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#### INDUSTRIAL COMPUTER

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#### MINI PC

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### **INDUSTRIAL PANEL PC**

anless Full-screen Industrial Panel P	C 29
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# **Company Profile**

Fodenn Electronic Technology Co., Ltd is a high-tech enterprise that integrates R&D, design, production, sales, and after-sales service. It is a global leading provider of high-performance computing technology across multiple embedded industries.

Established in 2009, Fodenn opened its R&D center in Shenzhen in 2014 and established the North China branch in 2018. Presently, Fodenn supplies motherboards to 85% of self-service equipment manufacturers in China.

With superior service and premium quality, Fodenn's product coverage has expanded from mainland China to Southeast Asia, Europe, the Middle East, North America, and South America.

Spanning an area of 20,000 square meters, Fodenn's manufacturing R&D center is equipped with a complete set of automatic assembly lines, including 8 automatic DIP lines, 12 automatic SMT lines, 6 automatic packaging lines, 6 test lines, and 2 automatic aging lines.

Leveraging professional technology, R&D advantages, and years of manufacturing experience, Fodenn offers customers various types of industrial motherboards, industrial computers, industrial panel PCs, multi-function allin-one kiosks, and more.

Fodenn's products find widespread applications in intelligent manufacturing, financial terminals, medical information, digital signage, government information, cloud storage, and various other scenarios.

As a member of the Intel IoT Solutions Alliance, Fodenn has provided customers with over 1000 solutions and completed product customization in as fast as 35 days to meet diverse customer needs. Fodenn remains committed to focusing on Intel product solutions and delivering more innovative application scenarios.





# **Development History**

Awarded the Intel Market Breakthrough Award 2023 Establishment of North American office Establishment of Industrial Panel PC Business Unit Awarded the Intel IoT Product Innovation Award 2021 Awarded the Intel Technology Innovation Award 2019 Jointly defined Smart Kiosk Module with INTEL. redefining IPC for KIOSK industry Develop and produce ETC products Participated in the development and production of China Social Security machine Participated in the development and production of CCB STM's industrial computer (Industrial computer started to 2015 develop and produce batch shipments) Participated in the development and production of the Super Counter of the ABC (Started the development 2014.12 and production of multi-functional machines for mass shipment) Shenzhen company established (Became the motherboard supplier for 70% of Chinese self-service KIOSK manufacturers) Became an AMD/Intel partner (Realized the R&D, production and mass shipment of industrial motherboards) The Shanghai company was established

## **Customization Service**

Fodenn is defined as an industrial IoT product company that provides OEM services to customers for product customization, including but not limited to changes in appearance, structure, brand identity, extended functionality, and performance enhancement.

#### All in one customization

(industrial computer, industrial panel pc, multifunctional kiosk)

#### Machine customization services include:

- 1.Customization of machine structure
- 2.System assembly
- 3.Customized CMOS/BIOS settings
- 4. Operating system installation
- 5.Complete system testing
- 6. Customized environment and EMC testing
- 7.Certification tools
- 8.Customized packaging

#### Motherboard customization

In addition to providing standard embedded motherboards such as 3.5 inches, EPIC, Mini-ITX, ATX, and other IPC embedded products, Fodenn also provides customized non-standard motherboard services.

The customization services for motherboard include:

- 1. Customized function combination, board type, and interface
- 2.Customized CMOS/BIOS settings
- 3. Customized accessories and peripheral devices pre-installed
- 4. Customized environmental and EMC testing, etc.

### Development and process

With professional technical capabilities, R&D advantages, and years of experience, Fodenn provides customers with various custom solutions for industrial motherboards and industrial all in one computer products.

45 days

Customization of motherboard products is completed in 45 working days.

60 days

Customization of whole machine products is completed in 60 working days.

#### Feasibility study

HW, BIOS, PE, VE, and procurement evaluate all related issues of the project, provide evaluation reports, PM evaluates in a meeting, and determines project progress.

Design and development

HW design, key component review, cost review, PCB layout design, review, EVT BIOS ready, VE EVT plan. Sampling and debugging

EVT PCBA, HW/BIOS debugging, power and clock checks, pre-testing; VE EVT, BFT, RT, ST, CT, VE reports.

HW redesign, DVT PCB, DVT PCBA, DVT testing, PE/VE reports.

Small batch production

200-500 pieces, factory testing reports, VE testing reports, finally start mass production

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### Nano Motherboard





#### Industrial motherboard

Fodenn Electronics, a manufacturer of industrial motherboards, is associate member of the Intel Internet of Things Solutions Alliance. The company is dedicated to creating industrial products for the Internet of Things, and its self-developed industrial motherboards cover a full range of specifications, including PICO-ITX, MINI-ITX, 3.5&4 inches, Micro-ATX, ATX and more. Fodenn products are widely used in a variety of fields, such as self-service terminals, cloud terminals, thin clients, OPS terminals, industrial control, edge computing, network gateways, machine vision, Al computers, and more.









Operating System: Win7/WES7/Win10/Linux/Vxworks/Qnx etc.

Processor: Intel Celeron J1900/ J6412/ Core 4-12th i3/i5/i7 all series CPU

Size: PICO-ITX, 3.5&4 inch, MINI-ITX, Micro-ATX, ATX and other non-standard dimension.



















#### **Product Features**

- 1.Ultra-long supply cycle: The use of industrial-grade materials ensures an ultra-long supply cycle of 5-15 years, maintaining stability in product lifespan.
- 2.Rich peripheral interfaces: Our industrial motherboards support a multitude of peripheral interfaces, ranging from 8 PCIe 16X and other expansion interfaces to 18 USB, 14 COM, 6 RJ45, 3 M.2, 3 MINIPCIE, 4 POE, 48 SATA, CAN-OPEN, and other multi-functional interfaces for comprehensive coverage. Products can be customized, and customers can easily find the corresponding Fodenn standard product based on their requirements.
- 3.Extensive application cases: Fodenn not only serves the top five integrators in the self-service terminal industry but also has industry benchmark customer applications in industrial automation, laser fields, smart logistics, edge computing, and super-large storage server fields. Fodenn's products have also been widely used in overseas countries such as Europe and the United States
- 4.Seamless upgrade replacement: To provide customers with convenient applications, Fodenn has maintained a uniform layout for its industrial motherboards since 2012, extending from Intel H81 to H610 and will continue to do so. Customers can achieve seamless upgrades and product improvements without changing the original structural scheme.
- 5.Customer deep customization: Fodenn has been providing reliable and comprehensive OEM/ODM customization services since its establishment, helping many leading application manufacturers in the industry with product customization and achieving exceptional product performance and unparalleled quality over the past decade.
- 6.Wide Voltage Design: The industrial motherboard unit supports DC 9~36V wide voltage input and is equipped with overcurrent, overvoltage, and anti-failure protection functions, as well as Phoenix-type terminal fastening.
- 7.Wide Temperature Design: Adhering to the philosophy of strict material selection, Fodenn selects industrial-grade wide temperature materials to ensure the normal operation of the machine within the temperature range of -20°C to 60°C.

### **IPC-ADN4L**







IPC-ADN4L Industrial Motherboard			
	CPU	Intel 12th Gen Alder lake-N, N95, N100,N200,N305,default N100	
	RAM	1 x SO-DIMM DDR4 -2666/3200 ,max support 32GB	
0	BIOS	AMI UEFI	
System	Graphics	Intel® HD Graphics	
	OS Support	Win 10/11, LINUX,UNIX	
	Watchdog	256 levels, programmable 0-255 sec/min	
	LAN	4 x LAN port, RJ45, Intel I225/ I226 chipset, (One of POE supported fo powering)	
Rear I/O	Display	DP + HDMI	
	USB	1. 1 x USB3.2, 1 x USBC, 6 x USB2.0 (2 x USB2.0 pins)	
	Expansion port	M.2 B key support 5G, M.2 E key support WiFi	
	COM	The LAN can be reserved for COM ports (Reserve Power Socket)	
Internal I/O	USB	1. 1 x USB3.0, 1 x USBC, 4 x USB2.0 (2 x USB2.0 pins)	
internal I/O	Storage	1 x m.2 2280 SATA SSD, 1 x 2.5 " SATA III HDD /SSD	
	GPIO	8bits digital I/O	
	SIM card	Onboard SIM card slot	
Devices	Power Input	DC in	
Power	Input Voltage	+12V	
Structure	Dimension	120* 120mm	
	Operating Environment	0°C ~60°C , 0~95%RH, non-condensing	
Environment	Storage Environment	-40°C ~85°C , 0~95%RH, non-condensing	
Certificate	Safety Certification	CE	
	Parts List	DB9 COM cable , USB cable	

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## IPC-BT35



IoT Solutions Alliance



	CPU	Intel Celeron J1900/J1800 Quad Core TDP 10W
	RAM	DDR3L-1333, 1*SO-DIMM up to 8GB
0	BIOS	AMI UEFI
System	Graphics	Intel® HD Graphics
	OS Support	WIN7/8/10, LINUX,UNIX
	Watchdog	256 levels, programmable 0-255 sec/min
	LAN	2*RJ45 Gigbite LAN
	Display	VGA+HDMI+LVDs/eDP synchronous/asynchronous display
Rear I/O	Audio	5.1 Channel, 1*LINE-OUT, 1*MIC-IN build-in ampifier
	USB	2*USB2.0
	PS/2	Pin header
	Expansion port	1*Full length MINI-PCIE for 3G/4G/WiFi
	COM	6*COM(COM2 support RS422/485),COM1/COM2 support 5V/12V output
Internal I/O	USB	6*USB2.0
	Storage	1*SATA2.0, 1*MSATA
	GPIO	8bits digital I/O
Power	Power Input	DC in
Powel	Input Voltage	+12V
Structure	Dimension	3.5&4 inch, 154.8X117.4MM
Environment	Operating Environment	0°C ~60°C, 0~95%RH, non-condensing
Environment	Storage Environment	-40°C ~85°C, 0~95%RH, non-condensing
Certificate	Safety Certification	CE

Model Name	Specification
IPC-BT35-N	VGA+HDMI/eDP, 8*USB2.0,6*COM
IPC-BT35-L	VGA+HDMI/LVDs, 8*USB2.0,6*COM
Parts List	DB9 COM cable, USB cable

## **IPC-TGL35**





IPC-TGL35 Industrial Motherboard			
	CPU	Intel Core 11th gen Tiger Lake-U Series	
	RAM	DDR4 21333200MHz ,1*SO-DIMM up to 32G	
System	BIOS	AMI UEFI	
System	Graphics	Intel® HD Graphics	
	OS Support	WIN10/11, LINUX,UNIX	
	Watchdog	256 levels, programmable 0-255 sec/min	
	LAN	1*Intel I226V 2.5Gbe LAN,1*I219LM 1000Gbps LAN	
Rear I/O	Display	HDMI/DP/LVDs/eDP synchronous/asynchronous display	
	USB	4*USB3.2(Gen1)	
	Expansion port	1* M.2 (B key 3042/3052 for 4G/5G) 1* M.2 (E key 2230 CNVi,PCI-E,USB2.0)	
	Audio	1*LINE-OUT, 1*MIC IN, build-in ampifier	
	COM	6*COM(COM1/2 support RS422/485)	
Internal I/O	USB	6*USB2.0 (2*USB for B Key and E key optional)	
	Storage	1*SATA3.0,1*M.2 M key NVME 2280	
	GPIO	8bits digital I/O	
	SIM card	Onboard SIM card slot	
	CAN	1*CAN	
	I2C	Support SMbus/ I2C	
Power	Power Input	wide voltage	
rowei	Input Voltage	12-24V DC in	
Structure	Dimension	3.5inch 146X102MM	
Environment	Operating Environment	-20°C ~60°C, 0~95%RH, non-condensing	
Environment	Storage Environment	-40°C ~85°C, 0~95%RH, non-condensing	
Certificate	Safety Certification	CE	
	Parts List	DB9 COM cable, USB cable	
	Paris List DB9 COM Cable, OSB Cable		



## **Mini ITX Motherboard**





## IPC-EK35



(intel) IoT Solutions Alliance



	CPU	Intel Elkhart Lake Celeron J6412 TDP 10W
	RAM	DDR4 -2666/2933/3200Mhz ,1*SO-DIMM up to 32GB
0	BIOS	AMI UEFI
System	Graphics	Intel® HD Graphics
	OS Support	Win 10/11, LINUX,UNIX
	Watchdog	256 levels, programmable 0-255 sec/min
	LAN	2*RJ45 Gigbite LAN
Rear I/O	Display	HDMI +LVDS+eDP/LVDS synchronous/asynchronous TRIPLE display
Rear I/O	Audio	1*LINE-OUT, build-in 10W ampifier
	USB	4*USB3.2(Gen1)
	Expansion port	M.2 B key support 5G, M.2 E key support PCI-E WiFi
	COM	6*COM(COM1/2 support RS422/485)
	USB	6*USB2.0 (4*USB2.0 if use E-Key and B Key port)
Internal I/O	Storage	1*SATA 7 PIN, 1*M.2 M key NVME and mSATA 2280
	CAN	2*CAN(only X series CPU support)
	GPIO	8bits digital I/O
	SIM card	Onboard SIM card slot
Danner	Power Input	DC in
Power	Input Voltage	+12V
Structure	Dimension	3.5inch (146mm*102mm)
Environment	Operating Environment	-20°C ~60°C, 0~95%RH, non-condensing
Environment	Storage Environment	-40°C ~85°C, 0~95%RH, non-condensing
Certificate	Safety Certification	CE

## IPC-H5110C







IPC-H5110C Industrial Motherboard			
	CPU	Intel Core 10-11th gen/ Celeron/Pentium LGA1200	
	Chipset	H510/B560	
	RAM	DDR4-2133-3200Mhz ,1*U-DIMM up to 32G	
Custom	BIOS	AMI UEFI	
System	Graphics	Intel® HD Graphics	
	OS Support	WIN10/11,LINUX,UNIX	
	Watchdog	256 levels, programmable 0-255 sec/min	
	TPM	Depends on CPU model, support TPM	
	LAN	2*RJ45 Gigbite LAN	
	Display	VGA+VGA/HDMI synchronous/asynchronous display	
Boor I/O	Audio	5.1 Channel,1*LINE-OUT,1*MIC-IN,1*LINE-IN, build-in ampifier	
Rear I/O	USB	8*USB3.0, 6*USB2.0	
	PS/2	1*PS/2, 2 in1	
	Button/light	1*SYS, 1*HDD status indicator	
	Expansion port	1*PCIE X16,1*M.2 B Key,1*M.2 E Key	
Internal I/O	СОМ	10*RS232 Header (COM1 and COM2 support RS422/485) COM1/COM2 support 5V/12V output	
internal I/O	Storage	2*SATA3.0 1*M.2	
	GPIO	8bits digital I/O	
	SIM card	Onboard SIM card slot	
Power	Power Input	24+4Pin ATX Power supply	
rowei	Input Voltage	+12V +5V +3.3V -12V	
Structure	Dimension	Mini ITX, 170X170MM	
Environment	Operating Environment	0°C ~60°C, 0~95%RH, non-condensing	
Environment	Storage Environment	-40°C ~85°C, 0~95%RH, non-condensing	
Certificate	Safety Certification	CE	
	Parts List	I/O bezel, DB9 COM cable, USB cable	
Tario Eist			



## **Mini ITX Motherboard**

## **Mini ITX Motherboard**





## IPC-H61010C







IPC-H61010C Industrial Motherboard		
	CPU	Intel Core 12th gen/Celeron/Pentium LGA1700
	Chipset	INTEL H610
	RAM	DDR4-2133-3200Mhz, 2*SO-DIMM up to 32G
System	BIOS	AMI UEFI
System	Graphics	Intel® HD Graphics
	OS Support	WIN10/11, LINUX,UNIX
	Watchdog	256 levels, programmable 0-255 sec/min
	TPM	Depends on CPU model, support TPM
	LAN	2*RJ45 Gigbite LAN
	Display	VGA+VGA/HDMI synchronous/asynchronous display
Rear I/O	Audio	5.1Channel, 1*LINE-OUT, 1*MIC IN, 1*LINE-IN, build-in ampifier
Real I/O	USB	8*USB3.0 6*USB2.0
	PS/2	1*PS/2, 2 in 1
	Button/light	1*SYS,1*HDD status indicator
	Expansion port	1*PCIEX16 1*M.2 B Key 1*M.2 E Key
	COM	10*RS232 Header (COM2 support RS422/485) COM1/COM2 support 5/12V output
Internal I/O	Storage	2*SATA3.0 1*M.2
	GPIO	8bits digital I/O
	SIM card	Onboard SIM card slot
Power	Power Input	24+4Pin ATX Power supply
Power	Input Voltage	+12V +5V +3.3V -12V
Structure	Dimension	MINI ITX, 170X170MM
Environment	Operating Environ- ment	0°C ~60°C, 0~95%RH, non-condensing
	Storage Environment	-40°C ~85°C, 0~95%RH, non-condensing
Certificate	Safety Certification	CE
Pa	rts List	I/O bezel, DB9 COM cable, USB cable

## **IPC-TGL6L**





IPC-TGL6L Industrial Motherboard				
	CPU	Intel Core 11th gen Tiger Lake U-series/Pentium/Celeron		
	RAM	DDR4 21333200MHz ,2*SO-DIMM up to 64G		
	BIOS	AMI UEFI		
System	Graphics	Intel® HD Graphics		
	OS Support	WIN10/11, LINUX,UNIX		
	Watchdog	256 levels, programmable 0-255 sec/min		
	TPM	Depends on CPU model, support TPM		
	LAN	4*Intel I226LM ( PoE PS ) + 2*Intel I226LM Gigbite LAN		
Rear I/O	Display	HDMI/LVDs/eDP synchronous/asynchronous display		
	USB	2*USB3.0		
	Expansion port	1* M.2 (B key 3042/3052 for 4G/5G) 1* M.2 (E key 2230 PCI-E,USB2.0 )		
	Audio	Front_FP ( support ALC888S/ALC897/ALC662 ) + build-in SPK		
	COM	4*COM(COM1/2 support RS422/485 )		
Internal I/O	USB	1*USB3.0, 4*USB2.0		
	Storage	1*SATA3.0, 1*M.2 M key NVME 22110		
	GPIO	8bits digital I/O		
	SIM card	Onboard SIM card slot		
	CAN	1*CAN		
	I2C	Support SMbus/ I2C		
Power	Power Input	DC in		
Fower	Input Voltage	9~36V wide voltage		
Structure	Dimension	Mini ITX , 170X170MM		
Environment	Operating Environment	0°C ~60°C , 0~95%RH, non-condensing		
Environment	Storage Environment	-40°C ~85°C , 0~95%RH, non-condensing		
Certificate	Safety Certification	CE		
	Parts List	I/O bezel , DB9 COM cable , USB cable		



### **Mini ITX Motherboard**

## **Mini ITX Motherboard**





## IPC-6412P01





	IPC-64	12P01 Industrial Motherboard
	CPU	Intel Elkhart Lake Celeron J6412 TDP 10W
Suntana.	RAM	DDR4 -2666/2933/3200Mhz,1*SO-DIMM up to 32G
	BIOS	AMI UEFI
System	Graphics	Intel® HD Graphics
	OS Support	WIN10/11, LINUX,UNIX
	Watchdog	256 levels, programmable 0-255 sec/min
	LAN	2*RJ45 Gigbite LAN
Rear I/O	Display	HDMI+VGA+LVDS(default) Notes:HDMI/EDP2 +LVDS1/EDP1 (BOM Optional) synchronous/asynchronous TRIPLE display
	Audio	1*LINE-OUT, build-in 10W ampifier
	USB	4*USB3.0
	Expansion port	M.2 B key support 5G, M.2 E key support PCI-E WiFi
	COM	6*COM(COM1/2 support RS422/485)
	USB	6*USB2.0 (4*USB2.0 if use B Key and E Key port)
Internal I/O	Storage	1*SATA 7 PIN, 1*M.2 M key NVME 2280
	CAN	2*CAN(only X series CPU support)
	GPIO	8bits digital I/O
	SIM card	Onboard SIM card slot
Dawar	Power Input	DC in
Power	Input Voltage	+12V
Structure	Dimension	Mini ITX, 170X170MM
Environment	Operating Environment	0°C ~60°C, 0~95%RH, non-condensing
Environment	Storage Environment	-40°C ~85°C, 0~95%RH, non-condensing
Certificate	Safety Certification	CE
	Parts List	DB9 COM cable , USB cable

## IPC-1151P03





		IPC-I1151P03 Industrial Motherboard
	CPU	Intel Core 6-7th gen i3/i5/i7/Celeron/Pentium LGA1151
	Chipset	H110/B150/H170 TDP 6W
	RAM	DDR4-1866/2133, 1*U-DIMM up to 16G
System	BIOS	AMI UEFI
System	Graphics	Intel® HD Graphics
	OS Support	WIN7/8/10,LINUX,UNIX
	Watchdog	256 levels, programmable 0-255 sec/min
	TPM	Depends on CPU model, support TPM1.1/2.0
	LAN	2*RJ45 Gigbite LAN
	Display	VGA+VGA/HDMI synchronous/asynchronous display
Rear I/O	Button/light	1*SYS,1*HDD status indicator
Rear I/O	Audio	5.1 Channel, 1*LINE-OUT, 1*MIC-IN, 1*LINE-IN, build-in ampifier
	USB	8*USB3.0, 6*USB2.0
	PS/2	1*PS/2, 2 in1
	Expansion port	1*PCIE X1 slot, 1*Full length MINI-PCIE for 3G/4G/WiFi
	COM	10*RS232(COM2 support RS422/485),COM1/COM2 support 5V/12V output
Internal I/O	Storage	2*SATA3.0, 1*MSATA, 1*Mini PCIE
internal I/O	GPIO	8bits digital I/O
	SIM card	Onboard SIM card slot
	LPT	1*LPT pin header
Power	Power Input	24+4Pin ATX Power supply
Power	Input Voltage	+12V +5V +3.3V -12V
Structure	Dimension	Mini ITX, 170X170MM
Environment	Operating Environment	0°C ~60°C, 0~95%RH, non-condensing
Environment	Storage Environment	-40°C ~85°C, 0~95%RH, non-condensing
Certificate	Safety Certification	CE
1	Model Name	Specification
IPO	C-I1151P03-01	VGA+VGA, up to16GB, 8*USB3.0,6*USB2.0,10*COM
IPO	C-I1151P03-02	VGA+HDMI, up to16GB, 8*USB3.0,6*USB2.0,10*COM
IPO	C-I1151P03-02	VGA+HDMI, up to 32GB, 2*USB3.0,8*USB2.0,10*COM
	Parts List	I/O bezel, DB9 COM cable, USB cable



### **Micro ATX Motherboard**

## **ATX Motherboard**





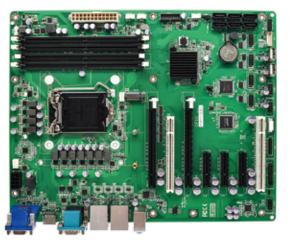
## IPC-Q37MF





		C-Q37MF Industrial Motherboard
	CPU	Intel®LGA1151 Socket Supports 8/9th Gen CoreTM
	Chipset	Q370
	RAM	DDR4 2666/2400/2133 MHz DRAM, up to 128GB
System	BIOS	AMI UEFI
	Graphics	Intel® HD Graphics
	OS Support	WIN 7 / 8 / 10 / 11,LINUX,UNIX
	Watchdog	256 levels, programmable 0-255 sec/min
	LAN	Intel®I219-V +i210AT Gigabit LAN,2*RJ45
	Display	VGA+HDMI+LVDS+DVI-D
Rear I/O	Audio	Realtek ALC662VD, Line-Out, Line-in, MIC.
rteal 1/0	сом	5(COM2:RS232/422/485,COM3/4/5/6:RS232,COM2/3/4/5 Support 5/12V TTL)
	USB	4* USB 3.1 (Gen.2) port
	Expansion port	2*PCI-E x16 + 2*PCI-E x4 slots
	COM	5*RS232/RS422/RS485
	USB	2* USB3.0 +4* USB 2.0 + 1*USB2.0(Erect)
	Storage	6 * SATAIII (6.0Gb/s , Support RAID 0/1/5/10)
	GPIO	1* 16-bit GPIO header
	TPM	Depends on CPU model, support TPM
Internal I/O	PS/2	1*PS/2
	Port	1*SIM Card holder
	Function	2 * M.2 Key M slot(1*2242/2280/22110 (NVMe ), 1*2242(SATA, Co-lay SATA4); 1*M.2 B slot(3042/3052,Support 3G/4G/5G Module); 1*M.2 E slot(2230,Support CNVi)
	Parallel port	1* Parallel port header
Dower	Power Input	24+8Pin ATX power supply
Power	Input Voltage	+12V +5V +3.3V -12V
Structure	Dimension	244 * 244mm
Ci	Operating Environment	0°C ~60°C, 0~95%RH, non-condensing
Environment	Storage Environment	-20°C ~ 85°C
Certificate	Safety Certification	CE

## IPC-Q477





	IPC-Q4	477 Industrial Motherboard
	CPU	Intel Core 10-11th Gen Core i7/i5/i3/Celeron/Pentium LGA1200
	Chipset	Q470E/Q470 TPD 6W
	RAM	DDR4-2400/2666/2933,4*U-DIMM up to 128GB
System	BIOS	AMI UEFI
- 101 2111	Graphics	Intel® HD Graphics
	OS Support	WIN10/11, LINUX,UNIX
	Watchdog	256 levels, programmable 0-255 sec/min
	LAN	2*RJ45, Intel219LM/i225V Gigbite LAN
	Display	VGA+HDMI+DP synchronous/asynchronous TRIPLE display
Rear I/O	Audio	5.1 Channel, 1*LINE-OUT, 1*MIC-IN, 1*LINE-IN
	COM	2*RS232/RS422/RS485
	USB	4*USB3.1(Gen1)
	Expansion port	1*PCIE X16 ,1*PCIE X8, 3*PCIE X4, 2*PCI
	COM	4*RS232 Header
	USB	2*USB3.0 Header,4*USB2.0Header, 2*USB(erect)
	Storage	6*SATA3.0, 1*M.2 NVME 2260/2280
Internal I/O	GPIO	16 bits digital I/O
	TPM	20Pin TPM Header
	CAN	4pin CAN port
	LPC	1*LPC socket
	PS/2	PS/2, 2 in 1
Dower	Power Input	24+8Pin ATX power supply
Power	Input Voltage	+12V +5V +3.3V -12V
Structure	Dimension	305*245MM
Environment	Operating Environment	-20°C ~60°C, 0~95%RH, non-condensing
Environment	Storage Environment	-40°C ~85°C, 0~95%RH, non-condensing
Certificate	Safety Certification	CE
	Parts List	I/O bezel, DB9 COM cable, USB cable





### ATX Motherboard





### **IPC-Q677**





	IPC-Q67	77 Industrial Motherboard
	CPU	Core 12-14th gen desktop platform
	Chipset	Q670
	Socket Type	LGA 1700
System	RAM	4*DIMM DDR4 3200 UP to128GB
System	BIOS	AMI EFI 256MBIT
	Graphics	Intel® HD Graphics
	OS Support	WIN10/11, LINUX,UNIX
	Watchdog	256 levels, programmable 0-255 sec/min
	LAN	2*RJ45,Intel219/226 Gigbite LAN
	Display	VGA+HDMI+DP synchronous/asynchronous display
Rear I/O	Audio	5.1 Channel,1*LINE-OUT,1*MIC-IN,1*LINE-IN,support SPK
Real I/O	COM	2*RS232/RS422/RS485
	USB	6*USB3.2
	PS/2	PS/2
	Expansion port	1*PCIEX16 ,1*PCIEX8,3*PCIEX4,2*PCI ,1*M.2
	COM	4*RS232 Header
	USB	2*USB2.0Header, 2*USB(erect)
Internal I/O	SATA	4*SATA
internal I/O	GPIO	16 bits digital I/O,8*In,8*Out
	TPM	20Pin TPM Header
	CAN	4pin CAN port
	LPC	1*LPC socket
Power	Power Input	24+8Pin ATX power supply
Power	Input Voltage	+12V +5V +3.3V -12V
Structure	Dimension	305*245MM
Environment	Operating Environment	0°C ~60°C ,0~95%RH, non-condensing
Environment	Storage Environment	-40°C ~85°C ,0~95%RH, non-condensing
Certificate	Safety Certification	CE,CCC

#### INDUSTRIAL COMPUTER

IPC (Industrial control computer) is a reinforced and enhanced personal computer. Industrial control computers, in general, are tools used to monitor and control production processes and mechanical and electrical equipment, as well as process equipment, using a bus structure. Industrial control computers possess important computer attributes and characteristics, such as a computer CPU, hard disk, memory, peripherals, and interfaces, and include an operating system, control network and protocols, computing power, and a user-friendly interface. Industrial control computers are often operated in harsh environments



and have higher requirements for data security, so they are typically designed for reinforcement, dust prevention, moisture prevention, corrosion prevention, and radiation prevention, among other special designs.

















#### The Characteristics of Industrial control computer (IPC)

#### 1.Strong Customization:

As an Intel AloT partner and industrial control product manufacturer, Fodenn has a modular design for its IPC products and also offers perfect customization of functions, performance, size, color, and appearance, according to customer demands.

#### 2.Flexible Expansion of Industrial Buses and Expansion Modules:

- . Some of the IPCs support the EASYBUS expansion structure, which makes it convenient for customers to achieve industrial field bus interface through various interfaces.
- Some of the IPCs have built-in CAN/POE/Ether-Cat interfaces and support expansion of multiple peripherals.
- Most of our products support wireless communication functions such as WIFI/4G/5G.

Before shipping, the industrial control series products undergo electrostatic testing to ensure electrical safety for the customer. Customized industrial control units can also adopt leakage protection incoming switch and are equipped with overcurrent, overvoltage, and anti-failure protection measures.

#### 4.IP65 grade NEMA4 Aluminum Enclosure:

Some products front panels that support IP65/NEMA4 protection rating, and the reinforced aluminum alloy rear cover ensures the robustness of the product while fulfilling the product's heat dissipation requirements.

#### 5.Convenient Upgrades and Maintenance:

Fodenn's industrial control design enables customers to replace the HDD and memory easily.

In collaboration with Intel, Fodenn is developing KPMU2.1 which even allows remote maintenance even if the OS crashes, and has a USB feature that never disconnects.

#### **Application Scenarios of Industrial Computers**

Industrial computers feature characteristics such as high temperature resistance, dustproof, and anti-vibration, and are applicable in a variety of industrial scenarios:

Automated production line: Industrial computers are used to monitor equipment and processes on the production line, and to control production efficiency and quality.

Intelligent logistics: In the logistics sector, industrial computers are utilized to monitor logistics status and record logistics data to enhance logistics efficiency.

Industrial remote monitoring: Industrial computers are utilized for remote monitoring of factories, robots and other equipment to ensure production efficiency and device safety.

Industrial data analysis: Industrial computers are used for collecting and analyzing production data to improve production efficiency and enhance quality.

Industrial digital transformation: Industrial computers can assist enterprises in realizing industrial digital transformation to enhance production efficiency and quality.

Industrial Internet of Things (IIoT): Industrial computers can connect with other devices to achieve the IIoT, collecting and analyzing production data.

In conclusion, industrial computers possess characteristics such as high stability, high reliability, and high efficiency, meeting the diverse needs of the industrial automation sector and playing a crucial role in improving industrial production efficiency and quality.

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### **Embedded Fanless BOX**

### **Embedded Fanless BOX**





## IPC-AC200

# IPC-AC300









	IPO	C-AC200 Series Box
	CPU	Intel Celeron J1900
	Chipset	Bay Trail J1900
System	RAM	1*DDR3L SO-DIMM, up to 8GB
	OS Support	WIN7/8/10, LINUX, UNIX
	Watchdog	256 levels, programmable 0-255 sec/min
	LAN	2*RJ45 Gigabit LAN
	Display	VGA+HDMI synchronous/asynchronous display
	Audio	1*LINE-OUT
I/O Port	COM	4*COM(COM1/2 support RS422/RS485)
	USB	1*USB3.0, 4*USB2.0
	WIFI/4G	3G/4G/WiFi Optional
	Button/Indicator	1*POWER ON power indicator
Hard Disk	SSD	32GB/64GB/128GB/256GB/512GB
Power	Power Input	DC in
Power	Input Voltage	12V
	Appearance	Black/Silver/Grey
	Material	Aluminum alloy + Sheet metal
Structure	Installation Method	Embedded /Wall mount/ VESA Mount/Sliding Rail
	Dimensions	180*121.2*30mm
	Weight	1.8KG
Environment	Operating Environment	0°C ~60°C ,0~95%RH, non-condensing
Environment	Storage Environment	-40°C ~75°C ,0~95%RH, non-condensing
Certificate	Safety certification	CE,CCC
	Parts List	Power Adapter, Cable, Installation bracket

	II	PC-AC300 Series Box
	CPU	Intel Celeron J1900/J3455/3865U, Core 8-9th Gen U series
System	Chipset	Intel SoC
	RAM	1*DDR3L SO-DIMM, up to 8GB
	OS Support	WIN7/8/10, LINUX, UNIX
	Watchdog	256 levels, programmable 0-255 sec/min
	LAN	2*RJ45 Gigabit LAN
	Display	VGA+HDMI synchronous/asynchronous display
	Audio	1*LINE-OUT,1*MIC IN
I/O Port	COM	4*COM
	USB	6*USB
	WIFI/4G/5G	4G/5G/WiFi Optional
	Button/Indicator	1*POWER ON power indicator
Hard Disk	SSD	32GB/64GB/128GB/256GB/512GB
Power	Power Input	DC in
Fower	Input Volatge	12V
	Appearance	Black/Silver/Grey
	Material	Aluminum alloy + Sheet metal
Structure	Installation Method	Embedded /Wall mount/ VESA Mount/Sliding Rail
	Dimensions	252*155*53mm
	Weight	2.0KG
Environment	Operating Environment	0°C -60°C ,0-95%RH, non-condensing
Environment	Storage Environment	-40°C -75°C ,0-95%RH, non-condensing
Certificate	Safety certification	CE,CCC
Suppor	ted Motherboard Type	Specification
	IPC-TGL35	Intel Core 11th gen, up to 32GB DDR4,
	IPC-BT35	Intel Celeron J1900,up to 8GB DDR3L,
	IPC-I1356P02	Intel Core 6-7gen U-Series, up to 8GB DDR3L,
	IPC-EK35	Intel Celeron J6412,up to 16GB DDR4
	Parts List	Power Adapter, Cable, Installation bracket





## **Embedded Fanless BOX**

## **Embedded Fanless BOX**





## IPC-AC400





		PC-AC400 Series Box
	CPU	Intel Core 11th Gen Tiger Lake-U series/Celeron/Pentium
	RAM	2*DDR4 SO-DIMM 2400MHz, up to 64GB
System	OS Support	WIN/10/11, LINUX, UNIX
	Watchdog	256 levels, programmable 0-255 sec/min
	TPM	Depends on CPU model, support TPM
	LAN	4*Intel I226LM (PoE +) + 2*Intel I226LM Gigabit LAN
	Display	1*HDMI
I/O Port	COM	4*COM (COM1/2 support RS422/485)
I/O Port	USB	2*USB3.0, 4*USB2.0
	WIFI/4G/5G	4G/5G/WiFi Optional
	Button/Indicator	1*POWER ON power indicator
Hard Diek	SSD	32GB/64GB/128GB/256GB/512GB
Hard Disk	HDD	500GB/1TB/4TB
Davisa	Power Input	DC in
Power	Input Volatge	9~36V
	Appearance	Black
	Material	Aluminum alloy + Sheet metal
Structure	Installation Method	Embedded /Wall mount/ VESA Mount/Sliding Rail
	Dimensions	232*200*78mm
	Weight	2.45kg
Environment.	Operating Environment	0°C -60°C ,0-95%RH, non-condensing
Environment	Storage Environment	-40°C -75°C ,0-95%RH, non-condensing
Certificate	Safety certification	CE,CCC

## IPC-AC500





		IPC-A500 Series Box
	CPU	Intel 12th Gen Alder lake-N, N95, N100,N200,N305,default N100
	RAM	1 x SO-DIMM DDR4 -3200 ,max support 32GB
System	OS Support	WIN/10/11, LINUX, UNIX
	Watchdog	256 levels, programmable 0-255 sec/min
	TPM	Depends on CPU model, support TPM
	LAN	4 x LAN port, RJ45, Intel I225/ I226 chipset, (One of POE supported for powering)
	Display	DP + HDMI
I/O Port	COM	The LAN can be reserved for COM ports (Reserve Power Socket)
I/O POR	USB	1 x USB3.2, 1 x USBC, 4 x USB2.0 (2 x USB2.0 pins)
	WIFI/4G/5G	4G/5G/WiFi Optional
	Button/Indicator	1*POWER ON power indicator
Hard Disk	SSD	32GB/64GB/128GB/256GB/512GB
Haid Disk	HDD	500GB/1TB/4TB
Power	Power Input	DC in
Power	Input Volatge	+12V
	Appearance	Black
	Material	Aluminum alloy + Sheet metal
Structure	Installation Method	Embedded /Wall mount/ VESA Mount/Sliding Rail
	Dimensions	155*130*60mm
	Weight	1.8kg
Environment	Operating Environment	0°C -60°C, 0-95%RH, non-condensing
Environment	Storage Environment	-40°C -75°C, 0-95%RH, non-condensing
Certificate	Safety certification	CE
	Parts List	Power Adapter, Cable, Installation bracket





## **Industrial Compact Computer**

## **Industrial Compact Computer**





## IPC-HC1210





	IPC-HC1210	Series Industrial Computer
	CPU	Intel Core 4th Gen mobile platform/Celeron J1900
System	RAM	1*DDR3L SO-DIMM,up 8GB
	OS Support	WIN7/8/10/11, LINUX, UNIX
	Watchdog	256 levels, programmable 0-255 sec/min
	TPM	Depends on CPU model, support TPM2.0
	LAN	2*RJ45 Gigabit LAN
	Display	VGA+HDMI synchronous/asynchronous display
	Audio	1*LINE-OUT,1*MIC IN
	COM	6*COM up to 10*COM
I/O Port	USB	8*USB
I/O Port	PS/2	1*PS/2, 2in1
	WIFI/4G/5G	4G/5G/WiFi Optional
	System Restore	1*4PIN Phoenix extension, reset
	Button/Indicator	1*POWER ON 1*HDD-LED
	GPIO	Optional
Hard Disk	SSD	32GB/64GB/128GB/256GB/512GB/1TB
naru Disk	HDD	500GB/1TB/4TB
Power	Power Input	DC in
rowei	Input Volatge	12V
	Appearance	Black/Silver/Grey
Structure	Installation Method	Embedded /Wall mount/ VESA Mount/Sliding Rail
Structure	Dimensions	243*69*146mm
	Weight	2.0KG
Environment	Operating Environment	0°C -60°C ,0-95%RH, non-condensing
Environment	Storage Environment	-40°C -75°C ,0-95%RH, non-condensing
Certificate	Safety certification	CE,CCC
Support	ed Motherboard Type	Specification
	IPC-TGL35	Intel Core 11th gen, up to 32GB DDR4,
	IPC-BT35	Intel Celeron J1900,up to 8GB DDR3L,
	IPC-I1356P02	Intel Core 6-7gen U-Series, up to 8GB DDR3L,
	IPC-EK35	Intel Celeron J6412,up to 16GB DDR4
	Parts List	Power Cable, Installation bracket

## IPC-HC5043





		5043 Series Industrial Computer
	CPU	Intel Core 6-12th Gen desktop platform
	Chipset	H110,H310,H510 H610
System	RAM	DDR4 SO-DIMM up to 32GB
Oysicili	OS Support	WIN7/8/10/11, LINUX, UNIX
	Watchdog	256 levels, programmable 0-255 sec/min
	TPM	Depends on CPU model, support TPM2.0
	LAN	2*RJ45 Gigabit LAN
	Display	VGA+HDMI synchronous/asynchronous display
	Audio	1*LINE-OUT,1*MIC IN,1*LINE-IN
	COM	10*COM
I/O Port	USB	14*USB
I/O POIL	PS/2	1*PS/2, 2in1
	WIFI/4G/5G	4G/5G/WiFi Optional
	System Restore	1*4PIN Phoenix extension, reset
	Button/Indicator	1*POWER ON 1*HDD-LED
	GPIO	Optional
lard Disk	SSD	32GB/64GB/128GB/256GB/512GB/1TB
naru Disk	HDD	500GB/1TB/4TB
Power	Power Input	M-ATX power supply
Powel	Input Volatge	90-264V
	Appearance	Black
Structure	Installation Method	Embedded /Wall mount/ VESA Mount/Sliding Rail
Siructure	Dimensions	260*204.6*131.3MM without bracket
	Weight	3.8KG
nvironment	Operating Environment	0°C -60°C ,0-95%RH, non-condensing
ivironment	Storage Environment	-40°C -85°C ,0-95%RH, non-condensing
Certificate	Safety certification	CE,CCC

Specification
Intel Core 4th Gen platform,up to 16GB DDR4,6*USB3.0,8*USB2.0,10*COM
Intel Core 6-9th Gen platform,up to 32GB DDR4,8*USB3.0,6*USB2.0,10*COM
Intel Core 8-9th Gen platform,up to 32GB DDR4,8*USB3.0,6*USB2.0,10*COM
Intel Core 10-11th Gen platform, up to 64GB DDR4 2666MHz, 8*USB3.0, 6*USB2.0, 12*COM
Intel Core 12th Gen platform, up to 64GB DDR4 2666MHz, 8*USB3.0, 6*USB2.0, 10*COM
Power Cable, Installation bracket



## **Industrial Compact Computer**

## 4U Rackmount Industrial Computer Foden | International Industrial Computer | International Industrial Computer | International Computer | International Industrial Computer |





## IPC-HC3100CP005





IPC-HC3100CP005 Series Industrial Computer				
System	CPU	Intel Core 6-12th Gen desktop platform		
	Chipset	H110,H310,H510 H610		
	RAM	DDR4 SO-DIMM up to 64GB		
	OS Support	WIN7/8/10/11, LINUX, UNIX		
	Watchdog	256 levels, programmable 0-255 sec/min		
	TPM	Depends on CPU model, support TPM2.0		
	LAN	2*RJ45 Gigabit LAN		
	Display	VGA+HDMI synchronous/asynchronous display		
	Audio	1*LINE-OUT,1*MIC IN,1*LINE-IN		
	COM	6*COM, up to 14*COM		
I/O Port	USB	10*USB, up to 22*USB		
I/O Port	PS/2	1*PS/2, 2in1		
	WIFI/4G/5G	4G/5G/WiFi Optional		
	System Restore	1*4PIN Phoenix extension, reset		
	Button/Indicator	1*POWER ON 1*HDD-LED		
	GPIO	Optional		
Hard Disk	SSD	32GB/64GB/128GB/256GB/512GB/1TB		
nard Disk	HDD	500GB/1TB/4TB		
Power	Power Input	M-ATX power supply		
rowei	Input Volatge	90-264V		
	Appearance	Black/Grey		
Structure	Installation Method	Embedded		
Structure	Dimensions	320*320*131.4MM without bracket		
	Weight	5.3KG		
Environment	Operating Environment	0°C -60°C ,0-95%RH, non-condensing		
Environment	Storage Environment	-40°C -75°C ,0-95%RH, non-condensing		
Certificate	Safety certification	CE,CCC		

Supported Motherboard Type	Specification
IPC-I1150P04	Intel Core 4th Gen platform,up to 16GB DDR4, 6*USB3.0,8*USB2.0,10*COM
IPC-I1151P03	Intel Core 6-9th Gen platform,up to 32GB DDR4,8*USB3.0,6*USB2.0,10*COM
IPC-H310P01	Intel Core 8-9th Gen platform,up to 32GB DDR4,8*USB3.0,6*USB2.0,10*COM
IPC-H5110C	Intel Core 10-11th Gen platform, up to 64GB DDR4 2666MHz, 8*USB3.0, 6*USB2.0, 12*COM
IPC-H61010C	Intel Core 12th Gen platform, up to 64GB DDR4 2666MHz, 8*USB3.0, 6*USB2.0, 10*COM
Parts List	Power Cable, Installation bracket

## IPC-M4U





	IPC-IVI4U S	eries Industrial Computer	
System	CPU	Intel Core 10/11th Gen desktop platform	
	Chipset	Q470E	
	RAM	DDR4 SO-DIMM,up to 128GB	
	OS Support	WIN/10/11, LINUX, UNIX	
	Watchdog	256 levels, programmable 0-255 sec/min	
	TPM	TPM2.0	
	LAN	2*RJ45 Gigabit LAN	
	Display	VGA+HDMI+DP synchronous/asynchronous TRIPLE displa	
	Audio	1*LINE-OUT,1*MIC IN,1*LINE-IN	
	COM	6*COM	
I/O Port	USB	6*USB3.0 6*USB2.0	
I/O FOIL	PS/2	1*PS/2, 2in1	
	WIFI/4G/5G	Option 4G/5G/WiFi	
	System Restore	1*4PIN Phoenix extension, reset	
	Button/Indicator	Indicator 1*POWER ON 1*HDD-LED	
	GPIO	Optional	
Hand Diele	SSD	32GB/64GB/128GB/256GB/512GB/1TB	
Hard Disk	HDD	500GB/1TB/4TB	
Davis	Power Input	ATX power supply	
Power	Input Volatge	90-264V	
	Appearance	Black/White	
Structure	Installation Method	Sliding Rail	
Structure	Dimensions	650*430*176MM	
	Weight	10KG	
Environment	Operating Environment	0°C -60°C ,0-95%RH, non-condensing	
Environment	Storage Environment	-40°C -75°C ,0-95%RH, non-condensing	
Certificate	Safety certification	CE,CCC	
	Parts List	Power Cable	





### MINI PC





#### MINI PC

Mini PC mini personal computer), a small form factor (SFF) computer, is a compact desktop computer designed to deliver robust performance within a diminutive footprint. Unlike traditional desktop towers, Mini PCs pack powerful components into a significantly smaller chassis, making them ideal for environments with limited space or those prioritizing aesthetics without sacrificing computing power.















#### **Key Features and Benefits:**

#### Space Efficiency:

Mini PCs epitomize space-saving design, offering robust computing power within a compact footprint. Their diminutive size makes them perfect for environments where space is at a premium, such as small offices, classrooms, or even entertainment centers in homes.

#### Portability:

Designed for mobility, Mini PCs are lightweight and easy to transport. This makes them ideal for professionals on the move, enabling seamless transitions between workspaces or facilitating on-the-go computing needs for digital nomads and remote workers.

#### Energy Efficiency:

Mini PCs are engineered to consume minimal power without compromising performance. Their energy-efficient operation not only reduces electricity bills but also contributes to sustainability efforts by minimizing carbon footprint.

#### Performance Prowess:

Despite their compact size, Mini PCs pack a punch in terms of performance. Equipped with high-speed processors, ample RAM, and SSD storage, they excel in handling diverse computing tasks ranging from everyday productivity to multimedia editing and light gaming.

#### **Common Applications:**

#### Home Entertainment Hub:

Transform your living room into a multimedia paradise with a Mini PC serving as a compact entertainment hub. Stream movies,or browse the web on your TV with ease, enjoying high-definition content without cluttering your space.

#### Office Productivity Powerhouse:

In corporate settings, Mini PCs shine as efficient workstations, enabling seamless productivity with applications like document editing, email management, and video conferencing. Their small footprint optimizes desk space while maximizing productivity.

#### Gaming

Equipped with powerful processors, Mini PCs deliver impressive gaming performance without the bulk of traditional gaming desktops. Whether you're a casual gamer or a competitive enthusiast, Mini PCs offer the perfect blend of performance and portability for gaming

#### **Educational Environments:**

Mini PCs are invaluable assets in educational institutions, providing students and educators with access to educational resources, interactive learning tools, and collaborative platforms. Deploy them in classrooms, libraries, or computer labs to facilitate modern teaching and learning experiences.



#### F10

CPU: Intel Alder Lake-N N95 / N100 / N300

USB: 4\*USB 3.2 Display: 2\* HDMI Other: 1\*LAN



CPU: AMD Ryzen 7 series ( 6800U / 6800H / 7735U ) USB:1\*Thunderbolt + 1\*Type C + 2\*USB 3.2 + 2\*USB 2.0

Display:1\*DP+1\*HDMI Other: 2\*LAN, 1\*Audio







#### F30

CPU: Intel Alder Lake-N N95 / N100 / N300

USB: 3\*USB 3.0 + 1\*Type C Port

Display: 3\*HDMI Other: 2\*LAN, 1\*Audio

#### F40

CPU :Intel Core Ultra 5 / 7 / 9

USB:1\*Thunderbolt + 1\*Type C + 2\*USB 3.2 + 2\*USB 2.0

Display:1\*DP+1\*HDMI Other: 2\*LAN, 1\*Audio



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### **Industrial Panel PC**





#### **Industrial Panel PC**

Fodenn possesses in-house developed embedded motherboards, molds, custom development, and modular design capabilities in the industrial tablet market. Through flexible combinations, various product specifications can be achieved without the need to alter the customer's original design. This enables rapid upgrades and maintenance, allowing customers to experience seamless, unobstructed processes in the future, including product upgrades, selection, testing, maintenance, and production.



















Operating System: Win7/WES7/Win10/Linux/Vxworks/Qnx etc.

Processor: Intel Celeron J1900/ J6412/ Core 4-12th i3/i5/i7 all series CPU

Display Screen Size: 8/10.1/12.1/15/15.6/17/19/21.5 etc.

Touch Screen Type: 5-wire resistive touch screen/multi-touch projected capacitive touch screen/capacitive electromagnetic

touch screen

#### **Product Features**

 Multiple Wireless Connectivity Modes: Equipped with RJ45, this product supports WiFi, Bluetooth, 4G/5G multiple wireless connectivity modes, facilitating remote control by industrial customers and use in unmanned factories.

2.Flexible Modular Design: Display module and host adopt modular design, with multiple specifications available in the same series. Fodenn, as a member of Intel Alot Solutions Alliance, is compatible with all series of solutions currently released by Intel.

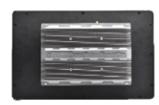
3.Flexible Extension of CAN, Profibus and Other Industrial Bus Modules: Some hosts support EASYBUS expansion structure, allowing customers to achieve various industrial site bus interfaces through MiniPCIE. Some hosts also have built-in CAN interfaces.

4.IP65 and NEMA4 Aluminum Housing: Some products adopt front panels that support 4.IP65/NEMA4 protection levels, along with thick aluminum alloy back covers, ensuring product durability and effective heat dissipation.

5.Support for EtherCAT and Various Peripheral Extensions: Equipped with Intel network card chips, this product ensures 2500M communication speed and supports high-speed EtherCAT and jumbo frames. Without a fan, it can support up to 6\*network ports, 4\*POE/6COM, with 2\* 422/485 optional/8\*USB, 4 of which are USB3.1 working at the same time and supporting 5G communication/WIFI 6 capabilities.

#### **Multiple Installation Methods**

Support Embedded, various VESA wall-mounted, Slide rail installation







### **Application Scenario**









#### IPC-HC1301 10.1inch





	IPC-HC1301	Series 10.1inch Industrial Panel PC	
	Screen Type	10.1inch display panel	
	Resolution	1280x800	
	Display Area	216.96x135.6mm(WxH)	
Display	Back Light(MTBF)	WLED+30,000 Hours	
	Brightness (cd/m²)	250 cd/m²	
	Contrast Ratio	800:1	
	Response Time	30ms	
	Screen Type	10 point capacitive touch	
uch Screen	Surface Hardness	≧ 6H (JIS-5400)	
	LAN	2*RJ45 Gigabit LAN	
	Display	VGA+HDMI	
	Audio	1*LINE-OUT, 1*MIC-IN, build-in speaker	
	COM	2*COM , support up to 4*COM	
I/O Port	USB	4*USB, support up to 6*USB	
	WiFi/4G	Optional	
	GPIO	Optional	
	Button	1*POWER ON	
	CPU	Intel Core 7/11th Gen U-series/ Celeron J1900/3865U/J6412	
	RAM	4-32GB	
System	Cooling	Fanless	
	OS Support	WIN7/8/10/11, LINUX, UNIX	
Storage	Msata SSD	32GB/64GB/128GB/256GB/512GB	
	Power Input	DC in	
Power	Input Voltage	12V	
	Appearance	Black/Silver	
	Material	Aluminium alloy+Sheet metal	
	Installation Method	Embedded /Wall mount	
Structure	Dimensions	273*192*64mm	
	Recommended Hole Size		
	Weight	2.0kg	
	Operating Environment	-10°C ~60°C, 0~95%RH,non-condensing	
nvironment	Storage Environment	-20°C ~70°C, 0~95%RH,non condensing	
Vaterproof	Front Panel	IP65	
stomization	Support	BIOS, LOGO, Color, Size	
J. J	Сарроп	5100, 2000, 0001, 0120	
Supporte	ed Motherboard Type	Specifications	
	IPC-TGL35	Intel Core 11th Gen, up to 32GB DDR4,	
IPC-19L35		Intel Celeron J1900, up to 8GB DDR3L,	
IPC-B135			

supported Motherboard Type	Specifications
IPC-TGL35	Intel Core 11th Gen, up to 32GB DDR4,
IPC-BT35	Intel Celeron J1900, up to 8GB DDR3L,
IPC-I1356P02	Intel Core 7th Gen U-Series, upo to 8GB DDR3L,
IPC-EK35	Intel Celeron J6412, up to16GB DDR4
Parts List	Power Adapter, Cable, Installation bracket
	IPC-TGL35 IPC-BT35 IPC-I1356P02 IPC-EK35

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### **Industrial Panel PC**

## **Clinic Payment Kiosk**





### 21.5inch IPC-HC1321





	IPC-HC1321 Series 21.5inch	n Industrial Panel PC	
	Screen Type	21.5inch display panel	
Display	Resolution	1920x1080	
	Display Area	476.64 × 268.11mm(WxH)	
	Back Light(MTBF)	WLED+30,000 Hours	
	Brightness (cd/m²)	250 cd/m²	
	Contrast Ratio	1000:1	
	Response Time	14ms	
Touch Conson	Screen Type	10 point capacitive touch	
Touch Screen	Surface Hardness	≧ 6H (JIS-5400)	
	LAN	2*RJ45 Gigabit LAN	
	Display	VGA+HDMI	
	Audio	1*LINE-OUT, 1*MIC-IN, build-in speaker	
110 B . 1	COM	2*COM, support up to 4*COM	
I/O Port	USB	4*USB, support up to 6*USB	
	WiFi/4G	Optional	
	GPIO	Optional	
	Button	1*POWER ON	
		Intel Core 7/11th Gen U-series/ Celeron J1900/3865U	
	CPU	J6412	
System	RAM	4-32GB	
-,	Cooling	Fanless	
	OS Support	WIN7/8/10/11, LINUX, UNIX	
Storage	Msata SSD	32GB/64GB/128GB/256GB/512GB	
	Power Input	DC in	
Power	Input Voltage	12V	
	Appearance	Black/Silver/Grey	
	Material	Aluminium alloy+SUS/platemetal	
	Installation Method	Embedded /Wall mount/ VESA Mount	
Structure	Dimensions	525*317*82mm	
	Recommanded Hole Size	527*319mm	
	Weight	6.0kg	
	Operating Environment	-10°C ~60°C, 0~95%RH,non-condensing	
Environment	Storage Environment	-20°C ~70°C, 0~95%RH,non-condensing	
Waterproof	Front Panel	IP65	
Customization	Support	BIOS, LOGO, Color, Size	
Suppor	ted Motherboard Type	Specifications	
	IPC-TGL35	Intel Core 11th Gen, up to 32GB DDR4,	
	IPC-BT35	Intel Celeron J1900, up to 8GB DDR3L,	
	IPC-I1356P02	Intel Core 7th Gen U-Series, upo to 8GB DDR3L,	
	IPC-EK35	Intel Celeron J6412, up to16GB DDR4	
Parts List		Power Adapter, Cable, Installation bracket	

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#### **Features**

Slim type clinics payment terminal ,the basic configuration consists of Motherboard, power module, touch screen display, four-in-one card reader (including ID card reader, magnetic card reader, contact IC card module, contactless card reader) barcode scanner, password keyboard, thermal printer and so on. Extensible components include cameras, wireless modules, etc. It can provide a human-computer interaction interface to reduce person-to-person contact, and support contactless payment methods and contactless person authentication methods.



#### **Specifications**

	_	
Motherboard	Processor	Intel Celeron J1900,Core i3/i5/i7
	Network support	RJ-45 LAN interface and LED indicator
	Model	15.6-inch capacitive touch screen
Touch screen	Interface form	USB2.0
	Response time	less than 10 milliseconds
	Resolution	1920 * 1080
15.6-inch LCD screen	Backlight	WLED
	Interface mode	EDP
Magnetic cord reader	Magnetic stripe standard	ISO7810 / 7811
Magnetic card reader	Operation mode	Support 1/2/3 track reading
Contact IC cord module	IC card standard	ISO7816 type 5V 5B type 3V card and support SLE4428, SLE4442, AT88SC1604 type memory card
Contact IC card module	Card reading and writing speed	9600-96700bps
	Support card type	Comply with ISO14443 TypeA & B type CPU card, S50, S70 card
	Working frequency	13.56MHz ± 7kHz
Contactless card reader	Communication parameters	1200/2400/4800 / 9600BPS optional
	Read and write speed	106Kbps
	Contact IC card communication distance	0-30MM
	Printing method	Line thermal
	Print speed	75mm / sec
Thermal printer	Print paper width	57.5 ± 0.5mm
memai printer	Limited printing width	58mm
	Paper processing method	Automatic paper cutting (full or half cut)
	Key configuration	10 numeric keys, 6 function keys
Password keyboard	Function support	PIN encryption, MAC operation, data encryption and decryption, remote key management
	Algorithm support	DES, Triple DES, RSA, SM2, SM3, SM4
Temperature Measurement	Optional	Support high and low temperature warning of human body, error $\pm$ 0.2 $^{\circ}$ C above 1 meter, can support thermal imaging
Power	Voltage	110-264V
Power	Working environment	-20-60 °C , 20-90% RH

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### **Wall Mount Payment Kiosk**

### PCMT-516K

#### **Features**

Clinics payment terminal, the basic configuration consists of a 23.6inch touch display integrated screen, password keyboard, barcode scanner, contactless IC card reader, ID card reader, magnetic stripe reader, contact IC card reader, camera, receipt printer. It can provide a human-computer interaction interface to reduce person-to-person contact, and support contactless payment methods and contactless person authentication methods. Provide self-service medical services, divert artificial pressure, improve medical service capabilities





#### **Specifications**

Mathaubaaud	Processor	Intel Celeron J1900,Core i3/i5/i7
Motherboard	Network support	RJ-45 LAN interface and LED indicator
	Model	23.6-inch capacitive touch screen
Touch screen	Interface form	USB2.0
	Response time	less than 10 milliseconds
	Resolution	1920 * 1080
23.6-inch LCD screen	Backlight	WLED
20.0 11011 200 3010011	Interface mode	EDP
Magnatia aard raadar	Magnetic stripe standard	ISO7810 / 7811
Magnetic card reader	Operation mode	Support 1/2/3 track reading
	IC card standard	ISO7816 type 5V 5B type 3V card and support SLE4428, SLE4442, AT88SC1604 type memory card
Contact IC card module	Card reading and writing speed	9600-96700bps
	Support card type	Comply with ISO14443 Type A & B type CPU card, S50, S70 card
	Working frequency	13.56MHz ± 7kHz
Contactless card reader	Communication parameters	1200/2400/4800 / 9600BPS optional
	Read and write speed	106Kbps
	Contact IC card communication distance	0-30MM
	Printing method	Line thermal
	Print speed	75mm / sec
Thermal printer	Print paper width	57.5 ± 0.5mm
F	Limited printing width	58mm
	Paper processing method	Automatic paper cutting (full or half cut)
	Key configuration	10 numeric keys, 6 function keys
Password keyboard	Function support	PIN encryption, MAC operation, data encryption and decryption, remote key management
	Algorithm support	DES, Triple DES, RSA, SM2, SM3, SM4
Temperature Measurement	Optional	Support high and low temperature warning of human body, error ± 0.2 °C above 1 meter, can support thermal imaging
Power	Voltage	110-264V
Power	Working environment	-20-60 °C , 20-90% RH

# **Certification**

















# **Cooperative Partners**

























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