



MODEL. I800-BI

Fanless Design Industrial Box PC



Introduction

I800-BI embedded fanless industrial Box pc supports multiple installation methods, integrated Intel 4-12th generation processors optional and it has strong scalability. It supports Windows / Linux operating system, onboard J1900/J6412/ 4-12th generation Core i3/i5/i7, supports 4G/5G Internet access function, meet communication requirements (need to add a module separately), supports Wifi, Bluetooth dual communication module (need to add a module separately), DC 12V-36V/DC 9-36V power input optional. Silent, Rugged, Dustproof, Vibration-Resistant, Wide-Temperature.

Specification

Mother Board Specification

Model	I800-BI		
CPU	Celeron J1900 i3-4010U i5-4260U i7-4650U	Celeron J6412 / N95 / N100 i3-7100U / 8130U / 10110U i5-7200U / 8250U / 8260U / 10210U i7-7500U / 8550U / 10710U	i3: 1115G4 / 1215U i5: 1135G7 / 1235U i7: 1195G7 / 1255U / 1270P
Memory	^[1] 2*DDR3 RAM Slots, Up to 16GB	^[2] 2*DDR4 RAM Slots, Up to 32GB	2*DDR4 RAM Slots, Up to 64GB
Storage	1*MSATA SSD Slot + 1*SATA SSD Slots		1*M.2 NVME SSD Slot
Display	^[3] 1*HDMI: Resolution up to 4096*2106@24Hz		1*HDMI: Resolution up to 4096*2106@60Hz
Expansion	1*Mini PCIE Slot, Support 4G and WIFI module		1*Mini PCIE + 1*M.2 Slots Support 4G/5G and WIFI module
Ethernet	2*Intel i210v LAN Chip (10 / 100 / 1000 Mbps, RJ-45 Type)		
USB	4*USB 3.0 (Type-A)		
COM	2*RS-232 / 422 / 485 (DB9 type) + 4*RS-232 (DB9 type)		
Audio	1*Line-Out		
Daughter Card	Support expansion more I/O interfaces and functional slots		

Note:

[1] : The maximum memory capacity and the maximum capacity per strip supported by this motherboard depend on the CPU. J1900 CPU only supports one RAM slot, up to 8GB

[2] : The maximum memory capacity and the maximum capacity per strip supported by this motherboard depend on the CPU.

[3] : The maximum resolution and frame rate of the display interface output depends on the CPU.



Fittings Information

RAM	DDR3	4GB / 8GB
	DDR4	4GB / 8GB / 16GB / 32GB
Storage	MSATA	64GB / 128GB / 256GB / 512GB / 1TB
	M.2 NVME	128GB / 256GB / 512GB / 1TB / 2TB / 4TB
	SATA	120GB / 128GB / 240GB / 256GB / 480GB / 512GB / 960GB / 1TB / 2TB / 4TB
GSM Module	4G	4G+GPS
	5G	5G+GPS
WIFI Module	7260AN / 7260AC / AX210	
CAN BUS Module	2*CAN BUS Ports	

Device Specification

BIOS	AMI UEFI BIOS
Power Input	DC 9-36V With Overvoltage Protection
	Support Auto-Start
	2 Pin Phoenix Terminal Type DC Plug
RTC	Support
Working Temperature	-20°C - 70°C , Support 24/7 Working
Storage Temperature	-30°C - 80°C
Humidity	90% (20±50°C)
Size	285mm*160mm*50.5mm
Structure	Fully Enclosed Aluminum Alloy Material
Heat dissipation	Fanless Design, Conduction Heat Dissipation
Installation	Desktop / Embedded / Wall-Mounted
System	Windows and Linux



Ordering Information

Model	CPU	LAN	USB	COM	Display	RAM	SSD	Expansion	Power
I800-BI	J1900	2	4	2*RS-232/422/485 4*RS-232	1*HDMI	1*DDR 3 Up to 8GB	1*MSATA 1*SATA	1*Mini PCIE	DC 9-36V
	4th					2*DDR 3 Up to 16GB			
	N95 / N100					1*DDR 4 Up to 16GB			
	J6412					2*DDR 4 Up to 32GB			
	7th					2*DDR 4 Up to 32GB			
	8th / 10th					2*DDR 4 Up to 64GB			
	11th / 12th					2*DDR 4 Up to 64GB	1*M.2 NVME	1*Mini PCIE 1*M.2	

CPU Information

CPU	Core	Threads	Frequency	Cache	Graphics
Celeron J1900	4	4	2.00-2.42GHz	2 MB	HD Graphics
Celeron J6412	4	4	2.00-2.60GHz	1.5 MB	UHD Graphics
N95	4	4	3.40GHz	6 MB	UHD Graphics
N100	4	4	3.40GHz	6 MB	UHD Graphics
i3-4010U	2	4	1.70GHz	3 MB	HD Graphics 4400
i5-4260U	2	4	1.40-2.70GHZ	3 MB	HD Graphics 5000
i7-4650U	2	4	1.70-3.30GHz	4 MB	HD Graphics 5000
i3-7100U	2	4	2.40GHz	3 MB	HD Graphics 620
i5-7200U	2	4	2.50-3.10GHz	3 MB	HD Graphics 620
i7-7500U	2	4	2.70-3.50GHz	4 MB	HD Graphics 620
i3-8130U	2	4	2.20-3.40GHz	4 MB	HD Graphics 620
i5-8250U	4	8	1.60-3.40GHz	6 MB	UHD Graphics 620
i5-8260U	4	8	1.60-3.90GHz	6 MB	UHD Graphics 620

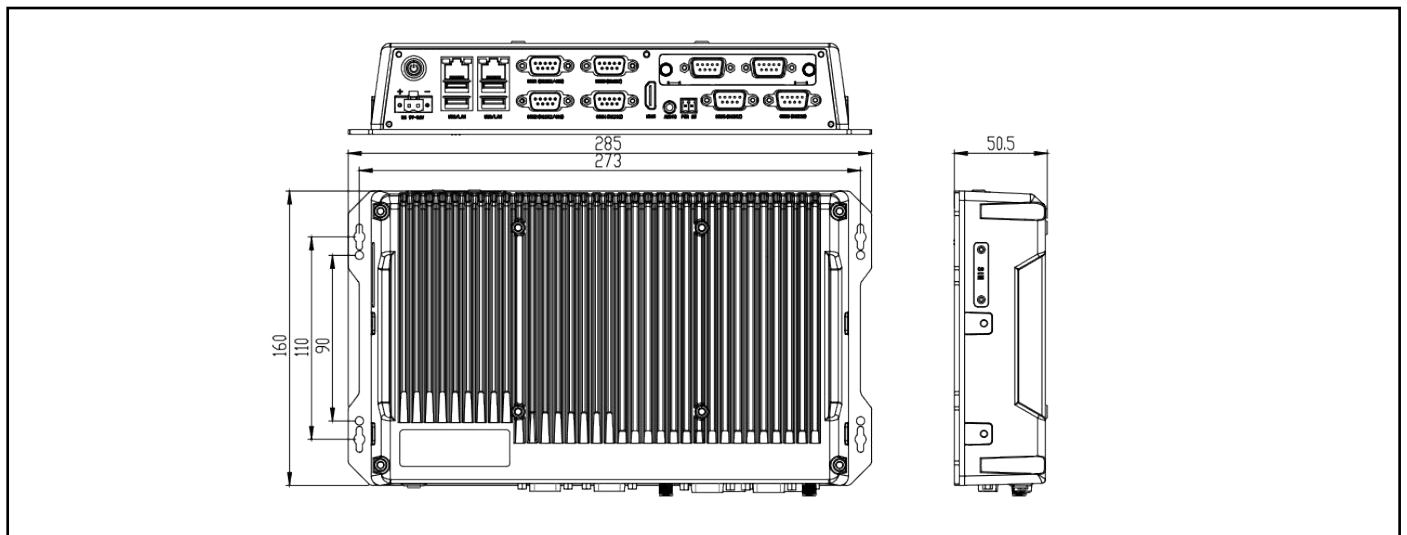


CPU	Core	Threads	Frequency	Cache	Graphics
i7-8550U	4	8	1.80-4.00GHz	8 MB	UHD Graphics 620
i3-10110U	2	4	2.10-4.10GHz	4 MB	UHD Graphics
i5-10210U	4	8	1.60-4.20GHz	6 MB	UHD Graphics
i7-10710U	6	12	1.10-4.70GHz	12 MB	UHD Graphics
i3-1115G4	2	4	3.00-4.10GHz	6 MB	UHD Graphics
i5-1135G7	4	8	2.40-4.20GHz	8 MB	Iris Xe Graphics
i7-1195G7	4	8	2.90-5.00GHz	8 MB	Iris Xe Graphics
i3-1215U	6	8	1.20-4.40GHz	10 MB	UHD Graphics
i5-1235U	10	12	1.30-4.40GHz	12 MB	Iris Xe Graphics
i7-1255U	10	12	1.70-4.70GHz	12 MB	Iris Xe Graphics
i7-1270P	12	16	2.20-4.80GHz	18 MB	Iris Xe Graphics

System Information

CPU	Specification
J1900 / 4th / 7th	Windows 7 / 10 and Linux
J6412 / N95 / N100 / 8th / 10th / 11th / 12th	Windows 10 / 11 and Linux

Dimensions



Daughter Card Specification

COM Port-2	2*RS-232 / 485 (DB9 type)
COM Port-6	4*RS-232 / 485+2*RS-232 (Phoenix terminal type)
Ethernet Port-2	2*Intel i211V LAN Chip (RJ-45 type)
Ethernet Port-4	4*Intel i211V LAN Chip (RJ-45 type,POE function optional)
10G Ethernet Port-2	2*10Gbps Ethernet Ports
USB Port-4	4*USB 3.0 (Type-A)
GPIO Port-14	14 ports GPIO, 7*GPI+7*GPO, 0-3.3V (Phoenix terminal type)
Mini PCIE Slot-2	2*Mini PCIE slots, Support 4G and WIFI module
M.2 Slot-1	1*M.2 Key-B slot, Support 5G module
M.2 NVME SSD Slot-1	1*M.2 NVME SSD slot
SATA SSD Slot-1	1*SATA 3.0 SSD Slot, Support RAID 1
CAN Port-2	2*CAN interfaces (Phoenix terminal type)
UPS battery	1.2AH or 4.8AH
DIDO Port-16	16 ports DIDO, 8*DI+8*DO, 24V, Isolation (Phoenix terminal type) Comes with 4*RS-485 COM ports (Phoenix terminal type)



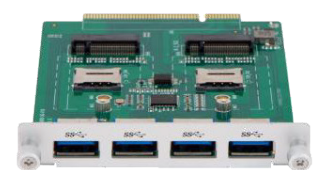
6-way COM



2.5-inch SSD



UPS power supply



4-channel USB



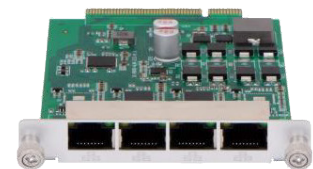
2-channel COM



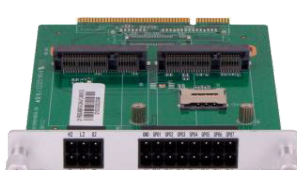
14 GPIO channels



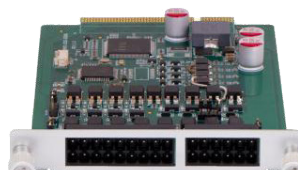
Dual Gigabit Ethernet ports



Four Gigabit Ethernet port



CAN+GPIO



DIDO



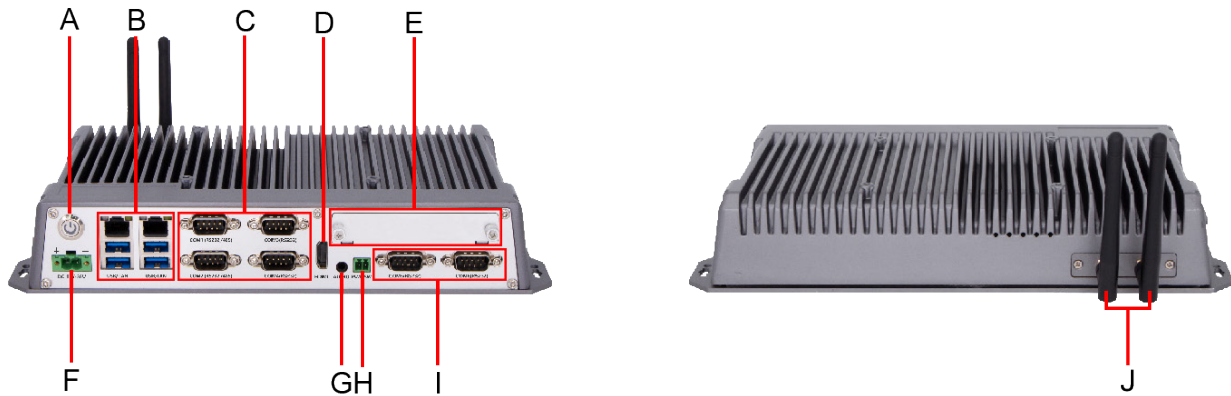
M.2 SSD



4G WIFI GPS



I/O Port



- A** : 1*Power
- B** : 4*USB 3.0 + 2*LAN
- C** : 2*COM(RS-232/422/485) + 2*COM (RS-232)
- D** : 1*HDMI
- E** : 1*Daughter Card

- F** : 1*DC POWER IN
- G** : 1*Audio
- H** : 1*Power Sw
- I** : 1*2*COM (RS-232)
- J** : 1*ANT1-2

Package List

Adapter	1*12V 5A adapter
Power Cable	1*Power Cable (The type is depends on the national standard of the buyer)
Terminal	2 Pin phoenix terminal for Power Switch

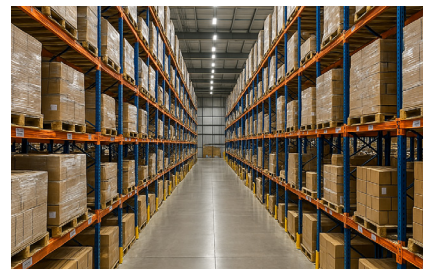
Applications



Industrial Factory



Industrial Robot



WareHouse

