

MODEL. I510-BI

Fanless Design Industrial Box PC

Introduction

I510-BI series Industrial Box PC is an industrial machine with small size, powerful functions and excellent performance. The rugged design ensures the product is strong and durable and can withstand harsh environments. It uses high-performance Intel processors, supports Core i3,i5,i7 Gen-4/6/7/8/10th processors, and has efficient processing capabilities to meet users' pursuit of performance. I510-BI supports desktop / embedded / wall / rail-mounted installation methods, it can meet the needs of customers in different industries.

iDEETECH

I510-BI

INDUSTRIAL BOX PC

POWERFUL. RELIABLE. BUILT FOR INDUSTRY



All aluminum alloy heat dissipation

FANLESS COOLING
LOW-NOISE DESIGN

The surface of the industrial computer adopts a striped grid pattern and is molded into a sealed, integrated structure, which ensures external air circulation and improves heat dissipation efficiency; the fanless design reduces dust accumulation.

CIRCULATING HEAT DISSIPATION
Efficient air circulation

LOW NOISE DESIGN
Silent • Reliable • Dust-free



TEMPERATURE

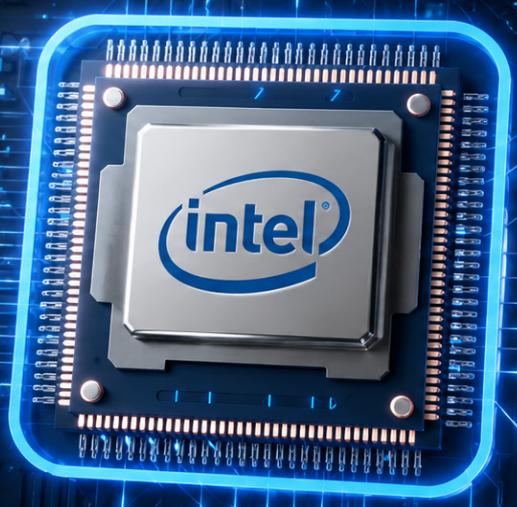
WITHSTANDS EXTREME TEMPERATURES:

-20°C TO +70°C

- WIDE TEMPERATURE -20°C TO 70°C
- RUGGED & RELIABLE
- DUST RESISTANT
- ALL-ALUMINUM ALLOY
- LONG-TERM STABILITY



Intel Power Chip
Stable Operation
Faster Than One Step



Through The Controlled High Temperature Test To Test The Product To Adapt To High And Low Temperature, Even In The Harsh Environment Is Not Afraid.

Stable operation

Power on and run 24/7
Stable operation around the clock

Capable of operating around the clock, it can run stably in unstable environments and meets the operational needs of various commercial, automated, and unmanned equipment.



MULTISCREEN DISPLAY

MULTITASK DISPLAY

HDMI + DP USED TOGETHER (EXTENDED OR COPIED DISPLAY CUSTOMER CHOICE) TO ACHIEVE MULTI-TASK DISPLAY PLATFORM

SAME SCREEN DISPLAY

- 1080P FULL HD Clarity
- SAME VIEW Consistent Experience
- EASY SETUP Plug & Play



ASYNCHRONOUS DISPLAY

- MULTI-TASK Independent Content
- HIGH EFFICIENCY Work Smarter
- FLEXIBLE SETUP Extend Your Workspace



STRICT STRESS TESTING AGING TEST

Each Industrial Mini PC undergoes 72 hours of high-temperature aging and full-load testing before leaving the factory to ensure hardware and software compatibility and system stability.



INSTALLATION

3 INSTALLATION OPTIONS

DESKTOP / EMBEDDED / WALL-MOUNTED

DESKTOP

Place on a desk or flat surface for easy access and maintenance.



EMBEDDED

Integrate into cabinets, kiosks, or enclosures for a clean and space-saving solution.



WALL-MOUNTED

Mount on walls or structures securely with the included mounting brackets.



POWERFUL

COMPATIBILITY SYSTEM

Compatible with Windows 7 / Windows 8 / Windows 10 / Linux.









Specification

Mother Board Specification

Model	I510-BI	
CPU	J1900 i5-4260U	J6412 i3-7100U i5-6200U / 7200U / 8260U / 10210U i7-7500U / 10610U
Memory [1]	1*DDR3 RAM Slot, Up to 8GB	1*DDR4 RAM Slot, Up to 16GB
Storage	1*MSATA SSD Slot	
Display [2]	1*HDMI: Resolution up to 4096*2304@24Hz + 1*DP: Resolution up to 4096*2304@60Hz	
Expansion	1*Mini PCIE Slot, Support 4G and WIFI module	
Ethernet	3*Intel i211-AT LAN Chip (10 / 100 / 1000 Mbps, RJ-45 Type)	
USB	4*USB 3.0 (Type-A)	
COM	2*RS-232 + 2*RS-485 / 422 / 232 (Phoenix type)	
GPIO	8 ports GPIO (4*GPI+4*GPO, Phoenix Terminal Type)	

Note:

[1]: The maximum memory capacity and the maximum capacity per strip supported by this motherboard depend on the CPU.
[2]: 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	SATA	64GB / 128GB / 256GB / 512GB / 1TB
GSM Module	4G	4G+GPS
WIFI Module	7260AN / 7260AC / AX210	

Device Specification

BIOS	AMI UEFI BIOS
Power Input	DC 9-36V, Overvoltage Protection
	Support Auto-Start
	3 Pin Phoenix terminal type DC plug
Watch Dog	Support
Working Temperature	-20℃ - 70℃ , Support 24/7 Working
Storage Temperature	-30℃ - 80℃
Humidity	90% (20±50℃)
Size	170mm*108mm*48mm
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
I510-BI	J1900 / 4th	3	4	2*RS-232 422/485 2*RS-232	1*HDMI 1*DP	1*DDR 3 Up to 8GB	1*MSATA	1*Mini PCIE	DC 9-36V
	J6412 6th / 7th					1*DDR 4 Up to 16GB			
	8th / 10th					1*DDR 4 Up to 32GB			

CPU Information

CPU	Core	Threads	Frequency	Cache	Graphics	RAM
J1900	4	4	2.00-2.42GHz	2MB	HD Graphics	Max to 8GB for 1*DDR3 Slot
J6412	4	4	2.00-2.60GHz	1.5 MB	UHD Graphics	Max to 16GB for 1*DDR4 Slot
i5-4260U	2	4	1.40-2.70GHz	3 MB	HD Graphics 5000	Max to 16GB for 1*DDR3 Slot
i5-6200U	2	4	2.30-2.80GHz	3 MB	HD Graphics 520	Max to 16GB for 1*DDR4 Slot
i3-7100U	2	4	2.40GHz	3 MB	HD Graphics 620	Max to 16GB for 1*DDR4 Slot
i5-7200U	2	4	2.50-3.10GHz	3 MB	HD Graphics 620	Max to 16GB for 1*DDR4 Slot
i7-7500U	2	4	2.70-3.50GHz	4 MB	HD Graphics 620	Max to 16GB for 1*DDR4 Slot
i5-8260U	4	8	1.60-3.90GHz	6 MB	UHD Graphics 620	Max to 32GB for 1*DDR4 Slot
i5-10210U	4	8	1.60-4.20GHz	6 MB	UHD Graphics	Max to 32GB for 1*DDR4 Slot
i7-10610U	4	8	1.80-4.90 GHz	8 MB	UHD Graphics	Max to 32GB for 1*DDR4 Slot

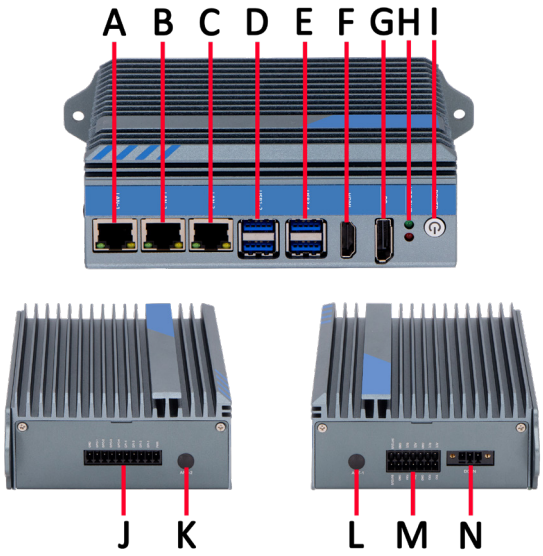
System Information

CPU	Specification
J1900 / 4th / 6th / 7th	Windows 7 / 10 and Linux
J6412 / 8th / 10th	Windows 10 / 11 and Linux

Package List

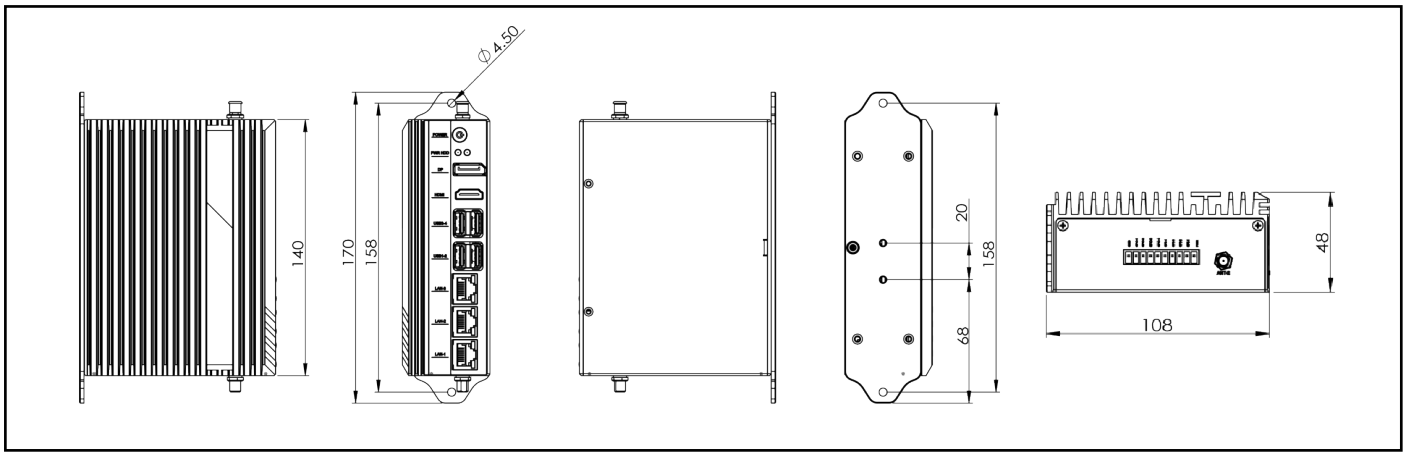
Adapter	1*12V 5A Adapter
Power Cable	1*Power Cable (The type is depends on the national standard of the buyer)
Terminal	1*10 Pin phoenix terminal for GPIO
Terminal	1*14 Pin phoenix terminal for COM

I/O Port



A : LAN	H : PWR HDD
B : LAN	I : POWER
C : LAN	J : GPIO
D : USB 3.0	K : ANTENNA
E : USB 3.0	L : ANTENNA
F : HDMI	M : COM
G : DP	N : DC IN

Dimensions



Applications



Factory Automation



Machine Control



Data Collection