OUT 1*MIC-IN 1*LAN 2*USB2.0 2*USB3.2 Gen2 1*VGA 1*HDMI 1*DC 2*COM232 1*M3 ground screw hole	1*LINE-OUT 1*MIC-IN 1*LAN 2*USB2.0 2*USB3.0 1*VGA 1*HDMI 1*DC 2*COM232 1*CLR_CMOS Button 1*M3 ground screw hole	1*LINE-OUT 1*MIC-IN 1*LAN 2*USB3.2 Gen2 2*USB3.2 Gen2 1*VGA 1*HDMI 1*DC 2*COM232 1*CLR_CMOS Button Note: For Gen 8 U Processor,USB3.2 is Gen1 5Gbps
Power	DC 12V Input	DC 12V Input	DC 12V Input	DC 12V Input	DC 12V Input
OS	Windows 7 / Windows 10 / Linux				
Certificate	CE				

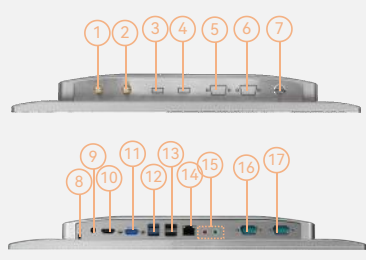
Environment

	National Standard	Parameters
EMC	GB/T 9254.1-2021 Radio disturbance limits and methods of measurement for information technology equipment	Radiation disturbance (B) grade Conduction disturbance (B) grade
	GB/T 17618-2015 Immunity limits and measurement methods for information technology equipment	Meet the requirements of 6KV contact discharge and 12KV air discharge
Safety Standard	GB 4943.1-2011 Information technology equipment security - Part 1: General requirements	Ground Resistance: $\leq 0.1\Omega$ Electrical strength: limited leakage current 10mA, for class I equipment, the primary circuit on the housing withstand voltage $\geq 1.5KV$ AC or 2.2KV DC; For Class II equipment, the primary circuit withstand voltage of the housing $\geq 3.0KV$ AC or 4.3KV DC Insulation Resistance: $\geq 100M\Omega$ Drain current: current to the floor drain $\leq 3.5mA$
Environment	GB/T 9813.4-2017 General specification for computers - Part 4: Microcomputers for industrial applications GB/T 2423 Environment Test	Operating Temperature: $0^{\circ}C \sim 50^{\circ}C$ Storage Temperature: $-20^{\circ}C \sim 70^{\circ}C$ Humidity: $40^{\circ}C$ 95%RH Panel protection class: IP65 Fall in packaging: the machine is packed at a height of 1 meter, 8 edges and 6 sides fall once each Vibration: 5 ~ 5.5Hz, displacement 25.4mm; 5.5 ~ 200Hz/ acceleration 1.0g, working direction; The duration of the test is 1 cycle Impact: half sine pulse, peak acceleration 10g, pulse width 11ms, 3 times of impact in the working direction Noise: (0) dB

I/O Ports & Dimension



IO Port



① WIFI ANT	⑦ POWER	⑬ USB2.0*2
② WIFI ANT	⑧ M3	⑭ LAN
③ USB(Res)	⑨ ground	⑮ AUDIO
④ USB(Res)	⑩ DC IN	⑯ COM
⑤ COM(Res)	⑪ HDMI	⑰ COM
⑥ COM(Res)	⑫ VGA	
	⑬ USB3.0*2	

Order Information

Product Model No.	Description	Remarks
KT-PPC1511	15.6"inch /Capacitive Touch/J1900/DDR3L 1333MHz 4GB/M-SATA 128GB	
KT-PPC1511G	15.6"inch /Capacitive Touch/J4125/DDR4 2133/2400MHz 4GB/M-SATA 128GB	
KT-PPC1511E	15.6"inch /Capacitive Touch/J6412/DDR4 3200MHz 4GB/M.2 2280 Sata 128GB	
KT-PPC1511S	15.6"inch /Capacitive Touch/6200U/DDR4 2133MHz 8GB/M.2 2280 NVME 256GB	
KT-PPC1511W	15.6"inch /Capacitive Touch/8145U/DDR4 2666MHz 8GB/M.2 2280 NVME 256GB	USB3.2 is Gen1 5Gbps



KT-PPC1711

- Support Intel® Bay Trail、Gemini lake、Elkhart Lake、6th Sky Lake &7th Kaby Lake、8th Whiskeylake &10th Cometlake-U Processor
- Support SO-DIMM ,M-SATA,M.2 Sata,M.2 NVME storage
- Industrial-grade 17.3" TFT LCD, capacitive touch,support tribrid display
- Standard 4USB,1LAN,support 2USB or multi COM ports expansion
- Support 1*MINI-PCIE(for WIFI),1*SIM, 3G,4G,5G modules
- Support VESA, wall mounted,desktop installation
- Fanelss&Patent industrial modeling Slim design
- Applied for MES,store display,self-service terminal etc



Specification

Model No.	KT-PPC1711	Indicator Light	Power status indicator reserved	Dimension	417x260x46mm
Display	17.3''inch	Loudspeaker	2* 4Ω 3W	Weight	< 2.8kg
Touch	Capacitive touch	Heat dissipation	Fanless	Color	Grey
Resolution	1920*1080	Consumption	< 21W (screen 7.5W),6~10th higher	Material	Aluminum alloy die-casting
Brightness	300cd/m²	Installation	Embedded,Wall-mount,Desktop		

Processor	Intel® Bay Trail J190	Intel® Gemini lake J4125/J4105/N4000	Intel® Elkhart Lake J6412/J6413	Intel®Kaby Lake & Sky Lake (Gen 6-7)	Intel® Gen 8 Whiskeylake &Gen10 Cometlake-U
BIOS	AMI BIOS	AMI BIOS	AMI BIOS	AMI BIOS	AMI BIOS
Chipset	Intel® SOC	Intel® SOC	Intel® SOC	Intel® SOC	Intel® SOC
Graphics	Intel®HD Graphics	Intel UHD Graphics 600	Intel® UHD Graphics	Intel® Graphics 610	Intel® UHD Graphics
Network	Realtek RTL8111	RTL8111H/RTL8111G	Realtek 8111H/8111G	Realtek RTL8111H/8111G	Realtek RLT8111H/8111G
Audio	Realtek ALC269HD	Realtek ALC269HD	Realtek ALC269HD	HS-100B Audio decoding controller	HS-100B USB Audio decoding controller
RAM	DDR3L 1333MHz Max 8G	DDR4 2133/2400MHz Max 8G	DDR4 3200MHz Max 32G	DDR4 2133MHz Max 32G	DDR4 2666MHz Max 32G
ROM	M-SATA 128G	M-SATA 128GB	M.2 2280 Sata 128GB	M.2 2280 NVME 256GB	M.2 2280 NVME 256GB
Function	Support WiFi,BT,4G,watchdog	Support WiFi,BT,4G,watchdog	Support WiFi,BT,4G,5G modules	Support WiFi,BT,4G modules	Support WiFi,BT,3G/4G,5G,self-booting with power, Hardware monitoring,wake on LAN
Up I/O	1*Power ON/OFF (LED) 2*Antenna 2*USB/2*COM (Res)	1*Power ON/OFF (LED) 2*Antenna 2*USB/2*COM (Res)	1*Power ON/OFF (LED) 2*Antenna 2*USB/2*COM (Res)	1*Power ON/OFF (LED) 2*Antenna 2*USB/2*COM (Res)	1*Power ON/OFF (LED) 2*Antenna 2*USB/2*COM (Res)
Down I/O	1*LINE-OUT 1*MIC-IN 1*LAN 3*USB2.0 1*USB3.0 1*HDMI 1*VGA 1*DC 2*COM232 1*M3 ground screw hole	1*LINE-OUT 1*MIC-IN 1*LAN 2*USB2.0 2*USB3.0 1*VGA 1*HDMI 1*DC 2*COM232 1*M3 ground screw hole	1*LINE-OUT 1*MIC-IN 1*LAN 2*USB2.0 2*USB3.2 Gen2 1*VGA 1*HDMI 1*DC 2*COM232 1*M3 ground screw hole	1*LINE-OUT 1*MIC-IN 1*LAN 2*USB2.0 2*USB3.0 1*VGA 1*HDMI 1*DC 2*COM232 1*CLR_CMOS button 1*M3 ground screw hole	1*LINE-OUT 1*MIC-IN 1*LAN 2*USB3.2 Gen2 2*USB3.2 Gen2 1*VGA 1*HDMI 1*DC 2*COM232 1*CLR_CMOS button Note:For Gen 8 U Processor,USB3.2 is Gen1 5Gbps
Power	DC 12V Input	DC 12V Input	DC 12V Input	DC 12V Input	DC 12V Input
OS	Windows 7 / Windows 10 / Linux				
Certificate	CE				

Environment

	National Standard	Parameters
EMC	GB/T 9254.1-2021 Radio disturbance limits and methods of measurement for information technology equipment	Radiation disturbance (B) grade Conduction disturbance (B) grade
	GB/T 17618-2015 Immunity limits and measurement methods for information technology equipment	Meet the requirements of 6KV contact discharge and 12KV air discharge
Safety Standard	GB 4943.1-2011 Information technology equipment security - Part 1: General requirements	Ground Resistance: $\leq 0.1\Omega$ Electrical strength: limited leakage current 10mA, for class I equipment, the primary circuit on the housing withstand voltage $\geq 1.5KV$ AC or 2.2KV DC; For Class II equipment, the primary circuit withstand voltage of the housing $\geq 3.0KV$ AC or 4.3KV DC Insulation Resistance: $\geq 100M\Omega$ Drain current: current to the floor drain $\leq 3.5mA$
Environment	GB/T 9813.4-2017 General specification for computers - Part 4: Microcomputers for industrial applications GB/T 2423 Environment Test	Operating Temperature: $0^{\circ}C \sim 50^{\circ}C$ Storage Temperature: $-20^{\circ}C \sim 70^{\circ}C$ Humidity: $40^{\circ}C$ 95%RH Panel protection class: IP65 Fall in packaging: the machine is packed at a height of 1 meter, 8 edges and 6 sides fall once each Vibration: 5 ~ 5.5Hz, displacement 25.4mm; 5.5 ~ 200Hz/ acceleration 1.0g, working direction; The duration of the test is 1 cycle Impact: half sine pulse, peak acceleration 10g, pulse width 11ms, 3 times of impact in the working direction Noise: (0) dB

I/O Ports & Dimension

IO Port

① WIFI ANT	⑦ POWER	⑬ USB2.0*2
② WIFI ANT	⑧ M3	⑭ LAN
③ USB(Res)	⑨ ground	⑮ AUDIO
④ USB(Res)	⑩ DC IN	⑯ COM
⑤ COM(Res)	⑪ HDMI	⑰ COM
⑥ COM(Res)	⑫ VGA	
	⑬ USB3.0*2	

Order Information

Product Model No.	Description	Remarks
KT-PPC1711	17.3"inch/Capacitive Touch/J1900/DDR3L 1333MHz 4GB/M-SATA 128GB	
KT-PPC1711G	17.3"inch/Capacitive Touch/J4125/DDR4 2133/2400MHz 4GB/M-SATA 128GB	
KT-PPC1711E	17.3"inch/Capacitive Touch/J6412/DDR4 3200MHz 4GB/M.2 2280 Sata 128GB	
KT-PPC1711S	17.3"inch/Capacitive Touch/6200U/DDR4 2133MHz 8GB/M.2 2280 NVME 256GB	
KT-PPC1711W	17.3"inch/Capacitive Touch/8145U/DDR4 2666MHz 8GB/M.2 2280 NVME 256GB	USB3.2 is Gen1 5Gbps

KT-PPC1911



- Support Intel® Bay Trail, Gemini lake, Elkhart Lake, 6th Sky Lake & 7th Kaby Lake, 8th Whiskeylake & 10th Cometlake-U Processor
- Support SO-DIMM, M-SATA, M.2 SATA, M.2 NVME storage
- Industrial-grade 18.5" TFT LCD, capacitive touch, support tribrid display
- Standard 4USB, 1LAN, support 2USB or multi COM ports expansion
- Support 1*MINI-PCIE (for WIFI), 1*SIM, 3G, 4G, 5G modules
- Support VESA, wall mounted, desktop installation
- Panel & Patent industrial modeling Slim design
- Applied for MES, store display, self-service terminal etc



Specification

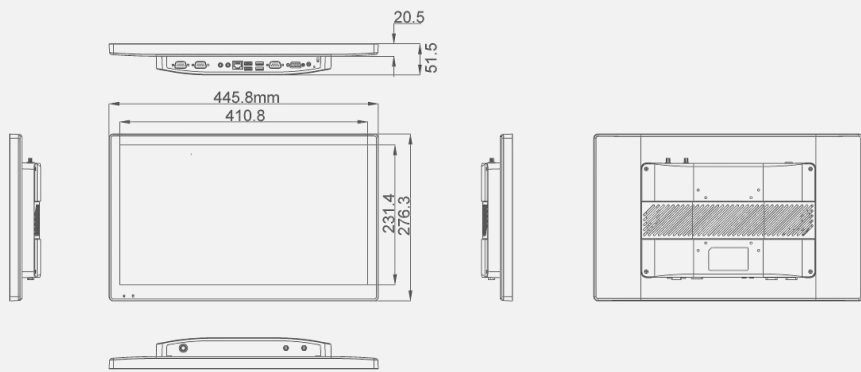
Model NO.	KT-PPC1911	Indicator Light	Power status indicator reserved	Dimension	446x276x52mm
Display	18.5" inch	Loudspeaker	2* 4Ω 3W	Weight	< 3.0kg
Touch	Capacitive touch	Heat dissipation	Fanless	Color	Grey
Resolution	1440*900/1920*1080	Consumption	<29W (screen 15W), Gen 6-10 higher	Material	Aluminum alloy die-casting
Brightness	300cd/m²	Installation	Embedded, Wall-mount, Desktop		

Processor	Intel® Bay Trail J1900	Intel® Gemini lake J4125/J4105/N4000	Intel® Elkhart Lake J6412/J6413	Intel® Kaby Lake & Sky Lake (Gen 6-7)	Intel® 8th Whiskeylake & 10th Cometlake-U
BIOS	AMI BIOS	AMI BIOS	AMI BIOS	AMI BIOS	AMI BIOS
Chipset	Intel® SOC	Intel® SOC	Intel® SOC	Intel® SOC	Intel® SOC
Graphics	Intel® HD Graphics	Intel UHD Graphics 600	Intel® UHD Graphics	Intel® Graphics 610	Intel® UHD Graphics
Network	Realtek RTL8111	RTL8111H/RTL8111G	Realtek 8111H/8111G	Realtek RTL8111H/8111G	Realtek RTL8111H/8111G
Audio	Realtek ALC269HD	Realtek ALC269HD	Realtek ALC269HD	HS-100B Audio decoding controller	HS-100B USB Audio decoding controller
RAM	DDR3L 1333MHz Max 8G	DDR4 2133/2400MHz Max 8G	DDR4 3200MHz Max 32G	DDR4 2133MHz Max 32G	DDR4 2666MHz Max 32G
ROM	M-SATA 128G	M-SATA 128GB	M.2 2280 SATA 128GB	M.2 2280 NVME 256GB	M.2 2280 NVME 256GB
Function	Support WiFi, BT, 4G, watchdog	Support WiFi, BT, 4G, watchdog	Support WiFi, BT, 4G, 5G modules	Support WiFi, BT, 4G modules	Support WiFi, BT, 3G/4G/5G, self-booting with power, Hardware monitoring, wake on LAN
Up I/O	1*Power ON/OFF (LED) 2*Antenna 2*USB/2*COM (Res)	1*Power ON/OFF (LED) 2*Antenna 2*USB/2*COM (Res)	1*Power ON/OFF (LED) 2*Antenna 2*USB/2*COM (Res)	1*Power ON/OFF (LED) 2*Antenna 2*USB/2*COM (Res)	1*Power ON/OFF (LED) 2*Antenna 2*USB/2*COM (Res)
Down I/O	1*LINE-OUT 1*MIC-IN 1*LAN 3*USB2.0 1*USB3.0 1*HDMI 1*VGA 1*DC 2*COM232 1*M3 ground screw hole	1*LINE-OUT 1*MIC-IN 1*LAN 2*USB2.0 2*USB3.0 1*VGA 1*HDMI 1*DC 2*COM232 1*M3 ground screw hole	1*LINE-OUT 1*MIC-IN 1*LAN 2*USB2.0 2*USB3.2 Gen2 1*VGA 1*HDMI 1*DC 2*COM232 1*M3 ground screw hole	1*LINE-OUT 1*MIC-IN 1*LAN 2*USB2.0 2*USB3.0 1*VGA 1*HDMI 1*DC 2*COM232 1*CLR_CMOS button 1*M3 ground screw hole	1*LINE-OUT 1*MIC-IN 1*LAN 2*USB3.2 Gen2 2*USB3.2 Gen2 1*VGA 1*HDMI 1*DC 2*COM232 1*CLR_CMOS button Note: For Gen 8 U Processor, USB3.2 is Gen1 5Gbps
Power	DC 12V Input	DC 12V Input	DC 12V Input	DC 12V Input	DC 12V Input
OS	Windows 7 / Windows 10 / Linux				
Certificate	CE				

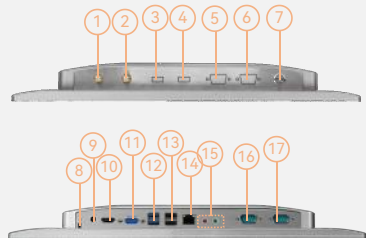
Environment

	National Standard	Parameters
EMC	GB/T 9254.1-2021 Radio disturbance limits and methods of measurement for information technology equipment	Radiation disturbance (B) grade Conduction disturbance (B) grade
	GB/T 17618-2015 Immunity limits and measurement methods for information technology equipment	Meet the requirements of 6KV contact discharge and 12KV air discharge
Safety Standard	GB 4943.1-2011 Information technology equipment security - Part 1: General requirements	Ground Resistance: $\leq 0.1\Omega$ Electrical strength: limited leakage current 10mA, for class I equipment, the primary circuit on the housing withstand voltage $\geq 1.5KV$ AC or 2.2KV DC; For Class II equipment, the primary circuit withstand voltage of the housing $\geq 3.0KV$ AC or 4.3KV DC Insulation Resistance: $\geq 100M\Omega$ Drain current: current to the floor drain $\leq 3.5mA$
Environment	GB/T 9813.4-2017 General specification for computers - Part 4: Microcomputers for industrial applications GB/T 2423 Environment Test	Operating Temperature: $0^{\circ}C \sim 50^{\circ}C$ Storage Temperature: $-20^{\circ}C \sim 70^{\circ}C$ Humidity: $40^{\circ}C$ 95%RH Panel protection class: IP65 Fall in packaging: the machine is packed at a height of 1 meter, 8 edges and 6 sides fall once each Vibration: 5 ~ 5.5Hz, displacement 25.4mm; 5.5 ~ 200Hz/ acceleration 1.0g, working direction; The duration of the test is 1 cycle Impact: half sine pulse, peak acceleration 10g, pulse width 11ms, 3 times of impact in the working direction Noise: (0) dB

I/O Ports & Dimension



IO Ports



① WIFI ANT	⑦ POWER	⑬ USB2.0*2
② WIFI ANT	⑧ M3	⑭ LAN
③ USB(Res)	ground	⑮ AUDIO
④ USB(Res)	⑨ DC IN	⑯ COM
⑤ COM(Res)	⑩ HDMI	⑰ COM
⑥ COM(Res)	⑪ VGA	
	⑫ USB3.0*2	

Order Information

Product Model No.	Description	Remarks
KT-PPC1911	18.5"inch/Capacitive Touch/J1900/DDR3L 1333MHz 4GB/M-SATA 128GB	
KT-PPC1911G	18.5"inch/Capacitive Touch/J4125/DDR4 2133/2400MHz 4GB/M-SATA 128GB	
KT-PPC1911E	18.5"inch/Capacitive Touch/J6412/DDR4 3200MHz 4GB/M.2 2280 Sata 128GB	
KT-PPC1911S	18.5"inch/Capacitive Touch/6200U/DDR4 2133MHz 8GB/M.2 2280 NVME 256GB	
KT-PPC1911W	18.5"inch/Capacitive Touch/8145U/DDR4 2666MHz 8GB/M.2 2280 NVME 256GB	USB3.2 is Gen1 5Gbps



KT-PPC2111

- Support Intel® Bay Trail、Gemini lake、Elkhart Lake、6th Sky Lake &7th Kaby Lake、8th Whiskeylake &10th Cometlake-U Processor
- Support SO-DIMM ,M-SATA,M.2 Sata,M.2 NVME storage
- Industrial-grade 21.5" TFT LCD, capacitive touch,support tribrid display
- Standard 4USB,1LAN,support 2USB or multi COM ports expansion
- Support 1*MINI-PCIE(for WIFI),1*SIM, 3G,4G,5G modules
- Support VESA, wall mounted,desktop installation
- Fanelss&Patent industrial modeling Slim design
- Applied for MES,store display,self-service terminal etc



Specification

Model No.	KT-PPC2111	Indicator Light	Power status indicator reserved	Dimension	511x313x42mm
Display	21.5"inch	Loudspeaker	2*4Ω 3W	Weight	< 3.4kg
Touch	Capacitive touch	Heat dissipation	Fanless	Color	Grey
Resolution	1920*1080	Consumption	<29W (screen 15W),Gen 6-10 higher	Material	Aluminum alloy die-casting
Brightness	300cd/m²	Installation	Embedded,Wall-mount,Desktop		

Processor	Intel® Bay Trail J1900	Intel® Gemini lake J4125/J4105/N4000	Intel® Elkhart Lake J6412/J6413	Intel®Kaby Lake & Sky Lake (Gen 6-7)	Intel®8th Whiskeylake &10th Cometlake-U
BIOS	AMI BIOS	AMI BIOS	AMI BIOS	AMI BIOS	AMI BIOS
Chipset	Intel® SOC	Intel® SOC	Intel® SOC	Intel® SOC	Intel® SOC
Graphics	Intel®HD Graphics	Intel UHD Graphics 600	Intel® UHD Graphics	Intel® Graphics 610	Intel® UHD Graphics
Network	Realtek RTL8111	RTL8111H/RTL8111G	Realtek 8111H/8111G	Realtek RTL8111H/8111G	Realtek RLT8111H/8111G
Audio	Realtek ALC269HD	Realtek ALC269HD	Realtek ALC269HD	HS-100B Audio decoding controller	HS-100B USB Audio decoding controller
RAM	DDR3L 1333MHz Max 8G	DDR4 2133/2400MHz Max 8G	DDR4 3200MHz Max 32G	DDR4 2133MHz Max 32G	DDR4 2666MHz Max 32G
ROM	M-SATA 128G	M-SATA 128GB	M.2 2280 Sata 128GB	M.2 2280 NVME 256GB	M.2 2280 NVME 256GB
Function	Support WiFi,BT,4G,watchdog	Support WiFi,BT,4G,watchdog	Support WiFi,BT,4G,5G modules	Support WiFi,BT,4G modules	Support WiFi,BT,3G/4G,5G,self-booting with power, Hardware monitoring,wake on LAN
Up I/O	1*Power ON/OFF (LED) 2*Antenna 2*USB/2*COM (Res)	1*Power ON/OFF (LED) 2*Antenna 2*USB/2*COM (Res)	1*Power ON/OFF (LED) 2*Antenna 2*USB/2*COM (Res)	1*Power ON/OFF (LED) 2*Antenna 2*USB/2*COM (Res)	1*Power ON/OFF (LED) 2*Antenna 2*USB/2*COM (Res)
Down I/O	1*LINE-OUT 1*MIC-IN 1*LAN 3*USB2.0 1*USB3.0 1*HDMI 1*VGA 1*DC 2*COM232 1*M3 ground screw hole	1*LINE-OUT 1*MIC-IN 1*LAN 2*USB2.0 2*USB3.0 1*VGA 1*HDMI 1*DC 2*COM232 1*M3 ground screw hole	1*LINE-OUT 1*MIC-IN 1*LAN 2*USB2.0 2*USB3.2 Gen2 1*VGA 1*HDMI 1*DC 2*COM232 1*M3 ground screw hole	1*LINE-OUT 1*MIC-IN 1*LAN 2*USB2.0 2*USB3.0 1*VGA 1*HDMI 1*DC 2*COM232 1*CLR_CMOS button 1*M3 ground screw hole	1*LINE-OUT 1*MIC-IN 1*LAN 2*USB3.2 Gen2 2*USB3.2 Gen2 1*VGA 1*HDMI 1*DC 2*COM232 1*CLR_CMOS button Note:For Gen 8 U Processor,USB3.2 is Gen1 5Gbps
Power	DC 12V Input	DC 12V Input	DC 12V Input	DC 12V Input	DC 12V Input
OS	Windows 7 / Windows 10 / Linux				
Certificate	CE				

Environment

	National Standard	Parameters
EMC	GB/T 9254.1-2021 Radio disturbance limits and methods of measurement for information technology equipment	Radiation disturbance (B) grade Conduction disturbance (B) grade
	GB/T 17618-2015 Immunity limits and measurement methods for information technology equipment	Meet the requirements of 6KV contact discharge and 12KV air discharge
Safety Standard	GB 4943.1-2011 Information technology equipment security - Part 1: General requirements	Ground Resistance: $\leq 0.1\Omega$ Electrical strength: limited leakage current 10mA, for class I equipment, the primary circuit on the housing withstand voltage $\geq 1.5KV$ AC or 2.2KV DC; For Class II equipment, the primary circuit withstand voltage of the housing $\geq 3.0KV$ AC or 4.3KV DC Insulation Resistance: $\geq 100M\Omega$ Drain current: current to the floor drain $\leq 3.5mA$
Environment	GB/T 9813.4-2017 General specification for computers - Part 4: Microcomputers for industrial applications GB/T 2423 Environment Test	Operating Temperature: $0^{\circ}C \sim 50^{\circ}C$ Storage Temperature: $-20^{\circ}C \sim 70^{\circ}C$ Humidity: $40^{\circ}C$ 95%RH Panel protection class: IP65 Fall in packaging: the machine is packed at a height of 1 meter, 8 edges and 6 sides fall once each Vibration: 5 ~ 5.5Hz, displacement 25.4mm; 5.5 ~ 200Hz/ acceleration 1.0g, working direction; The duration of the test is 1 cycle Impact: half sine pulse, peak acceleration 10g, pulse width 11ms, 3 times of impact in the working direction Noise: (0) dB

I/O Ports & Dimension

IO Port

① WIFI ANT	⑦ POWER	⑬ USB2.0*2
② WIFI ANT	⑧ M3	⑭ LAN
③ USB(Res)	⑨ ground	⑮ AUDIO
④ USB(Res)	⑩ DC IN	⑯ COM
⑤ COM(Res)	⑪ HDMI	⑰ COM
⑥ COM(Res)	⑫ VGA	
	⑬ USB3.0*2	

Order Information

Product Model No.	Description	Remarks
KT-PPC2111	21.5"inch/Capacitive Touch/J1900/DDR3L 1333MHz 4GB/M-SATA 128GB	
KT-PPC2111G	21.5"inch/Capacitive Touch/J4125/DDR4 2133/2400MHz 4GB/M-SATA 128GB	
KT-PPC2111E	21.5"inch/Capacitive Touch/J6412/DDR4 3200MHz 4GB/M.2 2280 Sata 128GB	
KT-PPC2111S	21.5"inch/Capacitive Touch/6200U/DDR4 2133MHz 8GB/M.2 2280 NVME 256GB	
KT-PPC2111W	21.5"inch/Capacitive Touch/8145U/DDR4 2666MHz 8GB/M.2 2280 NVME 256GB	USB3.2 is Gen1 5Gbps



KT-PPC1021

- Support Rockchip RK3566/RK3568/RK3399 quad-core Processor
- Standard 2G (4G optional) LPDDR4X/LPDDR4, built-in 16G eMMC (32G/64G/128G optional)
- Industrial-grade 10.1" TFT LCD, capacitive touch, support dual display
- Supports multiple playback modes such as loop, timing, and interstitial
- Support 100 Mbit Ethernet, WiFi/BT4.1, wireless peripheral expansion
- Support VESA, wall mounted, desktop installation
- Fanless & Patent industrial modeling Slim design
- Applied for MES, store display, self-service terminal etc



Specification

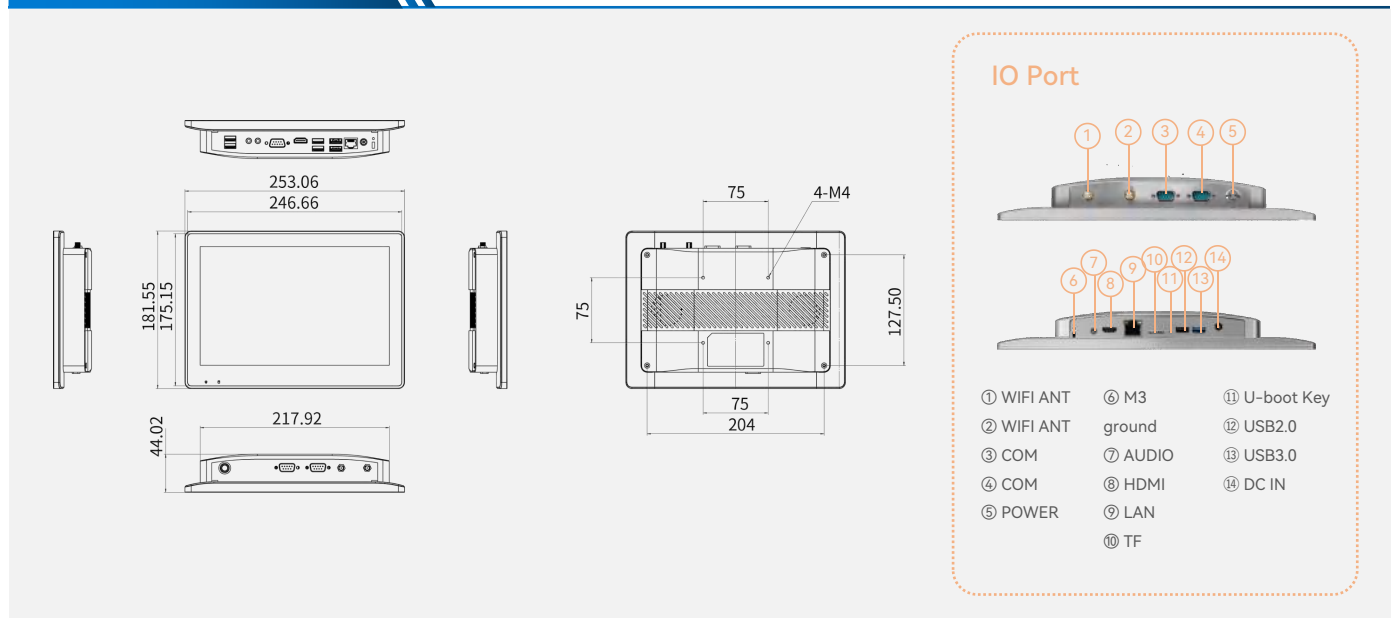
Model No.	KT-PPC1021	Indicator Light	Power status indicator reserved	Dimension	253x182x44mm
Display	10.1" inch	Loudspeaker	2*4Ω 3W	Weight	< 1.8kg
Touch	Capacitive touch	Heat dissipation	Fanless	Color	Grey
Resolution	1280*800/1920*1200	Consumption	< 7W (screen 3.5W)	Material	Aluminum alloy die-casting
Brightness	300cd/m²	Installation	Embedded, Wall-mount, Desktop		

CPU	Rockchip RK3566UP to 2.0GHz	Rockchip RK3568UP to 2GHz	Rockchip RK3399 up to 64 bit high performance CPU, 2.0GHz dual Cortex-A72 big+quad Cortex-A53 small 64-bit CPU low consumption MCU Cortex-M0
GPU	Mali-G52-2EE high performance GPU	Mali-G52-2EE high performance GPU	Quad-core ARM Mali-T860MP4 high performance GPU
NPU	NPU support 0.8T	NPU support 0.8T	/
RAM	2G LPDDR4X/LPDDR4	2G LPDDR4X/LPDDR4	4G LPDDR4
ROM	EMMC16G (32G optional)	EMMC16G (32G optional)	EMMC16G (32G optional)
Decoding Resolution	1080P/H.265(4K2K)	1080P/H.265(4K2K)	1080P/H.265(4K2K)
Play Mode	Support loop, timing, and interstitial etc	Support loop, timing, and interstitial etc	Support loop, timing, and interstitial etc
Network	100 Mbit Ethernet, support WiFi/BT4.1, wireless peripheral expansion	100 Mbit Ethernet, support WiFi/BT4.1, wireless peripheral expansion	100 Mbit Ethernet, support WiFi/BT4.1, wireless peripheral expansion
Function	Support RTC real-time clock, hardware watchdog, timing switch; TF card/computer update; TF/USB automatically imports screen parameters	Support RTC real-time clock, hardware watchdog, timing switch; TF card/computer update; TF/USB automatically imports screen parameters	Support RTC real-time clock, hardware watchdog, timing switch; TF card/computer update; TF/USB automatically imports screen parameters
Up I/O	2*Antenna 1*Power ON/OFF 2*USB2.0/COM (Reserved)	2*Antenna 1*Power ON/OFF 2*USB2.0/COM (Reserved)	2*Antenna 1*Power ON/OFF 2*USB2.0/COM (Reserved)
Down I/O	1*AUDIO 1*HDMI 1*LAN 1*TF Slot 1*U-boot Key 1*USB3.0 1*USB2.0 1*DC 2*COM 1*M3 ground screw hole	1*AUDIO 1*HDMI 1*LAN 1*TF Slot 1*U-boot Key 1*USB3.0 1*USB2.0 1*DC 2*COM 1*M3 ground screw hole	1*AUDIO 1*HDMI 1*LAN 1*TF Slot 1*U-boot Key 1*USB3.0 1*USB2.0 1*DC 2*COM 1*M3 ground screw hole
Power	DC 12V Input	DC 12V Input	DC 12V Input
OS	Android 11.0	Android 11.0	Android 8.1
Certificate	CE		

Environment

	National Standard	Parameters
EMC	GB/T 9254.1-2021 Radio disturbance limits and methods of measurement for information technology equipment	Radiation disturbance (B) grade Conduction disturbance (B) grade
	GB/T 17618-2015 Immunity limits and measurement methods for information technology equipment	Meet the requirements of 6KV contact discharge and 12KV air discharge
Safety Standard	GB 4943.1-2011 Information technology equipment security - Part 1: General requirements	Ground Resistance: $\leq 0.1\Omega$ Electrical strength: limited leakage current 10mA, for class I equipment, the primary circuit on the housing withstand voltage $\geq 1.5KV$ AC or 2.2KV DC; For Class II equipment, the primary circuit withstand voltage of the housing $\geq 3.0KV$ AC or 4.3KV DC Insulation Resistance: $\geq 100M\Omega$ Drain current: current to the floor drain $\leq 3.5mA$
Environment	GB/T 9813.4-2017 General specification for computers - Part 4: Microcomputers for industrial applications GB/T 2423 Environment Test	Operating Temperature: $0^{\circ}C \sim 50^{\circ}C$ Storage Temperature: $-20^{\circ}C \sim 70^{\circ}C$ Humidity: $40^{\circ}C$ 95%RH Panel protection class: IP65 Fall in packaging: the machine is packed at a height of 1 meter, 8 edges and 6 sides fall once each Vibration: $5 \sim 5.5Hz$, displacement 25.4mm; $5.5 \sim 200Hz$ / acceleration 1.0g, working direction; The duration of the test is 1 cycle Impact: half sine pulse, peak acceleration 10g, pulse width 11ms, 3 times of impact in the working direction Noise: (0) dB

I/O Ports & Dimension



Order Information

Product Model No.	Description	Remarks
KT-PPC1021	10.1"inch/Capacitive Touch/ RK3566/ 2G LPDDR4X/LPDDR4/EMMC16G	
KT-PPC1022	10.1"inch/Capacitive Touch/ RK3568 / 2G LPDDR4X/LPDDR4/EMMC16G	
KT-PC1023	10.1"inch/Capacitive Touch/ RK3599/ 2G LPDDR4X/LPDDR4/EMMC16G	



KT-PPC1521

- Support Rockchip RK3566/RK3568/RK3399 quad-core Processor
- Standard 2G (4G optional) LPDDR4X/LPDDR4, built-in 16G eMMC (32G/64G/128G optional)
- Industrial-grade 15.6" TFT LCD, capacitive touch, support dual display
- Supports multiple playback modes such as loop, timing, and interstitial
- Support 100 Mbit Ethernet, WiFi/BT4.1, wireless peripheral expansion
- Support VESA, wall mounted, desktop installation
- Fanless & Patent industrial modeling Slim design
- Applied for MES, store display, self-service terminal etc



Specification

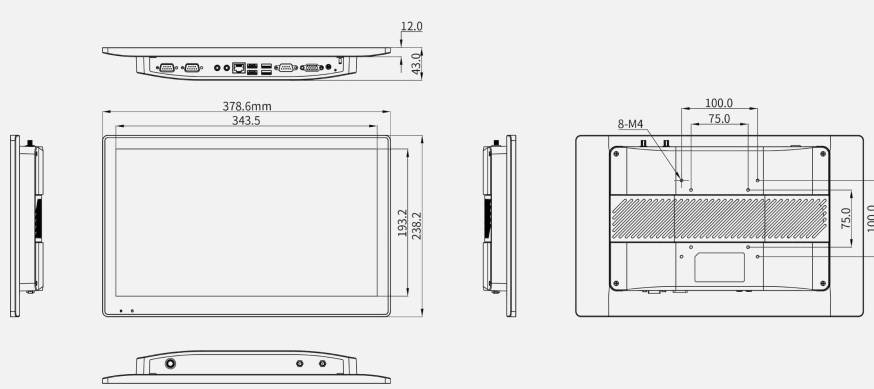
Model No.	KT-PPC1521	Indicator Light	Power status indicator reserved	Dimension	379x238x43mm
Display	15.6" inch	Loudspeaker	2* 4Ω 3W	Weight	< 2.5kg
Touch	Capacitive touch	Heat dissipation	Fanless	Color	Grey
Resolution	1920*1080	Consumption	< 9W (screen 3.5W)	Material	Aluminum alloy die-casting
Brightness	300cd/m²	Installation	Embedded, Wall-mount, Desktop		

CPU	Rockchip RK3566UP to 2.0GHz	Rockchip RK3568UP to 2GHz	Rockchip RK3399 up to 64 bit high performance CPU, 2.0GHz dual Cortex-A72 big+quad Cortex-A53 small 64-bit CPU low consumption MCU Cortex-M0
GPU	Mali-G52-2EE high performance GPU	Mali-G52-2EE high performance GPU	四核ARM Mali-T860MP4 high performance GPU
NPU	NPU support 0.8T	NPU support 0.8T	/
RAM	2G LPDDR4X/LPDDR4	2G LPDDR4X/LPDDR4	4G LPDDR4
ROM	EMMC16G (32G optional)	EMMC16G (32G optional)	EMMC16G (32G optional)
Decoding Resolution	1080P/H.265(4K2K)	1080P/H.265(4K2K)	1080P/H.265(4K2K)
Play Mode	Support loop, timing, and interstitial etc	Support loop, timing, and interstitial etc	Support loop, timing, and interstitial etc
Network	100 Mbit Ethernet, support WiFi/BT4.1, wireless peripheral expansion	100 Mbit Ethernet, support WiFi/BT4.1, wireless peripheral expansion	100 Mbit Ethernet, support WiFi/BT4.1, wireless peripheral expansion
Function	Support RTC real-time clock, hardware watchdog, timing switch; TF card/computer update; TF/USB automatically imports screen parameters	Support RTC real-time clock, hardware watchdog, timing switch; TF card/computer update; TF/USB automatically imports screen parameters	Support RTC real-time clock, hardware watchdog, timing switch; TF card/computer update; TF/USB automatically imports screen parameters
Up I/O	2*Antenna 1*Power ON/OFF 2*USB2.0/COM (Reserved)	2*Antenna 1*Power ON/OFF 2*USB2.0/COM (Reserved)	2*Antenna 1*Power ON/OFF 2*USB2.0/COM (Reserved)
Down I/O	1*AUDIO 1*HDMI 1*LAN 1*TF Slot 1*U-boot Key 1*USB3.0 1*USB2.0 1*DC 2*COM 1*M3 ground screw hole	1*AUDIO 1*HDMI 1*LAN 1*TF Slot 1*U-boot Key 1*USB3.0 1*USB2.0 1*DC 2*COM 1*M3 ground screw hole	1*AUDIO 1*HDMI 1*LAN 1*TF Slot 1*U-boot Key 1*USB3.0 1*USB2.0 1*DC 2*COM 1*M3 ground screw hole
Power	DC 12V Input	DC 12V Input	DC 12V Input
OS	Android 11.0	Android 11.0	Android 8.1
Certificate	CE		

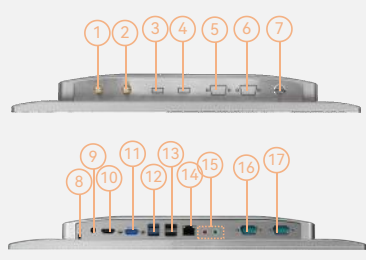
Environment

	National Standard	Parameters
EMC	GB/T 9254.1-2021 Radio disturbance limits and methods of measurement for information technology equipment	Radiation disturbance (B) grade Conduction disturbance (B) grade
	GB/T 17618-2015 Immunity limits and measurement methods for information technology equipment	Meet the requirements of 6KV contact discharge and 12KV air discharge
Safety Standard	GB 4943.1-2011 Information technology equipment security - Part 1: General requirements	Ground Resistance: $\leq 0.1\Omega$ Electrical strength: limited leakage current 10mA, for class I equipment, the primary circuit on the housing withstand voltage $\geq 1.5KV$ AC or 2.2KV DC; For Class II equipment, the primary circuit withstand voltage of the housing $\geq 3.0KV$ AC or 4.3KV DC Insulation Resistance: $\geq 100M\Omega$ Drain current: current to the floor drain $\leq 3.5mA$
Environment	GB/T 9813.4-2017 General specification for computers - Part 4: Microcomputers for industrial applications GB/T 2423 Environment Test	Operating Temperature: $0^{\circ}C \sim 50^{\circ}C$ Storage Temperature: $-20^{\circ}C \sim 70^{\circ}C$ Humidity: $40^{\circ}C$ 95%RH Panel protection class: IP65 Fall in packaging: the machine is packed at a height of 1 meter, 8 edges and 6 sides fall once each Vibration: 5 ~ 5.5Hz, displacement 25.4mm; 5.5 ~ 200Hz/ acceleration 1.0g, working direction; The duration of the test is 1 cycle Impact: half sine pulse, peak acceleration 10g, pulse width 11ms, 3 times of impact in the working direction Noise: (0) dB

I/O Ports & Dimension



IO Port



① WIFI ANT	⑦ POWER	⑬ USB2.0*2
② WIFI ANT	⑧ M3	⑭ LAN
③ USB(Res)	⑨ ground	⑮ AUDIO
④ USB(Res)	⑩ DC IN	⑯ COM
⑤ COM(Res)	⑪ HDMI	⑰ COM
⑥ COM(Res)	⑫ VGA	
	⑬ USB3.0*2	

Order Information

Product Model No.	Description	Remarks
KT-PPC1521	15.6"inch/Capacitive Touch/ RK3566/ 2G LPDDR4X/LPDDR4/EMMC16	
KT-PPC1522	15.6"inch/Capacitive Touch/ RK3568 / 2G LPDDR4X/LPDDR4/EMMC16G	
KT-PPC1523	15.6"inch/Capacitive Touch/ RK3599/ 2G LPDDR4X/LPDDR4/EMMC16G	

KT-PPC2121



- Support Rockchip RK3566/RK3568/RK3399 quad-core Processor
- Standard 2G (4G optional) LPDDR4X/LPDDR4, built-in 16G eMMC (32G/64G/128G optional)
- Industrial-grade 21.5" TFT LCD, capacitive touch, support dual display
- Supports multiple playback modes such as loop, timing, and interstitial
- Support 100 Mbit Ethernet, WiFi/BT4.1, wireless peripheral expansion
- Support VESA, wall mounted, desktop installation
- Fanless & Patent industrial modeling Slim design
- Applied for MES, store display, self-service terminal etc



Specification

Model No	KT-PPC2121	Indicator Light	Power status indicator reserved	Dimension	512x314x56mm
Display	21.5" inch	Loudspeaker	2*4Ω 3W	Weight	< 3.4kg
Touch	Capacitive touch	Heat dissipation	Fanless	Color	Grey
Resolution	1920*1080	Consumption	< 19W (screen 15W)	Material	Aluminum alloy die-casting
Brightness	300cd/m²	Installation	Embedded, Wall-mount, Desktop		

CPU	Rockchip RK3566UP to 2.0GHz	Rockchip RK3568UP to 2GHz	Rockchip RK3399 up to 64 bit high performance CPU, 2.0GHz dual Cortex-A72 big+quad Cortex-A53 small 64-bit CPU low consumption MCU Cortex-M0
GPU	Mali-G52-2EE high performance GPU	Mali-G52-2EE high performance GPU	四核ARM Mali-T860MP4 high performance GPU
NPU	NPU support 0.8T	NPU support 0.8T	/
RAM	2G LPDDR4X/LPDDR4	2G LPDDR4X/LPDDR4	4G LPDDR4
ROM	EMMC16G (32G optional)	EMMC16G (32G optional)	EMMC16G (32G optional)
Decoding Resolution	1080P/H.265(4K2K)	1080P/H.265(4K2K)	1080P/H.265(4K2K)
Play Mode	Support loop, timing, and interstitial etc	Support loop, timing, and interstitial etc	Support loop, timing, and interstitial etc
Network	100 Mbit Ethernet, support WiFi/BT4.1, wireless peripheral expansion	100 Mbit Ethernet, support WiFi/BT4.1, wireless peripheral expansion	100 Mbit Ethernet, support WiFi/BT4.1, wireless peripheral expansion
Function	Support RTC real-time clock, hardware watchdog, timing switch; TF card/computer update; TF/USB automatically imports screen parameters	Support RTC real-time clock, hardware watchdog, timing switch; TF card/computer update; TF/USB automatically imports screen parameters	Support RTC real-time clock, hardware watchdog, timing switch; TF card/computer update; TF/USB automatically imports screen parameters
Up I/O	2*Antenna 1*Power ON/OFF 2*USB2.0/COM (Reserved)	2*Antenna 1*Power ON/OFF 2*USB2.0/COM (Reserved)	2*Antenna 1*Power ON/OFF 2*USB2.0/COM (Reserved)
Down I/O	1*AUDIO 1*HDMI 1*LAN 1*TF Slot 1*U-boot Key 1*USB3.0 1*USB2.0 1*DC 2*COM 1*M3 ground screw hole	1*AUDIO 1*HDMI 1*LAN 1*TF Slot 1*U-boot Key 1*USB3.0 1*USB2.0 1*DC 2*COM 1*M3 ground screw hole	1*AUDIO 1*HDMI 1*LAN 1*TF Slot 1*U-boot Key 1*USB3.0 1*USB2.0 1*DC 2*COM 1*M3 ground screw hole
Power	DC 12V Input	DC 12V Input	DC 12V Input
OS	Android 11.0	Android 11.0	Android 8.1
Certificate	CE		

Environment

	National Standard	Parameters
EMC	GB/T 9254.1-2021 Radio disturbance limits and methods of measurement for information technology equipment	Radiation disturbance (B) grade Conduction disturbance (B) grade
	GB/T 17618-2015 Immunity limits and measurement methods for information technology equipment	Meet the requirements of 6KV contact discharge and 12KV air discharge
Safety Standard	GB 4943.1-2011 Information technology equipment security - Part 1: General requirements	Ground Resistance: $\leq 0.1\Omega$ Electrical strength: limited leakage current 10mA, for class I equipment, the primary circuit on the housing withstand voltage $\geq 1.5KV$ AC or 2.2KV DC; For Class II equipment, the primary circuit withstand voltage of the housing $\geq 3.0KV$ AC or 4.3KV DC Insulation Resistance: $\geq 100M\Omega$ Drain current: current to the floor drain $\leq 3.5mA$
Environment	GB/T 9813.4-2017 General specification for computers - Part 4: Microcomputers for industrial applications GB/T 2423 Environment Test	Operating Temperature: $0^{\circ}C \sim 50^{\circ}C$ Storage Temperature: $-20^{\circ}C \sim 70^{\circ}C$ Humidity: $40^{\circ}C$ 95%RH Panel protection class: IP65 Fall in packaging: the machine is packed at a height of 1 meter, 8 edges and 6 sides fall once each Vibration: 5 ~ 5.5Hz, displacement 25.4mm; 5.5 ~ 200Hz/ acceleration 1.0g, working direction; The duration of the test is 1 cycle Impact: half sine pulse, peak acceleration 10g, pulse width 11ms, 3 times of impact in the working direction Noise: (0) dB

I/O Ports & Dimension

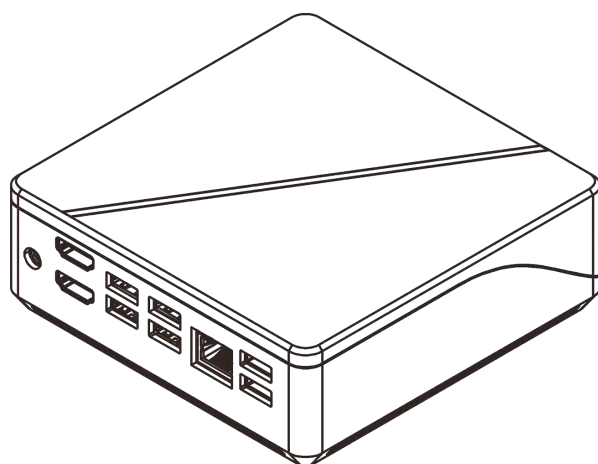
IO Port

① WIFI ANT	⑦ POWER	⑬ LAN
② WIFI ANT	⑧ M3	⑭ TF
③ USB(Res)	ground	⑮ U-boot Key
④ USB(Res)	⑨ COM	⑯ USB2.0
⑤ COM(Res)	⑩ COM	⑰ USB3.0
⑥ COM(Res)	⑪ AUDIO	⑱ DC IN
	⑫ HDMI	

Order Information

Product Model No.	Description	Remarks
KT-PPC2121	21.5"inch/Capacitive Touch/ RK3566/ 2G LPDDR4X/LPDDR4/EMMC16G	
KT-PPC2122	21.5"inch/Capacitive Touch/ RK3568 / 2G LPDDR4X/LPDDR4/EMMC16G	
KT-PPC2123	21.5"inch/Capacitive Touch/ RK3599/ 2G LPDDR4X/LPDDR4/EMMC16G	

KT-BOX1012



1. Support Intel®Pentium®Silver and Intel®Celeron®Processor Alder lake –P Series Processor
2. Support DDR4 3200MHz, M.2 SATA,M.2 NVME storage
3. Standard 2*HDMI ports,supports dual display and asynchronous
4. Support 1*MINI-PCIE(for WIFI),1*SIM,4G/5G module
5. Support wall mounted and desktop installation
6. 12V Power Supply,high performance active cooling design, equipped with silent fan, stable and reliable
7. Applied for commercial office, personal portable computer, e-commerce, training and education fields



Specification

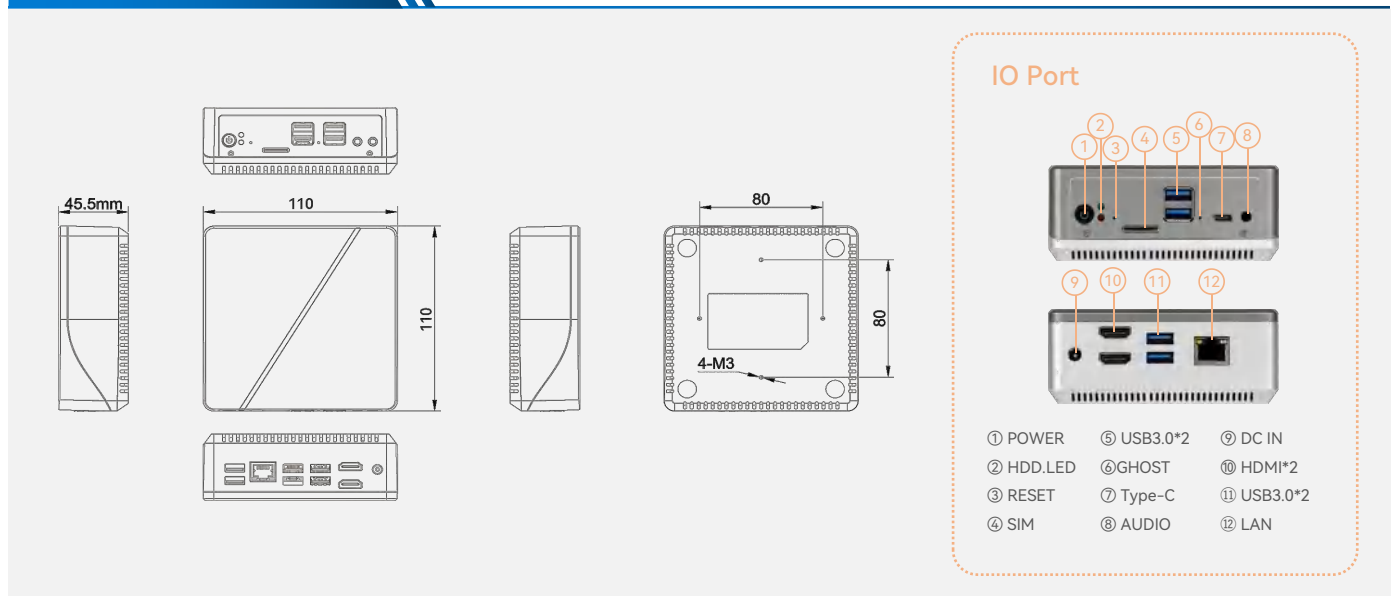
Model No.	KT-BOX1012		
Dimension (mm)	≤ 110x110x46mm	Indicator Light	Power status indicator, integrated with the power button
Weight(kg)	≤ 0.4kg	Heat dissipation	High performance active cooling design,silent fan
Color	Grey	Consumption	< 15W
Material	Aluminum alloy die-casting +ABS	Installation	Embedded,Desktop

Processor	Alder Lake
BIOS	AMI BIOS
Chipset	Intel® SOC
Graphics	Intel® HD Graphics
Network	1*i226V,1*RTL8111H(optional)
Audio	Realtek ALC897
RAM	DDR4 3200MHz Max 32GB
ROM	M.2 2280 NVME 256GB SSD
Function	Support WiFi,BT,4G,diskless booting,self-booting with power,wake on LAN
Front I/O	1*Power ON/OFF (LED) 1*HDD_LED 1*SIM Slot 2*USB3.2 (10Gbps) 1*Full functional Type-C 1*microSD Slot 1*Audio
Rear I/O	4*USB2.0 1*Type-C (Power) 2*LAN 1*ghost&cl_cmos button 1*HDMI 1*VGA (optional) 1*RS232 COM (optional)
Power Supply	DC 12V Input
OS	WIN10 / Linux
Certificate	CE

Environment

	National Standard	Parameters
EMC	GB/T 9254.1-2021 Radio disturbance limits and methods of measurement for information technology equipment	Radiation disturbance (B) grade Conduction disturbance (B) grade
	GB/T 17618-2015 Immunity limits and measurement methods for information technology equipment	Meet the requirements of 6KV contact discharge and 12KV air discharge
Safety Standard	GB 4943.1-2011 Information technology equipment security - Part 1: General requirements	Ground Resistance: $\leq 0.1\Omega$ Electrical strength: limited leakage current 10mA, for class I equipment, the primary circuit on the housing withstand voltage $\geq 1.5KV$ AC or 2.2KV DC; For Class II equipment, the primary circuit withstand voltage of the housing $\geq 3.0KV$ AC or 4.3KV DC Insulation Resistance: $\geq 100M\Omega$ Drain current: current to the floor $\leq 3.5mA$
Environment	GB/T 9813.4-2017 General specification for computers - Part 4: Microcomputers for industrial applications GB/T 2423 Environment Test	Operating Temperature: $0^{\circ}C \sim 50^{\circ}C$ Storage Temperature: $-20^{\circ}C \sim 70^{\circ}C$ Humidity: $40^{\circ}C$ 95%RH Panel protection class: IP65 Fall in packaging: the machine is packed at a height of 1 meter, 8 edges and 6 sides fall once each Vibration: $5 \sim 5.5Hz$, displacement 25.4mm; $5.5 \sim 200Hz$ / acceleration 1.0g, working direction; The duration of the test is 1 cycle Impact: half sine pulse, peak acceleration 10g, pulse width 11ms, 3 times of impact in the working direction Noise: (0) dB

I/O Ports & Dimension



Order Information

Product Model No.	Description	Remarks
KT-BOX1012	Intel 12th/13th Processors PS Series/DDR4 3200MHz 8GB/M.2 2280 NVME 128GB	



KT-BOX1211

- Support Intel® Gemini lake, Gen 11 Tiger Lake Processor
- Support SO-DIMM, M-SATA, M.2 SATA, M.2 NVME storage
- Standard 2*HDMI, 1*DP/VGA, support dual/tribrid and asynchronous display
- Standard 2*LAN, Support 4*COM expansion
- Support 1*MINI-PCIE (for WIFI), 1*SIM, 3G, 4G, 5G modules
- Support embedded, wall mounted, desktop installation
- 12~19V Wide Voltage input; High performance active cooling & Silent Fan & Robustness design
- Applied for Commercial office, personal portable host, e-commerce, training and education etc



Specification

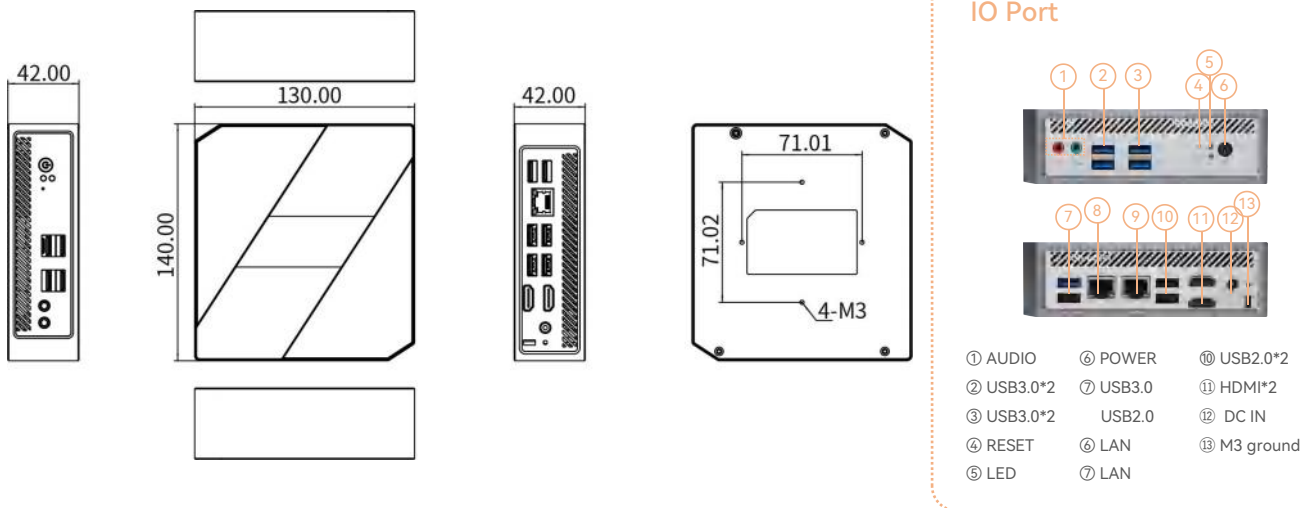
Model No.	KT-BOX1211		
Dimension ≤ (mm)	≤ 140x130x42mm	Indicator Light	Power status indicator, integrated with the power button
Weight(kg)	≤ 0.6kg	Heat dissipation	High performance active cooling design, silent fan
Color	Grey	Consumption	< 15W
Material	Aluminum alloy die-casting	Installation	Embedded, Wall mount, Desktop

Processor	Gemini Lake	Tiger Lake
BIOS	AMI BIOS	AMI BIOS
Chipset	Intel® SOC	Intel® SOC
Graphics	Intel® UHD Graphics 600	Intel® HD Graphics
Network	2*RTL8111H/8111G	1*I226V, 1*RTL8111H (optional)
Audio	Realtek ALC662/ALC887	Realtek ALC897
RAM	DDR4 2133/2400MHz Max 8G	DDR4 3200MHz Max 32GB
ROM	M.2 2280 SATA 128GB	M.2 2280 NVME 256GB SSD
Function	Support WiFi, BT, 4G, watchdog, diskless booting, self-booting with power, wake on LAN	Support WiFi, BT, 4G, watchdog, diskless booting, self-booting with power, wake on LAN
Front I/O	1*Power ON/OFF (LED) 2*LED (HDD&WiFi) 1*Reset&CLR_CMOS button 4*USB3.0 1*LINE-OUT 1*MIC-IN	1*Power ON/OFF (LED) 1*HDD_LED 2*USB3.2 (10Gbps) 1*Full functional Type-C 1*microSD Slot 1*Audio
Rear I/O	1*USB2.0 1*USB3.0 2*LAN 2*USB2.0 2*HDMI 1*DC IN 1*M3 ground screw hole	4*USB2.0 1*Type-C (Power) 2*LAN 1*ghost&clr_cmos button 1*HDMI 1*VGA (optional) 1*RS232 COM (optional) 1*M3 ground screw hole
Power Supply	DC 12~19V Input	DC 12V Input
OS	WIN10 / Linux	
Certificate	CE	

Environment

	National Standard	Parameters
EMC	GB/T 9254.1-2021 Radio disturbance limits and methods of measurement for information technology equipment	Radiation disturbance (B) grade Conduction disturbance (B) grade
	GB/T 17618-2015 Immunity limits and measurement methods for information technology equipment	Meet the requirements of 6KV contact discharge and 12KV air discharge
Safety Standard	GB 4943.1-2011 Information technology equipment security - Part 1: General requirements	Ground Resistance: $\leq 0.1\Omega$ Electrical strength: limited leakage current 10mA, for class I equipment, the primary circuit on the housing withstand voltage $\geq 1.5KV$ AC or 2.2KV DC; For Class II equipment, the primary circuit withstand voltage of the housing $\geq 3.0KV$ AC or 4.3KV DC Insulation Resistance: $\geq 100M\Omega$ Drain current: current to the floor drains $\leq 3.5mA$
Environment	GB/T 9813.4-2017 General specification for computers - Part 4: Microcomputers for industrial applications GB/T 2423 Environment Test	Operating Temperature: $0^{\circ}C \sim 50^{\circ}C$ Storage Temperature: $-20^{\circ}C \sim 70^{\circ}C$ Humidity: $40^{\circ}C$ 95%RH Panel protection class: IP65 Fall in packaging: the machine is packed at a height of 1 meter, 8 edges and 6 sides fall once each Vibration: $5 \sim 5.5Hz$, displacement 25.4mm; $5.5 \sim 200Hz$ / acceleration 1.0g, working direction; The duration of the test is 1 cycle Impact: half sine pulse, peak acceleration 10g, pulse width 11ms, 3 times of impact in the working direction Noise: (0) dB

I/O Ports & Dimension



Order Information

Product Modle NO.	Description	Remarks
KT-BOX1211	Intel® Celeron J4125/DDR3L 1333MHz 4GB/M-SATA 128GB	



KT-BOX1212

- Support Intel® Gemini lake,Gen 11 Tiger Lake Processor
- Support SO-DIMM,M-SATA,M.2 Sata,M.2 NVME storage
- Standard 2*HDMI,1*DP/VGA,support dual/tribrid and asynchronous display
- Standard 2*LAN,Support 4*COM expansion
- Support 1*MINI-PCIE(for WIFI),1*SIM,3G,4G,5G modules
- Support embedded, wall mounted, desktop installation
- 12~19V Wide Voltage input; High performance active cooling & Silent Fan & Robustness design
- Applied for Commercial office, personal portable host, e-commerce, training and education etc



Specification

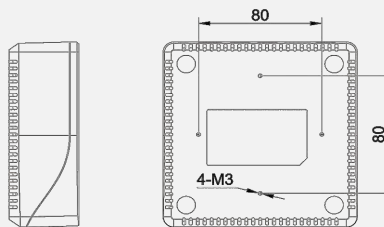
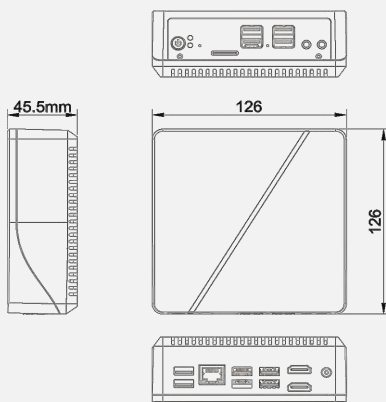
Model No.	BOX-1212		
Dimension(mm)	≤ 126x126x45mm	Indicator Light	Power status indicator, integrated with the power button
Weight (kg)	≤ 0.5kg	Heat dissipation	High performance active cooling design,silent fan
Color	Grey	Consumption	< 15W
Material	Aluminum alloy die-casting+ABS	Installation	Embedded,Wall mount,Desktop

BIOS	AMI BIOS	AMI BIOS
Processor	Gemini Lake	Tiger Lake
Chipset	Intel® SOC	Intel® SOC
Graphics	Intel® UHD Graphics 600	Intel® HD Graphics
Network	2*RTL8111H/8111G	2*RTL8111H/8111G
Audio	Realtek ALC662/ALC887	Realtek ALC662HD
RAM	DDR4 2133/2400MHz Max 16G	DDR4 2666MHz Max 32G
ROM	M.2 2280 Sata 128GB	M.2 2280 NVME128GB
Function	Support WiFi,BT,4G,watchdog,diskless booting,self-booting with power,wake on LAN	Support WiFi,BT,4G,watchdog,diskless booting,self-booting with power,wake on LAN
Front I/O	1*Power ON/OFF (LED) 2*LED (HDD&WiFi) 1*Reset&CLR_CMOS Button 1*SIM Slot 4*USB3.0 1*Ghost Button 1*LINE-OUT 1*MIC-IN	1*Power ON/OFF (LED) 2*LED (HDD&WiFi) 1*Reset&CLR_CMOS Button 1*SIM Slot 4*USB3.0 1*Ghost Button 1*LINE-OUT 1*MIC-IN
Rear I/O	3*USB2.0 1*USB3.0 1*LAN 2*USB2.0 2*HDMI 1*DC IN	3*USB2.0 1*USB3.0 1*LAN 2*USB2.0 2*HDMI 1*DC IN
Power Supply	DC 12~19V Input	DC 12V Input
OS	WIN10 / Linux	
Certificate	CE	

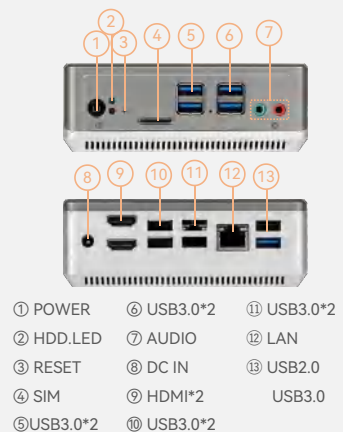
Environment

	National Standard	Parameters
EMC	GB/T 9254.1-2021 Radio disturbance limits and methods of measurement for information technology equipment	Radiation disturbance (B) grade Conduction disturbance (B) grade
	GB/T 17618-2015 Immunity limits and measurement methods for information technology equipment	Meet the requirements of 6KV contact discharge and 12KV air discharge
Safety Standard	GB 4943.1-2011 Information technology equipment security - Part 1: General requirements	Ground Resistance: $\leq 0.1\Omega$ Electrical strength: limited leakage current 10mA, for class I equipment, the primary circuit on the housing withstand voltage $\geq 1.5KV$ AC or 2.2KV DC; For Class II equipment, the primary circuit withstand voltage of the housing $\geq 3.0KV$ AC or 4.3KV DC Insulation Resistance: $\geq 100M\Omega$ Drain current: current to the floor drains $\leq 3.5mA$
Environment	GB/T 9813.4-2017 General specification for computers - Part 4: Microcomputers for industrial applications GB/T 2423 Environment Test	Operating Temperature: $0^{\circ}C \sim 50^{\circ}C$ Storage Temperature: $-20^{\circ}C \sim 70^{\circ}C$ Humidity: $40^{\circ}C$ 95%RH Panel protection class: IP65 Fall in packaging: the machine is packed at a height of 1 meter, 8 edges and 6 sides fall once each Vibration: 5 ~ 5.5Hz, displacement 25.4mm; 5.5 ~ 200Hz/ acceleration 1.0g, working direction; The duration of the test is 1 cycle Impact: half sine pulse, peak acceleration 10g, pulse width 11ms, 3 times of impact in the working direction Noise: (0) dB

I/O Ports & Dimension



IO Port



Order Information

Product Model NO.	Description	Remarks
KT-BOX1212	J1900/DDR3L 1333MHz 4GB/M-SATA 128GB	

KT-BOX1711



- Support Intel® Bay Trail, Gemini lake, Elkhart Lake, Gen 6th Sky Lake & 7th Kaby Lake, 8th Whiskeylake & 10th Cometlake-U Processor
- Support SO-DIMM,M-SATA,M.2 SATA,M.2 NVME storage
- Support VGA,HDMI dual display (Synchronous/Asynchronous)
- Standard 6*USB,1*LAN,support multi COM expansion
- 1*Mini-PCIE(for WiFi),1*SIM, 3G, 4G, and 5G modules
- Support horizontal& vertical installation,Wall-mount installation
- Fanless,aluminum alloy shell, air fluid mechanics heat dissipation design
- Applied for industrial equipment, GPS navigation, environmental online monitoring, government agencies, telecommunications, banking, electric power etc



Specification

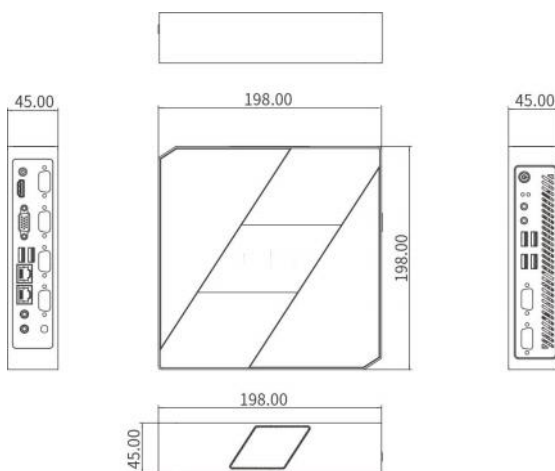
Model No.	KT-BOX1711		
Dimension(mm)	198x198x45mm	Indicator Light	Power status indicator, integrated with the power button
Weight(kg)	≤ 2.2kg	Heat dissipation	Atom&4-6th U-series Fanless passive heat dissipation design,6-11th non-Useries with Fan
Color	Grey	Consumption	< 15W,6th-10th higher higher
Material	Aluminum alloy die-casting	Installation	Embedded,Wall mount,Desktop

Prcessor	Intel® Bay Trail J1900	Intel® Gemini lake J4125/J4105/N4000	Intel® Elkhart Lake J6412/J6413	Intel®Kaby Lake & Sky Lake (Gen 6-7)	Intel®8th Whiskeylake &10th Cometlake-U
BIOS	AMI BIOS	AMI BIOS	AMI BIOS	AMI BIOS	AMI BIOS
Chipset	Intel® SOC	Intel® SOC	Intel® SOC	Intel® SOC	Intel® SOC
Graphics	Intel®HD Graphics	Intel UHD Graphics 600	Intel® UHD Graphics	Intel® Graphics 610	Intel® UHD Graphics
Network	Realtek RTL8111E	RTL8111H/RTL8111G	Realtek 8111H/8111G	Realtek RTL8111H/8111G	Realtek RLT8111H/8111G
Audio	Realtek ALC662HD	Realtek ALC269HD	HS-100B Audio decoding controller	HS-100B Audio decoding controller	HS-100B USB Audio decoding controller
RAM	DDR3L 1333MHz Max 8GB	DDR4 2133/2400MHz Max 8GB	DDR4 3200MHz Max 32GB	DDR4 2133MHz Max 32GB	DDR4 2666MHz Max 32GB
ROM	M-SATA 128GB	M-SATA 128GB	M.2 2280 Sata 128GB	M.2 2280 NVME 256GB	M.2 2280 NVME 256GB
Function	Support WiFi, BT、4G、Watchdog	Support WiFi, BT、4G、Watchdog	Support WiFi, BT、4G、5G	Support WiFi, BT、4G	Support WiFi,BT,3G/4G,5G,,watch dog,hardware monitoring,self-booting with power,wake on LAN
Front I/O	1*Power ON/OFF (LED) 2*LED(HDD、POWER) 1*LINE-OUT 1*MIC-IN 2*USB2.0 2*USB3.0(Correspondin g mainboard) 2*COM(Res)	1*Power ON/OFF (LED) 2*LED(HDD、POWER) 1*LINE-OUT 1*MIC-IN 2*USB2.0 2*USB3.0(Corresponding mainboard) 2*COM(Res)	1*Power ON/OFF (LED) 2*LED(HDD、POWER) 1*LINE-OUT 1*MIC-IN 2*USB2.0 2*USB3.0(Corresponding mainboard) 2*COM(Res)	1*Power ON/OFF (LED) 2*LED(HDD、POWER) 1*LINE-OUT 1*MIC-IN 2*USB2.0 2*USB3.0(Corresponding mainboard) 2*COM(Res)	1*Power ON/OFF (LED) 2*LED(HDD、POWER) 1*LINE-OUT 1*MIC-IN 2*USB2.0 2*USB3.0((Corresponding mainboard) 2*COM(Res)
Rear I/O	1*LINE-OUT 1*MIC-IN 1*LAN 2*USB2.0 2*USB3.0 1*HDMI 1*VGA 1*DC IN 1*Antenna 4*COM (Res) 1*M3 ground screw hole	1*LINE-OUT 1*MIC-IN 1*LAN 2*USB2.0 2*USB3.0 1*VGA 1*HDMI 1*DC IN 1*Antenna 4*COM (Res) 1*M3 ground screw hole	1*LINE-OUT 1*MIC-IN 1*LAN 2*USB2.0 2*USB3.2 Gen2 1*VGA 1*HDMI 1*DC IN 1*Antenna 4*COM (Res) 1*M3 ground screw hole	1*LINE-OUT 1*MIC-IN 1*LAN 2*USB2.0 2*USB3.0 1*VGA 1*HDMI 1*DC IN 1*Antenna 4*COM (Res) 1*M3 ground screw hole	1*LINE-OUT 1*MIC-IN 2*LAN 2*USB3.2 Gen2 1*VGA 1*HDMI 1*DC IN 1*Antenna 4*COM (Res) 1*M3 ground screw hole
Power	DC 12V Input				
OS	Windows 7 / Windows 10 / Linux				
Certificate	CE				

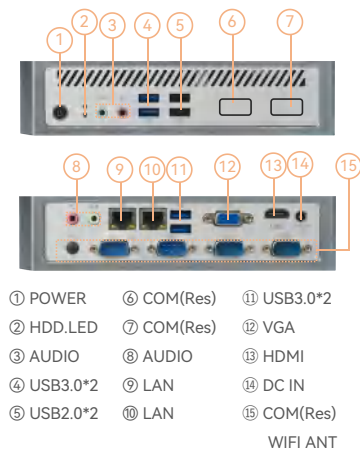
Environment

	National Standard	Parameters
EMC	GB/T 9254.1-2021 Radio disturbance limits and methods of measurement for information technology equipment	Radiation disturbance (B) grade Conduction disturbance (B) grade
	GB/T 17618-2015 Immunity limits and measurement methods for information technology equipment	Meet the requirements of 6KV contact discharge and 12KV air discharge
Safety Standard	GB 4943.1-2011 Information technology equipment security - Part 1: General requirements	Ground Resistance: $\leq 0.1\Omega$ Electrical strength: limited leakage current 10mA, for class I equipment, the primary circuit on the housing withstand voltage $\geq 1.5KV$ AC or 2.2KV DC; For Class II equipment, the primary circuit withstand voltage of the housing $\geq 3.0KV$ AC or 4.3KV DC Insulation Resistance: $\geq 100M\Omega$ Drain current: current to the floor drain $\leq 3.5mA$
Environment	GB/T 9813.4-2017 General specification for computers - Part 4: Microcomputers for industrial applications GB/T 2423 Environment Test	Operating Temperature: $-20^{\circ}C \sim 60^{\circ}C$ Storage Temperature: $-20^{\circ}C \sim 70^{\circ}C$ Humidity: $40^{\circ}C$ 95%RH Panel protection class: IP65 Fall in packaging: the machine is packed at a height of 1 meter, 8 edges and 6 sides fall once each Vibration: 5 ~ 5.5Hz, displacement 25.4mm; 5.5 ~ 200Hz/ acceleration 1.0g, working direction; The duration of the test is 1 cycle Impact: half sine pulse, peak acceleration 10g, pulse width 11ms, 3 times of impact in the working direction Noise: (0) dB

I/O Ports & Dimension



IO Port



Order Information

Product Model No.	Description	Remarks
KT-BOX1711	J1900/DDR3L 1333MHz 4GB/M-SATA 128GB	
KT-BOX1712	J4125/DDR4 2133/2400MHz 4GB/M-SATA 128GB	
KT-BOX1713	J6412/DDR4 3200MHz 4GB/M.2 2280 Sata 128GB	
KT-BOX1714	6200U/DDR4 2133MHz 8GB/M.2 2280 NVME 256GB	
KT-BOX1715	8145U/DDR4 2666MHz 8GB/M.2 2280 NVME 256GB	USB3.2 is Gen1 5Gbps

KT-EPC2311

- Support Intel® Gen 8th Whiskeylake &10th Cometlake-U Processor
- Support SO-DIMM DDR4,M-SATA,M.2 Sata,M.2 NVME storage
- Standard HDMI/DP port, support dual and asynchronous display
- Standard 16 channel GPIO, support multi-function expansion;support 6LAN, 6COM, 4USB or multi-channel GPIO optional
- 1*Mini-PCIE(for WiFi),1*SIM, 3G, 4G, and 5G modules
- Support embedded, wall mounted, desktop installation
- 9~36V Wide Voltage input,Fanless & Sealed dustproof & Robustness design
- Applied for production line automation, machine vision,security monitoring, intelligent logistics sorting etc



Specification

Model No.	KT-EPC2311		
Dimension(mm)	≤ 285x156x60mm	Indicator Light	Power status indicator, integrated with the power button
Weight(kg)	≤ 2.2kg	Heat dissipation	Passive cooling design,Fanless
Color	Grey	Consumption	< 15W
Material	Aluminum Alloy	Installation	Embedded,Wall mount,Desktop

Processor	Intel Whiskey Lake Series i3/ i5/ i7 Processors	Intel Whiskey Lake Series i3/ i5/ i7 Processors
BIOS	AMI (256M)	
Chipset	Intel® SOC	
Graphics	Intel® UHD Graphics	
Network	Intel i226-AT + I219-LM	
Audio	HS-100B	
RAM	DDR4 2400MHz Max 32G	
ROM	M.2 2280 NVME128GB,support SATA 3.0 2.5''inch HDD expansion	
Function	Support WiFi,BT,3G/4G/5G,diskless booting,self-booting with power,wake on LAN	

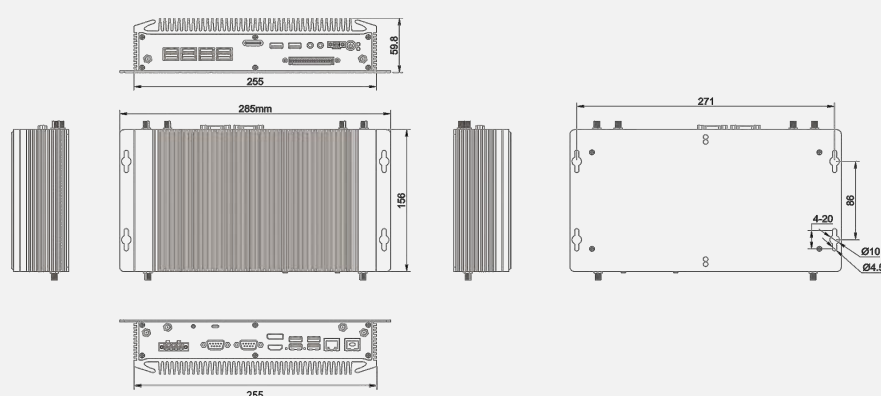
Front I/O	1*Power ON/OFF (LED) 2*LED (HDD&WiFi) 1*SW, 2pin Phoenix terminal 1*Mic_in 1*Line_out 2*USB2.0 1*SIM Slot 2*RS232+8*GPIO or up to 16*GPIO 2*Antenna	Rear I/O	2*LAN 4*USB3.1 2*HDMI 2*COM 1*DC IN,4pin Phoenix terminal 1*M3 ground screw hole 4*Antenna 1*RST;Press at least 3 seconds to clear BIOS configurations when device Off.Press 0.5 to 1 second to restart when device On 1*REC,system recovery
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Power Supply	12~19V Input (9~36V Wide Voltage Input Optional)
Expansion	① Basic configuration,GPIO extension,WiF module,12~19V DC input ② 4*COM expansion, GPIO expansion,12~19V DC input ③ POE 4*LAN expansion,GPIO expansion,12~19V DC input ④ 6*COM expansion,WiF module, 9~36V wide voltage power module ⑤ 14*USB extension, 4G module, GPIO extension,12~19V DC input
OS	WIN 7 / WIN10 / Linux
Certificate	CE

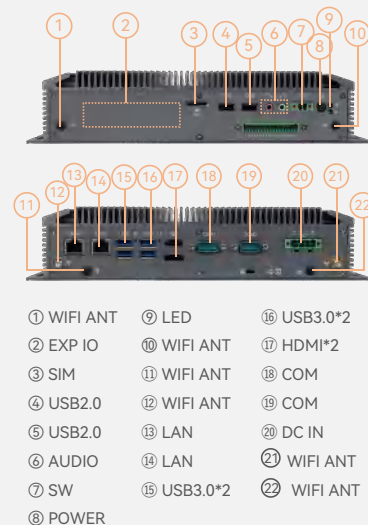
Environment

	National Standard	Parameters
EMC	GB/T 9254.1-2021 Radio disturbance limits and methods of measurement for information technology equipment	Radiation disturbance (B) grade Conduction disturbance (B) grade
	GB/T 17618-2015 Immunity limits and measurement methods for information technology equipment	Meet the requirements of 6KV contact discharge and 12KV air discharge
Safety Standard	GB 4943.1-2011 Information technology equipment security - Part 1: General requirements	Ground Resistance: $\leq 0.1\Omega$ Electrical strength: limited leakage current 10mA, for class I equipment, the primary circuit on the housing withstand voltage $\geq 1.5KV$ AC or 2.2KV DC; For Class II equipment, the primary circuit withstand voltage of the housing $\geq 3.0KV$ AC or 4.3KV DC Insulation Resistance: $\geq 100M\Omega$ Drain current: current to the floor $\leq 3.5mA$
Environment	GB/T 9813.4-2017 General specification for computers - Part 4: Microcomputers for industrial applications GB/T 2423 Environment Test	Operating Temperature: $-20^{\circ}C \sim 60^{\circ}C$ Storage Temperature: $-20^{\circ}C \sim 70^{\circ}C$ Humidity: $40^{\circ}C$ 95%RH Panel protection class: IP65 Fall in packaging: the machine is packed at a height of 1 meter, 8 edges and 6 sides fall once each Vibration: 5 ~ 5.5Hz, displacement 25.4mm; 5.5 ~ 200Hz/ acceleration 1.0g, working direction; The duration of the test is 1 cycle Impact: half sine pulse, peak acceleration 10g, pulse width 11ms, 3 times of impact in the working direction Noise: (0) dB

I/O Ports & Dimension



IO Port



Order Information

Product Model No.	Description	Remarks
KT-EPC2311	Intel 8365U/DDR4 2400MHz 8GB/M.2 2280 SATA 128GB/WiFi module/Sub card ZIC-DB-PWRGP ZO010	
KT-EPC2311-4L	Intel 8365U/DDR4 2400MHz 8GB/M.2 2280 SATA 128GB/Sub card EIO-4L ZO020/ Sub card ZIC-DB-PWRGP ZO010	
KT-EPC2311-POE4L	Intel 8365U/DDR4 2400MHz 8GB/M.2 2280 SATA 128GB/EIO-4LP ZO020/Sub card ZIC-DB-PWRGP ZO010	
KT-EPC2311-6C	Intel 8365U/DDR4 2400MHz 8GB/M.2 2280 SATA 128GB/WiFi module/EIO-4LP4UGP ZO010/ZIC-DB-PWRGP ZO020	
KT-EPC2311-14U	Intel 8365U/DDR4 2400MHz 8GB/M.2 2280 SATA 256GB/Sata3.0 256GB/4G module /EIO-4LP4UGP ZO010/ Sub card ZIC-DB-PWRGP ZO010	

KT-EPC3511



- Support Intel® Bay Trail, Gemini lake, Elkhart Lake, Gen 6th Sky Lake & 7th Kaby Lake, 8th Whiskeylake & 10th Cometlake-U Processor
- Support SO-DIMM, M-SATA, M.2 Sata, M.2 NVME storage
- Equipped with 1*HDMI and 1*DP/VGA port, support dual and asynchronous display
- Standard dual LAN, partial support Intel encryption TPM 2.0, 8*GPIO
- 1*Mini-PCIE(for WiFi), 1*SIM, 3G, 4G, and 5G modules
- Support embedded, wall mounted, desktop installation
- Applied for production line automation, machine vision, security monitoring, intelligent logistics sorting etc



Specification

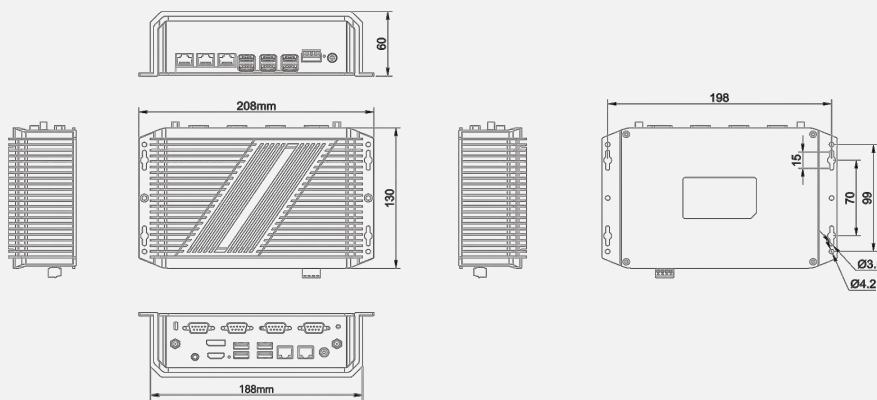
Model No.	KT-EPC3511				
Dimension(mm)	≤ 208x130x60mm		Indicator Light	Power status indicator, integrated with the power button	
Weight(kg)	≤ 1.2kg		Heat dissipation	Passive cooling design, Fanless	
Color	Grey		Consumption	< 15W	
Material	Aluminum alloy die-casting		Installation	Embedded, Wall mount, Desktop	

Processor	Baytrail	Gemini Lake	Elkhart Lake	Sky Lake (6-7th)	Whiskey Lake (8-10th)
BIOS	AMI BIOS	AMI BIOS	AMI BIOS	AMI BIOS	AMI BIOS
Chipset	Intel® SOC	Intel® SOC	Intel® SOC	Intel® SOC	Intel® SOC
Graphics	Intel® HD Graphics	Intel® HD Graphics	Intel® HD Graphic	Intel® HD Graphics	Intel® HD Graphics
Network	2*Intel 82583V	1*I219 gigabit, 1*I226-V gigabit	2*Intel I226- gigabit	2*Intel I211 gigabit	Intel I219+1 x Intel I211/21 gigabit
Audio	Realtek ALC662HD	Realtek ALC269HD	Realtek ALC256HD	Realtek ALC662HD	Realtek ALC662HD
RAM	DDR3L 1333MHz Max 8G	DDR4 2400MHz Max 8G	DDR4 3200MHz Max 16G	DDR4 2133 MHz Max 16G	DDR4 2400MHz Max 16G
ROM	M-SATA 128G	M.2 2280 Sata 128GB	M.2 2280 NVME128GB	M-SATA 128G	M.2 2280 NVME128GB
Function	Support WiFi,BT,3G/4G/5G,diskless booting,self-booting with power,wake on LAN	Support WiFi,BT,3G/4G/5G,diskless booting,self-booting with power,wake on LAN	Support WiFi,BT,3G/4G/5G,diskless booting,self-booting with power,wake on LAN	Support WiFi,BT,3G/4G/5G,diskless booting,self-booting with power,wake on LAN	Support WiFi,BT,3G/4G/5G,diskless booting,self-booting with power,wake on LAN
Front I/O	1*Power ON/FF (LED) 1*Reset Button 6*USB2.0(2*3) 2*COM232 RJ45 1*GPIO RJ45 1*SW(Remote Switch)	1*Power ON/FF (LED) 1*Reset Button 6*USB2.0(2*3) 2*COM232 RJ45 1*GPIO RJ45 1*SW(Remote Switch)	1*Power ON/OFF (LED) 1*Reset Button 6*USB2.0(2*3) 2*COM232 RJ45 1*GPIO RJ45 1*SW(Remote Switch)	1*Power ON/OFF (LED) 1*Reset Button 6*USB2.0(2*3) 2*COM232 RJ45 1*GPIO RJ45 1*SW(Remote Switch)	1*Power ON/OFF (LED) 1*Reset Button 6*USB2.0(2*3) 2*COM232 RJ45 1*GPIO RJ45 1*SW(Remote Switch)
Rear I/O	1*Audio 2*LAN 1*USB2.0 1*USB3.0 1*HDMI 1*VGA 1*DC IN 4*COM 1*M3 ground screw hole 2*Antenna	1*Audio 1*DP 1*HDMI 4*USB3.2(Gen 2) 2*LAN 1*DC IN 1*CMOS Button 4*COM 1*M3 ground screw hole 2*Antenna	1*Audio 1*DP 1*HDMI 1*USB2.0 3*USB3.1 2*LAN 1*DC IN 1*CMOS Button 4*COM 1*M ground screw hole 2*Antenna	1*Audio 2*LAN 2*USB3.0 1*HDMI 1*VGA 1*DC IN 4*COM 1*M3 ground screw hole 2Antenna	1*Audio 1*DP 1*HDMI 4*USB3.2 (Gen 2) 2*LAN 1*DC IN 1*CMOS Button 4*COM 1*M3 ground screw hole 2*Antenna
Power Supply	DC 12V~24V Wide Voltage Input	DC12V -24V Wide Voltage Input	DC 9V~24V Wide Voltage Input	DC12V -24V Wide Voltage Input	DC12V -24V Wide Voltage Input
OS	WIN 7 / WIN10 / Linux				
Certificate	CE				

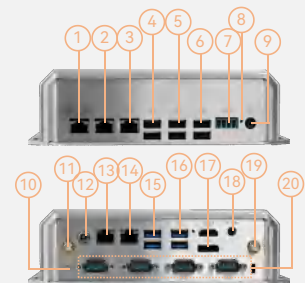
Environment

	National Standard	Parameters
EMC	GB/T 9254.1-2021 Radio disturbance limits and methods of measurement for information technology equipment	Radiation disturbance (B) grade Conduction disturbance (B) grade
	GB/T 17618-2015 Immunity limits and measurement methods for information technology equipment	Meet the requirements of 6KV contact discharge and 12KV air discharge
Safety Standard	GB 4943.1-2011 Information technology equipment security - Part 1: General requirements	Ground Resistance: $\leq 0.1\Omega$ Electrical strength: limited leakage current 10mA, for class I equipment, the primary circuit on the housing withstand voltage $\geq 1.5KV$ AC or 2.2KV DC; For Class II equipment, the primary circuit withstand voltage of the housing $\geq 3.0KV$ AC or 4.3KV DC Insulation Resistance: $\geq 100M\Omega$ Drain current: current to the floor drain $\leq 3.5mA$
Environment	GB/T 9813.4-2017 General specification for computers - Part 4: Microcomputers for industrial applications GB/T 2423 Environment Test	Operating Temperature: $-20^{\circ}C \sim 60^{\circ}C$ Storage Temperature: $-20^{\circ}C \sim 70^{\circ}C$ Humidity: $40^{\circ}C$ 95%RH Panel protection class: IP65 Fall in packaging: the machine is packed at a height of 1 meter, 8 edges and 6 sides fall once each Vibration: 5 ~ 5.5Hz, displacement 25.4mm; 5.5 ~ 200Hz/ acceleration 1.0g, working direction; The duration of the test is 1 cycle Impact: half sine pulse, peak acceleration 10g, pulse width 11ms, 3 times of impact in the working direction Noise: (0) dB

I/O Ports & Dimension



IO Port



- | | | |
|------------|------------|------------|
| ① GPIO | ⑧ RESET | ⑮ USB3.0*2 |
| ② COM | ⑨ POWER | ⑯ USB3.0*2 |
| ③ COM | ⑩ M3 G | ⑰ HDMI+DP |
| ④ USB2.0*2 | ⑪ WIFI ANT | ⑱ AUDIO |
| ⑤ USB2.0*2 | ⑫ DC IN | ⑲ WIFI ANT |
| ⑥ USB2.0*2 | ⑬ LAN | ⑳ COM*4 |
| ⑦ SW | ⑭ LAN | |

Order Information

Product Model No.	Description	Remarks
KT-EPC3511	J1900/DDR3L 1333MHz 4GB/M-SATA 128GB	
KT-EPC3512	J4125 /DDR4 2133/2400MHz 4GB/M.2 2280 Sata 128GB	
KT-EPC3513	J6412/DDR4 3200MHz 4GB/M.2 2280 NVME128GB	
KT-EPC3514	6200U/DDR4 2133MHz 8GB/M-SATA 128G	
KT-EPC3515	8145U/DDR4 2666MHz 8GB/M.2 2280 NVME 128GB	

KT-EPC1211



- Support Intel® Gemini lake、Gen 12 Alder Lake Processor
- Support SO-DIMM,M-SATA,M.2 Sata,M.2 NVME storage
- Standard 2*HDMI,1*DP/VGA,support dual synchronous and asynchronous display
- Standard 2*LAN,Support 4*COM expansion
- Support 1*MINI-PCIE(for WIFI),1*SIM,3G,4G,5G modules
- Support embedded, wall mounted, desktop installation
- 12~19V Wide Voltage input; High performance active cooling & Silent Fan & Robustness design
- Applied for production line automation, security monitoring, intelligent logistics sorting etc



Specification

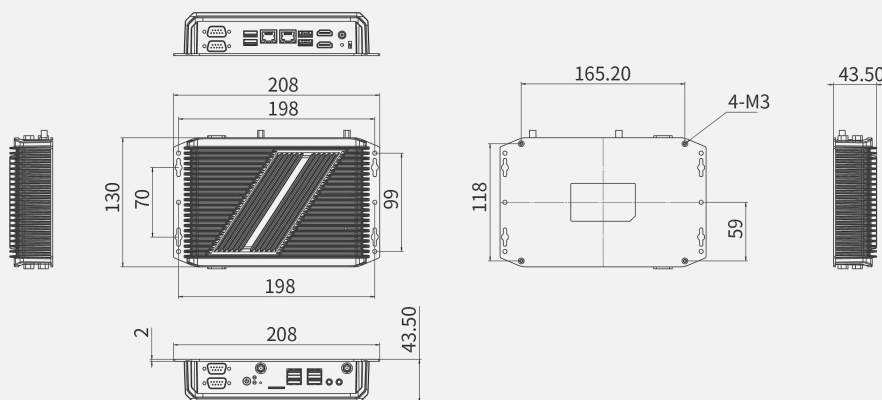
Model No.	KT-EPC1211	Indicator Light	Power status indicator, integrated with the power button
Dimension(mm)	208x130x40mm	Heat dissipation	Passive cooling design,Fanless
Weight (kg)	≤ 1.0kg	Consumption	< 15W
Color	Grey	Installation	Embedded,Wall mount,Desktop
Material	Aluminum alloy die-casting		

Processor	Gemini Lake	Alder Lake
BIOS	AMI BIOS	AMI BIOS
Chipset	Intel® SOC	Intel® SOC
Graphics	Intel® UHD Graphics 600	Intel® HD Graphics
Network	2*RTL8111H/8111G	1*I226V,1*RTL8111H(optional)
Audio	Realtek ALC662/ALC887	Realtek ALC897
RAM	DDR4 2133/2400MHz Max 8GB	DDR4 3200MHz Max 32GB
ROM	M.2 2280 Sata 128GB	M.2 2280 NVME 256GB SSD
Function	Support WiFi,BT,3G/4G/5G,diskless booting,self-booting with power,wake on LAN	Support WiFi,BT,3G/4G/5G,diskless booting,self-booting with power,wake on LAN
Front I/O	1*Power ON/OFF (LED) 2*LED (HDD&WiFi) 1*Reset&CLR_CMOS Button 1*SIM Slot 4*USB3.0 1*LINE-OUT 1*MIC-IN 2*Antenna 2*COM	1*Power ON/OFF (LED) 1*HDD_LED 1*SIM Slot 2*USB3.2 (10Gbps) 1*Full Functional Type-C 1*microSD Slot 1*Audio
Rear I/O	1*USB2.0 3*USB3.0 2*LAN 2*USB2.0 2*HDMI 1*DC IN 1*M3 ground screw hole 2*COM	4*USB2.0 1*Type-C (Power) 2*LAN 1*ghost&cl_cmos button 1*HDMI 1*VGA (optional) 1*RS232 COM (optional)
Power Supply	DC12~19V Input	DC12V Input
OS	WIN10 / Linux	
Certificate	CE	

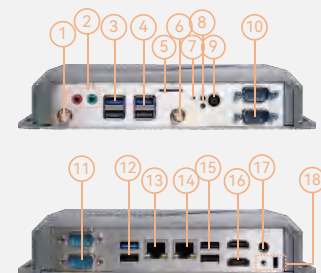
Environment

	National Standard	Parameters
EMC	GB/T 9254.1-2021 Radio disturbance limits and methods of measurement for information technology equipment	Radiation disturbance (B) grade Conduction disturbance (B) grade
	GB/T 17618-2015 Immunity limits and measurement methods for information technology equipment	Meet the requirements of 6KV contact discharge and 12KV air discharge
Safety Standard	GB 4943.1-2011 Information technology equipment security - Part 1: General requirements	Ground Resistance: $\leq 0.1\Omega$ Electrical strength: limited leakage current 10mA, for class I equipment, the primary circuit on the housing withstand voltage $\geq 1.5KV$ AC or 2.2KV DC; For Class II equipment, the primary circuit withstand voltage of the housing $\geq 3.0KV$ AC or 4.3KV DC Insulation Resistance: $\geq 100M\Omega$ Drain current: current to the floor drains $\leq 3.5mA$
Environment	GB/T 9813.4-2017 General specification for computers - Part 4: Microcomputers for industrial applications GB/T 2423 Environment Test	Operating Temperature: $-20^{\circ}C \sim 60^{\circ}C$ Storage Temperature: $-20^{\circ}C \sim 70^{\circ}C$ Humidity: $40^{\circ}C$ 95%RH Panel protection class: IP65 Fall in packaging: the machine is packed at a height of 1 meter, 8 edges and 6 sides fall once each Vibration: 5 ~ 5.5Hz, displacement 25.4mm; 5.5 ~ 200Hz/ acceleration 1.0g, working direction; The duration of the test is 1 cycle Impact: half sine pulse, peak acceleration 10g, pulse width 11ms, 3 times of impact in the working direction Noise: (0) dB

I/O Ports & Dimension



IO Port



- | | | |
|------------|--------------|-------------|
| ① WIFI ANT | ⑦ RESET | ⑬ LAN |
| ② AUDIO | ⑧ LED | ⑭ LAN |
| ③ USB3.0*2 | ⑨ POWER | ⑮ USB2.0*2 |
| ④ USB3.0*2 | ⑩ COM*2 | ⑯ HDMI*2 |
| ⑤ SIM | ⑪ COM*2 | ⑰ DC IN |
| ⑥ WIFI天线 | ⑫ USB3.0+2.0 | ⑱ M3 ground |

Order Information

Product Model No.	Description	Remarks
KT-EPC1211	Intel® Celeron J4125/DDR3L 1333MHz 4GB/M-SATA 128GB	

KT-NWS1241



- Support Intel®Celeron®BayTrail 、 Gemini lake Processor
- Support SO-DIMM,M-SATA,M.2 Sata,M.2 NVME Storage
- Equipped with 1*HDMI port and 1*DP/VGA port,support dual and asynchronous display
- Intel 4*LAN,1*COM expansion
- Support1*Mini-PCIE(for WiFi),1*SIM,3G,4G,5G modules
- Support embedded, wall mounted, desktop installation
- Low power consumption Fanless design, 7*24 hours uninterrupted stable operation, high protection level
- Applied for intrusion detection/defense, VPN gateway, online behavior management, traffic analysis, and vulnerability scanning



Specification

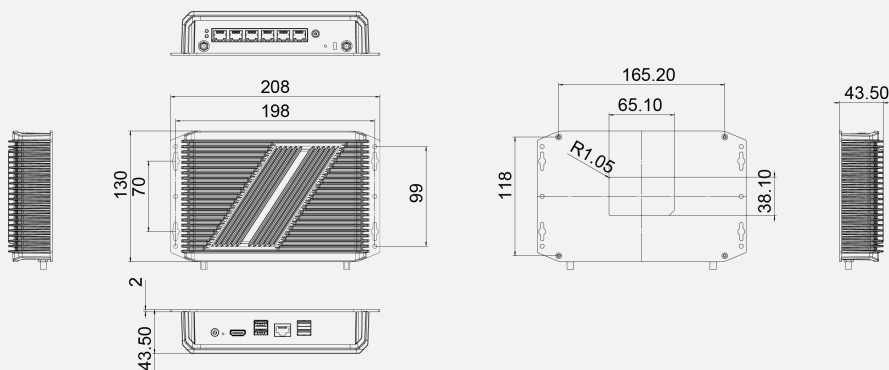
Model No.	KT-NWS1241		
Dimension(mm)	≤ 208x130x40mm	Indicator Light	Power status indicator, integrated with the power button
Weight (kg)	≤ 1.0kg	Heat dissipation	Passive cooling design,Fanless
Color	Grey	Consumption	< 15W
Material	Aluminum alloy die-casting	Installation	Embedded,Wall mount,Desktop

Processor	Baytrail	Gemini Lake
BIOS	AMI BIOS	AMI BIOS
Chipset	Intel® SOC	Intel® SOC
Graphics	Intel® HD Graphics	Intel® HD Graphics
Network	4*Intel I211AT /Intel i226-AT	4*Intel I226 gigabit
RAM	DDR3L 1333MHz Max 8G	DDR4 2666MHz Max 32G
ROM	M.2 2280 Sata 128GB	M.2 2280 NVME128GB
Function	Support WiFi,BT,4G,watchdog,diskless booting,self-booting with power,wake on LAN	Support WiFi,BT,3G/4G/5G,diskless booting,self-booting with power,wake on LAN
Front I/O	1*Power ON/OFF (LED) 1*SIM Slot 1*USB2.0 1*USB3.0 1*VGA 1*HDMI	1*Power ON/OFF (LED) 1*SIM Slot 4*USB3.0 1*DP 1*HDMI
Rear I/O	1*Reset Button 2*LED PWR LED (green) +HDD LED (red) 4*LAN 1*COM RJ45 1*DC IN 1*M3 ground screw hole 2*Antenna	2*LED PWR LED (green) +HDD LED (red) 4*LAN 1*SW 2PIN Phoenix terminal 1*DC IN 1*M3 ground screw hole 2*Antenna 1*COM
Power Supply	DC12V Input	DC12V Input
OS	WIN10 / Linux	
Certificate	CE	

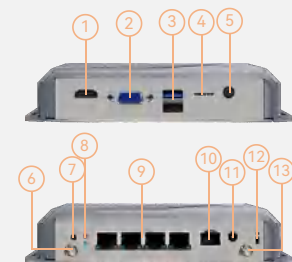
Environment

	National Standard	Parameters
EMC	GB/T 9254.1-2021 Radio disturbance limits and methods of measurement for information technology equipment	Radiation disturbance (B) grade Conduction disturbance (B) grade
	GB/T 17618-2015 Immunity limits and measurement methods for information technology equipment	Meet the requirements of 6KV contact discharge and 12KV air discharge
Safety Standard	GB 4943.1-2011 Information technology equipment security - Part 1: General requirements	Ground Resistance: $\leq 0.1\Omega$ Electrical strength: limited leakage current 10mA, for class I equipment, the primary circuit on the housing withstand voltage $\geq 1.5KV$ AC or 2.2KV DC; For Class II equipment, the primary circuit withstand voltage of the housing $\geq 3.0KV$ AC or 4.3KV DC Insulation Resistance: $\geq 100M\Omega$ Drain current: current to the floor drain $\leq 3.5mA$
Environment	GB/T 9813.4-2017 General specification for computers - Part 4: Microcomputers for industrial applications GB/T 2423 Environment Test	Operating Temperature: $-20^{\circ}C \sim 60^{\circ}C$ Storage Temperature: $-20^{\circ}C \sim 70^{\circ}C$ Humidity: $40^{\circ}C$ 95%RH Panel protection class: IP65 Fall in packaging: the machine is packed at a height of 1 meter, 8 edges and 6 sides fall once each Vibration: 5 ~ 5.5Hz, displacement 25.4mm; 5.5 ~ 200Hz/ acceleration 1.0g, working direction; The duration of the test is 1 cycle Impact: half sine pulse, peak acceleration 10g, pulse width 11ms, 3 times of impact in the working direction Noise: (0) dB

I/O Ports & Dimension



IO Port



- | | | |
|----------|------------|-------------|
| ① HDMI | ⑤ POWER | ⑩ COM |
| ② VGA | ⑥ WIFI ANT | ⑪ DC IN |
| ③ USB3.0 | ⑦ RESET | ⑫ M3 ground |
| USB2.0 | ⑧ LED | ⑬ WIFI ANT |
| ④ SIM | ⑨ LAN*4 | |

Order Information

Product Model No.	Description	Remarks
KT-NWS1241	Intel® J1900/DDR3L 1333MHz 4GB/M-SATA 128GB	
KT-NWS1242	Intel® J4125 /DDR4 2133/2400MHz 4GB/M.2 2280 Sata 128GB	

KT-NWS1261



- Support Intel®Elkhart Lake series Gen 6th,7th Sky Lake-U Processor
- Support SO-DIMM,M-SATA,M.2 Sata,M.2 NVME Storage
- Equipped with 1*HDMI,2*USB3.0
- Intel 6*LAN,1COM expansion
- Support 1*Mini-PCIE(for WiFi),1*SIM,3G,4G,5G module
- Support embedded, wall mounted, desktop installation
- Low power consumption Fanless design, 7*24 uninterrupted stable operation, high protection level
- Applied for intrusion detection/defense, VPN gateway, online behavior management, traffic analysis, and vulnerability scanning



Specification

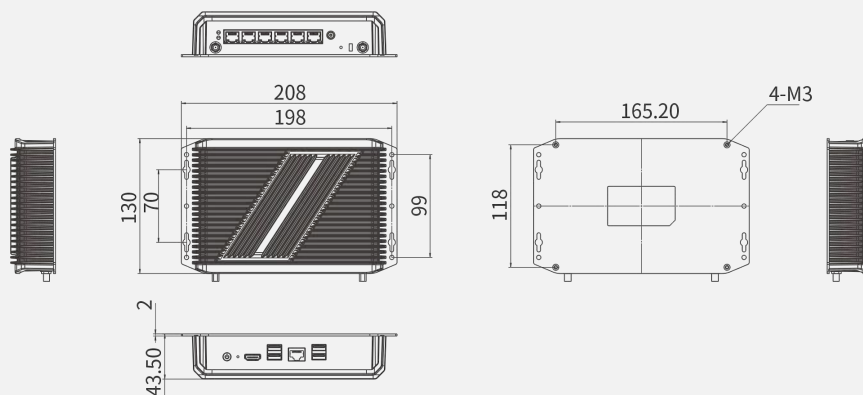
Model No.	KT-NWS1261		
Dimension(mm)	≤ 208x130x40mm	Indicator Light	Power status indicator, integrated with the power button
Weight (kg)	≤ 1.0kg	Heat dissipation	Passive cooling design,Fanless
Color	Grey	Consumption	< 15W
Material	Aluminum alloy die-casting	Installation	Embedded,Wall mount,Desktop

Processor	Elkhart Lake	Sky Lake
BIOS	AMI BIOS	AMI BIOS
Chipset	Intel® SOC	Intel® SOC
Graphics	Intel® UHD Graphics	Intel® HD Graphic
Network	6*Intel I226 Gigabit	6*Intel I211AT
RAM	2*DDR4 3200MHz Max 32G	2*DDR4 3200MHz Max 32G
ROM	M Sata 128GB	M.2 2280 Sata 128GB
Function	Support WiFi,BT,4G,watchdog,diskless booting,self-booting with power,wake on LAN	Support WiFi,BT,4G,watchdog,diskless booting,self-booting with power,wake on LAN
Front I/O	1*Power ON/OFF (LED) 1*Reset Button 1*HDMI 1*CMOS Button 2*USB2.0 1*COM RJ45 2*USB3.0 1*Shift switch	1*Power ON/OFF (LED) 1*Reset Button 1*HDMI 2*USB3.0 1*COM RJ45 2*USB3.0
Rear I/O	2*LED PWR LED (green) +HDD LED (red) 6*LAN 1*DC IN 1*M3 ground screw hole 2*Antenna	2*LED PWR LED (green) +HDD LED (red) 6*LAN 1*DC IN 1*M3 ground screw hole 2*Antenna
Power Supply	DC12V Input	DC12V Input
OS	WIN10 / Linux	
Certificate	CE	

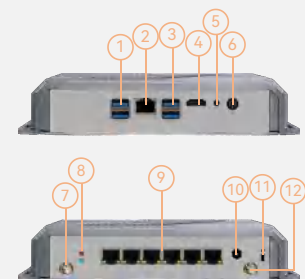
Environment

	National Standard	Parameters
EMC	GB/T 9254.1-2021 Radio disturbance limits and methods of measurement for information technology equipment	Radiation disturbance (B) grade Conduction disturbance (B) grade
	GB/T 17618-2015 Immunity limits and measurement methods for information technology equipment	Meet the requirements of 6KV contact discharge and 12KV air discharge
Safety Standard	GB 4943.1-2011 Information technology equipment security - Part 1: General requirements	Ground Resistance: $\leq 0.1\Omega$ Electrical strength: limited leakage current 10mA, for class I equipment, the primary circuit on the housing withstand voltage $\geq 1.5KV$ AC or 2.2KV DC; For Class II equipment, the primary circuit withstand voltage of the housing $\geq 3.0KV$ AC or 4.3KV DC Insulation Resistance: $\geq 100M\Omega$ Drain current: current to the floor drain $\leq 3.5mA$
Environment	GB/T 9813.4-2017 General specification for computers - Part 4: Microcomputers for industrial applications GB/T 2423 Environment Test	Operating Temperature: $-20^{\circ}C \sim 60^{\circ}C$ Storage Temperature: $-20^{\circ}C \sim 70^{\circ}C$ Humidity: $40^{\circ}C$ 95%RH Panel protection class: IP65 Fall in packaging: the machine is packed at a height of 1 meter, 8 edges and 6 sides fall once each Vibration: 5 ~ 5.5Hz, displacement 25.4mm; 5.5 ~ 200Hz/ acceleration 1.0g, working direction; The duration of the test is 1 cycle Impact: half sine pulse, peak acceleration 10g, pulse width 11ms, 3 times of impact in the working direction Noise: (0) dB

I/O Ports & Dimension



IO Port



- | | | |
|------------|------------|-------------|
| ① USB3.0*2 | ⑤ RESET | ⑨ LAN*6 |
| ② COM | ⑥ POWER | ⑩ DC IN |
| ③ USB3.0*2 | ⑦ WIFI ANT | ⑪ M3 ground |
| ④ HDMI | ⑧ LED | ⑫ WIFI ANT |

Order Information

Product Model No.	Description	Remarks
KT-NWS1261	Intel®J6412/DDR4 3200MHz 4GB/M-SATA 128GB	
KT-NWS1262	Intel®Celeron®3855U/DDR4 2133MHz 8GB/M.2 2280 Sata 128GB	

IPC-8411



- Support Gen 6th & 7th Intel LGA1151 (Skylake/Kabylake-S) series Processor
- Dual-channel 4*DDR4,supports up to 64GB,8*3.5"HDD
- Support DP, HDMI, VGA display options, built-in EDP interface
- Supports 2× Intel Gigabit LAN ports I219+I211
- Support 4*USB3.0+7*USB2.0;4*PCIe Slot+3*PCI Slot
- 12*COM232,1*COM422/485,support WIFI,4G modules
- Standard 19 "4U industrial computer form, support rackmount,desktop installation
- Hard disk bracket adopts spring damping design, effectively reduce the vibration of hard disk working
- Products are widely used in industrial control, security monitoring, mechanical automation, intelligent transportation, Internet of things and other fields



Specification

Model No.	KT-IPC8411		
Dimension(mm)	≤ 480x450x173mm	Indicator Light	Power status indicator,HDD indicator
Weight (kg)	≤ 6.5kg	Heat Dissipation	Active cooling design,1*12025+2*8025 Fans
Color	Grey	Consumption	< 60W
Material	Metal Rackmount Chassis	Installation	Rack-mount,Desktop

Mainboard	MB-H110PA-12C
Processor	Intel®6th、6th Sky Lake Series CPU
BIOS	AMI BIOS
Chipset	Intel® SOC
Graphics	Intel® HD Graphics核显
Network	1*Intel I211 1*Intel I219 Gigabit on-board
Audio	Realtek ALC662HD Audio decoding controller on-board
RAM	4*DDR4 2133MHz Max 64G
ROM	3*SATA3.0 1*M-SATA
Function	Support WiFi, Bluetooth, 4G,wake on LAN, autoboot with power on,TeamViewer Host,TPM/TCM reserved

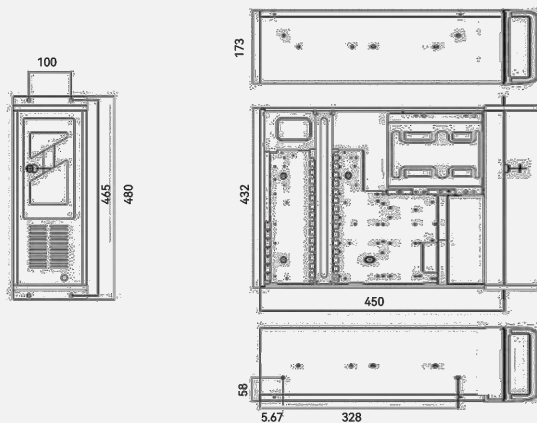
Front I/O	1*Power ON/PFF Reset Button 2*LED 2*USB2.0	Rear I/O	1*PS2 4*USB2.0 1*HDMI 1*DP 1*COM 1*VGA 2*LAN 4*USB3.0 3*AUDIO
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Expansion	Support 8 x 3.5"HDD,2 x 5.25"CD driver
Power Supply	Standard PS2 power,AC 220V Input
OS	WIN 7 / WIN10 / Linux
Certificate	CE

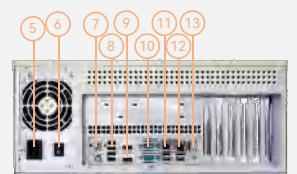
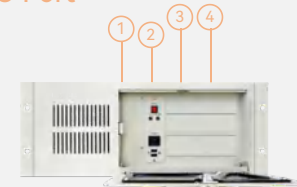
Environment

	National Standard	Parameters
EMC	GB/T 9254.1-2021 Radio disturbance limits and methods of measurement for information technology equipment	Radiation disturbance (B) grade Conduction disturbance (B) grade
	GB/T 17618-2015 Immunity limits and measurement methods for information technology equipment	Meet the requirements of 6KV contact discharge and 12KV air discharge
Safety Standard	GB 4943.1-2011 Information technology equipment security - Part 1: General requirements	Ground Resistance: $\leq 0.1\Omega$ Electrical strength: limited leakage current 10mA, for class I equipment, the primary circuit on the housing withstand voltage $\geq 1.5KV$ AC or 2.2KV DC; For Class II equipment, the primary circuit withstand voltage of the housing $\geq 3.0KV$ AC or 4.3KV DC Insulation Resistance: $\geq 100M\Omega$ Drain current: current to the floor $\leq 3.5mA$
Environment	GB/T 9813.4-2017 General specification for computers - Part 4: Microcomputers for industrial applications GB/T 2423 Environment Test	Operating Temperature: $-20^{\circ}C \sim 60^{\circ}C$ Storage Temperature: $-20^{\circ}C \sim 70^{\circ}C$ Humidity: $40^{\circ}C$ 95%RH Panel protection class: IP65 Fall in packaging: the machine is packed at a height of 1 meter, 8 edges and 6 sides fall once each Vibration: 5 ~ 5.5Hz, displacement 25.4mm; 5.5 ~ 200Hz/ acceleration 1.0g, working direction; The duration of the test is 1 cycle Impact: half sine pulse, peak acceleration 10g, pulse width 11ms, 3 times of impact in the working direction Noise: (0) dB

I/O Ports & Dimension



IO Port



- | | | |
|-----------|------------|-----------|
| ① RESET | ⑥ POWER | ⑪ LAN |
| ② LED | ⑦ PS2 | USB3.0*2 |
| ③ POWER | ⑧ USB2.0*4 | ⑫ LAN |
| ④ USB2.0 | ⑨ HDMI+DP | USB3.0*2 |
| ⑤ AC 220V | ⑩ COM+VGA | ⑬ AUDIO*3 |

Order Information

Product Model No.	Description	Remarks
KT-IPC8411	MB-H110PA-12C/DDR4 2133MHz 8GB/SATA3.0 128GB	



KT-EPC1711P

- Intel® TigerLake, Raptor Lake & Alder Lake Processor
- Support SO-DIMM, M-SATA, M.2 SATA, M.2 NVME Storage
- Support DP, HDMI Dual/4-display Synchronous & Asynchronous
- Standard 6*COM, 2*LAN, multi-USB expansion
- Support 1*Mini-PCIE (for WiFi, 1*SIM, support 3G, 4G, 5G module) support 1*PCI, 1*PCI-e expansion
- Support embedded, wall mounted, desktop installation
- Fanless/fan, magnesium alloy casing, and aerodynamic heat dissipation design
- Applied for industrial equipment, GPS navigation, environmental online monitoring, government, telecommunications, banks, and electric power



Specification

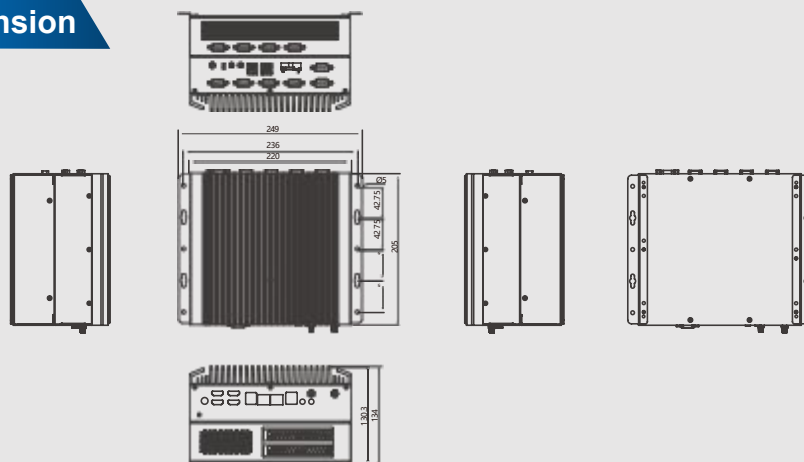
Model No.	KT-EPC1711P		
Dimension(mm)	≤250x205x134 mm	Indicator Light	Power status indicator, integrated with the power button
Weight(kg)	≤6kg	Heat dissipation	Fanless passive cooling design、TigerLake with Fan
Color	Grey	Consumption	< 30W, TigerLake higher
Material	Aluminum alloy die casting + sheet metal	Installation	Embedded,VESA,Wall-mount,Desktop

Processor	Intel®TigerLake-UP3/H35 processor	Intel® Raptor Lake/Alder Lake S Processor 12/13th Gen. Intel® Core™ Processor with H610/B660/H670 etc
BIOS	AMI BIOS	AMI BIOS
Chipset	Intel® SOC	H610/H610E/B660
Graphics	Intel® Iris® X ^e Graphics	Intel® HD Graphics
Network	On-board 1*Intel I210 Gigabit Network card (Dual-LAN optional)	On-board 1*Intel i226-V Network Card (Dual-LAN optional);
Audio	On-board ALC897 audio decoding controller	On-board ALC897+NS4258 audio decoding controller
RAM	2*SO-DIMM DDR4 3200MHz Max32GB	2*SO-DIMM DDR4 3200MHz Max64GB
SSD	1*M.2 M Key,PCIEX2/SATA self-adaptive; 1*SATA2.0 Port	1*M.2 M Key, PCIe4 (PCH signal PCIe3.0 rate) ; 1*SATA3.0 Port
Front I/O	1*Power ON/OFF 1*LED (PW HDD) 1*LINE-OUT 1*MIC-IN 4*USB2.0 10*COM 1*4Pin Phoenix terminal (Power Input,Switch)	1*Power ON/OFF 2*LED (PW HDD) 1*LINE-OUT 1*MIC-IN 4*USB2.0 10*COM 1*4Pin Phoenix terminal (Power Input,Switch)
Rear I/O	1*LINE-OUT 1*MIC-IN 2*USB2.0 2*LAN 2*USB3.0 Gen2(10Gbps) 4*HDMI 1*DC IN 2*Antenna (WiFi) 1*M3 ground screw hole	1*LINE-OUT 1*MIC-IN 2*LAN 2*USB3.0 Gen2(10Gbps) 4*HDMI 1*DC IN 2*Antenna (WiFi) 1*M3 ground screw hole
Power	DC12-19V Wide-voltage Input, Adapter 19V 5A	DC19-24V Wide-voltage Input, Adapter 19V 5A
Extension	1*PCI, 1*PCIe	1*PCI, 1*PCIe
Function	Support WiFi、BT、4G、5G、watchdog	Support WiFi6、BT、4G、5G、watchdog
OS	Windows 10 /Windows 11 /Linux	
Certificate	CE Fcc RoHS	

Environment

	National Standard	Parameters
EMC	GB/T 9254.1-2021 Radio disturbance limits and methods of measurement for information technology equipment	Radiation disturbance (B) grade Conduction disturbance (B) grade
	GB/T 17618-2015 Immunity limits and measurement methods for information technology equipment	Meet the requirements of 6KV contact discharge and 12KV air discharge
Safety Standard	GB 4943.1-2011 Information technology equipment security - Part 1: General requirements	Ground Resistance: $\leq 0.1\Omega$ Electrical strength: limited leakage current 10mA, for class I equipment, the primary circuit on the housing withstand voltage $\geq 1.5KV$ AC or 2.2KV DC; For Class II equipment, the primary circuit withstand voltage of the housing $\geq 3.0KV$ AC or 4.3KV DC Insulation Resistance: $\geq 100M\Omega$ Drain current: current to the floor $\leq 3.5mA$
Environment	GB/T 9813.4-2017 General specification for computers - Part 4: Microcomputers for industrial applications GB/T 2423 Environment Test	Operating Temperature: $-20^{\circ}C \sim 60^{\circ}C$ Storage Temperature: $-20^{\circ}C \sim 70^{\circ}C$ Humidity: $40^{\circ}C$ 95%RH Panel protection class: IP65 Fall in packaging: the machine is packed at a height of 1 meter, 8 edges and 6 sides fall once each Vibration: 5 ~ 5.5Hz, displacement 25.4mm; 5.5 ~ 200Hz/ acceleration 1.0g, working direction; The duration of the test is 1 cycle Impact: half sine pulse, peak acceleration 10g, pulse width 11ms, 3 times of impact in the working direction Noise: (0) dB

I/O Ports & Dimension



I/O Port



Order Information

Product Model No.	Description	Remarks
KT-EPC1711	1135G7/DDR4 3200MHz 8GB/M.2 2280 NVFE 256GB	

KT-EPC1711T



- Intel® TigerLake、Raptor Lake & Alder Lake Processor
- Support SO-DIMM,M-SATA,M.2 Sata,M.2 NVME storage
- Support DP,HDMI Dual/4-displaySynchronous&Asynchronous
- Standard 6*COM,2*LAN,support multi USB expansion
- Support 1*Mini-PCIE(for WiFi、1*SIM,support 3G,4G,5G)
- Support embedded, wall mounted, desktop installation
- Fanless/fan,magnesium alloy casing, and aerodynamic heat dissipation design
- Applied for industrial equipment, GPS navigation, environmental online monitoring, government,telecommunications, banks, and electric power



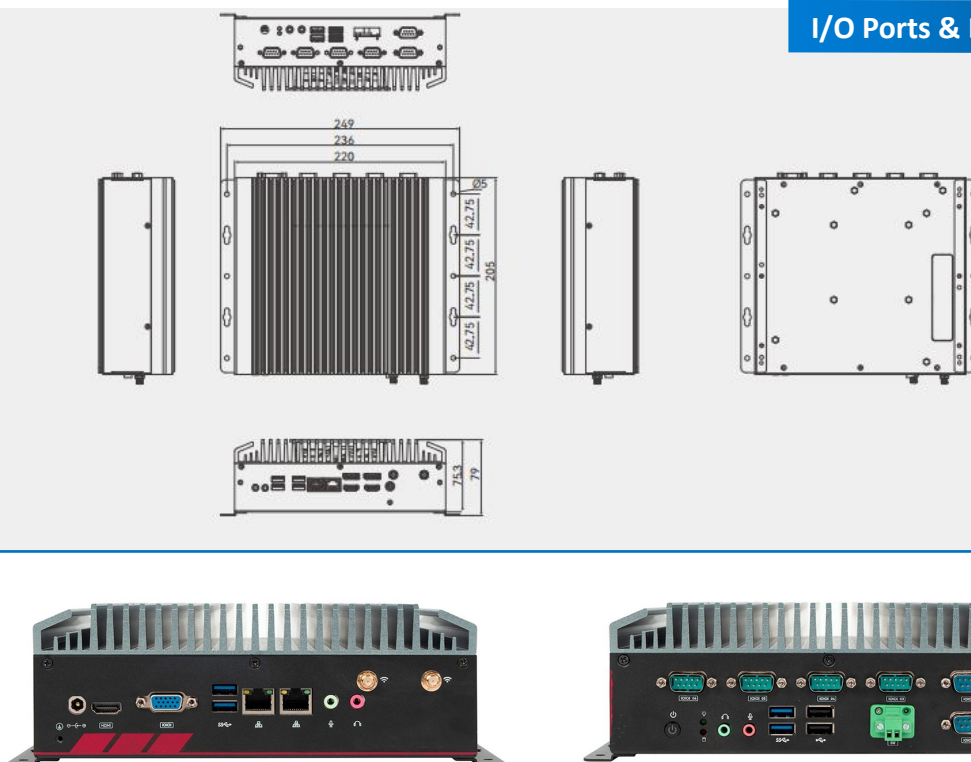
Specification

Model No.	KT-EPC1711T			
Dimension (mm)	≤250x205x80 mm		Indicator Light	Power,HDD indicator light
Weight (kg)	≤5kg		Heat dissipation	Fanless passive cooling design、TigerLake with Fan
Color	Grey		Consumption	< 30W, TigerLake higher
Material	Aluminum alloy die casting + sheet metal		Installation	Embedded,VESA,Wall-mount,Desktop
Processor	Intel®TigerLake-UP3/H35 Processor	Intel®TigerLake-UP3/H35 Processor	Intel®Raptor Lake & Alder Lake (U/P Series) Processor	Intel®Raptor Lake/Alder Lake S Processor 12/13th Gen. Intel® Core™ Processor with H610/B660/H670 etc
BIOS	AMI BIOS	AMI BIOS	AMI BIOS	AMI BIOS
Chipset	Intel®SOC	Intel®SOC	Intel®SOC	H610/H610E/B660
Graphics	Intel® Iris® X*	Intel® Iris® X*	Intel® Iris® X*	Intel® HD Graphics
Network	On-board 1*Intel I210 Gigabit Network (Duanl LAN optional)	On-board1*Realtek RTL8111H/8111G Gigabit Network card (Dual LAN optional)	On-board1*RealtekRTL8111H/8111G Gigabit Network card (Dual-LAN optional)	On-board 1*IIIntel i226-V Network Card (DualL LAN optional)
Audio	On-board ALC897 Audio decoding controller	On-board ALC897 Audio decoding controller	On-board ALC897 Audio decoding controller	On-board ALC897+NS4258 audio decoding controller
RAM	2*SO-DIMM DDR4 3200MHz Max32GB	2*SO-DIMM DDR4 3200MHz Max32GB	DDR4 3200MHz Max 16GB	2*SO-DIMM DDR4 3200MHz Max64GB
SSD	1*M. 2 M Key,support PCIeX2/SATA self-adaptive ; 1*SATA2.0 Port	1*M. 2 M Key,support PCIeX2/SATA self-adaptive ; 1*SATA2.0 Port	M. 2 2280 Sata 128GB, 1*SATA3.0	1*M. 2 M Key, PCIex4 (PCH signal PCIe3.0 Rate) ; 1*SATA3.0 Port
Front I/O	1*Power ON/OFF, 2*LED(PW HDD), 1*LINE-OUT, 1*MIC-IN, 4*USB2.0, 6*COM, 1*4Pin phoenix terminal(Power Input, Switch)	1*Power Button, 2*LED (PW HDD), 1*LINE-OUT, 1*MIC-IN, 4*USB2.0, 6*COM, 1*4Pin phoenix terminal(Power input, switch)	1* Power Button, 2*LED (PW HDD), 1*LINE-OUT, 1*MIC-IN, 4*USB2.0, 6*COM, 1*4Pin phoenix terminal(Power input, switch)	1* Power Button, 2*LED (PW HDD), 1*LINE-OUT, 1*MIC-IN, 4*USB2.0, 6*COM, 1*4Pin phoenix terminal(Power input, switch)
Rear I/O	1*LINE-OUT 1*MIC-IN 2*USB2.0 2*LAN 2*USB3.0 Gen2 (10Gbps) 4*HDMI 1*DC IN 2*Antenna (WiFi) 1*M3 ground screw hole	1*LINE-OUT 1*MIC-IN 2*LAN 2*USB3.0 Gen2 (10Gbps) 1*VGA 1*HDMI 1*DC IN 2* Antenna (WiFi) 1*M3 ground screw hole	1*LINE-OUT 1*MIC-IN 2*LAN 2*USB3.0 Gen2 (10Gbps) (Down: 1*Type-C optional) 1*VGA 1*HDMI 1*DC IN 2* Antenna (WiFi)	1*LINE-OUT 1*MIC-IN 2*USB3.2 Gen2 (10Gbps) 2*LAN 2*DP 2*HDMI 1*DC IN 2* Antenna (WiFi) 1*M3 ground screw hole
Power	DC12-19V Wide-voltage Input, Adapter 12V 5A	DC12-19V Wide-voltage Input, Adapter 12V 5A	DC12-19V Wide-voltage Input, Adapter 12V 5A	DC19-24V Wide-voltage Input, Adapter 19V 5A
Function	Support WiFi,BT、4G、5G、 Watchdog	Support WiFi,BT、4G、5G、 Watchdog	Support WiFi,BT、4G、5G、 Watchdog	Support WiFi6,BT、4G、5G, Watchdog
OS	Windows 7 /Windows 10/Linux			

Environment

	National Standard	Parameters
EMC	GB/T 9254.1-2021 Radio disturbance limits and methods of measurement for information technology equipment	Radiation disturbance (B) grade Conduction disturbance (B) grade
	GB/T 17618-2015 Immunity limits and measurement methods for information technology equipment	Meet the requirements of 6KV contact discharge and 12KV air discharge
Safety Standard	GB 4943.1-2011 Information technology equipment security - Part 1: General requirements	Ground Resistance: $\leq 0.1\Omega$ Electrical strength: limited leakage current 10mA, for class I equipment, the primary circuit on the housing withstand voltage $\geq 1.5\text{KV AC}$ or 2.2KV DC ; For Class II equipment, the primary circuit withstand voltage of the housing $\geq 3.0\text{KV AC}$ or 4.3KV DC Insulation Resistance: $\geq 100\text{M}\Omega$ Drain current: current to the floor $\leq 3.5\text{mA}$
Environment	GB/T 9813.4-2017 General specification for computers - Part 4: Microcomputers for industrial applications GB/T 2423 Environment Test	Operating Temperature: $-20^{\circ}\text{C} \sim 60^{\circ}\text{C}$ Storage Temperature: $-20^{\circ}\text{C} \sim 70^{\circ}\text{C}$ Humidity: $40^{\circ}\text{C } 95\%\text{RH}$ Panel protection class: IP65 Fall in packaging: the machine is packed at a height of 1 meter, 8 edges and 6 sides fall once each Vibration: $5 \sim 5.5\text{Hz}$, displacement 25.4mm ; $5.5 \sim 200\text{Hz}$ / acceleration 1.0g , working direction; The duration of the test is 1 cycle Impact: half sine pulse, peak acceleration 10g , pulse width 11ms , 3 times of impact in the working direction

I/O Ports & Dimension



Order Information

Model No.	Description	Remarks
KT-EPC1711T	1135G7/DDR4 3200MHz 8GB/M.2 2280 NVME 256GB	
KT-EPC1711T	1135G7/DDR4 3200MHz 8GB/M.2 2280 NGFF 128GB	
KT-EPC1711T	1260P/DDR4 3200MHz 8GB/M.2 2280 NGFF 128GB	

KT-EPC2411



- Intel® H110/H310/H510/H610 Series Processor
- Support SO-DIMM DDR4 RAM; 2.5" SSD & mSATA dual-SSD
- Support VGA/HDMI dual display
- 18xUSB 12xCOM, Compatible with various external devices
- 1xMINI-PCIE Slot (for dual antenna WIFI module)
- Standard ATX power, AC 220V Input
- Support embedded, wall mounted, desktop installation
- 7x24H working, Applied for high-speed highway toll collection, environmental monitoring, self-service terminals and etc



Specification

Model No.	KT-EPC2411		
Dimension(mm)	300x200x100mm	Indicator Light	Power, HDD indicator light
Weight(kg)	≤ 2kg	Heat dissipation	Passive cooling design, Fanless
Color	Black	Consumption	< 90W
Material	Galvanized steel	Installation	Embedded, Wall mount, Desktop

Processor	Intel® Haswell Core/Celeron/ Pentium Processor (LGA1150)		
Chipset	Intel® H110/H310/H510/H610		
BIOS	AMI 64Mbit, Supports write protection, diskless boot, wake-on-LAN, power-on boot, scheduled boot, watchdog remote power on and off device intelligent identification, etc.		
RAM	2xSO-DIMM DDR4 2666MHZ, Max.32GB		
ROM	2xSATA (for 2.5" SSD) SATA3.0; 1xMINI-SATA (for mSATA SSD) SATA3.0		

Display	Intel® HD Graphics Graphics	
	1xHDMI, 1xVGA, support dual display (synchronous/asynchronous)	
	HDMI: resolution can reach 4096x2160@30Hz VGA: resolution can reach 1920x1200@60Hz	

Ethernet	Wired	2 x RTL8111E 10/100/1000M (RJ45 on-board)
	Wireless	1 x MINI-PCIE (for WIFI Card) Dual Antenna

I/O	USB	10x USB2.0 8x USB3.0
	COM	12 x COM
	LAN	2 x RJ45
	PS2	1 x PS2 (2-in-1)
	Button	1 x Power Button
	Power	1 x AC-220V
	Audio	1 x LINE-OUT & 1 x MIC-IN

Remarks: I/O Make corresponding adjustments according to different motherboards, and the actual motherboard shall prevail

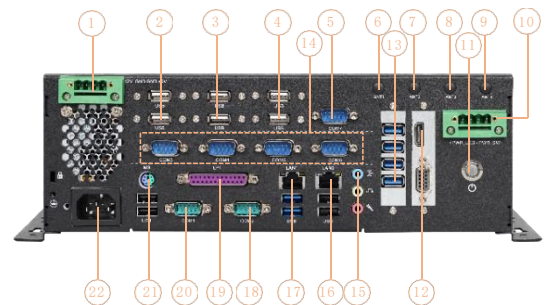
Power	AC 220V
Watchdog	Restart the system after downtime; 255-level scheduled interval
OS	Windows 7 / windows10 / Linux

Environment

	National Standard	Parameters
EMC	GB/T 9254.1-2021 Radio disturbance limits and methods of measurement for information technology equipment	Radiation disturbance (B) grade Conduction disturbance (B) grade
	GB/T 17618-2015 Immunity limits and measurement methods for information technology equipment	Meet the requirements of 6KV contact discharge and 12KV air discharge
Safety Standard	GB 4943.1-2011 Information technology equipment security - Part 1: General requirements	Ground Resistance: $\leq 0.1\Omega$ Electrical strength: limited leakage current 10mA, for class I equipment, the primary circuit on the housing withstand voltage $\geq 1.5KV$ AC or 2.2KV DC; For Class II equipment, the primary circuit withstand voltage of the housing $\geq 3.0KV$ AC or 4.3KV DC Insulation Resistance: $\geq 100M\Omega$ Drain current: current to the floor $\leq 3.5mA$
Environment	GB/T 9813.4-2017 General specification for computers - Part 4: Microcomputers for industrial applications GB/T 2423 Environment Test	Operating Temperature: $-20^{\circ}C \sim 60^{\circ}C$ Storage Temperature: $-20^{\circ}C \sim 70^{\circ}C$ Humidity: $40^{\circ}C$ 95%RH Panel protection class: IP65 Fall in packaging: the machine is packed at a height of 1 meter, 8 edges and 6 sides fall once each Vibration: 5 ~ 5.5Hz, displacement 25.4mm; 5.5 ~ 200Hz/ acceleration 1.0g, working direction; The duration of the test is 1 cycle Impact: half sine pulse, peak acceleration 10g, pulse width 11ms, 3 times of impact in the working direction Noise: (0) dB

I/O Ports & Dimension

① 1 x 4PIN phoenix terminal	⑪ POWER	⑰ LAN
② USB *2	⑫ VGA	⑱ USB3.0 *2
③ USB *2	HDMI	⑲ COM
④ USB *2	⑬ USB3.0 *4	⑲ LPT
⑤ COM	⑭ COM * 4	⑳ COM
⑥ WIFI Antenna	⑮ 1*LINE-IN	21 PS/2
⑦ WIFI Antenna	1*LINE-OUT	USB2.0 *2
⑧ WIFI Antenna	1*MIC-IN	22 AC IN
⑨ WIFI Antenna	⑰ LAN	
⑩ 1 x 4PIN phoenix terminal	USB2.0 *2	



Remarks: I/O bezel can be changed according to different motherboards

Order Information

Product Model No.	Description	Remarks
KT-EPC2411	ZO-H110PA-12C/DDR4 4GB/MSATA 128GB	
Appendix	Phoenix Terminal, 2.5" inch HDD bracket, screws	
Optional	☐ WIFI module ☐ 3G/4G module ☐ SSD storage hard drive	

CONTENTS

■ EC3 Series

■ Network Security
Series

■ NANO Series

■ POS Series

■ Self-Service Series

■ Standard Board
Series

■ All-in-one Series

KT-EC3-TGLUT-6C2L

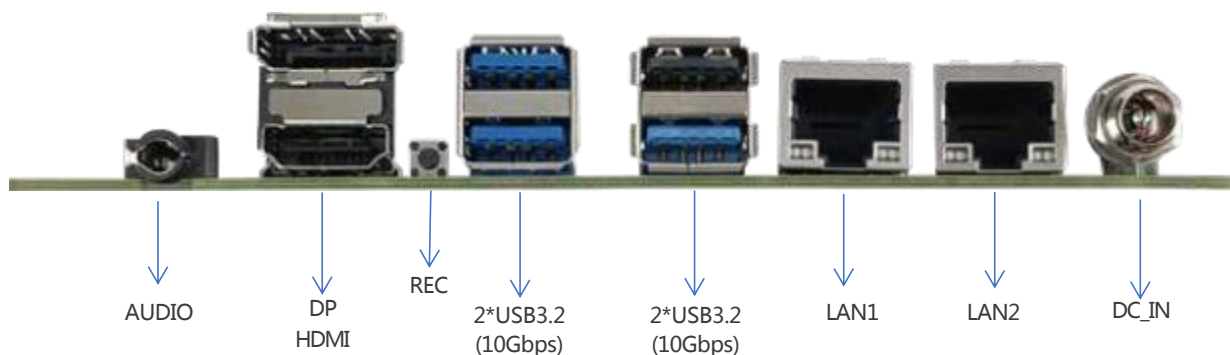
Embedded Industrial PC Board

Applied for Industrial Automation Control, Motion Control, Medical etc



- Intel Gen11th UP3 Serie Processor
- Support LVDS1/EDP1+HDMI+DP triple Synchronism&Asynchronism
- Support Intel Gigabit LAN (support Vpro)
- Support 6 *COM , 10*USB , 4G/5G extension
- Compact Design&Functional , multi USB , rich expansion

I/O Ports



Specification

CPU	Intel® 11th Tiger Lake-UP3 Processor (i3-1125G4/i5-1135G7/i7-1165G7 etc)		
Chipset	Intel® SOC		
GPU	Intel®UHD Graphics/ Intel® Iris X® Graphics		
Display Output	LVDS/EDP+DP+HDMI		
Multi Display	Triple Synchronism&Asynchronism		
USB	3*USB3.0 Gen2 (10Gbps) + 7*USB2.0		
RAM	1*SO-DIMM DDR4 3200MHz Max 32GB		
Audio	ALC269 audio decoding controller ;amplifier 2.2W@4 Ω		
Ethernet	Intel i210LM + i210AT Gigabit Network (support Vpro)		
Storage	1*M.2MKey, support SATA/PCIE optional ; 1*SATA3.0		
Expansion Slot	1*M.2EKey,support WiFi/BT module expansion;1*M.2BKey,suppor 4G/5G module expansion		
Rear I/O Port	1*DC_IN 1*LAN2(I210) 1*LAN1(I219) 1*USB3.2+USB2.0 2*USB3.2Gen2(10Gbps) 1*REC Button(One-key Recovery/Backup +clear CMOS) 1*DP+HDMI 1*AUDIO 2-in-1 port	Internal I/O PIN	1*F_AUDIO PIN 1*Speaker PIN 3*F_USB PIN(6*USB2.0 expansion) 1*F_PANEL PIN 1*GPIO PIN 1*J_PS2 PIN 1*SATA Socket 1*JSATA_PWR PIN 1*LVDS PIN 1*BKCL PIN 1*INVERT PIN 6*COM PIN 1*CPU_FAN Socket
I/O Chip	IT8786E		
BIOS	AMI BIOS		
Power	DC 9V-36V Wide-Voltage Input		
Cooling System	Built-in Fanless radiator: ST00000229		
Environment	Working : 0~60°C; Storage : -20°C~75°C;0% ~ 95% Relative humidity, non-condensation		
Dimension	146 x 102 mm		



Model No.	KT-EC3-WHLUT-6C2L	KT-EC3-ADLNT-6C2L	KT-EC3-EHLT-6C2L
CPU	Intel® Gen8/ 10Whiskeylake&Cometlake Processor	Intel® Alder Lake-N Processor (N50/N100/ N200/N300/ N95/N97/N305 etc)	Intel® Elkhart Lake J6412/J6413 Processor
Chipset	Intel® SOC	Intel® SOC	Intel® SOC
GPU	Intel® UHD Graphics	Intel®UHD Graphics	Intel® HD Graphics
Display Output	LVDS1/ EDP+HDMI+DP	LVDS1/EDP1 + HDMI (2.0b)+ DP (1.4a) MAX 4K@60Hz	LVDS/ EDP+DP+HDMI
Multi Display	Support triple Synchronism&Asynchronism	Support triple Synchronism&Asynchronism	Support triple Synchronism&Asynchronism
USB	4*USB3.0 Gen2 (10Gbps) + 6*USB2.0	4*USB3.2 Gen2 (10Gbps) + 6*USB2.0	3*USB3.0 Gen2 (10Gbps) + 7*USB2.0
RAM	1*SO-DIMM DDR4 2400MHz Max 32GB	1*SO-DIMM DDR4 3200MHz Max 16GB	1*SO-DIMM DDR4 3200MHz Max 32GB
Audio	ALC269 audio decoding controller on-board ; Integrated amplifier 2.2W@4Ω	ALC269 audio decoding controller on-board ; Integrated amplifier 2.2W@4Ω	ALC269 audio decoding controller on-board ; Integrated amplifier 2.2W@4Ω
Ethernet	2*IntelI226-V	On-board 2*Intel I210 Gigabit Network	On-board 2*IntelI226-V (Transmission rate 2.5Gb)
Storage	1*M.2 M Key,support SATA/ PCIe4self-adaption;1*SATA3.0	1*M.2 M Key,support SATA/ PCIe4self-adaption;1*SATA3.0	1*M.2MKey , support PCIe2 ; 1*SATA3.0
Expansion Sslot	1*M.2AKey,supportWifi/BT module expansion;1*M.2BKey,support 3G/4G module	1*M.2AKey,supportWifi/BT module expansion;1*M.2BKey,support 3G/4G module	1*M.2AKey,supportWifi/BT module expansion;1*M.2BKey,support 3G/4G module
Rear I/O Port	1*DC_IN 1*LAN2 1*LAN1 2*USB3.2 Gen2(10Gbps) 2*USB3.2 Gen2(10Gbps) 1*CLR_CMOS Button(Clear CMOS) 1*DP+HDMI 1*AUDIO	1*AUDIO 1*DP+1*HDMI dual socket 1*REC Button (Support 1-Key Recovery Backup/ Recovery&ClearCMOS) 2*USB3.2 Gen2 10Gbps 2*USB3.2 Gen2 10Gbps 1*LAN1 1*LAN2	1*DC_IN 1*LAN2 1*LAN1 1*USB3.0+1*USB2.0 dual socket 2*USB3.2Gen1(5Gbps) 1*HDMI+1*DP 1*AUDIO
InternalI/O PIN	1*Speaker PIN 1*F_AUDIO PIN 3*F_USB2.0 PIN(6*USB2.0 Exp) 1*F_PANEL PIN 1*GPIO PIN 1*PS2 PIN 1*SATA Socket 1*SATA_PWR Socket 1*BKCL PIN 1*INCN Socket 1*LVDS PIN 1*EDP PIN 6*COM PIN 1*CPU_FAN PIN 1*AT_IN Socket	1*F_AUDIO PIN 1*SPEAKER PIN 3*USB PIN(6*USB2.0 expansion) 1*F_PANEL PIN 1*GPIO (4 way) 1*JPS2 PIN 1*SATA Port 1*SATA_PWR PIN 1*BKCL PIN 1*LVDS PIN 1*INCN PIN 6*COM PIN 1*ATX Phoenix Terinal	1*F_AUDIO PIN 1*Speaker PIN 3*F_USB2.0 PIN (6*USB2.0 expansion) 1*F_PANEL PIN 1*GPIO PIN 1*PS2 PIN 1*BKCL PIN 1*LVDS PIN (In alternative with EDP) 1*INVERT Socket 1*SATA Socket 1*SATA_PWR Socket 1*EDP Socket 6*COM PIN 1*AT_IN Socket
I/O Chip	IT8786E	IT8786E	IT8786E
BIOS	AMI BIOS	AMI BIOS	AMI BIOS
Power	DC 12V-24V Wide-voltage	DC 9V-36V Wide-voltage	DC 12V Wide-voltage
Cooling System	Built-in Fanlessradiator	Built-in Fanlessradiator	Built-in Fanlessradiator
Environment	Working : 0~60°C;Storage : -20°C~75°C;0% ~ 95% Relative humidity, non-condensation		
Dimension	146X102mm		



Model No.	KT-EC3-SKYUT3-6CD8	KT-EC3-J19TC-6C
CPU	Intel® Gen 6/7th SkyLake & KabyLake Processor	Intel® Bay trail J1900/J1800/N2840 Processor
Chipset	Intel® SOC	Intel® SOC
GPU	Intel® HD Graphics	Intel® HD Graphics
Display Output	LVDS/EDP+HDMI+VGA	LVDS/ EDP2+EDP1/HDMI+VGA
Multi Display	Triple Synchronism&Asynchronism	Triple Synchronism&Asynchronism
USB	2*USB3.0 Gen1 (5Gbps) + 8*USB2.0	1*USB3.0 Gen1 (5Gbps) + 8*USB2.0
RAM	1*SO-DIMM DDR4 2133MHz Max 32GB	1*SO-DIMM DDR3L 1333MHz Max 8GB
Audio	ALC269 audio decoding controller on-board ; Independent amplifier NS4251 , 3W@4Ω	ALC269 audio decoding controller on-board ; integrated amplifier 2.2W@4Ω
Ethernet	1*Intel I219-LM Gigabit Network Card on-board (Dual LAN optional)	1*Realtek RLT8111H/8111G Gigabit Network Card on-board (Dual LAN optional)
Storage	1*mSATA ; 1*SATA3.0	1*mSATA ; 1*SATA3.0
Expansion Slot	1*mPCI-E , support Wifi/BT module expansion	1*mPCI-E , support Wifi/4G module expansion
Rear I/O Port	1*DC_IN Port 1*LAN1 Port 2*USB2.0 port (LAN2 optional) 1*CMOS Button 2*USB3.0 Gen1 (5Gbps) 1*HDMI Port 1*VGA Port 1*HP_OUT Port 1*MIC_IN Port	1*DC Port 1*LAN1 Port 2*USB2.0 Port (1*LAN2 optional) 1*USB3.0 1*USB2.0 Port 1*HDMI Port 1*VGA Port 1*LINE-OUT Port 1*MIC-IN Port
Internal I/O PIN	1*Speaker PIN 1*F_AUDIO PIN 1*EDP1 PIN 1*F_PANEL PIN 1*LVDS PIN 6*COM PIN 1*SFAN PIN 1*SATA PIN 1*SATA_PWR PIN 1*GPIO PIN 1*PS2 PIN 3*F_USB (6*USB2.0 expansion) 1*CFAN PIN 1*ATX Socket	1*F_AUDIO PIN 1*SPEAKER PIN 1*VGA_H1 PIN 1*EDP1 PIN 1*GPIO PIN 1*F_PANEL PIN 3*F_USB PIN (5*USB2.0 optional) 1*LVDS/ EDP2 PIN (In Alternative) 1*INCN PIN 1*BKCL PIN 1*PS/2 PIN 1*SATA Socket 1*JPWR_SATA PIN 6*COM232 PIN (Support 1*RS485/422 optional) 1*2Pin ATX Power Socket
I/O Chip	IT8786E	IT8786E
BIOS	AMI BIOS	AMI BIOS
Power	DC 12V-24V Wide-Voltage	DC 12V
Cooling System	Buit-in Fan Radiator	Buit-in Fan Radiator
Environment	Working : 0~60°C; Storage : -20°C~75°C; 0% ~ 95% Relative humidity, non-condensation	
Dimension	146X102mm	



Model No.	KT-EC3-SKYUT-6CD8	KT-EC3-J19TB-6CD8
CPU	Intel® Gen 6/7th Kaby Lake & Skylake Processor	Intel® Bay trail J1900/J1800/N2840 Processor
Chipset	Intel® SOC	Intel® SOC
GPU	Intel® HD Graphics	Intel® HD Graphics
Display Output	LVDS+HDMI+VGA	LVDS+HDMI+VGA
Multi Display	Triple Synchronism&Asynchronism	Triple Synchronism&Asynchronism
USB	2*USB3.0 Gen2 (5Gbps) + 8*USB2.0	1*USB3.0 Gen1 (5Gbps) + 9*USB2.0
RAM	1*SO-DIMM DDR4 2133MHz Max 32GB	1*SO-DIMM DDR3L 1333MHz Max 8GB
Audio	ALC269 audio decoding controller on-board ; Independent amplifier NS4251 , 3W@4 Ω	ALC269 audio decoding controller on-board ; Independent amplifier NS4251 , 3W@4 Ω
Ethernet	2*Intel I211 Gigabit Network	On-board 2*Intel i226 Network Card (Rate 2.5Gb)
Storage	1*mSATA ; 1*SATA3.0	1*mSATA ; 1*SATA3.0
Expansion Slot	1*mPCIe,support Wifi/BT module expansion	1*mPCIe,support Wifi/BT module expansion
Rear I/O Port	1*DC_IN Port 1*VGA Port 1*HDMI Port 2*USB3.0 Gen1(5Gbps) Port 1*LAN1 Port 1*LAN2 Port 1*AUDIO Port	1*DC_IN Port 1*VGA Port 1*HDMI Port 1*USB3.0 Gen1(5Gbps)+USB2.0 dual socket 1*LAN2 Port 1*LAN1 Port 1*AUDIO Port
Internal I/O PIN	1*Speaker PIN 1*F_AUDIO PIN 1*F_PANEL PIN 1*LVDS PIN 1*INVERT PIN 1*BKCL PIN 4*F_USB2.0 PIN (8*USB2.0 expansion) 6*COM PIN 1*GPIO PIN 1*SATA_PWR Socket 1*SATA Socket 1*PS2 PIN 1*AT_IN Socket	1*F_AUDIO PIN 1*Speaker Socket 1*F_PANEL PIN 1*LVDS PIN 1*INVERT PIN 1*BKCL Socket 4*F_USB2.0 (8*USB2.0 expansion) 1*SYS_FAN PIN 6*COM PIN (COM2 support RS232/485 optional) 1*SATA PIN 1*SATA_PWR PIN 1*PS2 PIN 1*GPIO PIN (4 way) 1*ATX_IN Socket
I/O Chip	IT8786E	IT8786E
BIOS	AMI BIOS	AMI BIOS
Power	DC 12V	DC 12V-19V Wide-Voltage
Cooling System	Built-in Fanless Radiator	Built-in Fanless Radiator
Environment	Working : 0~60°C; Storage : -20°C~75°C; 0% ~ 95% Relative humidity, non-condensation	
Dimension	146X102mm	

KT-LAN-B150T-8LC

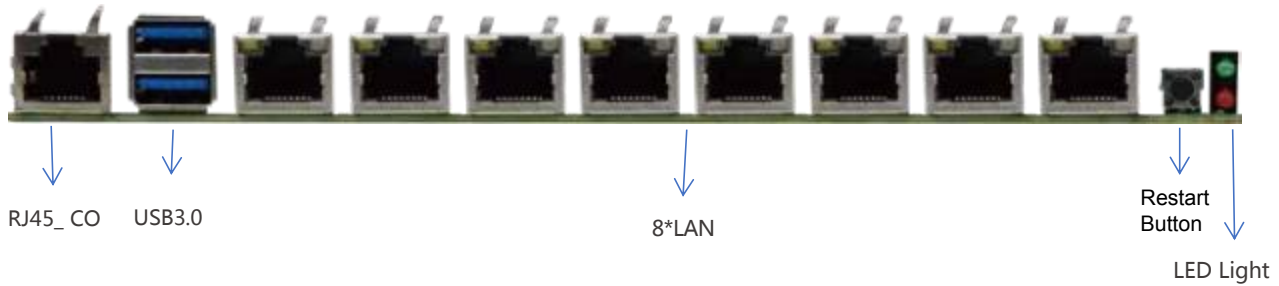
Embedded Industrial PC Board

Application : Enterprise-level network security systems, network auditing/monitoring/routing, Internet behavior management, firewall, VPN, traffic control, WiFi management, etc.



- Intel® Gen 6/7/8/9th Processor (i5-6400/I5-7500/I5-8400/I7-9700)
- Support Dual SO-DIMM, DDR4 RAM, up to 64GB
- On-board 8*Intel i226V Network Card (Rate 2.5G) , 4*LAN support Bypass

I/O Ports :



Specification

CPU	Intel® 6th Sky lake & 7th Kaby Lake & 8th Coffee Lake & 9th Processor (i5-6400/i5-7500/i5-8400/i7-9700)		
Chipset	Intel® B150		
GPU	Intel® HD Graphics		
Display Output	VGA		
Multi Display	/		
USB	2*USB3.0 Gen1(5Gbps) + 4*USB2.0		
RAM	2*SO-DIMM DDR4 3400MHz Max64GB		
Audio	/		
Ethernet	On-board 8*Intel i226V Network Card Rate 2.5G (Intel i219LM optional)		
Storage	1*mSATA HDD Slot; 3*SATA3.0 port		
Expansion Slot	1*mPCIe slot, support 4G module expansion ; 1*PCIEx8 Slot		
Rear I/O Port	1*RJ45_COM Port 2*USB3.0 Gen (5Gbps) Port 4*LAN Port (bypass optional) 4*LAN Port 1*SW But ton (Restart) 1*LED Status Indicator Light	Inner I/O PIN	1*F_PANEL PIN 2*F_USB2.0 PIN (4*USB2.0 expansion) 3*JLAN_LED PIN 2*SATA_PWR PIN 3*SATA PIN 1*JVGA PIN 3*SFAN PIN 1*CFAN PIN 1*GPIO (4 way) 1*COM2 1*24pin & 4pin ATX Power Socket
I/O Chip	IT8786E		
BIOS	AMI BIOS		
Power	ATX (24 +4 Pin) Power		
Cooling System	Requires additional CPU radiator		
Environment	Working : 0~60°C; Storage : -20°C~75°C;0% ~ 95% Relative humidity, non-condensation		
Dimension	280 x 210 mm		



Modle No.	KT-LAN-SKYUT2-6L	KT-LAN-EHLT2-6LC	KT-LAN-GLKT-4LC
CPU	Intel® Gen 6/7th Kaby Lake & Sky Lake Processor	Intel® Elkhart Lake J6412/J6413 Processor	Intel® Gemini Lake J4125/J4105/ N4000 Processor
Chipset	Intel® SOC	Intel® SOC	Intel® SOC
GPU	Intel®HD Graphics	Intel®HD Graphics	Intel®HD Graphics
Display Output	HDMI	HDMI	HDMI+DP
Multi Display	/	/	Synchronism&Asynchronism
USB	4*USB3.0 Gen1(5Gbps) + 2*USB2.0	4*USB3.2 Gen2(10Gbps) + 4*USB2.0	4*USB3.0 Gen1(5Gbps)
RAM	2*SO-DIMM DDR4 2133MHz Max 32GB	2*SO-DIMM DDR4 3200MHz Max 32GB	2*SO-DIMM DDR4 2400MHz Max 8GB
Audio	/	/	/
Ethernet	On-board 6*Intel i211 Gigabit Network Card	On-board 6*Intel i226 Network Card(Rate 2.5G)	On-board 4*Intel i226 Network Card(Rate 2.5G)
Storage	1*mSATA HDD Slot; 1*SATA	1*mSATA HDD Slot; 1*SATA	1*mSATA HDD Slot(1*M.2 M Key optional); 1*SATA
Expansion Slot	1*mPCIe Slot support 4G module expansion	1*mPCIe Slot support Wifi module expansion	1*mPCIe Slot support 4G module expansion
Rear I/O Port	1*DC IN Port 6*LAN Port 1*LED Status Indicator Light	1*DC IN Port 6*LAN Port 1*LED Status Indicator Light	1*DC IN Port 4*LAN Port 1*LED Status Indicator Light 1*RST Buttn
Front I/O Port	1*PWR ON Button 1*RST Button 1*HDMI Port 2*USB3.2 Gen1 Port 1*RJ45_COM 2*USB3.2 Gen1 Port	1*PWR_ON Button 1*RST Button 1*HDMI Port 1*Clear_CMOS Button 2*USB2.0 Port 1*RJ45_COM Port 2*USB3.0 Port 1*Shift Switch(AUTO_ON)	1*PWR_ON Button 1*SIM Slot 4*USB3.0 Port 1*DP Port 1*HDMI Port
External I/O PIN	1*F_USB1 PIN 1*GPIO PIN 1*SATA_PWR Socket 1*SATA Socket 1*F_PANEL PIN 1*ATX Socket 1*RST_GPIO_SET1 Stitch 1*JAT Stitch 1*CLR_CMOS Stitch 1*JME Stitch	1*F_USB2.0 PIN(2*USB2.0 expansion) 1*GPIO PIN 1*SATA_PWR Socket 1*SATA Socket 1*F_PANEL PIN 1*ATX_IN Socket 1*RST_GPIO_SET PIN	1*COM PIN 1*GPIO PIN 1*SATA Socket 1*SATA_PWR Socket 1*F_PANEL PIN 1*TPM PIN 1*CPU_FAN Socket 1*PWR Phoenix Terminal Socket
I/O Chip	IT8772E	IT8613E	IT8613E
BIOS	AMI BIOS	AMI BIOS	AMI BIOS
Power	DC 12V	DC 12V	DC 12V
Cooling System	Fanless Radiator Optional	require extra CPU radiator	require extra CPU radiator
Environment	Working : 0~60°C; Storage : -20°C~75°C; 0% ~ 95% Relative humidity, non-condensation		
Dimension	120 x 120 mm		



Model	KT-LAN-WHLUT-6LC	KT-LAN-3230MTH-6L	KT-LAN-1037UC-6LC
CPU	Intel® Gen 8/ 10th Whiskey Lake & Comet Lake Processor	Intel® Bay trail I5-3230M Processor	Intel®Ivy Bridge i3-3217U/i5-3317U Processor
Chipset	Intel® SOC	Intel® SOC	Intel® SOC
GPU	Intel®UHD Graphics	Intel®HD Graphics	Intel®HD Graphics
Display Output	LVDS + VGA	VGA	VGA
Multi Display	Synchronism&Asynchronism	/	/
USB	4*USB3.0 Gen1(5Gbps) +4*USB2.0	6*USB2.0	6*USB2.0
RAM	2*SO-DIMM DDR4 3200MHz Max 32GB	1*SO-DIMM DDR3 1333MHz Max 8GB	1*SO-DIMM DDR3 1600MHz Max 8GB
Audio	/	/	/
Ethernet	On-board 6*Intel i226 Network Card(2.5G)	On-board 6*Intel i226 Network Card(2.5G)	On-board 6*Intel i225 Network Card(Rate2.5G)
Storage	1*mSATA HDD Slot; 1*SATA	1*mSATA HDD Slot; 1*SATA	1*mSATA HDD Slot; 4*SATA
Expansion Slot	1*M.2 B Key ,SATA SSD/4G module expansion ; 1*M.2 A Key ,Wifi/BT module expansion	1*mPCIe Slot Wifi/BT/4G module expansion	1*mPCIe Slot Wifi/BT/4G module expansion
Rear I/O Port	1*DC_IN Port 1*PWR_ON Button 1*RST Button 1*RJ45_COM Port 2*USB3.2 Gen1(5Gbps) Port 1*LED Status Indicator Light 6*LAN Port	1*DC_IN Port 1*RST_BT Button 1*PWR_BT Btton 1*RJ45_COM Port 2*USB2.0 Port 1*LED Status Indicator Light 6*LAN Port	1*DC_IN Port 1*RST_BT Button 1*PWR_BT Button 1*RJ45_COM Port 2*USB2.0 Port 1*LED Status Indicator Light 6*LAN Port
Front I/O Port	/	/	/
Inner I/O PIN	1*LAN_LED PIN 1*LVDS PIN 1*BKCL PIN 1*INCN Socket 1*SATA Socket 1*SATA_PWR PIN 1*F_PANEL PIN 1*LPT PIN 1*GPIO PIN 1*COM PIN 2*F_USB2.0 PIN (4*USB2.0 expansion) 1*VGA_H PIN 2*SFAN PIN 1*CFAN PIN 1*JPS2 PIN 1*ATX_IN Socket	1*LAN_LED PIN 2*SYS_FAN PIN 1*PRINT PIN 4*SATA Socket 2*SATA_PWR PIN 1*GPIO PIN 2*F_USB2.0 PIN (4*USB2.0 expansion) 1*F_PANEL PIN 1*VGA_H PIN 1*CPU_FAN PIN 1*PCIE8X Slot 1*COM PIN 1*JPS2 PIN 1*ATX_IN Socket	1*LAN_LED PIN 1*PCIE8X Slot 2*F_USB2.0 PIN (4*USB2.0 expansion) 4*SATA Socket 2*SATA_PWR PIN 1*GPIO PIN 1*F_PANEL PIN 2*SYS_FAN PIN 1*CPU_FAN PIN 1*PRINT PIN 1*VGA_H PIN 1*COM PIN 1*JPS2 PIN 1*ATX_IN Socket
I/O Chip	IT8784E	IT8712F	IT8712F
BIOS	AMI BIOS	AMI BIOS	AMI BIOS
Power	DC 12V	DC 12V	DC 12V
Cooling System	Built-in Fan Radiator	Built-in Fan Radiator	Built-in Fan Radiator
Environment	Working : 0~60℃; Storage : -20℃~75℃; 0% ~ 95% Relative humidity, non-condensation		
Dimension	200 x 180 mm		



Model No.	KT-LAN-EHLT3-6LC	KT-LAN-GLKT3-6LC	KT-LAN-J1900T-6LC
CPU	Intel®Elkhart Lake J6412/J6413 Processor	Intel® Gemini Lake J4005/J4105/J4125 Processor	Intel® Bay trail J1900/J1800/N2840 Processor
Chipset	Intel® SOC	Intel® SOC	Intel® SOC
GPU	Intel®UHD Graphics	Intel®UHD Graphics	Intel®HD Graphics
Display Output	LVDS/ EDP1+HDMI+VGA	HDMI+VGA	LVDS+ VGA
Chipset	Triple Synchronism&Asynchronism	Dual Synchronism&Asynchronism	Dual Synchronism&Asynchronism
USB	1*USB3.0 Gen1(5Gbps) + 5*USB2.0	1*USB3.0 Gen1(5Gbps) + 5*USB2.0	1*USB3.0 Gen1(5Gbps) + 3*USB2.0
RAM	2*SO-DIMM DDR4 3200MHz Max 16GB	2*SO-DIMM DDR4 2400MHz Max 8GB	1*SO-DIMM DDR3 1333MHz Max 8GB
Audio	/	/	/
Ethernet	On-board 6*Intel i225 Network Card(Rate 2.5G)	On-board 6*Intel i226 Network Card(Rate 2.5G)	On-board 6*Intel i226 Network Card(Rate 2.5G)
Storage	1*mSATA HDD Slot; 1*SATA	1*mSATA Slot (1*CF Slot optional) 1*SATA3.0 Slot	1*mSATA HDD Slot; 1*SATA
Expansion Slot	1*mPCIe Slot Wifi/BT module expansion ; 1*M.2 B Key,SATA SSD/4G module optional	1*M.2 B Key,4G/ 5G module expansion	1*mPCIe Slot Wifi/BT/4G module expansion
Rear I/O Port	1*DC_IN Port 1*RST_BT Button 1*PWR_BT Butoon 1*RJ45_COM Port 1*USB3.2 Gen1(5Gbps)+USB2.0 Port1*LED Status Indicator Light 6*LAN Port	1*RST Button (Restar , can switch to GPIO trigger) 1*PWR Button (Power On/OFF) 1* RJ45_COM port 1*USB3.0+ 1*USB2.0 port (standby current) 1*LED Indicator Light (Power-Light , HDD-Red) 6*LAN Port,Front Panel: 1*DC_IN Port	1*DC_IN Port 1*PWR_BT Buton 1*RST_Button 1*RJ45_COM Port 1*USB3.2 Gen1(5Gbps)+USB2.0 Port 1*LED Status Indicator Light 6*LAN Port
Front I/O Port	/	/	/
Internal I/O PIN	1*PCIE1 Slot (PCIEX1 signal) 1*LAN_LED PIN 1*LPT PIN 1*GPIO PIN 1*COM PIN 1*SATA Socket 1*SATA_PWR PIN 1*F_PANEL PIN 2*F_USB2.0 PIN (4*USB2.0 expansion) 1*VGA_H PIN 2*SFAN PIN 1*CFAN PIN 1*HDMI PIN 1*LVDS/ EDP PIN (In alternative) 1*BKCL PIN 1*INCN Socket 1*JPS2 PIN 1*ATX_IN Socket	2*USB2.0 Socket(Type-A,inward,to connect encryption card) 1*LAN_LED PIN 1*COM PIN 1*USB PIN (2*USB2.0 expansion) 1*SATA PIN 1*SATA_PWR PIN 1*F_PANEL PIN 1*VGA PIN 2*SFAN PIN 1*ATX Power Socket 1*CFAN PIN 1*GPIO PIN(4 way) 1*HDMI PIN	1*PCIE1 Slot (PCIEX1 signal) 1*JPS2 PIN 1*LAN_LED PIN 1*LPT PIN 1*GPIO PIN 1*COM PIN 1*SATA Socket 1*SATA_PWR PIN 1*F_PANEL PIN 1*F_USB2.0 PIN (2*USB2.0 expansion) 1*VGA_H PIN 1*SFAN PIN 1*CFAN PIN 1*ATX_IN Socket
I/O Chip	IT8784E	IT8784E	IT8784E
BIOS	AMI BIOS	AMI BIOS	AMI BIOS
Power	DC 12V	DC 12V	DC 12V
Cooling System	Built-in Fan Radiator	Built-in Fan Radiato	Built-in Fan Radiato
Environment	Working : 0~60°C; Storage : -20°C~75°C; 0% ~ 95% Relative humidity, non-condensation		
Dimension	200 x 180 mm		



Model NO.	KT-LAN-B75B-SFP4
CPU	Intel®Ivy Bridge Celeron G1610/G1620 etc Processor
Chipset	Intel® B750
GPU	Intel®HD Graphics
Display Output	VGA
Multi Display	/
USB	6*USB2.0
RAM	2*SO-DIMM DDR3 1333MHz Max 8GB
Audio	/
Ethernet	On-board 6*Intel I210 Gigabit Network Card
Storage	1*mSATA HDD Slot; 4*SATA
Expansion Slot	1*mPCIe Slot support Wifi/BT/4G module expansion
Rear I/O Port	1*RST_BT Button 1*PWR_BT Buttn 1*RJ45_COM Port 2*USB2.0 Port 1*Power ON/OFF&HDD indicator light 6*LAN Port 2*SFP Fiber Port 2*SFP Status Indicator Light
Front I/O Port	/
Internal I/O PIN	1*PCIEX1 Socket 2*F_USB2.0 (4*USB2.0 expansion) 1*SATA_PWR PIN 4*SATA PIN 1*IDE_PWR Socket 1*VGA_H PIN 2*SYS_FAN PIN 1*F_PANEL PIN 1*GPIO PIN 1*DEBUG_CON1 PIN 1*PS2 PIN 1*JPRINT PIN 1*CPU_FAN PIN 1*LAN_LED PIN 1*COM PIN
I/O Chip	IT8712F
BIOS	AMI BIOS
Power	ATX 24+4 Pin
Cooling System	Requir extra standard 115X Fan radiator
Environment	Working : 0~60°C; Storage : -20°C~75°C; 0% ~ 95% Relative humidity, non-condensation
Dimension	230 x 240 mm

KT-NANO-ADLN-1C2L

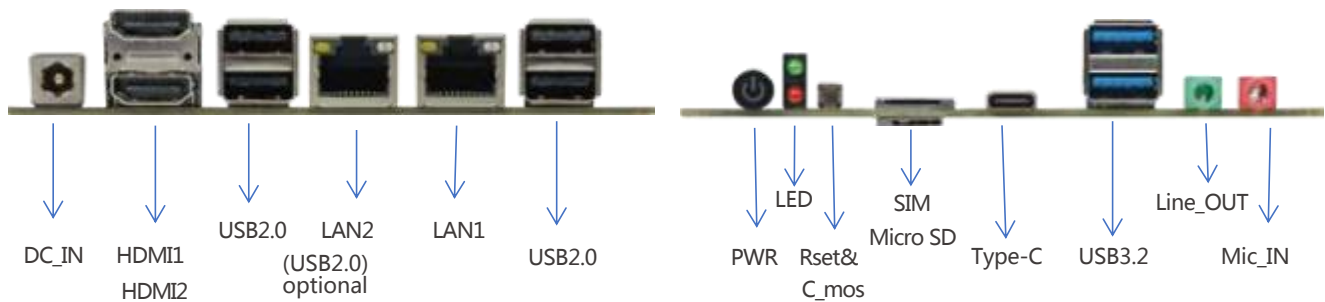
Embedded Industrial PC Board

Application : Terminal residence, office PC, soft routing, education cloud desktop, etc



- Intel Gen 12th Low-consumption N Series,DDR5 RAM
- Support 2*HDMI+VGA(PIN)Triple Synchronism&Asynchronism
- Support Dual LAN,6USB,1*Type-C , 4G/5G expansion
- Compact & feature-rich deisgn,Apply for multimedia entertainment and etc

I/O Ports :



Specification

CPU	Intel® Alder Lake-N (N305/N100 etc) Processor				
Chipset	Intel® SOC				
GPU	Intel® UHD Graphics				
Display Output	2*HDMI2.0(4k 60Hz)+VGA(1080P)				
Multi Display	Triple Synchronism&Asynchronism				
USB	2*USB3.2 Gen2 (10Gbps) + 4*USB2.0 + 1*Type-C				
RAM	1*SO-DIMM DDR5 4800MHz Max 16GB				
Audio	On-board ALC897 audio decoding controller ; Independent amplifier NS4251 3W@4Ω				
Ethernet	2*Realtek RTL8111H Gigabit Network Card on-board				
Storage	1*M.2 M Key,support SATA3/PCIEx2 self-adaption				
Expansion Slot	1*M.2 E Key , support Wifi6/BT expansion; 1*M.2 B Key, support 5G module expansion				
Rear I/O Port	1*DC_IN Port 2*HDMI Port 2*USB2.0 Port 1*LAN2 Port(2*USB2.0 optional) 1*LAN1 Port 2*USB2.0 Port	Front I/O Port	1*PWRBTN Power 2*LED [Power(Grenb); HDD(Red)] 1*RST Button(Restart/Clear CMOS) 1*SIM Slot 1*MicroSD Slot 1*Type-C Port (USB3.2) 2*USB3.2 Gen2(10Gbps) Port 1*Line-OUT Port 1*MIC-IN Port	Internal I/O PIN	1*F_AUDIO PIN 1*Speaker PIN 1*COM PIN 1*VGA PIN 1*JLED PIN 1*TPM PIN 1*JFP PIN(Power ON/OFF)
I/O Chip	IT8613E				
BIOS	AMI BIOS				
Power	DC 12V				
Cooling System	Built-in Fanless Radiator				
Environment	Working : 0~60°C; Storage : -20°C~75°C; 0% ~ 95% Relative humidity, non-condensation				
Dimension	120 X120mm				

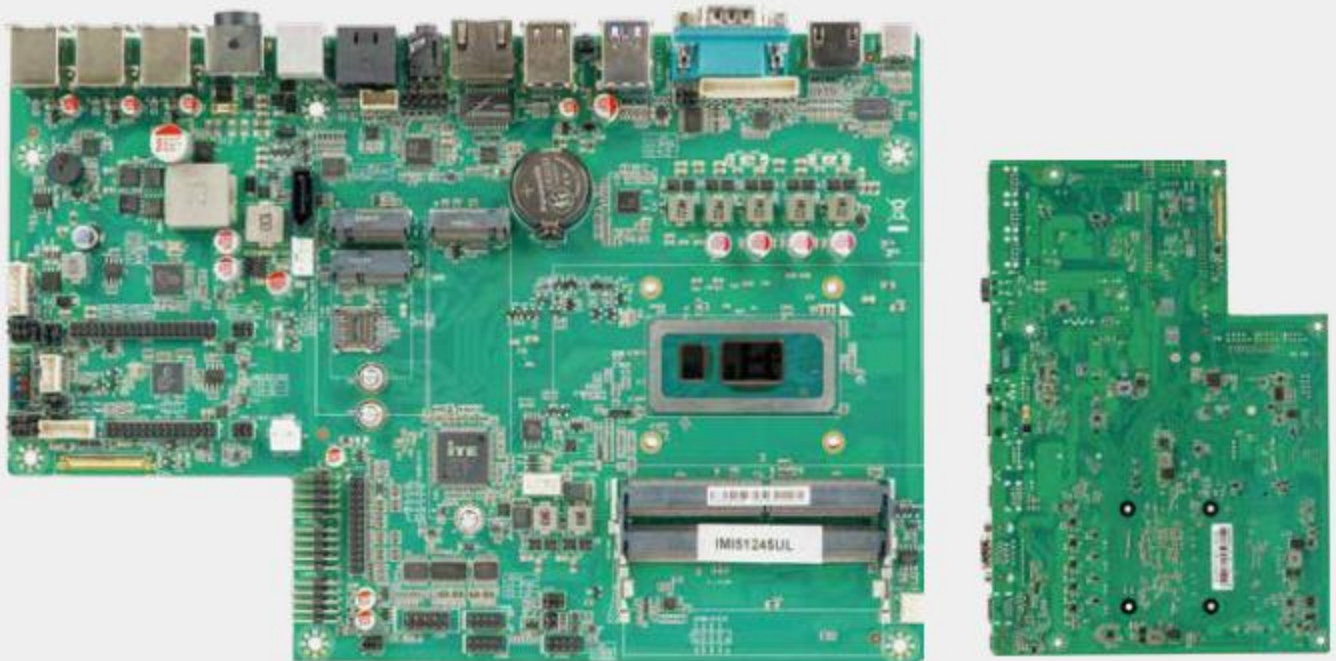


Model No.	KT-NANO-WHLUT-4C2L	KT-NANO-GLKT-4C2L	KT-NANO-J1900T-2C2L
CPU	Intel® Gen 8/ 10th Whiskey Lake & CometLake	Intel® Gemini Lake J4125/J4105/ N4000 Processor	Intel® Bay trail J1900/J1800 Processor
Chipset	Intel® SOC	Intel® SOC	Intel® SOC
GPU	Intel® HD Graphics	Intel® UHD Graphics	Intel® HD Graphics
Display Output	2*HDMI + DP	2*HDMI + LVDS	VGA + HDMI
Multi Display	Triple Synchronism&Asynchronism	Triple Synchronism&Asynchronism	Dual Synchronism&Asynchronism
USB	4*USB3.2 Gen2 (10Gbps) + 2*USB2.0 + 1*Type-C	5*USB3.0 Gen1 (5Gbps) + 5*USB2.0	1*USB3.0 Gen1 (5Gbps) + 3*USB2.0
RAM	2*SO-DIMM DDR4 2666MHz Max 32GB	1*SO-DIMM DDR4 2400MHz Max 8GB	1*SO-DIMM DDR3L 1333MHz Max 8GB
Audio	ALC662 audio decoding controller on-board ; Independent amplifier NS4251 3W@4Ω	ALC662 audio decoding controller on-board ; Independent amplifier NS4251 3W@4Ω	ALC662 audio decoding controller on-board ; Independent amplifier NS4251 3W@4Ω
Ethernet	2*Realtek RTL8111H Gigabit Network Card on-board	2*Realtek RTL8111H Gigabit Network Card on-board	2*Realtek RTL8111H Gigabit Network Card on-board
Storage	1*M.2 M Key,support PCIe4; 1*SATA	1*M.2 M Key,support SATA protocol; 1*SATA	1*mSATA HDD Slot; 1*SATA
Expansion Slot	1*mPCIe , support 4G/SATA; 1*M.2 E Key, support Wifi	1*mPCIe,support Wifi/BT/4G module expansion	1*mPCIe ,support Wifi/4G module expansion
Rear I/O Port	1*DCIN Port 2*HDMI Port (double-decker) 1*DP Port 1*LAN2 Port(2*USB2.0 optional) 1*LAN1 Port 2*USB2.0 Port	1*DCIN Port 2*HDMI Port 2*USB2.0 Port 1*LAN2 Port (USB2.0 Port optional) 1*LAN1 Port 1*USB2.0+1*USB3.0	1*DCIN Port 1*HDMI Port 1*VGA Port 1*LAN1 Port 1*LAN2 Port 1*RJ45_COM Port
Front I/O Port	1*LED Status Indicator Light 1*F_OUT Port 1*F_MIC Port 1*Type-C Port 1*RSTButton 2*USB3.2 Port 2*USB3.2 Port 1*PWR_ON Button	1*PWR_BT Button 2*LED Indicator Light 1*RST Button(Restart/Clear CMOS) 1*SIM Slot (Default without) 2*USB3.0 Port (1*Type-C optional) 1*Ghost Button 2*USB3.0 Port 1*LINE-OUT Port 1*MIC-IN Port	1*PWR Power Button 1*SIM Slot 1*TF Slot 2*USB2.0 port 1*USB2.0+1*USB3.0 1*LINE-OUT Port 1*MIC-IN Port
Internal I/O PIN	1*TPM PIN 1*CPUFAN Socket 1*R_USB2.0 PIN(2*USB2.0 expansion) 1*GPIO PIN 1*Speaker Socket 1*F_PANEL PIN 1*SATA Socket 1*SATA_PWR PIN 4*COM PIN 1*ATX_IN Scket	1*LVDS Scket 1*BKCT Scket 1*SATA_PWR PIN 1*SATA3.0 Port 4*COM232 PIN 1*GPIO PIN 1*CPU_FAN PIN 1*AUDIO PIN 1*SPEAKER PIN 1*4PIN PWR PIN 1*_USB2.0 PIN(2*USB2.0 expansion)	1*VGA PIN 1*COM PIN 1*F_PANEL PIN 1*F_AUDIO PIN 1*J1 PIN 1*GPIO PIN 1*SYS-FAN PIN 1*CPU-FAN PIN 1*CIR PIN 1*DEBUG PIN 1*SPEAKER PIN 1*SATA-PWR PIN
I/O Chip	IT8786E	IT8786E	IT8786E
BIOS	AMI BIOS	AMI BIOS	AMI BIOS
Power	DC 12V-19V Wide Voltage	DC 12V	DC 12V
Cooling System	Built-in Fan Radiator	Require Extra CPU Radiator	Built-in Fanless Radiator
Environment	Working : 0~60°C; Storage : -20°C~75°C; 0% ~ 95% Relative humidity, non-condensation		
Dimension	120X120mm		

KT-ZO-RPLPT-6C1L-GPOS

Embedded Industrial PC Board

Application : Self-service retail machines, smart express cabinets, self-service teller machines and other smart self-service equipment



- Intel Gen 12/13th U/P/H Series Processor
- Support LVDS1/EDP1+LVDS2/EDP2+HDMI+VGA+Type-C any 4-displays
- Support 1-way 12V/24V cash box, 2-way 12V support 6*COM VUSB, 1way 24VUSB
- Support 6*COM , 10*USB, 4G/5G expansion , makes easier expansion and smarter checkout

I/O Ports :



Specification					
CPU	Intel® Gen 12/13th Alder lake/Raptor Lake Processor (support U/P/H Series Processor)				
Chipset	Intel® SOC				
GPU	Intel® UHD Graphics				
Display Output	LVDS1/EDP1+LVDS2/EDP2+HDMI+VGA+Type-C				
Multi Display	4-displays synchronously and asynchronously				
USB	2*USB3.2 + 8*USB2.0 + 2* 12V@USB +1* 24V@USB +1*Type-C(USB3.0)				
RAM	2*SO-DIMM DDR4 3200MHz Max 64GB				
Audio	ALC897 audio decoding controller on-board ; Independent amplifier 3W@4Ω				
Ethernet	1*Realtek 8111H/8111G Gigabit Netowrk on-board				
Storage	1*M.2 M Key, support SATA3/PCIE4x4 self-adaption; 1*SATA3.0 Port				
Expansion Slot	1*M.2 E Key , support Wifi6/BT module expansion ; 1*M.2 B Key, support 4G/5G module expansion				
Rear I/O Port	1*Type-C Port 1*HDMI Port 1*COM(VGA optional) 2*USB3.0 Port 1*REC Button 2*USB2.0 Port 1*LAN Port 1*AUDIO Port	1*RJ50_COM Port 1*RJ12 Cash Box Port 1*DC Power Port 1*12V@USB Port 1*12V@USB Port 1*24V@USB Port	Internal I/O PIN	1*LVDS1 PIN 1*LVDS2 PIN 2*INVCN PIN 1*BKCL PIN 2*EDP2 Port 1*F_PANEL PIN 3*JUSB PIN(6*USB2.0 expansion) 1*LPT PIN	4*COM PIN 1*CPU_FAN PIN 1*SYS_FAN PIN 1*F_AUDIO PIN 1*SPEAKER PIN 1*SATA Port 1*SATA_PWR PIN
I/O Chip	IT8786E				
BIOS	AMI BIOS				
Power	Aviation 24V				
Cooling System	Built-in Fanless CPU Radiator				
Environment	Working : 0~60°C; Storage : -20°C~75°C; 0% ~ 95% Relative humidity, non-condensation				
Dimension	240X170mm				



Model No.	KT-ZO-EHLTC-6CGPOS
CPU	Intel®Elkhart Lake J6412/J6413 Processor
GPU	Intel® SOC
Display Output	Intel® UHD Graphics
Multi Display	LVDS1/ EDP1 + LVDS2/ EDP2 + HDMI/VGA(HDMI support 4K@60Hz)
GPU	Triple Synchronism&Asynchronism
USB	2*USB3.2 (Gen2 10Gbps) + 8*USB2.0 + 2* 12V@USB+1* 24V@USB +1*Type-C (USB3.0)
RAM	1*SO-DIMM DDR4 3200MHz Max 32GB
Audio	ALC897 audio decoding controller on-board ; Independent amplifier NS4251 3W@4Ω MAX
Ethernet	On-board 1*Realtek RTL8111H Gigabit Network Card
Storage	1*M.2 M Key, support SATA3/ PCIE4x1 self-adaption;1*SATA3.0 Port
Expansion Slot	1*M.2 E Key,support Wifi6/BT module expansion(CNVi) ; 1*M.2 B Key,support 4G/5G module expansion
Rear I/O Port	1*Type-C Port 1*HDMI Port 1*COM Port(VGA optional) 2*USB3.0 Port 1*REC Button 2*USB2.0 Port 1*LAN Port 1*AUDIO Port 1*RJ50_COM Port 1*RJ12 Cash Box Port 1*DC power Port 1*12V@USB Port 1*12V@USB Port 1*24V@USB Port
Internal I/O PIN	1*LVDS1 PIN 1*LVDS2 PIN 2*INVCN PIN 1*BKCL PIN 2*EDP2 Port 1*F_PANEL PIN 3*JUSB PIN(6*USB2.0 expansion) 1*LPT PIN 4*COM PIN 1*CPU_FAN PIN 1*SYS_FAN PIN 1*F_AUDIO PIN 1*SPEAKER PIN 1*SATA Port 1*SATA_PWR PIN
I/O Chip	IT8786E
BIOS	AMI BIOS
Power	Aviation 24V
Cooling System	Built-in Fan CPU Radiator
Environment	Working : 0~60°C; Storage : -20°C~75°C; 0% ~ 95% Relative humidity, non-condensation
Dimension	240 x 170 mm



Model No.	KT-ZO-GLKT-4C2L-GPOS	KT-ZO-EHLT-4C2L-GPOS	KT-ITX-J1900T4A-6CD8
CPU	Intel® Gemini Lake J4125/J4105/N4000 Processor		Intel® Bay trail J1900/J1800/N2840 Processor
Chipset	Intel® SOC	Intel® SOC	Intel® SOC
GPU	Intel® UHD Graphics 600	Intel® UHD Graphics	Intel® HD Graphics
Display Output	LVDS1/EDP1+ LVDS2/EDP2 +VGA	LVDS1/EDP1+LVDS2/EDP2+VGA	LVDS/EDP2+EDP1+VGA
Multi Display	Triple Synchronism&Asynchronism	Triple Synchronism&Asynchronism	Dual Synchronism&Asynchronism
USB	2*USB3.0 Gen1(5Gbps) + 8*USB2.0	2*USB3.2 Gen2 (10Gbps) + 7*USB2.0	1*USB3.0 Gen1(5Gbps) + 7*USB2.0
RAM	1*SO-DIMM DDR4 2400MHz Max 8GB	1*SO-DIMM DDR4 3200MHz Max 32GB	1*SO-DIMM DDR3L 1333MHz Max 8GB
Audio	ALC269 audio decoding controller on-board ; Integrated amplifier 2.2W@4 Ω	ALC269 audio decoding controller on-board ; Independent amplifier 3W@4 Ω	ALC269 audio decoding controller on-board ; Independent amplifier 3W@4 Ω
Ethernet	On-board 1*RealtekRTL8111H/8111G Gigabit Network Card(Dual LAN optional)		1*Realtek 8111H Gigabit Network Card/8106E 100M network card
Storage	1*mSATA ; 1*SATA Port		
Expansion Slot	1*mPCIe , support Wifi/BT Module expansion		
Rear I/O Port	1* DC Port 1* VGA Port (COM4 optional) 1* COM1 2* USB3.0 Port 2* USB2.0 Port(1*LAN2 optional) 1* LAN1 Port 1*HP_OUT Port 1*MIC_IN Port 1*CLR_CMOS Button	1*DC_IN Port 1*VGA Port (1*COM4 optional) 1*COM1 Port 2*USB3.2 Gen2(10Gbps) Port 2*USB2.0 (1*LAN2 optional) 1*LAN1 Port 1*HP_OUT Port 1*MIC_IN Port 1*CLR_CMOS Button	1*DC_IN Port 1*VGA Port 1*COM Port 1*USB3.2 +1*USB2.0 2*USB2.0 Port 1*LAN1 Port 1*HP_OUT Port 1*MIC_IN Port
Internal I/O PIN	1* F-AUDIO PIN 1* SPEAKER PIN 1* PRINT PIN 3* JUSB2.0 PIN(6*USB2.0 expansion) 2* COM PIN (COM2 support RS232/485) 1* F-PANEL PIN 1* GPIO PIN 1* FAN PIN 1* SATA_Port 1* SATA_PWR 1* LVDS1/EDP1 PIN (In Alternative) 1* LVDS2/EDP2 PIN (In Alternative) 1* INVERT1 PIN 1* INVERT2 PIN 1* JPS2 PIN 1* VGA PIN 1* 4Pin ATX Power Socket	1*F_AUDIO PIN 1*Speake PIN 1*J_PRINT PIN 1*JPS2 PIN 3*J_USB2.0 PIN (5*USB2.0 expansion) 3*COM PIN 1*GPIO PIN 1*F_PANEL PIN 1*SATA_PWR PIN 1*C_FAN PIN 2*LVDS_EDP PIN 2*INVERT Socket 1*LCTL Socket 1*VGA PIN 1*ATX_IN Socket	1*Speaker PIN 2*F_USB2.0(4*USB2.0 expansion) 1*JPRINT PIN 1*F_PANEL PIN 6*COM PIN 1*SATA PIN 1*SATA_PWR PIN 1*GPIO PIN 1*FAN PIN 1*LVDS/EDP1 PIN (In Alternative) 1*EDP2 PIN 1*INCN PIN 1*JPS2 PIN 1*JVGA PIN 1*ATX Socket
I/O Chip	IT8786E		IT8784E
BIOS	AMI BIOS		
Power	DC 12V		
Cooling System	Built-in Fanless CPU Radiator		
Environment	Working : 0~60°C; Storage : -20°C~75°C; 0% ~ 95% Relative humidity, non-condensation		
Dimension	170X170mm		



Model NO.	KT-ITX-J1900TE-6C2L	KT-EC3-J19TD-2C1L-GPOS
CPU	Intel® Bay trail J1900/J1800/ N2840 Processor	Intel® Bay trail J1900/J1800/ N2840 Processor
Chipset	Intel® SOC	Intel® SOC
GPU	Intel® HD Graphics	Intel® HD Graphics
Display Output	LVDS+HDMI+VGA	LVDS/ EDP1+ EDP2+ VGA
Multi Display	Dual Synchronism&Asynchronism	Dual Synchronism&Asynchronism
USB	2*USB3.0 Gen1(5Gbps) + 7*USB2.0	1*USB3.0 Gen1(5Gbps) +8*USB2.0
RAM	1*SO-DIMM DDR3L 1333MHz Max 8GB	1*SO-DIMM DDR3L 1333MHz Max 8GB
Audio	ALC269 audio decoding controller on-board ; Integrated amplifier2.2W@4 Ω	ALC897 HD audio decoding controller on-board ; Independent amplifier ALC105 3W@4 Ω
Ethernet	1*Realtek 8111H/8111G Gigabit Network Card on-board	1*Realtek RLT8111H/8111G Gigabit Network Card on-board
Storage	1*mSATA ; 1*SATA2.0 Port	1*mSATA
Expansion Slot	1 *mPCIe ,support Wifi/BT expansion	1 *mPCIe ,support Wifi/BT module expansion
Rear I/O Port	1*DC_IN Port 1*HDMI Port 1*VGA Port 2*USB3.0 Gen1 (5Gbps) 2*USB2.0 Port (LAN2 optional) 1*LAN1 Port 1*HP_OUT Port 1*MIC_IN Port	1*DC Port 1*LAN1 Port 2*USB2.0 Port 1*USB3.0+1*USB2.0 Port 1*VGA Port 1*LINE-OUT Port 1*MIC-IN Port
Internal I/O PIN	1*Speaker PIN 1*F_AUDIO PIN 3*F_USB2.0 (5*USB2.0 expansion) 1*SATA PIN 1*SATA_PWR PIN 6*COM PIN 1*F_PANEL PIN 1*PS2 PIN 1*JPRINT PIN 1*GPIO PIN 1*CPU_FAN PIN 1*LVDS PIN 1*INCN PIN 1*LCTL PIN 1*VGA_H PIN 1*HDMI PIN 1*ATX Socket	1*F_AUDIO PIN 1*SPEAKER PIN 1*VGA_H1 PIN 1*PS/2 PIN 1*LPT_PWR PIN 1*LPT PIN 2*COM RS232 PIN 1*EDP2 PIN 1*BKCL PIN 1*INCN PIN 1*LVDS/ EDP1 PIN (In Alternative) 1*F_PANEL PIN 1*GPIO PIN 3*F_USB PIN (5*USB2.0 expansion) 1*RJ11 Socket 1*2Pin AT Power Socket
I/O Chip	IT8784E	IT8784E
BIOS	AMI BIOS	AMI BIOS
Power	DC 12V	DC 12V
Cooling System	Built-in Fanless CPU Radiator	Built-in Fan Radiator
Environment	Working : 0~60°C; Storage : -20°C~75°C; 0% ~ 95% Relative humidity, non-condensation	Working : 0~60°C; Storage : -20°C~75°C; 0% ~ 95% Relative humidity, non-condensation
Dimension	170X170mm	146X102mm



Model No.	KT-ZO-1037UTB-4C2L-GPOS	KT-ZO-3230MTG-4C1L-GPOS
CPU	Intel®Ivy Bridge Processor (i3-3217U/i5-3317U)	
Chipset	Intel® SOC	Intel® SOC
GPU	Intel® HD Graphics	Intel® HD Graphics
Display Output	EDP1+EDP2+HDMI/VGA	LVDS1/ EDP1+LVDS2/ EDP2+VGA+HDMI
Multi Display	Triple Synchronism&Asynchronism	Gen 2th CPU: Dual Display Gen 3rd CPU : Triple Display
USB	4*USB3.0 Gen1(5Gbps) + 8*USB2.0	4*USB3.0 Gen1(5Gbps) + 6*USB2.0
RAM	1*SO-DIMM DDR3 1600MHz Max 8GB	1*SO-DIMM DDR3 1600MHz Max 8GB
Audio	ALC269 audio decoding controller on-board ; Integrated amplifier 3W@4 Ω	
Ethernet	1*Realtek RTL8111H/8111G Gigabit Network Card on-board	
Storage	1*mSATA ; 1*SATA Port	
Expansion Slot	1*mPCIe , support Wifi/BT module expansion	
Rear I/O Port	1*DC_IN Port 1*VGA Port 1*COM1 Port 2*USB3.0 Gen1 (5Gbps) Port 2*USB3.0 Gen1 (5Gbps) Port 1*LAN1 Port 1*HP_OUT Port 1*MIC_IN Port 1*CLR_CMOS Button	1*DC_IN Port 1*VCA Port (1*HDMI Port optional) 1*COM1 Port 2*USB3.0 Gen1 (5Gbps) Port 2*USB3.0 Gen1 (5Gbps) Port 1*LAN1 Port 1*HP_OUT Port 1*MIC_IN Port 1*REC Button (Clear CMOS/1-Key Recovery)
Internal I/O PIN	1*F_AUDIO PIN 1*Speaker PIN 4*F_USB2.0 PIN (8*USB2.0 expansion) 1*GPIO PIN 3*COM PIN 1*SATA_PWR PIN 1*SATA PIN 1*LPT PIN 1*F_PANEL PIN 1*CPU_FAN PIN 2*EDP PIN 1*JPS2 PIN 1*JR11 Socket 1*VGA PIN 1*HDMI PIN 1*ATX_IN Socket	1*Speaker PIN 1*F_AUDIO PIN 3*J_USB (6*USB2.0 expansion) 1*PS2 PIN 1*GPIO PIN 1*COM2 PIN 1*SATA PIN 1*SATA_PWR PIN 1*PRINT PIN 1*F_PANEL PIN 1*CFAN PIN 1*SFAN PIN 1*LVDS1/ EDP1 PIN 1*LVDS2/ EDP2 PIN 2*INVERT PIN 1*BKCL PIN 1*JR11 PIN 1*JVGA PIN 1*JHDMI PIN 1*ATX Socket
I/O Chip	IT8786E	IT8784E
BIOS	AMI BIOS	
Power	DC 12V	
Cooling System	Built-in Fan CPU Radiator	
Environment	Working : 0~60°C; Storage : -20°C~75°C; 0% ~ 95% Relative humidity, non-condensation	
Dimension	170X170mm	



Module No.	KT-DZ-1900T4-2C	KT-DZ-GLKT-2C1L	KT-DZ-EHLT-2C1L
CPU	Intel® Bay trail J1900/J1800/N2840 Processor		Intel® Elkhart Lake Processor (J6412/J6413)
Chipset	Intel® SOC		Intel® SOC
GPU	Intel® HD Graphics		Intel® UHD Graphics 600
Display Output	LVDS/ EDP1+ EDP2+ VGA (EDP1 is non-standard definition ,requires customized cable)		LVDS1/ EDP1+LVDS2/ EDP2+HDMI (PIN (EDP is non-standard definition ,requires customized cable)
Multi Display	Dual Synchronism&Asynchronism		Triple Synchronism&Asynchronism
USB	1*USB3.0 Gen1(5Gbps) + 7*USB2.0		4*USB3.0 Gen1 (5Gbps) + 5*USB2.0
RAM	1*SO-DIMM DDR3L 1333MHz Max 8GB		1*SO-DIMM DDR4 3200MHz Max 32GB
Audio	ALC269 audio decoding controller on-board ; Independent amplifier 3W@4Ω		ALC897 audio decoding controller on-board ; Interagted amplifier 2.2W@4 Ω
Ethernet	1*Realtek 8111H/8111G Gigabit Network Card on-board		1*Realtek RTL8111H/8111G Gigabit Network Card on-board
Storage	1*mSATA		1*mSATA
Expansion Slot	1*mPCIe,support Wifi/4G module expansion		1*mPCIe,support Wifi/BT module expansion
Rear I/O Port	1*DC_IN Port 1* USB3.0+USB2.0(Up-U2 Down-U3 double-decker) 1*REC Button (Support 1-Key recovery&Clear CMOS) 2*USB2.0 Port 1*LAN1 Port		1*DC_IN Port(4PIN Aviation Plug optional) 2*USB3.0 Gen1(5Gbps) Port 2*USB3.0 Gen1(5Gbps) Port 1*LAN Port
Internal I/O PIN	1* SPEAKER PIN 1*F_AUDIO PIN 1*LPT_PWR PIN 1*LPT PIN 1*RJ11 PIN 2*COM PIN 1*F_PANEL PIN 1*SYS_FAN 1*LVDS/ EDP1 PIN 1*EDP2 PIN 1*INVERT PIN 1*VGA_PWR PIN 1*JVGA PIN 2*F_USB2.0 PIN (4*USB2.0 Port expansion) 1*2PIN Phoenix		1* SPEAKER PIN 1*F_AUDIO PIN 3*JUSB2.0 PIN(5*USB2.0 expansion) 1*LPT_PWR PIN 1*LPT PIN 1*CPU_FAN Socket 1*F_PANEL PIN 2*COM PIN 2*LVDS/ EDP PIN 2*INVERT PIN 1*HDMI PIN 1*RJ11 Socket 1*ATX_OUT Socket
I/O Chip	IT8784E		IT8786E
BIOS	AMI BIOS		
Power	DC 12V		
Cooling System	Built-in Fanless CPU Radiator		
Environment	Working : 0~60°C; Storage : -20°C~75°C; 0% ~ 95% Relative humidity, non-condensation		
Dimension	146X102mm		



Model No.	KT-EC3-GLKTD-2C1L-GPOS	KT-EC3-EHLT-2C1L-GPOS
CPU	Intel® Gemini Lake J4125/J4105/N4000 Processor	
Chipset	Intel® SOC	Intel® SOC
GPU	Intel® UHD Graphics 600	Intel® UHD Graphics
Display Output	LVDS1/ EDP1+EDP2+ HDMI	LVDS1/ EDP1+ LVDS2/ EDP2+ HDMI (PIN) (EDP is non-standard definition ,requires customized cable)
Multi Display	Triple Synchronism&Asynchronism	Triple Synchronism&Asynchronism
USB	4*USB3.0 Gen1(5Gbps) + 6*USB2.0	4*USB3.2 Gen2 (10Gbps) + 5*USB2.0
RAM	1*SO-DIMM DDR4 2400MHz Max 8GB	1*SO-DIMM DDR4 3200MHz Max 32GB
Audio	ALC897 audio decoding controller on-board ; Independent amplifier 3W@4 Ω	ALC897 audio decoding controller on-board ; Independent amplifier 3W@4 Ω
Ethernet	1*Realtek RTL8111H/8111G Gigabit Network on-board	1*Realtek RTL8111H/8111G Gigabit Network on-board
Storage	1*mSATA	1*mSATA
Expansion Slot	1*mPCIe , support Wifi/BT module expansion	1*mPCIe , support Wifi/BT module expansion
Rear I/O Port	1*DC_IN Port 1*LAN1 Port 2*USB3.0 Gen1(5Gbps) Port 2*USB3.0 Gen1(5Gbps) Port 1*HDMI Port 1*COM Port 1*F_MIC Port 1*F_OUT Port	1*DC_IN Port 1*LAN1 Port 2*USB3.2 Port(10Gbps) 1*REC Button (Support 1-Key Recovery&Clear CMOS) 2*USB3.2 Port(10Gbps) 1*HDMI Port 1*COM Port 1*F_MICIN 1*F_HPOUT
Internal I/O PIN	1*F_AUDIO PIN 1*Speaker PIN 1*JPS2 Socket 1*HDMI PIN 1*LPT_PWR PIN 1*LPT PIN 1*CPU_FAN Socket 1*COM PIN 1*GPIO PIN 1*F_PANEL PIN 2*EDP PIN 1*INCN PIN 1*BKCL PIN 1*LVDS PIN 3*F_USB2.0 (6*USB2.0 expansion) 1*RJ11 Socket 1*ATX_IN Socket	1*F_AUDIO PIN 1*SPEAKER PIN 1*COM PIN 1*HDMI PIN 1*RJ11 PIN 3*USB PIN(5*USB2.0 Port expansion) 2*LVDS/ EDP PIN 2*INCN PIN 2*BKCL PIN(Deleted when EDP is selected) 1*F_PANEL PIN 1*CPU_FAN PIN 1*LPT PIN 1*LPT_PWR PIN 1*JPS2 PIN 1*ATX Phoenix terminal
I/O Chip	IT8784E	IT8786E
BIOS	AMI BIOS	AMI BIOS
Power	DC 12V	DC 12V
Cooling System	Built-in Fan Radiator	Built-in Fan Radiator
Environment	Working : 0~60°C; Storage : -20°C~75°C; 0% ~ 95% Relative humidity, non-condensation	
Dimension	146X102mm	

Model No.	KT-ZO-1037UTD-6C1L
CPU	Intel® Ivy Bridge Processor (i3-3217U/i5-3317U)
Chipset	Intel® SOC
GPU	Intel® HD Graphics
Display Output	EDP + 2*HDMI +VGA
Multi Display	Triple Synchronism&Asynchronism
USB	2*USB3.0 Gen1 (5Gbps) + 8*USB2.0
RAM	1*SO-DIMM DDR3 1600MHz Max 8GB
Audio	ALC269 audio decoding controller on-board ; Independent amplifier NS4251 3W@4Ω MAX
Ethernet	1*Realtek 8111H Gigabit Network Card on-board
Storage	1*mSATA HDD Slot; 1*SATA3.0 Port
Expansion Slot	1*mPCIE , Wifi/BT/4G module expansion
Rear I/O Port	1*DCIN Port 2*HDMI Port 1*VGA Port 1*CLR_CMOS Button 2*USB3.0 Port 2*USB2.0 Port 1*LAN1 Port 1*HP_OUT Port 1*MIC_IN Port
Internal I/O PIN	1*F_AUDIO PIN 1*Speaker PIN 1*JPS2 Socket 1*GPIO PIN (4 way) 3*F_USB PIN (6*USB2.0 expansion) 1*SATA_PWR Socket 1*SATA Socket 1*PRINT PIN 6*COM PIN 1*F_PANEL PIN 1*CFAN PIN 1*SFAN PIN 1*EDP1 PIN 1*JVGA PIN 1*ATX_IN Socket
I/O Chip	IT8786E
BIOS	AMI BIOS
Power	DC/4PIN ATX 12V
Cooling System	Built-in Fan CPU Radiator
Environment	Working : 0~60°C; Storage : -20°C~75°C; 0% ~ 95% Relative humidity, non-condensation
Dimension	170X170mm



KT-ZO-H510P-12C

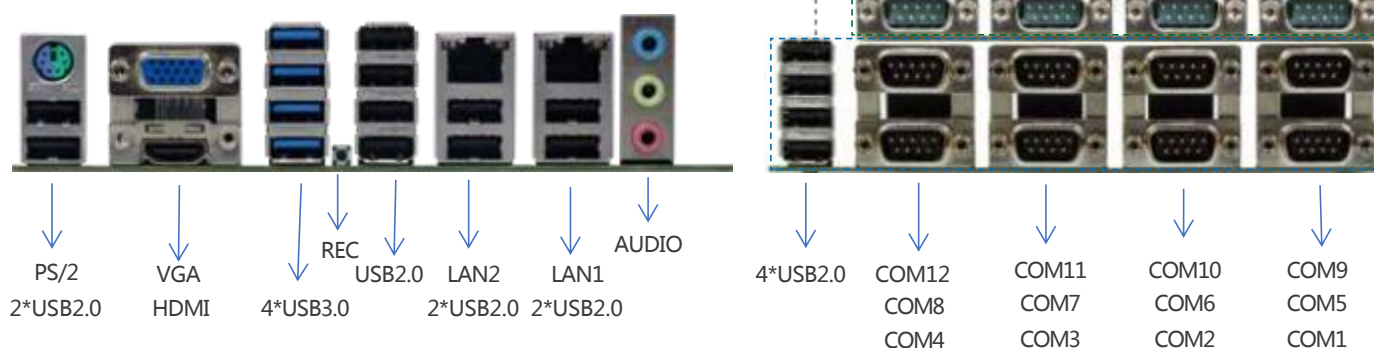
Embedded Industrial PC Board

Application : Self-service teller machines, lottery machines, ticketing terminals, self-service vending machines, smart express cabinets and other smart retail self-service application systems



- Intel Gen 10/11th S-series Processor
- Support 2*HDMI+VGA dual Synchronism&Asynchronism
- Support Dual LAN ,18*USB,12*COM , 4G/5G expansion
- Multi USB&COM,Strong scalability,Apply for financial self-service and etc

I/O Ports :



Specification

CPU	Intel® Gen 10/11th Comet Lake/Rocket Lake Processor (i7-11700/i5-11500/i7-10700/i5-10500 etc)		
Chipset	Intel® H510		
GPU	Intel®UHD Graphics		
Display Output	I/O: HDMI + VGA (Built-in : 1-way HDMI LVDS output can be realized through conversion board)		
Multi Display	Dual Synchronism&Asynchronism		
USB	4*USB3.0 Gen1 (5Gbps) + 14*USB2.0		
RAM	2*SO-DIMM DDR4 3200MHz Max 64GB		
Audio	ALC897 audio decoding controller on-board ; Independent amplifier NS4258 5W@2Ω MAX		
Ethernet	2*Realtek RTL8111H Gigabit Network Card on-board		
Storage	1*M.2 M Key, support SATA3/PCIEx2 self-adaption; 2*SATA3.0 Port		
Expansion Slot	1*M.2 E Key support WIFI6(CNVl)/BT module expansion ; 1*PCIEx16 Slot		
Rear I/O Port	1*PS/2+2*USB2.0 Port 1*VGA+HDMI Port 4*USB3.0 Port 1*REC Button (Support 1-Key Recovery&Clear CMOS) 4*USB2.0 Port 1*LAN+2*USB2.0 Port 1*LAN+2*USB2.0 Port 1*AUDIO Port	Daughter Card 1 : 4*USB2.0 Port 8*COM Port Daughter Card 2 : 4*COM Port	InterI I/O PIN 1*F_AUDIO PIN 1*SPEAKER PIN 2*SATA Socket 1*CFAN PIN 1*GPIO PIN(4 way) 1*J_PRINT PIN 1*F_PANEL PIN 1*SFAN PIN 1*JHDMI PIN
I/O Chip	IT8786E		
BIOS	AMI BIOS		
Power	ATX (20PIN+4PIN) Power		
Cooling System	Standard 115X hole radiator optional		
Environment	Working : 0~60°C; Storage : -20°C~75°C; 0% ~ 95% Relative humidity, non-condensation		
Dimension	170 x 170 mm		



Model No.	KT-ZO-H510P-6C	KT-ZO-H310P-12C	KT-ZO-H110PA-12C
CPU	Intel® Gen 10/11th Comet Lake/ Rocket Lake Processor (i7-11700/i5-11500/i7-10700/i5-10500 etc)	Intel® Gen 8/9th CoffeeLake/Coffeelake-R Processor	Intel®Core™ Gen 6/7/8/9th Processor
Chipset	Intel® H510	Intel® H310	Intel® H110
GPU	Intel®UHD Graphics	Intel®HD Graphics	Intel®HD Graphics
Display Output	I/O: HDMI + VGA (Built-in : 1-HDMI can realize LVDS output through conversion board)	HDMI + VGA + EDP	EDP+HDMI+VGA
Multi Display	Dual Synchronism&Asynchronism	Dual Synchronism&Asynchronism	Dual Synchronism&Asynchronism
USB	4*USB3.0 Gen1 (5Gbps) + 10*USB2.0	4*USB3.0 Gen1 (5Gbps) + 10*USB2.0	4*USB3.0 Gen1 (5Gbps) + 10*USB2.0
RAM	2*SO-DIMM DDR4 3200MHz Max 64GB	2*SO-DIMM DDR4 2666MHz Max 32GB	2*SO-DIMM DDR4 2400MHz Max 32GB
Audio	ALC897 audio decoding controller on-board ; Independent amplifier NS4258 5W@2Ω MAX	Realtek ALC662HD audio decoding controller on-board ; Integrated amplifier 5W@2Ω	ALC897 audio decoding controller on-board ; Independent amplifier, 3W@4Ω
Ethernet	2*Realtek RTL8111H Gigabit Network on-board	2*Realtek RTL8111H Gigabit Network on-board	2*Realtek RTL8111H Gigabit Network on-board
Storage	1*M.2 M Key, support SATA3/ PCIe2 self-adaption; 2*SATA3.0	1*mSATA HDD Slot ; 2*SATA3.0	1*mSATA HDD Slot ; 1*SATA3.0
Expansion Slot	1*M.2 E Key , support Wifi6 (CNVi)/BT module expansion; 1*PCIEX16 expansion Slot	1*M.2 E Key,support WiFi/3G/4G module expansion;	1*M.2 A Key,support WiFi/BT module expansion; 1*mPCIe Slot,support 4G module expansion
Rear I/O Port	1*PS/2+2*USB2.0 Port 1*VGA+HDMI Port 4*USB3.0 Port 1*REC Button (Support 1-key recovery&Clear CMOS) 4*USB2.0 1*LAN+2*USB2.0 Port 1*LAN+2*USB2.0 Port 1*AUDIO triple decker	1*PS/2+2*USB2.0 Port 1*VGA+HDMI Port 4*USB3.0 Port 4*USB2.0 Port 1*LAN+2*USB2.0 Port 1*LAN+2*USB2.0 Port 1*AUDIO triple decker	1*PS/2+2*USB2.0 triple decker 1*VGA+HDMI Port 4*USB3.0 1*REC Button (Support 1-key recovery&Clear CMOS) 4*USB2.0 Port 1*LAN2+2*USB2.0 Port 1*LAN1+2*USB2.0 Port 1*AUDIO triple decker
Internal I/O PIN	1*F_AUDIO PIN 1*SPEAKER PIN 2*SATA Socket 1*CFAN PIN 1*GPIO PIN(4-way) 1*J_PRINT PIN 1*F_PANEL PIN 1*SFAN PIN 1*JHDMI PIN	1*F_AUDIO PIN 1*SPEAKER PIN 1*PCIEX1 expansion slot 3*COM_CONN PIN (12*COM232,COM2 support RS232/485/422 jump selection) 1*F_PANEL PIN 2*FAN PIN 2*SATA Port 1*GPIO PIN 1*12PIN ATX Socket 1*4PIN ATX Socket	1*F_AUDIO PIN 1*Speaker PIN 1*PCIEX1 Slot 12*COM PIN 2*SATA PIN 1*SYS_FAN PIN 1*F_PANEL PIN 1*GPIO PIN 1*CPU_FAN PIN 1*EDP FPC Socket 1*ATX Socket
I/O Chip	IT8786E	ITE8786E	IT8786E
BIOS	AMI BIOS	AMI BIOS	AMI BIOS
Power	ATX (20PIN+4PIN) power	ATX (20PIN+4PIN) power	ATX (20PIN+4PIN) power
Cooling System	Optional standard 115X hole radiator	Optional standard 115X hole radiator	Optional standard 115X hole radiator
Environment	Working : 0~60°C; Storage : -20°C~75°C; 0% ~ 95% Relative humidity, non-condensation		
Dimension	170 x 170 mm		



Model No.	KT-ITX-J1900PCA-6C1L	KT-ZO-J1800P-6CD8DC
CPU	Intel® Bay trail J1900/J1800 Processor	
Chipset	Intel® SOC	Intel® SOC
GPU	Intel® HD Graphics	Intel® HD Graphics
Display Output	LVDS/EDP2+ EDP1+ VGA	LVDS + EDP + VGA
Multi Display	Dual Synchronism&Asynchronism	Dual Synchronism&Asynchronism
USB	1*USB3.0 Gen1 (5Gbps) + 8*USB2.0	8*USB2.0
RAM	1*SO-DIMM DDR3L 1333MHz Max 8GB	1*SO-DIMM DDR3 1333MHz Max 8GB
Audio	AC269 audio decoding controller on-board ; Independent amplifier, 3W@4 Ω	
Ethernet	1*Realtek RTL8111H Gigabit Network Card on-board	2*Realtek RTL8111H Gigabit Network Card on-board
Storage	1*mSATA HDD Slot ; 1*SATA3.0	1*mSATA HDD Slot ; 1*SATA2.0
Expansion Slot	1*mPCIe Slot, support WiFi/BT module expansion	
Rear I/O Port	1*DC_IN Port 1*PS/2 Port 1*COM Port 1*VGA Port 1*PRINT Port 1*USB2.0 + 1*USB3.0 Port 1*LAN+2*USB2.0 Port 1*AUDIO Port	1*DCIN Port 1*PS/2 Port 1*COM Port 1*PRT print Port 1*VGA Port 2*USB2.0+LAN Port Triple-decker 2*USB2.0+LAN Port Triple-decker 1*AUDIO Port double-decker
Internal I/O PIN	1*F_AUDIO PIN 1*SPEAKER PIN 3*F_USB PIN(5*USB2.0 expansion) 1*F_PANEL PIN 6*COM PIN 1*SATA Socket 1*GPIO PIN(1 way) 1*JSATA_PWR PIN 1*FAN PIN 1*LVDS/ EDP2 PIN 1*EDP1 PIN 1*JPS/2 PIN 1*J_PRINT PIN 1*JVGA PIN	1*Speaker Socket 1*F_AUDIO PIN 1*SATA Socket 1*SATA_PWR Socket 2*F_USB PIN (4*USB2.0 expansion) 5*COM PIN 1*F_PANEL PIN 1*GPIO PIN 1*SFAN Socket 1*LVDS PIN 1*INCN Socket 1*LCTL Socket 1*4PinATX Socket 1*EDP PIN 1*JVGA PIN
I/O Chip	IT8784E (IT8786 optional)	IT8786E
BIOS	AMI BIOS	AMI BIOS
Power	DC 12V	DC 12V
Cooling System	Built-in Fanless Radiator	Built-in Fanless Radiator
Environment	Working : 0~60°C; Storage : -20°C~75°C; 0% ~ 95% Relative humidity, non-condensation	
Dimension	170 x 170 mm	



Model No.	KT-ITX-J1900P-6C2L	KT-ZO-H81P-12C
CPU	Intel® Bay trail J1900/J1800 Processor	Intel® Gen 4th Haswell Processor
Chipset	Intel® SOC	Intel® H81
GPU	Intel® HD Graphics	Intel® HD Graphics
Display Output	LVDS + DVI + VGA	HDMI+VGA+DVI
Multi Display	Dual Synchronism&Asynchronism	Dual Synchronism&Asynchronism
USB	8*USB2.0	2*USB3.0 Gen1 (5Gbps) + 12*USB2.0
RAM	1*SO-DIMM DDR3L 1333MHz Max 8GB	2*SO-DIMM DDR3L 1600MHz Max 16GB
Audio	Realtek ALC662HD audio decoding controller on-board ; Integrated amplifier 3.2W@4Ω	Realtek ALC662HD audio decoding controller on-board ; Integrated amplifier 3.2W@4Ω
Ethernet	2*Realtek RTL8111H Gigabit Network on-board	2*Realtek RTL8111H Gigabit Network on-board
Storage	1*mSATA HDD Slot ; 2*SATA2.0	1*mSATA HDD Slot ; 2*SATA2.0
Expansion Slot	1*mPCIe Slot, support SATA/WiFi module expansion	1*mPCIe , support Wifi/BT module expansion
Rear I/O Port	1*PS2 Keyboard&Mouse Port 1*DVI Port 1*VGA Port 2*COM Port 1*LAN+2*USB2.0 1*LAN+2*USB2.0 1*AUDIO double-decker	1*PS2 Keyboard&Mouse Port 1*DVI Port 1*VGA Port 1*COM Port 1*HDMI Port 1*LAN+2*USB3.0 1*LAN+2*USB2.0 1*AUDIO double-decker
Internal I/O PIN	1*LVDS PIN 1*VGA PIN 4*COM PIN 2*COM-SET 1*SPEAKER PIN 1*INVERT PIN 2*USB2.0 PIN (4*USB2.0 Port expansion) 1*24pin ATX 1*F_AUDIO PIN 1*F_PANEL PIN 1*LPC PIN 1*LPT Print PIN	1*LPT PIN 1*F-AUDIO PIN 2*Speaker PIN 5*F_USB2.0 PIN (10*USB2.0 expansion) 11*COM PIN 1*F_PANEL PIN 1*GPIO PIN 1*20PIN ATX Power PIN 1*4PIN ATX PIN 2*SATA
I/O Chip	IT8786E	IT8786E
BIOS	AMI BIOS	AMI BIOS
Power	ATX (24PIN) power	ATX (20PIN+4PIN) power
Cooling System	Built-in Fanless Radiator	Built-in Fanless Radiator
Environment	Working : 0~60°C; Storage : -20°C~75°C; 0% ~ 95% Relative humidity, non-condensation	
Dimension	170 x 170 mm	

KT-ZO-RPLPT-6C2L

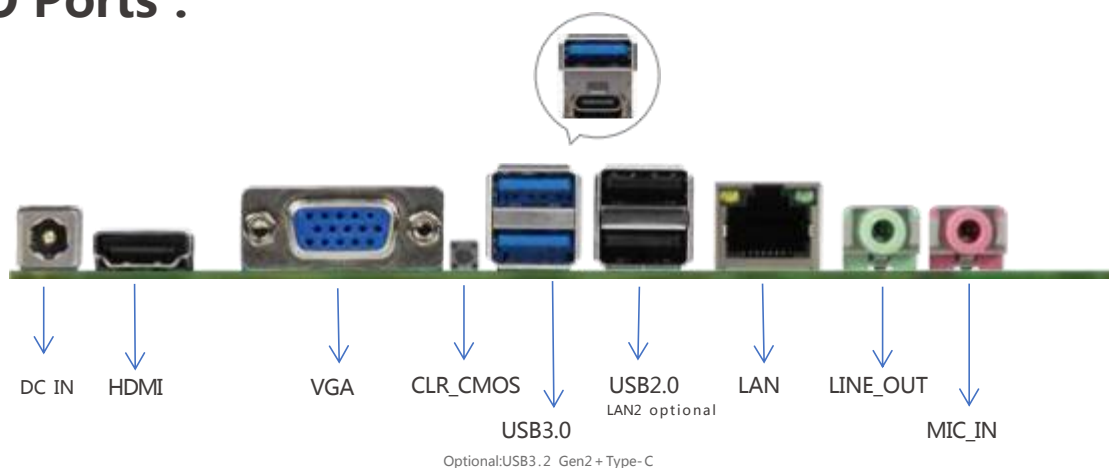
Embedded Industrial PC board

Application : Cashier, medical, desktop office, industrial automation control, motion control and other industrial intelligent manufacturing systems



- Intel® Gen 12/13 th U/P/H Series Processor
- Dual SO-DIMM , DDR4 3200MHz , Max64GB
- Support LVDS/EDP1+EDP2+HDMI (4k 60Hz)+VGA, 4-displays synchronously and asynchronously
- On-board 1*RTL8111H/RTL8111G Gigabit Network Card (Dual LAN optional)
- 2*USB3.2 Gen2(10Gbps)+ 2*USB3.0 Gen1(5Gbps) + 7*USB2.0

I/O Ports :



Specification

CPU	Intel® Gen 13th Raptor Lake & 12th Alder Lake (U/P/H)		
Chipset	Intel® SOC		
GPU	Intel® Iris® X® Graphics		
Display Output	LVDS/EDP1+EDP2+HDMI+VGA		
Multi Display	4-Displays Synchronism&Asynchronism		
USB	2*USB3.2 Gen2(10Gbps optional 1*type-C)+ 2*USB3.0 Gen1(5Gbps) + 7*USB2.0		
RAM	2*SO-DIMM DDR4 3200MHz Max 64GB		
Audio	ALC897 audio decoding controller on-board ; Independent amplifier NS4251 , 3W@4Ω max		
Ethernet	1*RTL8111H Gigabit Network Card (Dual LAN optional)		
Storage	1*M.2 M Key ; 1*SATA3.0 Port		
Expansion Slot	1*M.2 E Key , support Wifi6 CNVi/BT module expansion ; 1*M.2 B Key , support 4G/5G module expansion		
Rear I/O Port	1*DC_IN Port 1*HDMI Port 1*VGA Port 1*Clear_CMOS Button 2*USB3.2 Gen2 (10Gbps) 1*type-C optional 2*USB2.0 Port (LAN2 optional) 1*LAN1 Port 1*LINE_OUT Port 1*MIC_IN Port	Internal I/O PIN	1*Speaker PIN 1*F_AUDIO PIN 1*LVDS PIN 1*EDP1 PIN 1*INVCN PIN 1*SATA PIN 1*SATA_PWR PIN 1*JUSB1 (2*USB3.0 Gen1 5Gbps expansion) 3*F_USB (5*USB2.0 expansion) 1*LPT PIN 1*PS2 PIN 1*GPIO PIN 1*TPM PIN 1*F_PANEL PIN 6*COM PIN 1*CFAN PIN 1*SFAN PIN 1*EDP2 PIN 1*VGA PIN 1*HDMI PIN 1*ATX Socket
I/O芯片	IT8786E		
BIOS	AMI BIOS		
Power	DC/4Pin ATX ,recommend 19V 4.7A/ 12V 7A Power		
Cooling System	Built-in Fan Radiator/Built-in Fanless Radiator optional		
Environment	Working : 0~60°C; Storage : -20°C~75°C; 0% ~ 95% Relative humidity, non-condensation		
Dimension	170 x 170 mm		



Model NO.	KT-ZO-1037UTA-6C2L	KT-ZO-1037UTC-6C2L	KT-ZO-3230MTG-6C2L
CPU	Intel® Ivy Bridge i3-3217U/i5-3317U etc Processor		Intel® Ivy Bridge i3-2330M/i3-3110M Processor
Chipset	Intel® SOC		
GPU	Intel® HD Graphics		
Display Output	LVDS+EDP1+HDMI+VGA	EDP1+EDP2+HDMI+VGA	LVDS+EDP1+HDMI+VGA
Multi Display	Triple Synchronism&Asynchronism		Gen 2nd CPU: Dual-Display , Gen 3rd CPU : Triple Display
USB	2*USB3.0 Gen1 (5Gbps) +8*USB2.0		
RAM	1*SO-DIMM DDR3 1600MHz Max 8GB		
Audio	ALC269 audio decoding controller on-board ; Independent amplifier 3W@4 Ω MAX		ALC269 audio decoding controller on-board ; Independent amplifier 5W , 5.2W@2 Ω max
Ethernet	1*Realtek 8111G/8111H Gigabit Network Card on-board (Dual LAN optional)		
Storage	1*SATA, 1*mSATA		
Expansion Slot	1*mPCIe(Support Wifi/BT/4G module)		
Rear I/O Port	1*DCIN Port 1*HDMI Port 1*VGA Port 1*CLR_CMOS Buton 2*USB3.0 Port 2*USB2.0 (1*LAN2 optional) 1*LAN1 Port 1*HP_OUT Port 1*MIC_IN Port	1*DCIN Port 1*HDMI Port 1*VGA Port 1*CLR_CMOS Button 2*USB3.0 Port 2*USB2.0 (1*LAN2 optional) 1*LAN1 Port 1*HP_OUT Port 1*MIC_IN Port	1*DCIN Port 1*HDMI Port 1*VGA Port 1*CLR_CMOS Button 2*USB3.0 Port 2*USB2.0 (1*LAN2 optional) 1*LAN1 Port 1*HP_OUT Port 1*MIC_IN Port
Internal I/O PIN	1*F_AUDIO PIN 1*SPEAKER PIN 1*PS/2 PIN 1*GPIO PIN 6*COM PIN 3*F_USB PIN (6*USB2.0 expansion) 1*SATA_PWR PIN 1*SATA Sockey 1*PRINT PIN 1*F_PANEL PIN 1*CFAN Socket 1*SYS_FAN Socket 1*JSPI PIN 1*INCN PIN 1*LVDS PIN 1*EDP1 PIN 1*4Pin ATX Power Socket 1*HDMI PIN 1*JVGA PIN	1*F_AUDIO PIN 1*Speaker PIN 1*JPS2 Socket 1*GPIO PIN 3*F_USB PIN (6*USB2.0 expansion) 1*SATA_PWR Socket 1*SATA Socket 1*PRINT PIN 6*COM PIN 1*F_PANEL PIN 1*CFAN PIN 1*SFAN PIN 1*EDP1 PIN 1*EDP2 PIN 1*JVGA PIN 1*JHDMI PIN 1*ATX_IN Socket	1*Speaker PIN 1*F_AUDIO PIN 1*PS2 PIN 1*GPIO PIN 6*COM PIN 3*F_USB (6*USB2.0 expansion) 1*SATA PIN 1*SATA_PWR PIN 1*PRINT PIN 1*F_PANEL PIN 1*CFAN PIN 1*SFAN PIN 1*LVDS PIN 1*INCN PIN 1*EDP1 PIN 1*JVGA PIN 1*JHDMI PIN 1*ATX Socket
I/O Chip	ITE8784E	ITE8786E	
BIOS	AMI BIOS		
Power	DC/4PIN ATX 12V Power		
Cooling System	Built-in Fan CPU Radiator		
Environment	Working : 0~60℃; Storage : -20℃~75℃; 0% ~ 95% Relative humidity, non-condensation		
Dimension	170X170mm		



ZO-EHLTB-6C2L
ZO-GLKT-6C2L
Radiator optional



Model No.	KT-ZO-EHLTB-6C2L	KT-ZO-JSLT-6C2L	KT-ZO-GLKT-6C2L
CPU	Intel® Elkhart Lake J6412/J6413 Processor	Intel® Jasper lake Series Processor (N5095)	Intel® Gemini Lake Processor (J4125/ J4105/ N4000)
Chipset	Intel® SOC	Intel® SOC	Intel® SOC
GPU	Intel® UHD Graphics	Intel® UHD Graphics	Intel® UHD Graphics
Display Output	LVDS/ EDP1+HDMI/EDP2+VGA	LVDS/ EDP1+HDMI/EDP2+VGA	LVDS/ EDP1+HDMI/EDP2+VGA
Multi Display	Triple Synchronism&Asynchronism	Triple Synchronism&Asynchronism	Triple Synchronism&Asynchronism
USB	2*USB3.2 Gen2 (10Gbps) +8*USB2.0	2*USB3.2 Gen2 (10Gbps) +8*USB2.0	4*USB3.0 Gen1(5Gbps)+6*USB2.0
RAM	1*SO-DIMM DDR4 3200MHz Max 32GB	1*SO-DIMM DDR4 2933MHz Max16GB	1*SO-DIMM DDR4 2400MHz Max 8GB
Audio	ALC897 audio decoding controller on-board ; Independent amplifier NS4251 3W@4 Ω	HS-100B USB audio decoding controller on-board ; Independent amplifier NS4251(3W/4 Ω)	Realtek ALC269HDAudio decoding controller on-board ; Independent amplifier 3W@4 Ω
Ethernet	1*Realtek8111G/8111H Gigabit Network Card (Dual LAN optional) on-board	1*RTL8111H/ RTL8111G Gigabit Network Card (Dual LAN optional) on-board	1*RTL8111H/ RTL8111G Gigabit Network Card (Dual LAN optional) on-board
Storage	1*M.2 Key M,support SATA/ PCIeX2 signal self-adaption ; 1*SATA3.0Port	1*M.2 B Key (SATA SSD 2280mm) ; 1*SATA3.0	1*mSATA HDD Slot ; 1*SATA3.0
Expansion Slot	1*M.2 Key B,support 4G/5G module expansion ; 1*M.2 Key E ,support Wifi6+Bluetooth expansion	1*M.2 E Key(support Wifi+BT) 1*SIM (support 4G/5G,via B KEY)	1*mPCIe(support Wifi/BT/4G module)
Rear I/O Port	1*DCIN Port 1*HDMI Port 1*VGA Port 2*USB3.2 Gen2 Port 2*USB2.0 Port (1*LAN optional) 1*LAN Port 1*HP_OUT Port 1*MIC_IN Port	1*DC Port (ϕ 5.5-2.5mm DC JACK) 1*HDMI Port 1*VGA Port 1*CLR_CMOS Button 2*USB3.2 Port 2*USB2.0 Port (1*LAN Port optional) 1*LAN1 Port 1*LINE-OUT Port 1*MIC-IN Port	1*DC Port (ϕ 5.5&2.5mm DC Jack) 1*HDMI Port 1*VGA Port 2*USB3.0 Port 2*USB2.0 Port (LAN2 and 2*USB2.0 in alternative) 1*LAN 1*HP_OUT Port 1*MIC_IN Port
Internal I/O PIN	1*EDP2 PIN (Non-function in default , by updating bios firmware&hardware) 1*JVGA PIN 1*F_AUDIO PIN 1*SPEAKER PIN 3*F_USB2.0 PIN (6*USB2.0 Port expansion) 1*SATA Socket 1*SATA_PWR PIN 1*GPIO PIN 6*COMRS232 PIN (COM2&COM3 support 2-way RS485 optional,COM1/2/3 Support electrification RI/5V/12V optional) 1*F_PANEL PIN 1*PRINT PIN 1*PS2 PIN 1*INCN PIN 1*LVDS PIN/EDP1 PIN (In Alternative) 1*LCTL PIN 1*SYS_FAN PIN 1*CPU_FAN PIN 1*4PIN ATX Socket	1*F_AUDIO PIN 1*SPEAKER PIN 3*F_USB PIN (6*USB2.0 expansion) 1*SATA Socket 1*JSATA_PWR PIN 1*GPIO PIN 2*COM232 PIN (COM2 support RS485 optional,COM1/2 Support electrification DCD/ 5V/12V optional) 1*COM_CON PIN (Extension:4*COM,COM3 support RS485 optional) 1*F_PANEL PIN 1*JSIM (support external FPC SIM Signal extension cable) 1*J_PRINT PIN 1*JPS2 PIN 1*INCN PIN 1*LVDS/ EDP1 PIN (In alternative) 1*BKCL PIN 1*EDP2 PIN 1*JVGA PIN 1*4Pin ATX Power Socket	1*EDP2 PIN 1*VGA_H PIN 1*F_AUDIO PIN 1*SPEAKER PIN 1*F_USB3.0 PIN (2*USB3.0 expansion) 2*F_USB2.0 PIN (4*USB2.0 expansion) 1*SATA PIN 1*SATA_PWR PIN 1*JPS2 PIN 1*J_PRINT PIN 1*F_PANEL PIN 2*COM PIN (Support 1-way RS485 optional; , COM1&COM2 Support electrification DCD/ 5V/12V optional) 1*COM_CONN PIN (4*COMRS232) 1*GPIO PIN 1*LVDS PIN/1*EDP1 PIN 1*INVERT PIN 1*LCTL PIN 1*4PIN ATX Socket
I/O Chip	ITE8786E	ITE8786E	ITE8786E
BIOS	AMI BIOS	AMI BIOS	AMI BIOS
Power	DC/4PIN ATX 12V Power	DC/4PIN ATX 12V Power	DC/4PIN ATX 12V Power
Cooling System	Built-in Fanless Radiator(Fanless Radiator optional)	Built-in Fanless Radiator(Fanless Radiator optional)	Built-in Fanless Radiator
Environment	Working : 0~60°C; Storage : -20°C~75°C; 0% ~ 95% Relative humidity, non-condensation		
Dimension	170X170mm		



Model No.	KT-ZO-GLKTF-10C2L	KT-ZO-HSWUTB-6C2L	KT-ZO-SKYUTC-6CD8
CPU	Intel® Gemini Lake Processor (J4125/ J4105/ N4000)	Intel® Gen 4/5th Haswell & Broadwell Processor	Intel® Gen 6/7th Kaby Lake & Sky Lake Processor
Chipset	Intel® SOC	Intel® SOC	Intel® SOC
GPU	Intel® UHD Graphics	Intel® HD Graphics	Intel® HD Graphics
Display Output	LVDS1/ EDP + HDMI + VGA	LVDS/ EDP+ HDMI/EDP2+VGA	LVDS/ EDP1+EDP2/HDMI+VGA
Multi Display	Triple Synchronism&Asynchronism	Triple Synchronism&Asynchronism	Triple Synchronism&Asynchronism
USB	2*USB3.0 Gen1(5Gbps)+6*USB2.0	2*USB3.0 Gen1(5Gbps)+8*USB2.0	4*USB3.0 Gen1(5Gbps)+8*USB2.0
RAM	1*SO-DIMM DDR4 2400MHz Max 8GB	2*SO-DIMM DDR3 1600MHz Max 16GB	2*SO-DIMM DDR4 2133MHz Max 32GB
Audio	ALC897 audio decoding controller on-board ; Independent amplifier NS4251 3W@4 Ω MAX	ALC269 audio decoding controller on-board ; Independent amplifier NS4251(3W@4 Ω MAX)	ALC269 audio decoding controller on-board ; Independent amplifier NS4251 (3W@4 Ω MAX)
Ethernet	1*RTL8111H/ RTL8111G Gigabit Network Card on-board (Dual LAN optional)	1*RTL8111H/ RTL8111G Gigabit Network Card on-board (Dual LAN optional)	1*RTL8111H/ RTL8111G Gigabit Network Card on-board (Dual LAN optional)
Storage	1*mSATA Slot ; 1*SATA3.0	1*mSATA Slot ; 1*SATA3.0	1*M.2 M Key,support SATA/ PCIe3.0 self-adaption ; 1*SATA3.0
Expansion Slot	1*mPCIe(support Wifi/3G/4G module)	1*mPCIe(support Wifi/BT/4G module)	1*mPCIe(support Wifi/BT/4G module)
Rear I/O Port	1*DCIN Port 1*HDMI Port 1*VGA Port 1*CLR_CMOS Button 2*USB3.0 Port 2*USB2.0 (1*LAN2 optional) 1*LAN1 Port 1*HP_OUT Port 1*MIC_IN Port	1*DCIN Port 1*HDMI Port 1*VGA Port 1*CLR_CMOS Button 2*USB3.0 Port 2*USB2.0 (1*LAN2 optional) 1*LAN1 Port 1*HP_OUT Port 1*MIC_IN Port	1*DCIN Port 1*HDMI Port 1*VGA Port 1*CLR_CMOS Button 2*USB3.0 Port 2*USB2.0 (1*LAN2 optional) 1*LAN1 Port 1*HP_OUT Port 1*MIC_IN Port
Internal I/O PIN	1*HDMI PIN 1*VGA PIN 1*F_AUDIO PIN 1*SPEAKER PIN 3*F_USB2.0 PIN (6*USB2.0 expansion) 1*SATA PIN 1*SATA_PWR PIN 1*JPS2 PIN 1*LPT PIN 1*F_PANEL PIN 10*COM PIN 1*GPIO PIN(4 way) 1*LVDS/ EDP PIN 1*INVERT PIN 1*BKCL PIN 1*CPU_FAN 1*SYS_FAN PIN 1*4PIN ATX Socket	1*F_AUDIO PIN 1*Speaker Socket 1*LVDS/ EDP1 PIN (Inalternative) 1*INVERT PIN 1*JPS2 PIN 1*SATA Socket 1*SATA_PWR Socket 3*F_USB PIN (6*USB2.0 expansion) 1*PRINT PIN 6*COM PIN 1*F_PANEL PIN 1*GPIO PIN 1*SYS_FAN Socket 1*CPU_FAN Socket 1*EDP2_FAN 1*JVGA PIN 1*ATX_IN Socket	1*F_AUDIO PIN 1*Speaker PIN 1*INVERT PIN 2*EDP PIN 1*LVDS PIN 1*BKCL PIN 1*SATA PIN 1*SATA_PWR PIN 3*F_USB2.0 PIN (6*USB2.0 expansion) 1*F_USB3.0 PIN (2*USB3.0 expansion) 1*JPS2 PIN 1*_PRINT PIN 6*COM PIN 1*F_PANEL PIN 1*AXT_IN Socket 1*SYS_FAN Socket 1*CPU_FAN Socket 1*JVGA PIN
I/O Chip	1*IT8786E + 1*8768E	ITE8786E	ITE8786E
BIOS	AMI BIOS		
Power	DC/4PIN ATX 12V Power		
Cooling System	Built-in Fanless Radiator		
Environment	Working : 0~60℃; Storage : -20℃~75℃; 0% ~ 95% Relative humidity, non-condensation		
Dimension	170X170mm		



Radiator optional



Model No.	KT-ZO-TGLUTB-6C2L	KT-ZO-ADLNT-6C2L
CPU	Intel®Tiger Lake-UP3 Processor (1135G7/ 1145G7 etc)	
Chipset	Intel® SOC	
GPU	Intel® Iris® Xe Graphics	
Display Output	LVDS1/ EDP1+EDP2+HDMI+VGA	
Multi Display	4-Dispaly Synchronism&Asynchronism	
USB	2*USB3.2 Gen2 (10Gbps) + 2*USB3.0 Gen1 (5Gbps) + 7*USB2.0	
RAM	2*SO-DIMM DDR4 3200MHz Max 32GB	
Audio	ALC897 audio decoding controller on-board ; Independent amplifier NS4251 3W@4 Ω	
Ethernet	1*RTL8111H/ RTL8111G Gigabit Network Card (Dual LAN optional) on-board	
Storage	1*M.2 M Key,support SATA3.0/ PCIEX2 self-adaption; 1*SATA3.0	
Expansion Slot	1*M.2 E Key,support Wifi/BT module expansion ; 1*M.2 B Keysupport 4G (5G optional) module expansion	
Rear I/O Port	1*DC_IN Port 1*HDMI Port 1*VGA Port 1*CLR_CMOS Button 2*USB3.2 Gen2(10Gbps) 1*LAN2 Port 1*LAN1 Port 1*F_MIC Port 1*F_OUT Port	
Internal I/O PIN	1*F_AUDIO PIN 1*Speaker PIN 1*INVERT PIN 2*EDP PIN 1*LVDS PIN 1*BKCL PIN 1*SATA PIN 1*SATA_PWR PIN 1*F_USB1 (2*USB3.2 Gen1 expansion) 3*F_USB2.0 (5*USB2.0 expansion) 1*LPT PIN 1*JPS2 PIN 1*GPIO PIN 1*TPM PIN 1*F_PANEL PIN 6*COM PIN 1*CFAN PIN 1*SFAN PIN 1*JHDMI PIN 1*JVGA PIN 1*ATX_IN Socket	
I/O Chip	ITE8786E	
BIOS	AMI BIOS	
Power	DC/4PIN ATX 12V Power	
Cooling System	Built-in Fan CPU Radiator(Fanless Radiator optional)	
Environment	Working : 0~60°C; Storage : -20°C~75°C; 0% ~ 95% Relative humidity, non-condensation	
Dimension	170X170mm	



Model No.	KT-ZO-WHLUTB-6C2L	KT-ZO-HM170TA-6C2L	KT-ZO-HM370TA-6C2L
CPU	Intel® Gen 8th/10th Processor	Intel® 7th/6th (Kabylake/Skylake-H)Mobile Processor	Intel® Gen 8/9/ 10th H-Series Processor
Chipset	Intel® SOC	Intel® HM170/175/B150	Intel® SOC HM370/Z390
GPU	Intel® UHD Graphics	Intel® HD Graphics	Intel® UHD Graphics
Display Output	LVDS/ EDP1+EDP2/HDMI+VGA	LVDS/ EDP1+EDP2+HDMI+VGA	LVDS/ EDP1+EDP2+HDMI+VGA
Multi Display	Triple Synchronism&Asynchronism	Triple Synchronism&Asynchronism	Triple Synchronism&Asynchronism
USB	4*USB3.2 Gen2 (10Gbps) + 2*USB3.0 Gen1(5 Gbps) + 5*USB2.0	6*USB3.0 Gen1(5Gbps)+4*USB2.0	4*USB3.0 Gen1(5Gbps)+4*USB2.0
RAM	2*SO-DIMM DDR4 ; 8th support 2400MHz Max 32GB ; 10th support 2666MHz Max 64GB	1*SO-DIMM DDR4 2400MHz Max 32GB	2*SO-DIMM DDR4 2666MHz Max 64GB
Audio	ALC897 audio decoding controller on-board ; Independent amplifier 3W@4Ω	HS-100B USB audio decoding controller on-board ; Independent amplifier 3W@4Ω	ALC269 audio decoding controller on-board ; Independent amplifier 3W@4Ω
Ethernet	1*RTL8111H/ RTL8111G Gigabit Network Card on-board (Dual LAN optional)	1*RTL8111H/ RTL8111G Gigabit Network Card on-board (Dual LAN optional)	1*RTL8111H/ RTL8111G Gigabit Network Card on-board (Dual LAN optional)
Storage	1*M.2 M Key,support SATA3.0/ PCIE3.0 self-adaption; 1*SATA3.0	1*M.2 M Key,support SATA; 2*SATA	1*M.2 M Key,support SATA/ PCIE4 self-adaption; 2*SATA
Expansion Slot	1*M.2 E Key,support Wifi (CNVi)module ;1*M.2 B Key,support 4G module expansion	1*M.2 A Key(support Wifi+BT) 1*M.2 B Key (support 4G/5G module)	1*M.2 A Key(support Wifi+BT) 1*M.2 B Key (support 4G/5G module)
Rear I/O Port	1*DC_IN Port 1*HDMI Port 1*VGA Port 1*CLR_CMOS Button 2*USB3.2 Gen2 (10Gbps) Port (USB3.2+Type-C optional) 2*USB3.2Gen2 (10Gbps) Port (LAN2 optional) 1*LAN1 Port 1*HP_OUT Port 1*MIC_IN Port	1*DC Port (φ5.5-2.5mm DC JACK) 1*HDMI Port 1*VGA Port 1*CLR_CMOS Button 2*USB3.0 Port 2*USB3.0 Port (1*LAN Port optional) 1*LAN1 Port 1*LINE-OUT Port 1*MIC-IN Port	1*DC Port 1*HDMI Port 1*VGA Port 1*CLR_CMOS Button 2*USB3.0 Gen1 Port (5Gbps) 1*LAN2 Port (2*USB3.0 optional) 1*LAN1 Port 1*MIC-IN Port 1*LINE-OUT Port
Internal I/O PIN	1*F_AUDIO PIN 1*Speaker PIN 1*INVCN PIN 2*EDP PIN 1*LVDS PIN 1*JVGA PIN 1*BKCL PIN 1*SATA PIN 1*SATA_PWR PIN 3*J_USB2.0 PIN (5*USB2.0 expansion) 1*F_USB3.0 PIN (2*USB3.0 expansion) 1*JPS2 PIN 1*GPIO PIN(4 way) 1*TPM PIN 1*LPT PIN 6*COM PIN 1*F_PANEL PIN 1*AXT_IN Socket 1*SYS_FAN Socket 1*CPU_FAN Socket	1*F_AUDIO PIN 1*SPK PIN (3W 4Ω) 2*F_USB PIN (4*USB2.0 expansion) 1*F_USB3 PIN (2*USB3.0 Gen1 expansion) 1*GPIO PIN 2*SATA Socket 2*JSATA_PWR PIN 1*JPS2 PIN 1*DEBUG 6*COM232 PIN (COM2 support RS485/RS422 optional) 1*F_PANEL PIN 1*LPT PIN 1*INCN PIN 1*LCTL PIN 1*LVDS/EDP1 PIN (In alternative) 1*EDP2 PIN 1*SYS_FAN PIN 1*CFAN PIN 1*JVGA PIN 1*4Pin ATX Power Socket	1*F_AUDIO PIN 1*SPEAKER PIN 2*F_USB PIN (4*USB2.0 expansion) 1*F_USB1 PIN (2*USB3.0 Gen1 expansion) 1*GPIO PIN 2*SATA Socket 2*JSATA_PWR PIN 1*PS/2 PIN 1*DEBUG PIN 6*COM PIN (support 1-way RS485) 1*F_PANEL PIN 1*J_PRINT PIN 1*INCN PIN 1*LCTL PIN 1*LVDS PIN 2*EDP PIN 1*CPU_FAN PIN 1*4Pin ATX Power Socket 1*JVGA PIN
I/O Chip	IT8786E		
BIOS	AMI BIOS		
Power	DC/4PIN ATX 12V-19V Power		
Cooling System	Built-in Fan CPU Radiator/Fanless Radiator optional	Built-in Fan CPU Radiator	
Environment	Working : 0~60℃; Storage : -20℃~75℃; 0% ~ 95% Relative humidity, non-condensation		
Dimension	170X170mm		

KT-ZO-RPLPT-6C2H2D

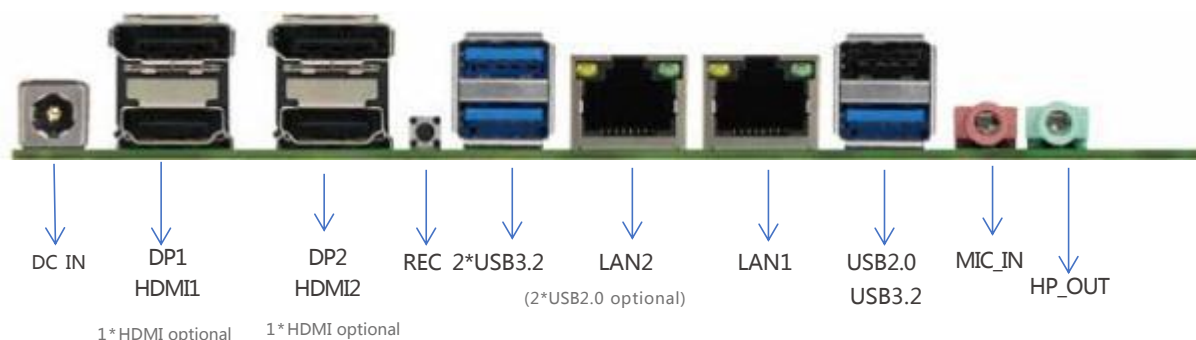
Embedded Industrial PC Board

Application : Digital signage, traffic control, smart education electronic whiteboard, video conferencing, smart SOP signage, multi-screen advertising machine, etc.



- Intel® Gen 12th/13th Alder lake/Raptor Lake Processor (Support U/P/H Series Processors)
- Support Dual SO-DIMM , DDR4 RAM , support up to 64GB
- 4-Display Synchronism&Asynchronism, multi display LVDS/EDP+2*HDMI+2*DP
- Support 1-Key Recovery and keyboard shortcut backup/recovery

I/O Ports :



Specification

CPU	Intel® Gen 12/13th Alder lake/Raptor Lake Processor (Support U/P/H Series) ; Intel® Core™ 1280P/1220P/1215U/12450H etc		
Chipset	Intel® SOC		
GPU	Intel® UHD Graphics		
Display Output	LVDS/EDP1+2*HDMI+2*DP		
Multi Display	4-Display Synchronism&Asynchronism		
USB	3*USB3.2 Gen2 (10Gbps) + 6*USB2.0		
RAM	2*SO-DIMM DDR4 3200MHz Max 64GB		
Audio	ALC897 audio decoding controller on-board ; Independent amplifier NS4251 3W@4Ω MAX		
Ethernet	On-board Intel i219LM + i210AT Gigabit work Card Net (Single/Dual LAN optional)		
Storage	1*M.2 M Key,Support SATA3/PCIEx4 ; 1*SATA3.0		
Expansion Slot	1*M.2 E Key , support Wifi6/BT expansion ; 1*M.2 B Key,support 4G module expansion(5G optional)1*PCIEX4 expansion slot		
Rear I/O Port	1*DC_IN Port 2* HDMI + 2* DP (Up-DP Down-HDMI double-decker) 1*REC Button (Support OS Recovery/Clear CMOS) 2*USB3.2 Port (Gen2 10Gbps) 1*LAN2 Port (2*USB2.0 optional) 1*LAN1 Port 1*USB3.2+1*USB2.0 Port 1*R_MIC 1*R_OUT	Internal I/O PIN	1*F_AUDIO PIN 1*Speaker PIN 3*USB PIN (5*USB2.0 expansion) 1*LVDS/EDP PIN 1*INVCN PIN 1*GPIO PIN(4-way) 1*LPT PIN 1*SATA PIN 1*SATA_PWR PIN 6*COM PIN 1*TPM PIN 1*JPS2 PIN 1*F_PANEL PIN 1*SYS_FAN PIN 1*CPU_FAN PIN 1*4pin ATX Socket
I/O Chip	IT8786E		
BIOS	AMI BIOS		
Power	DC/4PIN ATX 12V/19V Power (Suggest 19V 4.7A/12V 7A)		
Cooling System	Built-in Fan Radiator/Fanless Radiator optional		
Environment	Working : 0~60°C; Storage : -20°C~75°C; 0% ~ 95% Relative humidity, non-condensation		
Dimension	170 x 170 mm		



Model No.	KT-ZO-TGLUT-6C2H2D	KT-ZO-TGLUT-6C4HD
CPU	Intel®Tiger Lake-UP3/H35 SOC Processor (TDP 12-35W) 11th Intel® 1115G4E/1185G7E/1115GRE etc	Intel®Tiger Lake-UP3/ H35 Processor 11th Intel® 1115G4/1125G4/1145G7/1165G7
Chipset	Intel® SOC	Intel® SOC
GPU	Intel® Iris® Xe	Intel® Iris® Xe
Display Output	LVDS/EDP1 + 2*HDMI + 2*DP	LVDS/ EDP1+4*HDMI
Multi Display	4-Dispaly Synchronism&Asynchronism	4-Dispaly Synchronism&Asynchronism
USB	3*USB3.2 Gen2 (10Gbps) + 6*USB2.0	2*USB3.2 Gen2 (10Gbps) ; 9*USB2.0
RAM	2*SO-DIMM DDR4 3200MHz Max 64GB	2*SO-DIMM DDR4 3200MHz Max 64GB
Audio	ALC897 audio decoding controller on-board ; Independent amplifier NS4251 3W@4 Ω MAX	ALC897 audio decoding controller on-board ; Independent amplifier NS4251 3W@4 Ω MAX
Ethernet	Intel i219LM + i210AT Gigabit Network Card (Single/Dual LAN optional) on-board	1*Intel i219LM Gigabit Network Card (Duanl LAN optional i219LM+i210AT)
Storage	1*M.2 M Key,support SATA3/PCIEx4 ; 1*SATA3.0	1*M.2 M Key ,support PCIEX4/SATA signal by BOM selecting; 1*SATAIII(6.0 Gb/s)
Expansion Slot	1*M.2 E Key , support Wifi6/BT module expansion ; 1*M.2 B Key, support 4G module expansion(5G optional);1*PCIEX4 expansion slot	1*M.2 E Key , support CNVi/BT module expansion ; 1*M.2 B Key ,support 4G/5G module expansion ; 1*PCIEX4 expansion slot
Rear I/O Port	1*DC_IN Port 1*HDMI+1*DP(1*HDMI optional) 1*HDMI+1*DP(1*HDMI optional) 1*REC Button 2*USB3.2 Port 1*LAN2 Port (2*USB2.0 optional) 1*LAN1 Port 1*USB3.2+1*USB2.0 Port 1*R_MIC 1*R_OUT	1*DC_IN Port 2*HDMI Port (1*HDMI optional) 2*HDMI Port (1*HDMI optional) 2*USB3.2Gen2 (10Gbps) 2*USB2.0 Port (1*LAN2 optional) 1*LAN1 Port 2*USB2.0 Port 1*F_OUT Port 1*F_MIC Port
Internak I/O PIN	1*F_AUDIO PIN 1*Speaker PIN 3*J_USB (5*USB2.0 expansion) 1*LVDS/ EDP PIN 1*INVCN PIN 1*PCIEX4 Expansion Slot 1*GPIO PIN(4-way) 1*LPT PIN 1*SATA PIN 1*SATA_PWR PIN 6*COM PIN 1*TPM PIN 1*PS/2 PIN 1*F_PANEL PIN 1*SYS_FAN PIN 1*CPU_FAN PIN 1*4pin ATX Socket	1*F_AUDIO PIN 1*Speaker PIN 3*J_USB (5*USB2.0 expansion) 1*LVDS PIN (1*EDP optional) 1*INVCN PIN 1*PCIEX4 expansion Slot 1*GPIO PIN 1*LPT PIN 1*SATA PIN 1*SATA_PWR PIN, 6*COM PIN 1*TPM PIN 1*PS/2 PIN 1*F_PANEL PIN 1*SYS_FAN PIN 1*CPU_FAN PIN 1*4pin ATX Socket
I/O Chip	IT8786E	
BIOS	AMI BIOS	
Power	DC/4PIN ATX 12V/19V Power (Suggest 19V 4.7A/12V 7A)	
Cooling System	Built-in CPU Fan Radiator/Fanless Radiator optional	
Environment	Working : 0~60°C; Storage : -20°C~75°C; 0% ~ 95% Relative humidity, non-condensation	
Dimension	170X170mm	

KT-ZO-H610T-6CD8

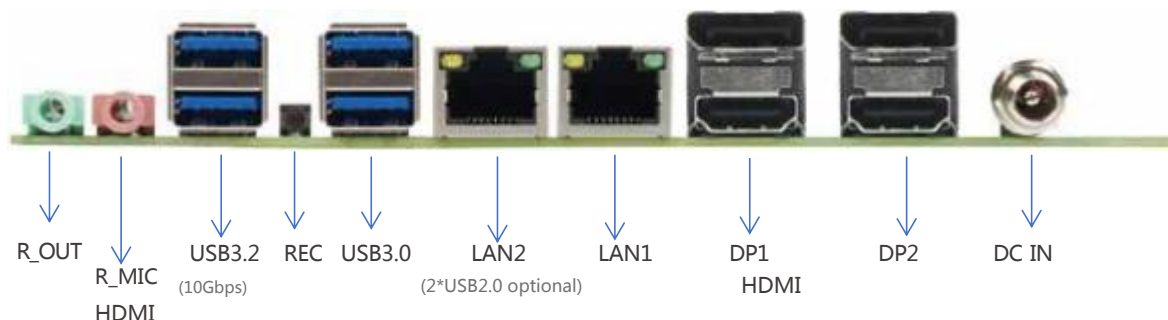
Embedded Industrial PC Board

Application : Digital signage, traffic control, smart education electronic whiteboard, video conferencing, smart SOP signage, multi-screen advertising machine, etc.



- Support Gen 12/13/14 th Intel® S Series Processor
- Support Dual SO-DIMM , DDR4 RAM , up to 64GB
- Support multi-display LVDS/EDP+2*HDMI+2*DP (Any 4-display ,H610 support only triple-display)
- Support Intel i226-V 2.5G dual LAN (i226-LM , Single LAN optional)

I/O Ports :



Model No.	KT-ZO-H610T-6CD8	KT-ZO-H610TB-6CD8
CPU	Gen 12/13/14th Intel® S Series Processor	
Chipset	Intel® H610/H670/B760 etc	Intel® H610/H670/B760 etc
GPU	Intel® HD Graphics	Intel® HD Graphics
Display Output	LVDS/EDP+2*HDMI(HDMI2.0)+2*DP(DP1.4)	LVDS/EDP+2*HDMI(HDMI2.0)+2*DP(DP1.4)
Multi Display	4-Dispaly Synchronism&Asynchronism(H610 support only triple-display)	4-Dispaly Synchronism&Asynchronism(H610 support only triple-display)
USB	2*USB3.2 Gen2(10Gbps)+2*USB3.2 Gen1(5Gbps)+5*USB2.0(Single LAN is 7*USB2.0)	2*USB3.2 Gen2(10Gbps)+2*USB3.2 Gen1(5Gbps)+5*USB2.0(Single LAN is 7*USB2.0)
RAM	2*SO-DIMM DDR4 3200MHz Max 64GB	2*SO-DIMM DDR4 3200MHz Max 64GB
Audio	ALC897 audio decoding controller on-board ; Independent amplifier NS4258 5.2W@2Ω MAX	ALC897 audio decoding controller on-board ; Independent amplifier NS4258 5.2W@2Ω MAX
Ethernet	On-board 2*Intel I226V 2.5G Network Card (i226LM,Single/Dual LAN optional)	On-board Intel i219-LM+i210AT Gigabit Network Card
Storage	1*M.2 M Key, Default PCIE3.0x4 (SATA3 optional) ;1*SATA3.0	1*M.2 M Key, Default PCIE3.0x4 (SATA3 optional) ;1*SATA3.0
Expansion Slot	1*M.2 E Key,support Wifi6(CNVi) / BT module ; 1*M.2 B Key, support 4G/5G (optional) ; 1*PCIE16 Slot	1*M.2 E Key,support Wifi6(CNVi) /BT module ; 1*M.2 B Key,support 4G/5G (optional) ; 1*PCIE16 Slot
Rear I/O Port	1*DC_IN Port 2*HDMI+DP (上DP下HDMI double-decker) 1*LAN1 Port 1*LAN2 Port (2*USB2.0 optional) 2*USB3.2 GEN2 Port(10G bps) 2*USB3.2 GEN1 Port(5G bps) 1*REC Button (Support 1-Key Recovery/Clear CMOS) 1*R_MIC 1*R_OUT	1*DC_IN Port 2*HDMI+DP (上DP下HDMI double-decker) 1*LAN1 Port 1*LAN2 Port (2*USB2.0 optional) 2*USB3.2 GEN2 Port(10G bps) 2*USB3.2 GEN1 Port(5G bps) 1*REC Button(Support 1-Key Recovery/Clear CMOS) 1*R_MIC 1*R_OUT
Internal I/O PIN	1*F_AUDIO PIN,1*SPEAKER PIN,1*SATA_PWR PIN,1*SATA PIN, 6*COM PIN,1*LVDS PIN,1*INVERT PIN,1*BKCL PIN,1*EDP PIN, 1*SYS_FAN PIN,1*F_PANEL PIN,1*CPU_FAN PIN,3*USB PIN(5*USB2.0 expansion),1*4pin ATX Slot,1*GPIO PIN(2-way)	1*F_AUDIO PIN,1*SPEAKER PIN,1*SATA_PWR PIN,1*SATA PIN, 6*COM PIN,1*LVDS PIN,1*INVERT PIN,1*BKCL PIN,1*SYS_FAN PIN,1*F_PANEL PIN,1*CPU_FAN PIN,3*USB PIN(5*USB2.0 expansion),1*4pin ATX Socket,1*GPIO PIN(4-way)
I/O Chip	IT8786E	IT8786E
BIOS	AMI BIOS	AMI BIOS
Power	DC / 4PIN ATX 19-24V Wide Voltage Inout	DC / 4PIN ATX 19V Input
Cooling System	/	/
Environment	Working : 0~60℃; Storage : -20℃~75℃; 0% ~ 95% Relative humidity, non-condensation	
Dimension	170 x 170 mm	



Model No.	KT-ZO-HM570T-2H2D	KT-ZO-H310CTB-2CD8
CPU	Intel®Core™ Tiger Lake Gen 11th H Series Processor	Intel®CoffeeLake/Coffeelake-R Processor
Chipset	Intel® HM570	Intel® H310
GPU	Intel® UHD Graphics	Intel® UHD Graphics 630
Display Output	LVDS+EDP+2*DP+2*HDMI	LVDS+HDMI+VGA
Multi Display	4-Display Synchronism&Asynchronism	Triple Synchronism&Asynchronism
USB	4*USB3.2 Gen2 (10Gbps) + 2*USB3.0 Gen1 (5Gbps) + 4*USB2.0	3*USB3.0 Gen1(5Gbps) + 5*USB2.0
RAM	2*SO-DIMM DDR4 3200MHz Max 32GB	2*SO-DIMM DDR4 2666MHz Max 32GB
Audio	ALC269 audio decoding controller on-board ; Integrated amplifier 2.2W@4 Ω MAX	ALC269 audio decoding controller on-board
Ethernet	On-board 1*RTL8111H/ RTL8111G Gigabit work Card (Dula LAN optional)	On-board 1*RTL8111H/ RTL8111G Gigabit work Card (Dula LAN optional)
Storage	1*M.2 M Key,support SATA3/PCIex4 ; 1*SATA3.0	1*M.2 M Key,support SATA/ NVME self-adaption; 1*SATA Port
Expansion Slot	1*M.2 E Key,support Wifi6/BT module expansion	1*mPCIe;Support /WIFI moduel expansion
Rear I/O Port	1*DC_IN Port 1*HDMI+DP Port 1*HDMI+DP Port(1*COM optional) 1*CLR_CMOS Button 2*USB3.2 Port (1*LAN2 optional) 1*LAN1 Port 2*USB3.2 Port 1*MIC_IN Port 1*HP_OUT Port	1*DC_IN Port 1*HDMI Port 1*VGA Port 2*USB3.2 Gen2 Port(LAN2 optional) 1*LAN1 Port 2*USB3.2 Gen2 Port 1*_MIC Port 1*_OUT Port
Internal I/O PIN	1*_AUDIO PIN 1*Speaker PIN 1*_PANEL PIN 1*_SYS_FAN PIN 1*_CPU_FAN PIN 1*EDP1 PIN 1*INVCN Socket 1*LVDS PIN 1*BKCL PIN 1*GPIO PIN 2*_USB2.0 PIN (4*USB2.0 expansion) 1*_USB3.0 PIN (2*USB3.0 expansion) 1*SATA Socket 1*SATA_PWR Socket 1*ATX_IN Socket	1*_AUDIO PIN 1*SPEAKER PIN 2*SATA Socket 2*SATA_PWR PIN 1*CFAN PIN 1*LVDS PIN 1*BKCL PIN 1*IVCN PIN 1*SFAN PIN 1*_PANEL PIN 2*COM PIN 3*_USB1 PIN(5*USB2.0 expansion) 1*VGA PIN
I/O Chip	IT8613E	IT8784E
BIOS	AMI BIOS	AMI BIOS
Power	DC 12V-19V Wide Voltage Input	DC/4Pin ATX 12~19V Input
Cooling System	Standard 115X spacing radiator	/
Environment	Working : 0~60°C; Storage : -20°C~75°C; 0% ~ 95% Relative humidity, non-condensation	
Dimension	170X170mm	

KT-MB-H610P-6C2L

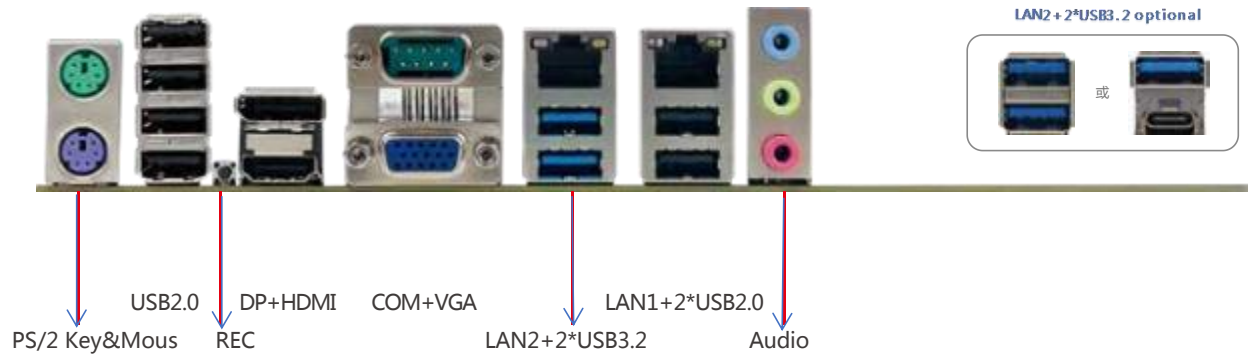
Embedded Industrial PC Board

Application : Self-service teller machines, government and enterprise office machines, home entertainment, etc.



- Intel® Gen 12th/13th/14th Processor
- Support Dual UDIMM , DDR4 R A M , up to 64GB
- 4-Dispaly Synchronism&Asynchronism , VGA+HDMI+DP+HDMI PIN (H610 support triple display ,B660 above support 4-displays)
- Support Intel Dual LAN (Single LAN optional)

I/O Ports :



Specification

CPU	Intel®12th/13th/14th S Series Processor		
Chipset	Intel® H610/B660/B760		
GPU	Intel® HD Graphics		
Display Output	VGA+HDMI2.0+DP1.2+HDMI PIN		
Multi Display	4-Display Synchronism&Asynchronism (H610 support triple display,B660 above support 4-displays)		
COM	COM1 support TTL by bom ; COM1/2/3/4 Support voltage selection by bios; COM2 support RS232/422/485 ; COM3 support RS232/485 optional by Jumper		
RAM	2*U-DIMM DDR4 3200MHz Max 64GB		
Audio	On-board ALC897 Audio decoding controller		
Ethernet	On-board 1*Intel i219-V + 1*Intel i226-V Network card (1*i219-LM + 1*i226-LM optional)		
Storage	1*M.2 M Key (PCIe4) ; 4*SATA3.0		
Expansion Slot	1*M.2 E Key support Wifi6(CNVi)/Bluetooth; 1*PCIEx16 Slot;1*PCIEx1 Slot; 1*PCIEx4 Slot (H610为X1 signal , B660 above is X4 signal)		
Rear I/O Port	1*AUDIO LAN1+2*USB2.0 LAN2+2*USB3.2(2*USB3.2 or USB3.2+Type-C optional) 1*COM+1*VGA; 1*DP+1*HDMI 1*REC Button(Support 1-Key Recovery Backup&Clear CMOS) 4*USB2.0 1*PS/2 keyboard mouse port	Internal I/O PIN	1*USB2.0 PIN (2*USB2.0 optional) 1*USB3.0 PIN (2*USB3.0 optional) 5*COM PIN 1*F_PANEL PIN 4*SATA3.0 Port 1*CPU_FAN PIN 1*SYS_FAN PIN 1*TPM PIN 1*HDMI PIN 1*24+8pin ATX Slot 1*Type-E(B above optional)
I/O Chip	IT8786E		
BIOS	AMI BIOS		
Power	ATX (24+8 Pin) Power		
Cooling System	Built-in Fan Radiator		
Environment	Working : 0~60°C; Storage : -20°C~75°C; 0% ~ 95% Relative humidity, non-condensation		
Dimension	244 x 206 mm		

KT-ZO-H610T-AIO

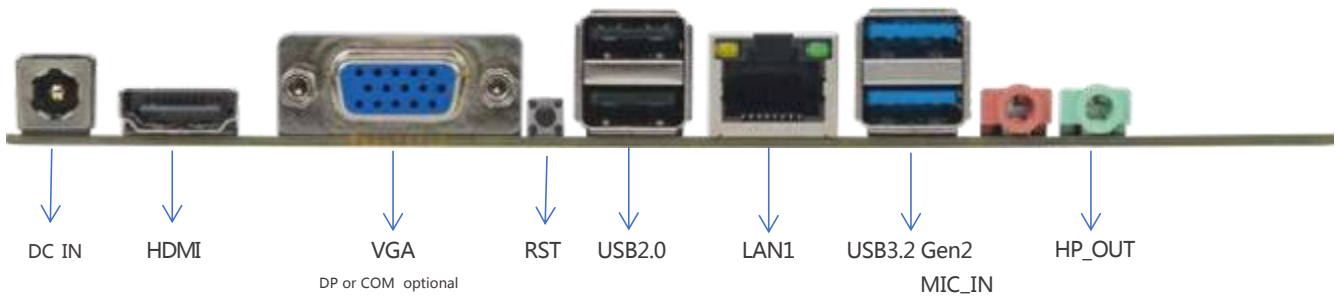
Embedded Industrial PC Board

Application : industrial intelligent manufacturing systems such as cashier, medical, desktop office, industrial automation control, motion control, etc.



- Intel® Gen 12/13th Processor with H610/B660
- Dual SO-DIMM, DDR4 RAM , 3200Mhz, Max 64GB
- Support LVDS/EDP+HDMI1+HDMI2+VGA/DP any triple-display
- On-board 1*Realtek RTL8111H Gigabit Network Card (Intel i219LM optional)
- 2*USB3.2 Gen2(10Gbps) + 2*USB3.0 Gen1(5Gbps) + 4*USB2.0

I/O Ports :



Specification

CPU	Intel® Gen 12/13th Alder Lake & Raptor Lake Processor		
Chipset	Intel® H610/B660		
GPU	Intel®UHD Graphics		
Display Output	LVDS/EDP+HDMI1+HDMI2+VGA/DP		
Multi Display	Triple Synchronism&Asynchronism		
USB	2*USB3.2 Gen2(10Gbps) +2*USB3.0 Gen1(5Gbps) + 4*USB2.0		
RAM	2*SO-DIMM DDR4 3200MHz Max 64GB		
Audio	ALC269 audio decoding controller on-board ; Independent amplifier 3W@4Ω		
Ethernet	1*Realtek RTL8111H Gigabit Network Card on-board (Intel i219LM optional)		
Storage	1*M.2 M Key, support SATA(PCIEx4 optional); 2*SATA3.0		
Expansion Slot	1*M.2 E Key support WIFI6(CNVl)/BT module expansion ; (optional)1*M.2 E Key		
Rear I/O Port	1*DC_IN Port 1*HDMI Port 1*VGA Port (DP Port or COM optional) 1*RST Button (Support Reboot &Clear CMOS) 2*USB2.0 Port 1*LAN1 Port 2*USB3.2 Gen2 Port 1*MIC_IN Port 1*HP_OUT Port	Internal I/O PIN	1*F_AUDIO PIN 1*SPEAKER PIN 1*F_USB1 PIN(2*USB2.0 optional) 1*CPU_FAN PIN 1*BKCL PIN 1*INVCN PIN 1*LVDS PIN (1*EDP optional) 1*F_PANEL PIN 1*F_USB3_1 PIN(2*USB3.0 expansion) 2*SATA Socket 2*SATA_PWR PIN 1*HDMI2 Port(Motherboard side display interface) 1*TPM PIN 1*SYS_FAN PIN
I/O Chip	IT8613E		
BIOS	AMI BIOS		
Power	DC 19V Input (Suggest i3 19V6A Power , i5 or above 19V 7.8A Power)		
Cooling System	Require extra standard 115X hole radiator		
Environment	Working : 0~60°C; Storage : -20°C~75°C; 0% ~ 95% Relative humidity, non-condensation		
Dimension	170 x 170 mm		



Model No.	KT-ZO-TGLUT2 -AIO	KT-ZO-HM570T-AIO	KT-ZO-HM170TA-AIO
CPU	Intel® Gen 11th Tiger Lake-UP3/ H35 Processor (1135G7/11390H etc)	Intel® Gen 11th Tiger Lake Processor (H Series)	Intel® Gen 7th/6th Kabylake/Sky lake-H Processor
Chipset	Intel® SOC	Intel® HM570	Intel® HM170/175/ B150
GPU	Intel® Iris® X ^e Graphics	Intel® UHD Graphics	Intel® HD Graphics
Display Output	LVDS/ EDP+HDMI+VGA	LVDS+ EDP+HDMI+DP+VGA	LVDS/ EDP1+ EDP2+ HDMI+VGA
Multi Display	Triple Synchronism&Asynchronism	4-Displays Synchronism&Asynchronism	Triple Synchronism&Asynchronism
USB	4*USB3.2 Gen2(10Gbps) + 5*USB2.0	4*USB3.2 Gen2(10Gbps) + 2*USB3.0 Gen1(5Gbps) + 4*USB2.0	6*USB3.0 Gen1(5Gbps) + 4*USB2.0
RAM	2*SO-DIMM DDR4 3200MHz Max 64GB	2*SO-DIMM DDR4 3200MHz Max 64GB	1*SO-DIMM DDR4 2400MHz Max 32GB
Audio	ALC269 audio decoding controller on-board ; Independent amplifier 3W@4 Ω	ALC269 audio decoding controller on-board ; Integrated amplifier 2.2W@4 Ω	HS-100B audio decoding controller on-board ; Independent amplifier 3W@4 Ω
Ethernet	1*Realtek RTL8111H Giganit Netwroke on-board		
Storage	1*M.2 M Key, support SATA/ PCIe4 self-adaption; 1*SATA3.0 Port		
Expansion Slot	1*M.2 E Key support WIFI6/BT module expansion	1*M.2 E Key support WIFI6(CNV)/BT module expansion	1*M.2 A Key support WIFI/BT module, 1*M.2 B Key support 4G/ 5G module expansion
Rear I/O Port	1*DC_IN Port 1*HDMI Port 1*COM Port (VGA optional) 1*CLR_CMOS Button 2*USB3.2 Gen2(10Gbps) Port 1*LAN1 Port 2*USB3.2 Gen2(10Gbps) Port 1*F_MIC Port 1*F_OUT Port	1*DC_IN Port 1*HDMI Port(HDMI+DP double-decker optional) 1*VGA Port(VGA/ DP single decker) 1*CLR_CMOS Button 2*USB3.0 Port 1*LAN1 Port 2*USB3.0 Port 1*MIC-IN Port 1*LINE- OUT Port	1*DC Port 1*HDMI Port 1*VGA Port 1*CLR_CMOS Button 2*USB3.0 Gen1 Port 2*USB3.0 Gen1 Port(1*LAN optional) 1*LAN1 Port 1*MIC-IN Port 1*LINE- OUT Port
Internal I/O PIN	1*F_AUDIO PIN 1*Speaker Socket 1*COM PIN 3*F_USB2.0 (5*USB2.0 expansion) 1*LVDS PIN (EDP optional) 1*INVERT PIN 1*BKCL PIN 1*F_PANEL PIN 1*CPU_FAN PIN 1*SYS_FAN PIN 1*SATA PIN 1*SATA_PWR PIN 1*ATX_IN Socket	1*F_AUDIO PIN 1*Speaker PIN 1*F_PANEL PIN 1*SYS_FAN PIN 1*CPU_FAN PIN 1*EDP1 PIN 1*INVCN Socket 1*LVDS PIN 1*BKCL PIN 2*F_USB2.0 PIN (4*USB2.0 expansion) 1*F_USB3.0 PIN (2*USB3.0 expansion) 2*SATA Socket 2*SATA_PWR Socket 1*ATX_IN Socket 1*JCOM1 PIN	1*F_AUDIO PIN 1*SPK PIN (3W 4 Ω) 2*F_USB PIN (4*USB2.0 expansion) 1*F_USB3 PIN (2*USB3.0 Gen1 expansion) 1*GPIO PIN 2*SATA Socket 2*JSATA_PWR PIN 1*JPS2 PIN 1*DEBUG 6*COM232 PIN (COM2 support RS485/ RS422 optional) 1*F_PANEL PIN 1*LPT PIN 1*INCN PIN 1*LCCTL PIN 1*LVDS/ EDP1 PIN (InAlternative) 1*EDP2 PIN 1*SYS_FAN PIN 1*CFAN PIN 1*JVGA PIN 1*4Pin ATX Power Socket
I/O Chip	IT8613E		IT8786E
BIOS	AMI BIOS		
Power	DC 12V-19V Wide Voltage Input		
Cooling System	Standard 115X Hole Radiator Optional		Built-in Fan Radiator
Environment	Working : 0~60°C; Storage : -20°C~75°C; 0% ~ 95% Relative humidity, non-condensation		
Dimension	170 x 170 mm		



Model No.	KT-ITX-EHLT-AIO	KT-ITX-GLKT-AIO
CPU	Intel® Elkhart Lake J6412/J6413 Processor	Intel® Gemini Lake Processor (J4215/ J4105/ N4000)
Chipset	Intel® SOC	Intel® SOC
GPU	Intel®HD Graphics	Intel®UHD Graphics
Display Output	LVDS+HDMI+VGA	LVDS+HDMI+VGA
Multi Display	Triple Synchronism&Asynchronism	Triple Synchronism&Asynchronism
USB	4*USB3.0 Gen1(5Gbps) + 4*USB2.0	4*USB3.0 Gen1(5Gbps) + 3*USB2.0
RAM	1*SO-DIMM DDR4 3200MHz Max 32GB	1*SO-DIMM DDR4 2400MHz Max 8GB
Audio	ALC269 audio decoding controller on-board ; Integrated amplifier 2.2W@4 Ω	ALC269 audio decoding controller on-board ; Integrated amplifier 2.2W@4 Ω
Ethernet	1*Realtek RTL8111H Gigabit Network LAN on-board	1*Realtek RTL8111H Gigabit Network LAN on-board
Storage	1*M.2 M Key, support SATA/PCIEx2 self-adaption; 1*SATA3.0 Port	1*M.2 M Key, support SATA; 1*SATA3.0 Port
Expansion Slot	1*M.2 E Key support WIFI/BT module expansion	1*M.2 E Key support WIFI/BT expansion
Rear I/O Port	1*DC Port 1*HDMI Port 1*VGA Port 1*CLR_CMOS Button 2*USB3.0 Gen1 Port 1*LAN1 Port 2*USB3.0 Gen1 Port 1*MIC-IN Port 1*LINE-OUT Port	1*DC Port 1*HDMI Port 1*VGA Port 1*CLR_CMOS Button 2*USB3.0 Gen1 Port 1*LAN1 Port 2*USB3.0 Gen1 Port 1*MIC-IN Port 1*LINE-OUT Port
Internal I/O PIN	1*F_AUDIO PIN 1*Speaker PIN 1*SYS_FAN PIN 2*J_USB2.0 PIN (4*USB2.0 expansion) 1*LVDS PIN 1*INCN Socket 1*LCTL Socket 1*F_PANEL PIN 1*CPU_FAN PIN 1*SATA PIN 1*SATA_PWR PIN 1*ATX_IN Socket	1*F_AUDIO PIN 1*SPEAKER PIN 1*CPU_FAN PIN 1*DEBUG PIN 1*SATA Socket 1*JSATA_PWR PIN 1*LVDS PIN 1*INVERT Socket 1*BKCL Socket 2*F_USB PIN (3*USB2.0 expansion) 1*F_PANEL PIN 1*4Pin ATX Power Socket
I/O Chip	IT8613E	IT8613E
BIOS	AMI BIOS	AMI BIOS
Power	DC 12V Input	DC 12V Input
Cooling System	Built-in Fan Radiator	Built-in Fan Radiator
Environment	Working : 0~60°C; Storage : -20°C~75°C; 0% ~ 95% Relative humidity, non-condensation	
Dimension	170 x 170 mm	