eBOX-NNZ-AI3000 Product Series

User Manual

2.0

2026-5-9

Automation Control Machine

Desktop & wall-mounted high-performance IPC

Revision history:

Version	Date	Author	Describe
1.0.0	2025-8-3	Luo Haozhe	Initial Version
2.0.0	2026-5-9	Luo Haozhe	Definition of Newly Added SATA Ports

Copyright Notice

Declaration of Recognition

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Declaration of Conformity

These restrictions aim to provide reasonable protection for system operations in commercial environments from harmful interference. This device generates, uses, and emits radio frequency energy. If not installed and used correctly according to the manual instructions, it may cause harmful interference to radio communication. But even if installed and used according to the manual instructions, there is no guarantee that there will be no interference. If this device will cause harmful interference to radio or television signal reception, users can confirm by turning the device on or off. When this device generates harmful interference, users can take the following measures to solve the interference problem：

- 1、Adjusting the direction or position of the receiving antenna；
- 2、Increase the distance between this device and the receiver；
- 3、Plug the power connector of this device into a power outlet that uses a different circuit from the receiver；
- 4、If you need technical support, please consult your dealer or experienced radio technician；

Technical Support and Services

1. For the latest information and documentation on this product, please visit the official website of Nodka www.nodka.com.
2. If users need technical support, please contact the local distributor or sales representative customer service center. Before conducting technical consultation, users must collect complete information on the following products：
   - Product name and serial number；
   - Description of peripheral additional devices；
   - Description of user software (operating system, version, application software, etc.)；

- A complete description of the problem with the product;
- The complete content of each error message;

Safety instructions

1. Before installing, wiring, operating, and inspecting this product, it is necessary to carefully read this manual and the related manuals introduced in the manual, and operate correctly with full attention to safety.
2. Please keep this user manual properly for future reference.
3. Before cleaning the device with a damp cloth, please unplug the power cord from the socket. Do not use liquids or decontamination sprays to clean the equipment.
4. For devices using power cords, there must be easily accessible power sockets around the device.
5. Please ensure that the equipment is placed on a reliable surface before installation, as accidental falls may cause damage to the equipment.
6. Before connecting the device to the power outlet, please confirm if the voltage of the power outlet meets the requirements.
7. Please arrange the power cord in a location that is not easily accessible to people, and do not cover any debris on the power cord.
8. Please pay attention to all warnings and caution slogans on the device.
9. If the device is not used for a long time, please disconnect it from the power socket to avoid damage to the device due to excessive voltage fluctuations.
10. Please do not allow any liquid to flow into the equipment to avoid causing a fire or short circuit.
11. Please do not open the device on your own. To ensure your safety, before turning on the device, all external power supplies used in the system must be disconnected before performing the operation. Please have a certified professional engineer with sufficient electrical knowledge turn on the device。

    If the following situations occur, please have professional personnel repair them：
    - Damaged power cord or plug;
    - There is liquid inflow inside the equipment;
    - The device is not working properly, or you cannot use the user manual to make it work properly;
    - Equipment falling or damaged ;
    - The equipment has obvious appearance damage;
12. Please do not store the device in an environment that exceeds our recommended temperature range, that is, not below -30° C or above 80° C, otherwise it may damage the device.
13. Please regularly clean the dust or replace the fan.

Table of contents:

Chapter 1 Overview

This chapter provides necessary explanations for the product's documentation, functional overview, specifications, etc.

1.1 Reference Documents

The documentation related to this product can be found in the following list. Please read it before using it.

Document Name	Documentation Targets	Document Content	Document Archiving
User's manual	Before using the product, it is necessary to read	Description of product functions and related settings	Download from the official website of Nuodajia or obtain from local distributors

Official website document download link：http://www.nodka.com

1.3 Safety Instructions

For safety reasons, the following icons are used in this document to provide users with more safety information prompts when operating the device.

Icon	Describe
	Warning: Indicates a potential hazardous situation that, if not avoided, may result in death, serious injury, or significant property damage.
	Danger: Indicates an imminent hazardous situation that, if not avoided, may result in death, serious injury, or significant property damage.
	Reminder: Indicates important information prompts.

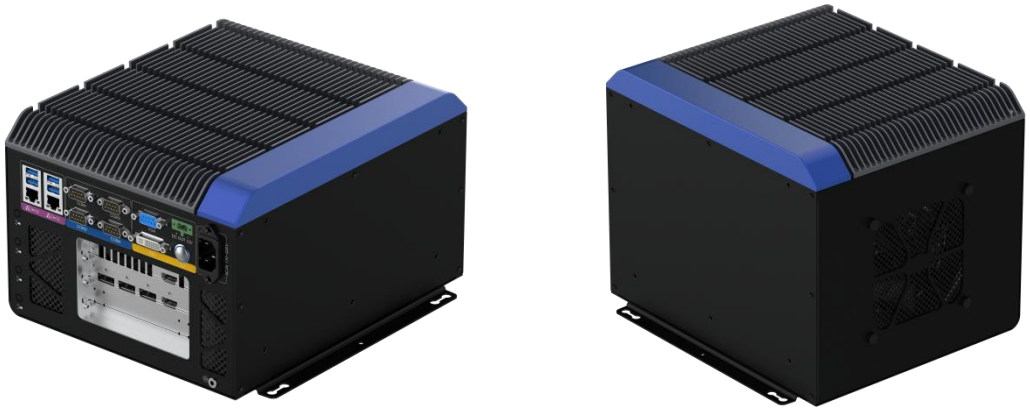
Chapter 2 eBOX-NNZ-AI3000

2.1 Product Introduction

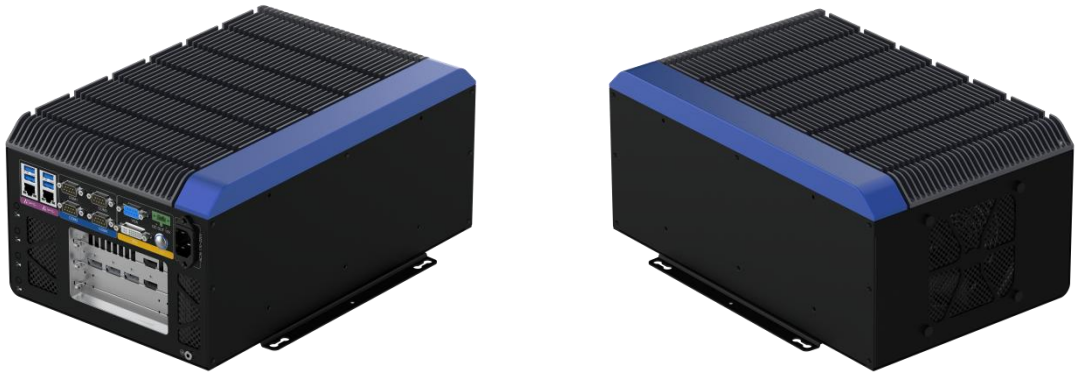
The eBOX-NNZ-AI3000 series host is characterized by flexibility, ease of operation and distinctive design. It is always tailored to meet the actual needs of industrial sites. Therefore, it can operate stably and for a long time in harsh working environments. It features shock resistance and anti-electromagnetic interference. As a solid back-end processing unit, it is applied in industrial systems and system integrations in various fields.

2.1.1 Features

- Intel® 12-14th Generation Celeron/Pentium/Core-I series processor, TDP up to 65W
- GPU (TDP up to 200W)
- Support 2 x DDR4-3200MHz SO-DIMM slots,up to 64GB
- 2 x Intel 10/100/1000Mbps LAN
- Onboard 4×RS232 serial port
- 4 x USB3.0,1 x VGA+1 x DVI
- AC100-240V Input



pictures 2-1 AIPC-3000-AH6-3S Drawing of the appearance of the product



pictures 2-2 eBOX-NNZ-AI3000-AH6-3L Drawing of the appearance of the product

pictures 2-3 eBOX-NNZ-AI3000-AH6-3L Drawing of the appearance of the product

2.2 Product Specifications

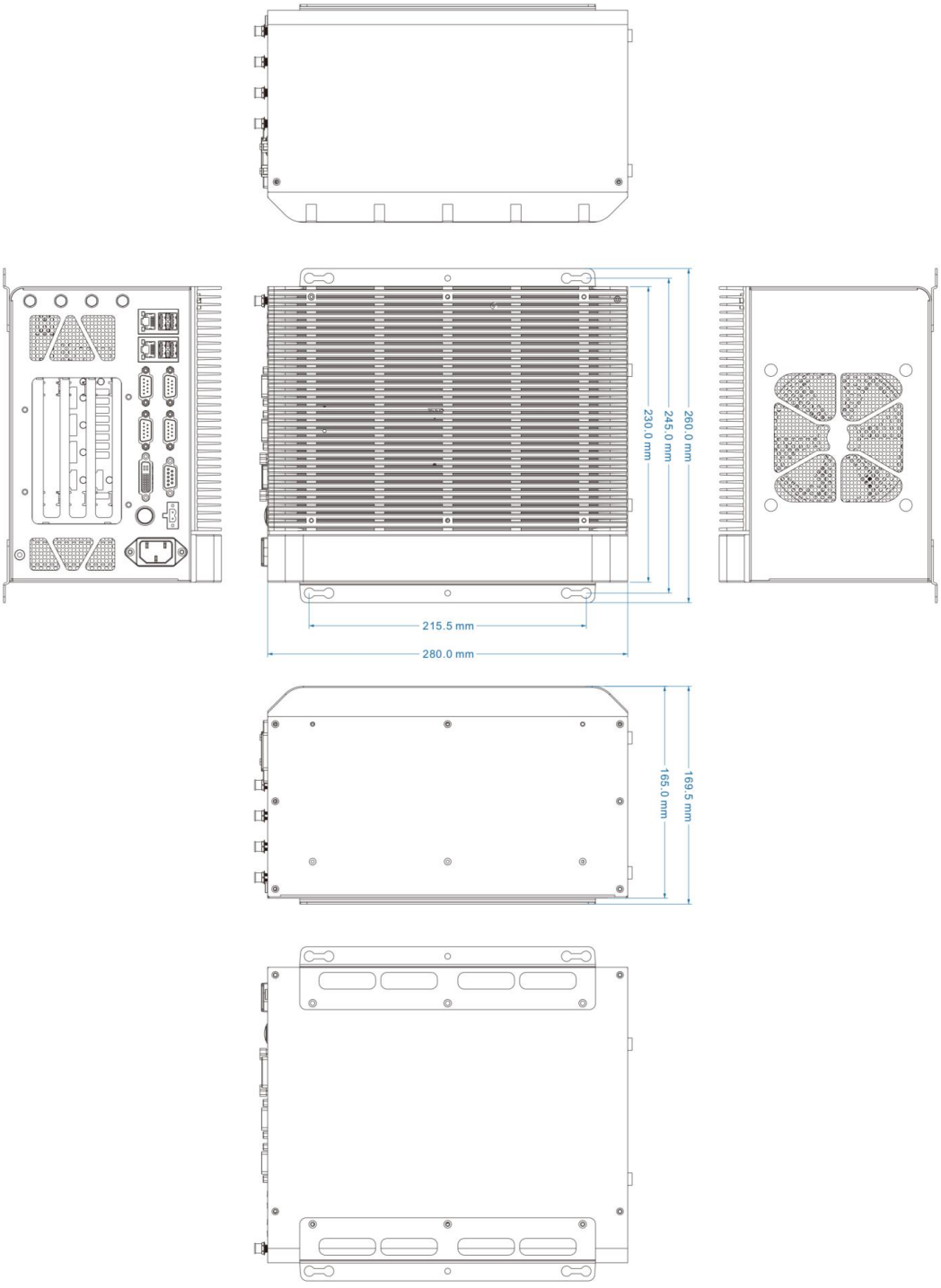
Model Name		eBOX-NNZ-AI3000-AH6-3S
System	CPU	Intel® 12/13/14th Generation Celeron/Pentium/Core-I series processor, TDP up to 65W
	BIOS	AMI UEFI 128Mbit
	Chipset	Intel® H610 Chipset
	Memory	2 x 260-pin DDR4 3200MHz SO-DIMM slots，up to 64GB
	Storage	1 x M.2-2242/2280 Key M slot SATA3.0（up to 6Gb/s） 2 x 2.5 寸 SATA3.0 (up to 6Gb/s)
	USB	4 x USB3.0
	COM	4 x RS-232(COM1-4)
	Expansion slot	1 x PCIE16X +1 x PCIE4X（Expandable graphics cards up to 230mm in length） 1 x MINI PCIE with expandable WIFI and 4G modules 1 x M.2 Key-B Slot for expandable 5G modules
	LAN	2 x Intel GbE LAN
	DVI	The highest resolution is 1920 x 1200@60Hz,Support asynchronous dual display
	VGA	The highest resolution is 1920 x 1200@60Hz,Support asynchronous dual display
	Watch Dogs	1~255 levels programmable setting
OS Support	Microsoft Windows	Windows 10，Windows 11
	Linux	Linux
Power	Input voltage	AC 100~240V
	power consumption	500W
	Output voltage	DC12V
Chassis	Structure	All-steel box structure
	Dimensions	(L)280mm x (W)260mm x (H)169.5mm
	Net Weight	8Kg
Environment	Work Temperature	0℃ ~ 35℃ (Use SSD)
	Storage Temperature	-40℃ ~ 80℃ (Use SSD)
	Relative Humidity	5~95% RH@40° C,non-condensing
	Vibration	SSD applied:1.5Grms,IEC 60068-2-64,random,5~500Hz,1 hr/axis
	Shock	SSD applied:10G,IEC 60068-2-27, Half sine wave, lasting 11ms
	EMC	CE/FCC Class A

Model Name		eBOX-NNZ-AI3000-AH6-3L
System	CPU	Intel® 12/13/14th Generation Celeron/Pentium/Core-I series processor, TDP up to 65W
	BIOS	AMI UEFI 128Mbit
	Chipset	Intel® H610 Chipset
	Memory	2 x 260-pin DDR4 3200MHz SO-DIMM slots，up to 64GB
	Storage	1 x M.2-2242/2280 Key M slot SATA3.0（up to 6Gb/s） 2 x SATA3.0 (up to 6Gb/s)(3.5 寸+2.5 寸)
	USB	4 x USB3.0
	COM	4 x RS-232(COM1-4)
	Expansion slot	1 x PCIE16X +1 x PCIE4X（Expandable graphics cards up to 300mm in length） 1 x MINI PCIE with expandable WIFI and 4G modules 1 x M.2 Key-B Slot for expandable 5G modules
	LAN	2 x Intel GbE LAN
	DVI	The highest resolution is 1920 x 1200@60Hz,Support asynchronous dual display
	VGA	The highest resolution is 1920 x 1200@60Hz,Support asynchronous dual display
	Watch Dogs	1~255 levels programmable setting
OS Support	Microsoft Windows	Windows 10，Windows 11
	Linux	Linux
Power	Input voltage	AC 100~240V
	power consumption	500W
	Output voltage	DC12V
Chassis	Structure	All-steel box structure
	Dimensions	(L)370mm x (W)260mm x (H)169.5mm
	Net Weight	9.2Kg
Environment	Work Temperature	0℃ ~ 35℃ (Use SSD)
	Storage Temperature	-40℃ ~ 80℃ (Use SSD)
	Relative Humidity	5~95% RH@40° C,non-condensing
	Vibration	SSD applied:1.5Grms,IEC 60068-2-64,random,5~500Hz,1 hr/axis
	Shock	SSD applied:10G,IEC 60068-2-27, Half sine wave, lasting 11ms
	EMC	CE/FCC Class A

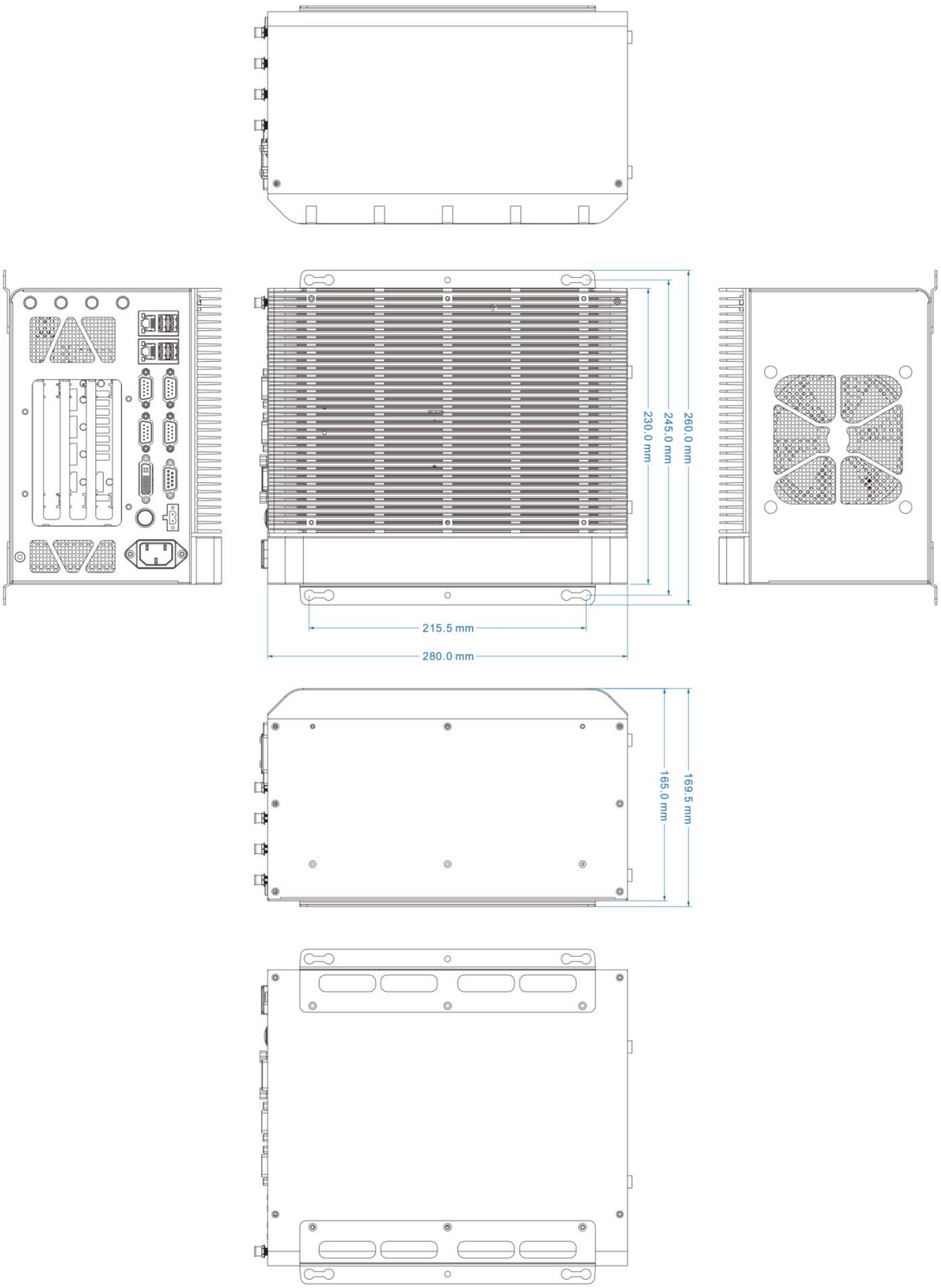
Model Name		eBOX-NNZ-AI3000-AQ6-6L
System	CPU	Intel® 12/13/14th Generation Celeron/Pentium/Core-I series processor, TDP up to 65W
	BIOS	AMI UEFI 128Mbit
	Chipset	Intel® Q670 Chipset
	Memory	2 * SO-DIMM Slot, Up to 64GB
	Storage	1 x M.2-2242/2280 Key M slot NVME；2 x SATA(3.5 寸+2.5 寸)
	USB	4 x USB3.0
	COM	4 x RS-232(COM1-4)
	Expansion slot	2 x PCIE16X（It can support the assembly of dual Intel A770 graphics cards）+1 x PCIE4X（Expandable graphics cards up to 300mm in length） 1 x MINI PCIE, expandable WIFI and 4G module, 1 x M.2 Key-B Slot, expandable 5G module
	LAN	2 x Intel GbE LAN
	DVI	The highest resolution is 1920 x 1200@60Hz,Support asynchronous dual display
	VGA	The highest resolution is 1920 x 1200@60Hz,Support asynchronous dual display
	Watch Dogs	1~255 levels programmable setting
OS Support	Microsoft Windows	Windows 10，Windows 11
	Linux	Linux
Power	Input voltage	AC 100~240V
	power consumption	750W
	Output voltage	DC12V
Chassis	Structure	All-steel box structure
	Dimensions	(L)370mm x (W)252.5mm x (H)234.8mm
	Net Weight	10Kg
Environment	Work Temperature	0℃ ~ 35℃ (Use SSD)
	Storage Temperature	-40℃ ~ 80℃ (Use SSD)
	Relative Humidity	5~95% RH@40° C,non-condensing
	Vibration	SSD applied:1.5Grms,IEC 60068-2-64,random,5~500Hz,1 hr/axis
	Shock	SSD applied:10G,IEC 60068-2-27, Half sine wave, lasting 11ms
	EMC	CE/FCC Class A

2.3 Product dimensions

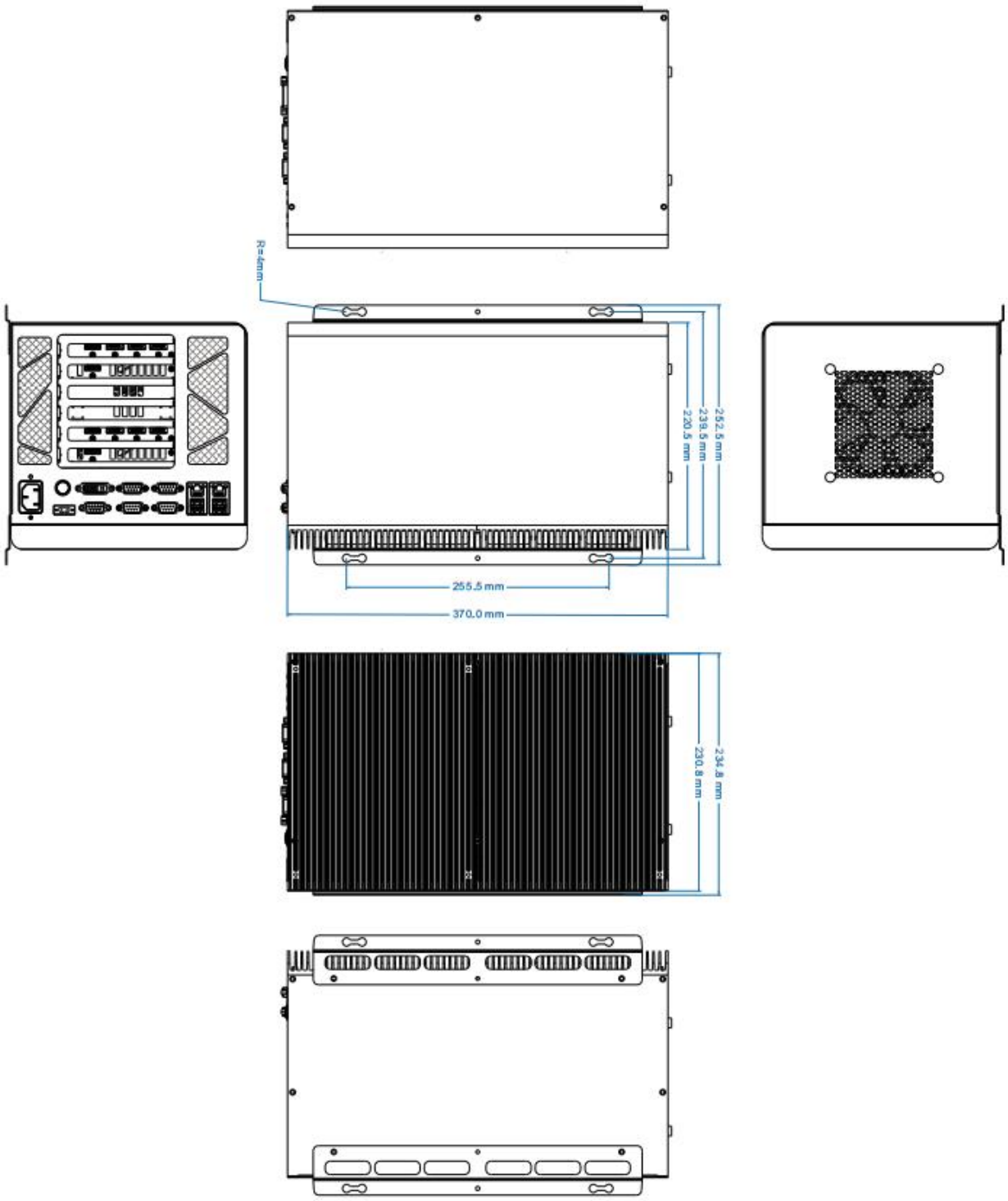
2.3.1 eBOX-NNZ-AI3000-AH6-3S



Picture 2-3 eBOX-NNZ-AI-3000-AH6-3S Product Dimension Drawing

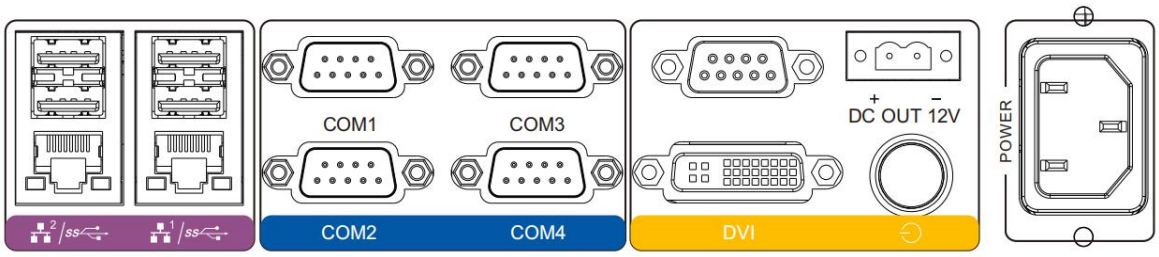


Picture 2-4 eBOX-NNZ-AI3000-AH6-3L Product Dimension Drawing



Picture 2-5 eBOX-NNZ-AI3000-Q6-6L Product Dimension Drawing

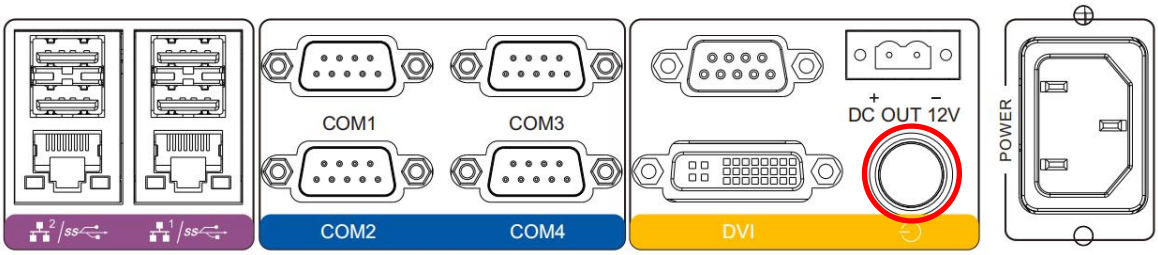
2.4 Product interface definition



Picture 2-6 eBOX-NNZ-AI3000 product interface definition

2.4.1 Status Lamp

On the rear panel, there is a status lamp for power supply status indication.

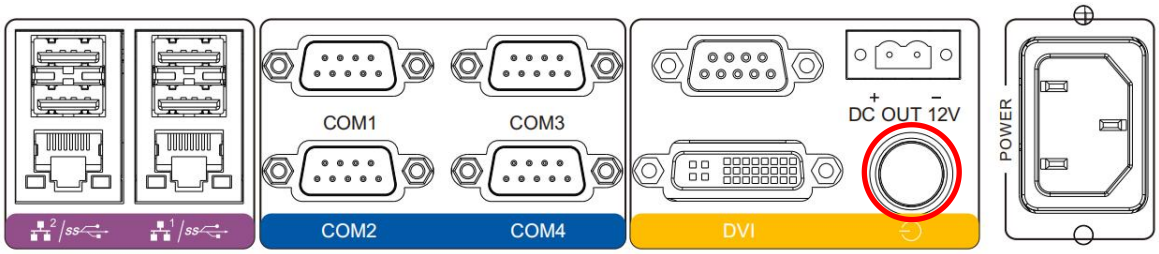


Picture 2-7 eBOX-NNZ-AI3000 LED

LED Name	State	Describe
Power status light	Extinguish	Indicates that the product is not powered
	Bright (green)	Indicates that the product has been powered on

2.4.2 Switch Button

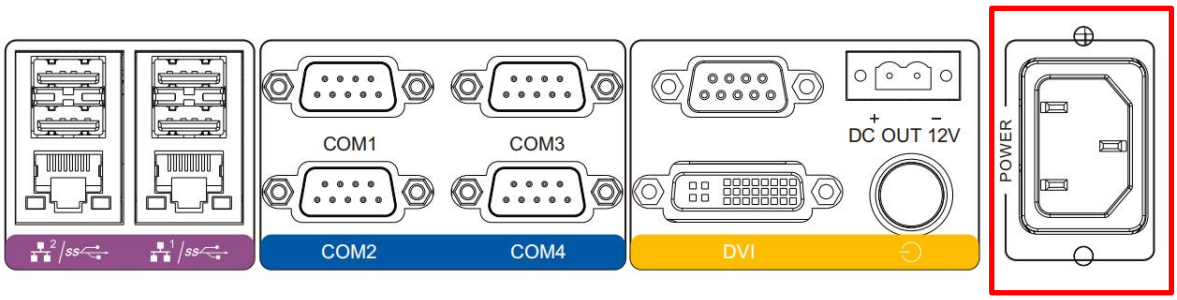
The front panel of the machine provides a power on button, which can be pressed to power on and start the machine or to turn off the machine when it is turned on.



Picture 2-8 eBOX-NNZ-AI3000 Switch Button

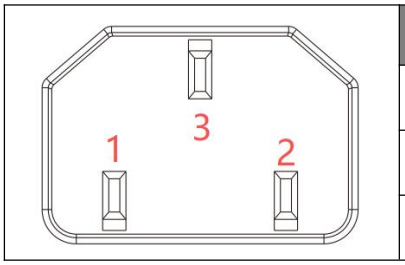
2.4.3 Power Interface

BOX-NNZ-AI3000 IPC uses AC100-240V input.



Picture 2-9 eBOX-NNZ-AI3000 Power terminal

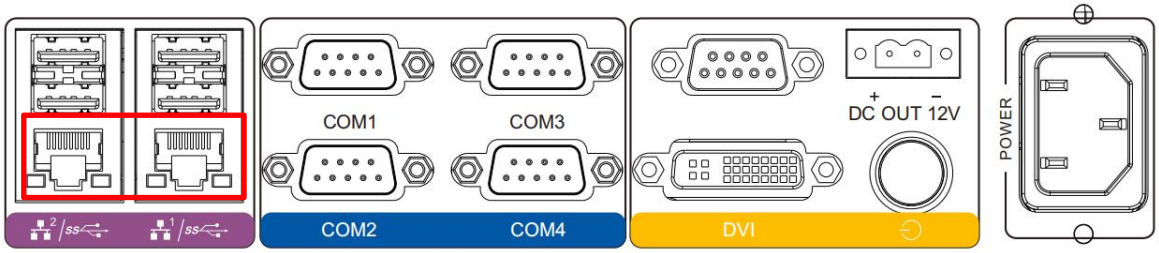
The signal definition of the power input connector is as follows：



Pin No.	Signal
1	L
2	N
3	E

2.4.4 Network interface：LAN1,LAN2

The product has two gigabit Ethernet ports on the carrier board, namely LAN1 and LAN2

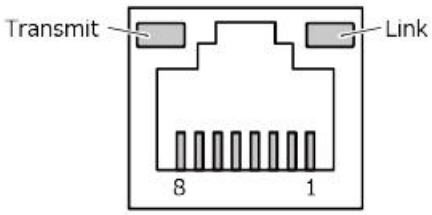


Picture 2-10 eBOX-NNZ-AI3000 J45 Ethernet port

Type	Parameter
Network	1000BASE-T/100BASE-TX/10BASE-T
Transmission speed*	1000M/100M/10M bps
Maximum cable distance	100m/segment
NIC type	Intel® Ethernet Controller I210

*When the transmission speed is 1000Mbps, a network cable of at least CAT 5e or above is required.

Network port signal definition:

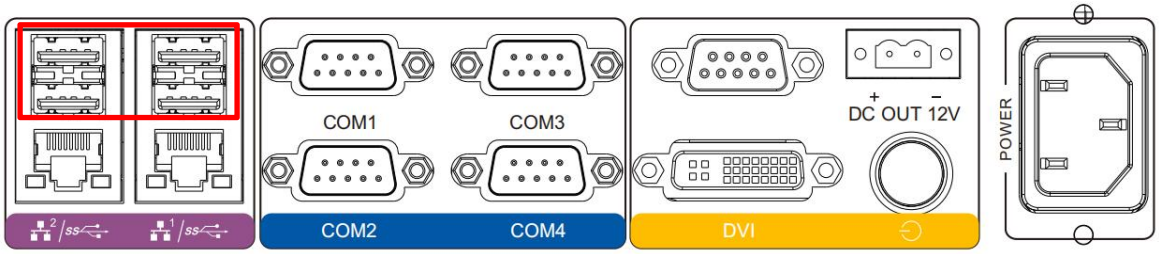


Pin No.	Signal Name	
	100BASE-TX	1000BASE-T
1	TX+	TRD+(0)
2	TX-	TRD-(0)
3	RX+	TRD+(1)
4	N.C.	TRD+(2)
5	N.C.	TRD-(2)
6	RX-	TRD-(1)
7	N.C.	TRD+(3)
8	N.C.	TRD-(3)

2.4.5 USB

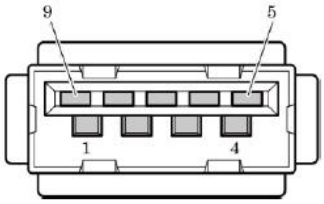
The rear panel of the eBOX-NNZ-AI3000 provides 4 independent USB TYPE-A ports. 2.4.1.6.1USB

This product is equipped with 4 USB ports for TYPE-A 4*USB3.0



Picture 2-11 eBOX-NNZ-AI3000 USB interface

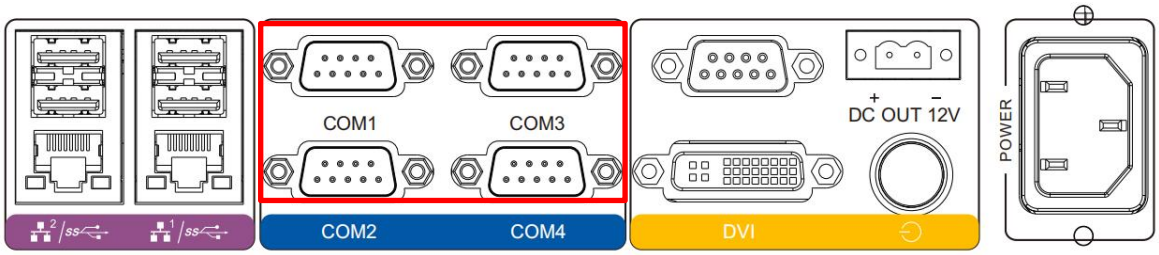
USB3.0 Connector pin definition:



Pin No.	Signal
1	USB_VCC
2	DATA-
3	DATA+
4	USB_GND
5	SSRX-
6	SSRX+
7	USB_GND
8	SSTX-
9	SSTX+

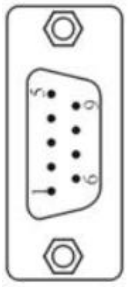
2.4.6 Serial COM1-COM4

The eBOX-NNZ-AI3000 product provides 4 DB9 serial ports, COM1-4 only supports RS232. The RI function as well as 3.3V and 5V power supply options can be configured via jumper headers JCOM1_PW1, JCOM2_PW1, JCOM3_PW1 and JCOM4_PW1. Two onboard reserved COM5 and COM6 ports adopt PH2.0-2×5P pin headers.



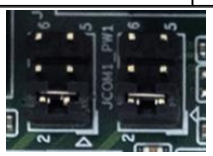
Picture 2-12 eBOX-NNZ-AI3000 Serial

The serial signal of the DB9 male terminal of the COM1~4 port is defined as follows:



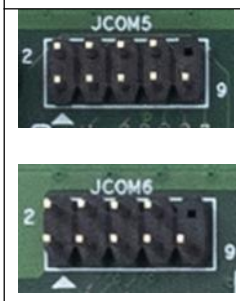
DB9

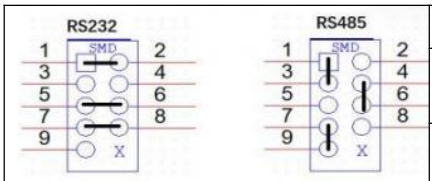
Pin No.	Signal Name	
	RS232	RS485
1	DCD	B
2	RXD	A
3	TXD	N.C.
4	DTR	N.C.
5	GND	GND
6	DSR	N.C.
7	RTS	N.C.
8	CTS	N.C.
9	RI	N.C.



设置	功能
1-2 Short Circuit	Set RI Signal Mode
3-4 Short Circuit	Set 5V Power Mode
5-6 Short Circuit	Set 12V Power Mode

COM5 and COM6 support RS485 and factory-default RS232 modes. Operation mode of each serial port can be toggled via jumpers JCOM5_SET and JCOM6_SET1, while the 120Ω terminating resistor is enabled/disabled by jumpers JCOM5_TR1 and JCOM6_TR1. Pin definitions and mode configurations for COM5/COM6 are specified below:

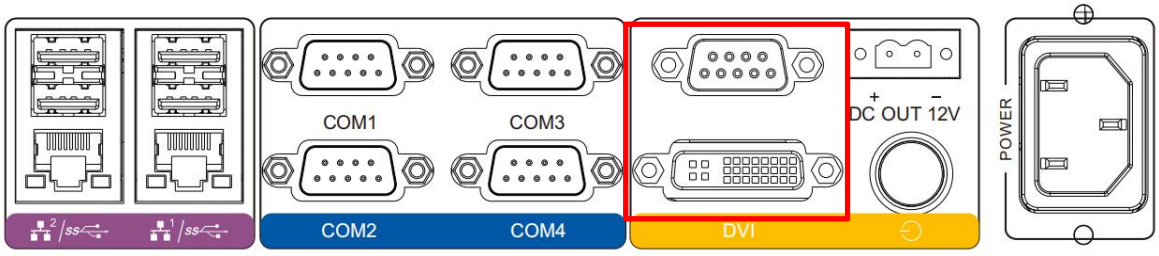
	PIN	COM5	C0M6
	1	DCD/RS485-	DCD/RS485-
	2	SIN/RS485+	SIN/RS485+
	3	SOUT	SOUT
	4	DTR	DTR
	5	GND	GND
	6	DSR	DSR
	7	RTS	RTS
	8	CTS	CTS
	9	RI	RI
	10	NC	NC

	设置	功能
	1-2,5-6,7-8 Short Circuit	RS232(Default)
	1-3,4-6,7-9 Short Circuit	RS485

	设置	功能
	1-2 Short Circuit	Disable 120Ω Terminating Resistor
	2-3 Short Circuit	Enable 120Ω Terminating Resistor

2.4.7 Display Interface

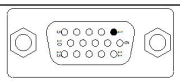
The eBOX-NNZ-AI3000 provides a standard HDMI+DVI+VGA interface.



Picture 2-13 eBOX-NNZ-AI3000 display interface

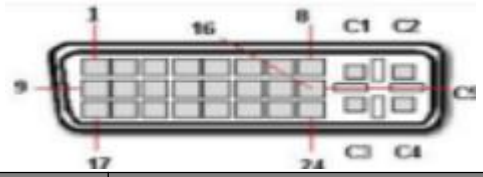
2.4.8 VGA

The eBOX-NNZ-AI3000 provides a standard DB15 monitor interface, which is defined as follows:

VGA Terminal			
Pin No.	Signal Name	Pin No.	Signal Name
1	RED	9	+5V
2	GREEN	10	GND
3	BLUE	11	N/C
4	N/C	12	SDA
5	GND	13	H SYNC
6	GND R	14	V SYNC
7	GND G	15	SCL
8	GND B		

2.4.9 DVI

The eBOX-NNZ-AI3000 is equipped with one standard DVI monitor interface. The pin assignments are detailed below:

VGA Terminal			
Pin No.	Signal Name	Pin No.	Signal Name
1	TMDS Data2-	16	Hot Plug Detect
2	TMDS Data2+	17	TMDS Data0-
3	TMDS Data 2/4 Shield	18	TMDS Data0+
4	TMDS Data4-	19	TMDS Data0/5 Shield
5	TMDS Data4+	20	TMDS Data5-
6	DDC Clock	21	TMDS Data5+
7	DDC Data	22	TMDS Clock Shield
8	Analog Vertical Sync	23	TMDS Clock+
9	TMDS Data1-	24	TMDS Clock-
10	TMDS Data1+	C1	Analog Red Video Out
11	TMDS Data1/3 Shield	C2	Analog Green Video Out
12	TMDS Data3-	C3	Analog Horizontal Sync
13	TMDS Data3+	C4	Analog Common Ground
14	+5V Power	C5	Hot Plug Detect
15	Ground		

2.4.10 SATA

The eBOX-NNZ-AI3000 is fitted with two SATA power supply connectors. Their pin definitions are as follows:

Pin No.	信号
JSATAPW1-1	PVCC5
JSATAPW1-2	GND
JSATAPW1-3	GND
JSATAPW1-4	PVCC12
JSATAPW2-1	PVCC5
JSATAPW2-2	GND
JSATAPW2-3	GND
JSATAPW2-4	PVCC12

2.4.11 AT/ATX

The eBOX-NNZ-AI3000 motherboard supports two power-on modes: ATX and AT. ATX mode triggers system startup via the power button, while AT mode enables automatic power-on upon power input (factory default). Jumper JAT1 selects between AT and ATX modes; auto power-on can be configured either via hardware jumper or BIOS setup. Jumper specifications are listed below:

Setting	Function
1-2 Short Circuit	AT Model，Auto Power-on (Default)
2-3 Short Circuit	ATX Model，Power Button Startup

Chapter 3 **BIOS** Settings

3.1 Introduction to this Chapter

This section describes how to use AMI's BIOS configuration program to set up your system. Setting BIOS parameters correctly can ensure stable and reliable operation of the system, while also improving the overall performance of the system. Improper or even incorrect BIOS parameter settings can greatly reduce the system's performance, making it unstable or even unable to function properly.

When the BIOS setting content in CMOS is damaged, the system will also request to enter the BIOS setting program. All setting values modified through BIOS are also saved in the system's CMOS memory, which is powered by the battery. Even if the external power supply is cut off, its content will not be lost unless an operation to clear the CMOS content is performed.

3.2 Boot BIOS Settings

When the system is powered on and turned on normally, you can see the message prompted to enter the BIOS setup program.

Press <DEL> or <ESC> to enter setup.

At this point (invalid for other times), press the key specified in the prompt message (usually the<Del>key) to enter the BIOS setup program.

If this prompt message has disappeared but the BIOS setup system needs to be re-entered, the computer needs to be powered off and restarted, or the system needs to be reloaded using the<Ctrl>+<Alt>+<Delete>key combination. Follow the above prompt message to re-enter the BIOS setup interface.

3.3 BIOS Setup Method

Usually, select the Settings tab through the arrow keys on the keyboard, enter the Settings tab with the<Enter>key, switch between the "+" and "-" keys, obtain help information with the<F1>key, and exit the Settings tab with the<Esc>key.

Please refer to the table below for details.

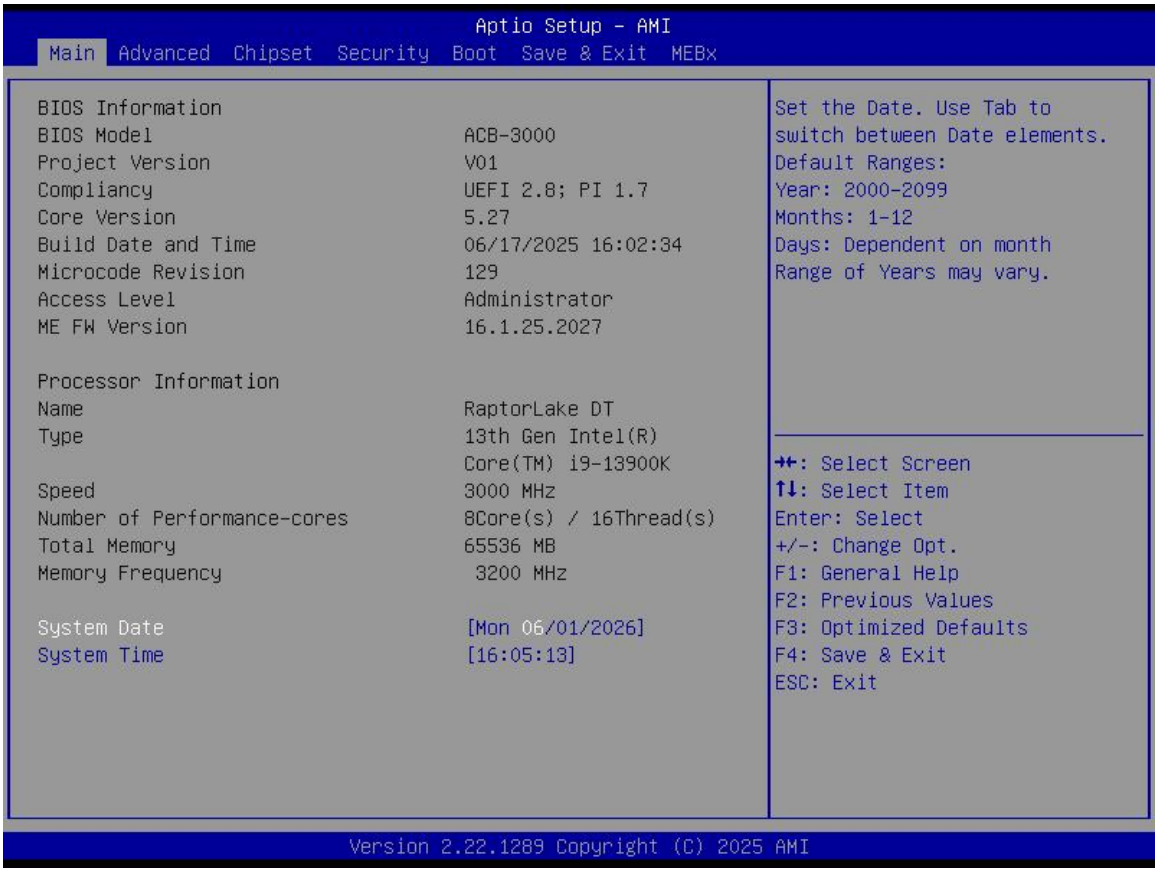
Key	Function Description
< ↑ >	Move one item forward
< ↓ >	Move one item back
< ← >	Move one item to the left (main menu item)
< → >	Move one item to the right (main menu item)
<Esc>	Exit or return to the main interface
<Enter>	Enter Selection
< + >	Add or change options
< - >	Reduce or change options
< F1 >	Get help information
< F2 >	Load previous settings from CMOS
< F3 >	Load default optimization settings
< F4 >	Maintain the set values and exit the BIOS setup interface

3.4 BIOS Settings

：Due to the BIOS program being updated from time to time, the following BIOS setup interface and description are for reference only.

3.4.1 *BIOS Main Interface*

Once entering the BIOS setup system, the Main interface will be displayed.



Picture 3.4-1 BIOS-Main

The following menu items can be switched through the<←>and<→>directional keys on the keyboard:

- **Main**
  - In this menu, you can view basic system configuration information, set language, and system time.
- **Advanced**
  - In this menu, specific system functions can be set.
- **Chipset**
  - In this menu, you can set the functions of the system on a chip set.
- **Security**
  - In this menu, you can set password protection and other security functions for the system.
- **Boot**
  - In this menu, the system startup order can be set.
- **Save & Exit**
  - In this menu, you can load or save settings and exit the BIOS setup system.

3.4.2 Main

This interface is mainly used to confirm the basic configuration information of the system.

- Display items

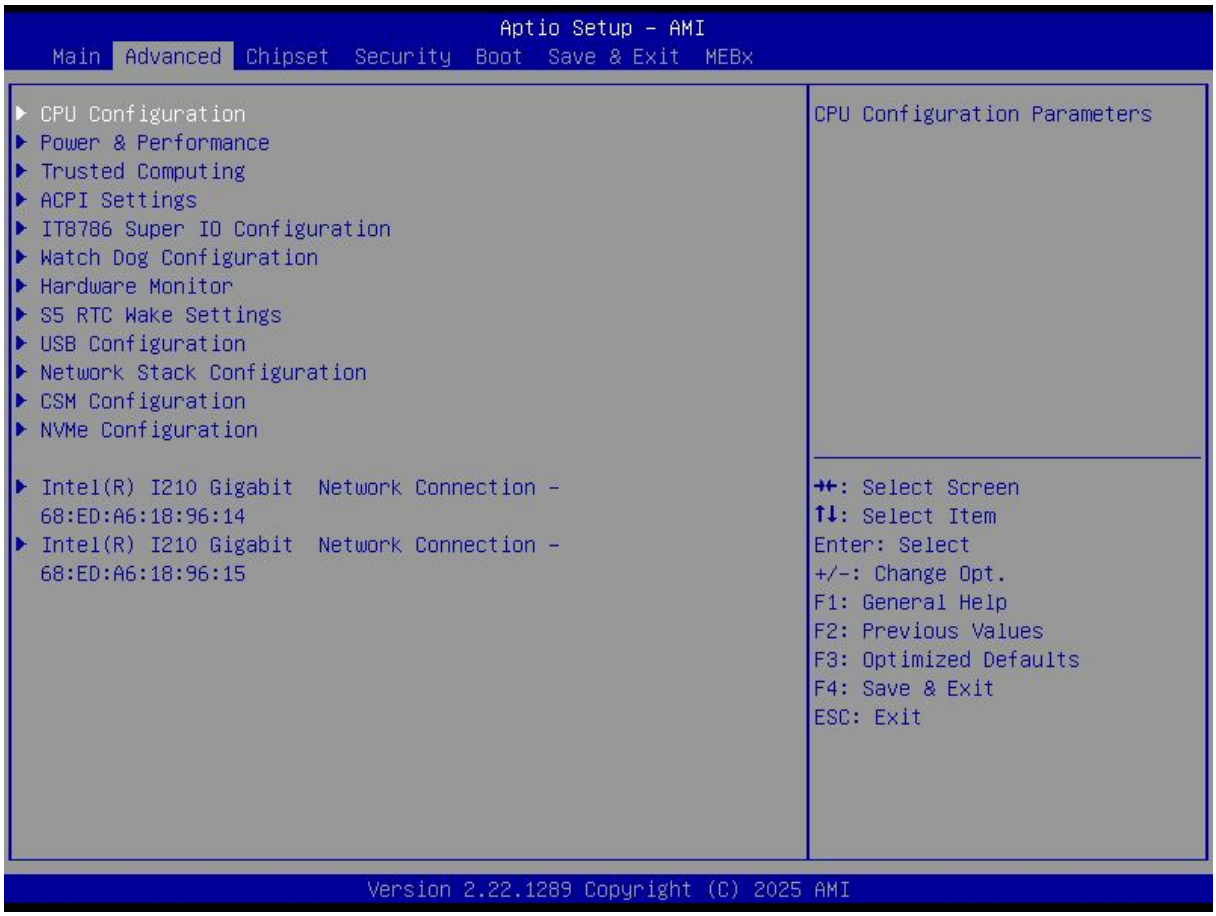
Project	Content	Describe
Project Version	xxx	BIOS version
Build Date and Time	xx/xx/xxxx xx:xx:xx	Creation time of BIOS

- Settable items

Project	Content	Describe
System Language	[English]	Set the language of BIOS, default English version
System Date	Week Day Month / Day / Year	Set the date of the system
System TIme	Hour : Minute : Second	Set the time for the system

3.4.3 Advanced

In this menu, set the detailed functions of the system, and the functional items that can be set are as follows:



Picture 3.4-2 BIOS-Advanced

- CPU Configuration
  - The main function of this item is to display specific information and configuration items of the CPU.
- ACPI Settings
  - This is a setting item related to ACPI (Advanced Configuration and Power Management Interface).
- SATA Configuration
  - The main function of this item is the setting of SATA.
- Display Configuration
  - The main function of this item is display configuration.
- AC Power Loss
  - The main function of this item is power management settings.
- Wake up settings
  - The main function of this item is to set the system's sleep and wake-up functions.
- Watch Dog Configuration

- This is the setting of the system's watchdog.

➢ Super IO Configuration

- This is the setting of IO parameters for the system.

➢ Hardware Monitor

- The main function of this item is to display hardware monitoring parameters such as CPU temperature.

➢ USB Configuration

- The main function of this item is to set up the USB interface.

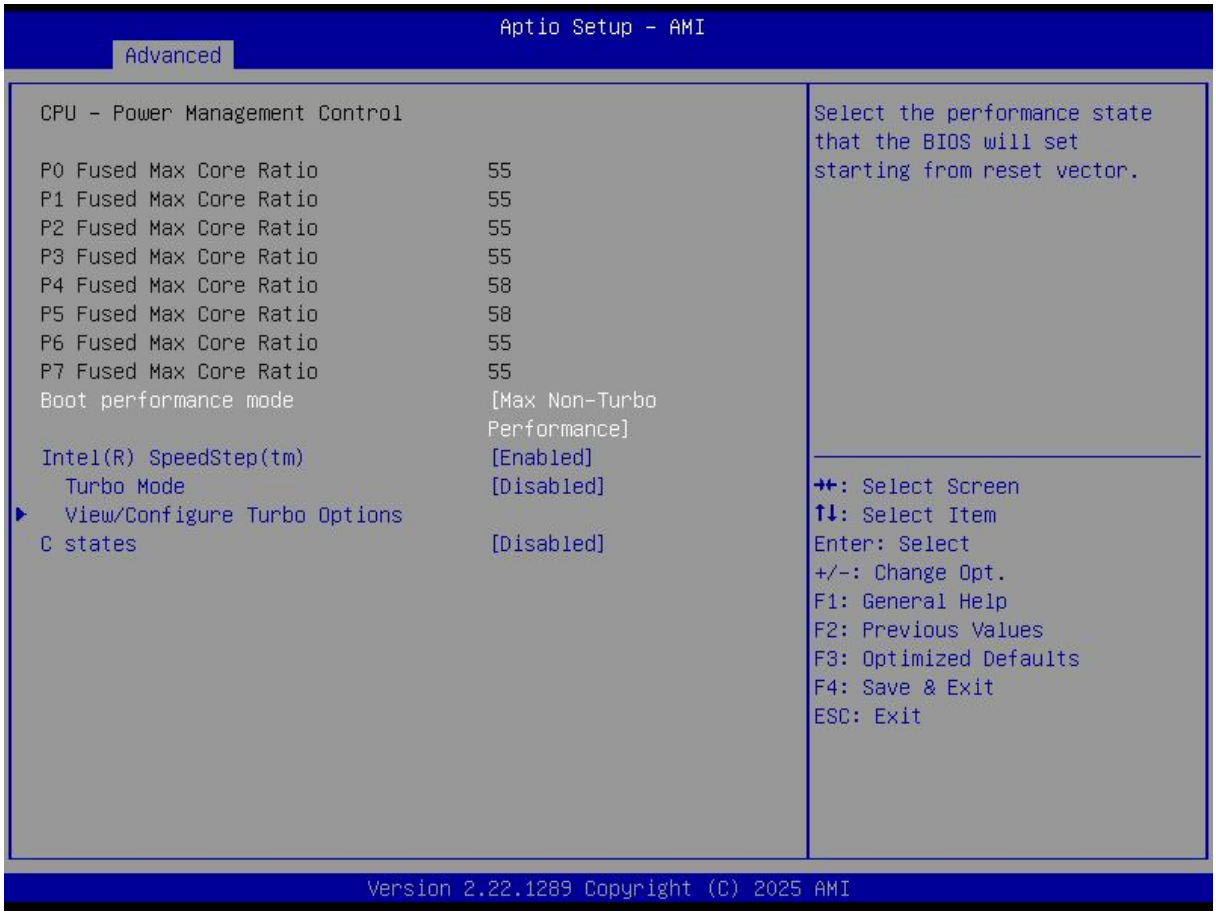
➢ CSM Configuration

- This is the setting for the Compatibility Support Module. This option is specifically designed for compatibility with devices that can only work in Legacy mode and operating systems that do not support or cannot fully support UEFI.

: Please set it carefully under the guidance of technical support. Improper setting may cause the system to fail to start or hardware damage!

3.4.3.1 CPU -Power Management Control

In this interface, you can view CPU configuration information and make relevant settings for the CPU.



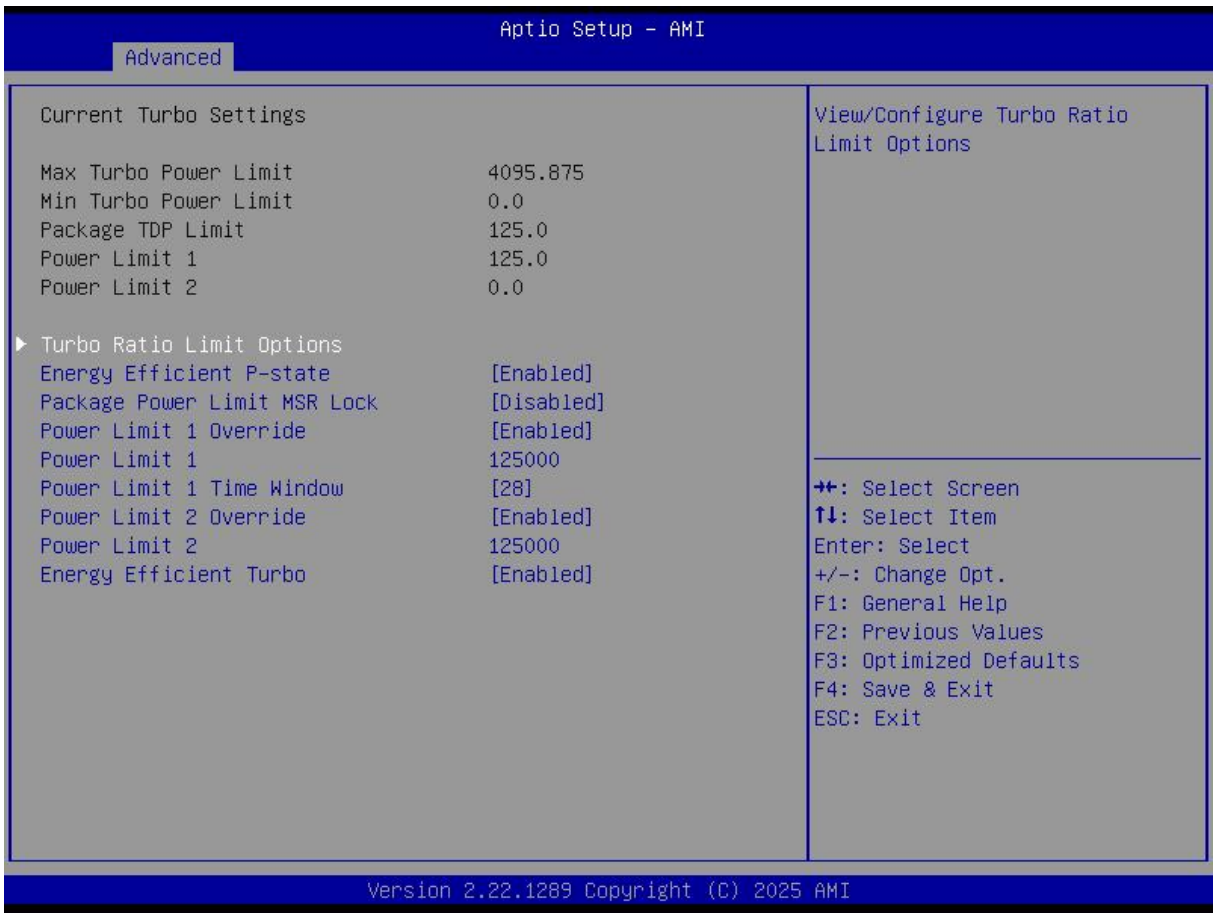
Picture 3.4-3 BIOS-CPU Configuration

- **CPU Configuration:**

Project	Content	Describe
Hardware Prefetcher	Disabled / Enabled	The hardware prefetching option refers to the CPU having hardware prefetching function. Before the CPU processes instructions or data, it prefetches them from memory to the L2 cache, thereby reducing memory read time, helping to eliminate potential bottlenecks, and improving system performance. It is usually recommended to set it to Enabled.
Intel (VMX) Virtualization Technology	Disabled / Enabled	Intel virtualization technology, which allows a CPU to work like multiple CPUs running in parallel, making it possible to run multiple operating systems simultaneously within a computer. Normally set to Disabled state.
Intel(R) SpeedStep(tm)	Disabled / Enabled	This option is Intel's intelligent frequency reduction technology, where the CPU automatically adjusts voltage and frequency doubling based on usage to reduce power consumption and heat generation. The state needs to be set to Disabled.
C states	Disabled / Enabled	It refers to the standby state of the CPU, which adjusts the clock and voltage according to different states, or completely turns off. It needs to be set to Disabled.

3.4.3.2 CPU-Power Management Control

CPU Power Configuration on this screen.



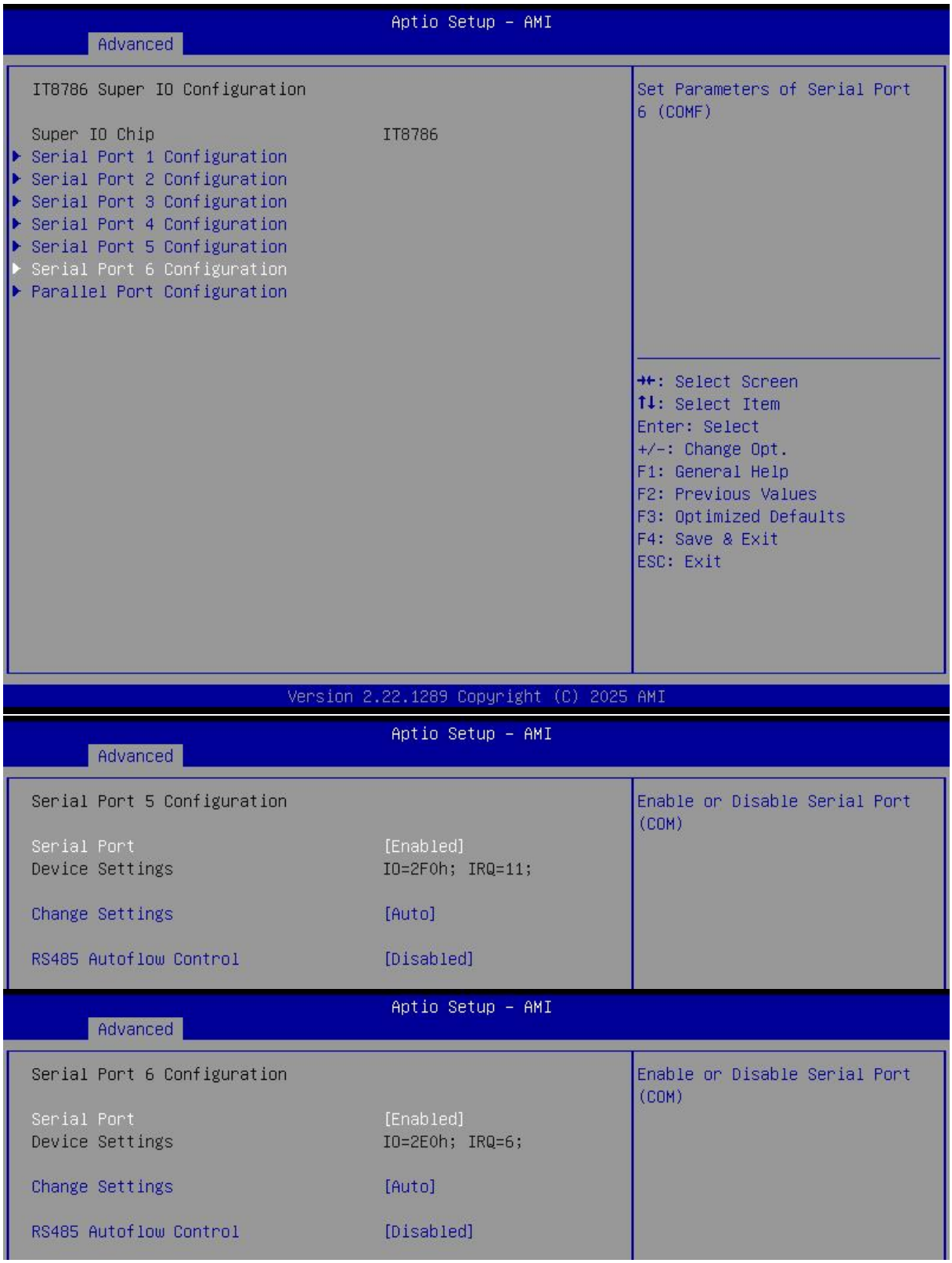
Picture 3.4-4 BIOS-Current Turbo Settings

■ Current Turbo Settings：

Item	Content	Description
Power Limit 1 Override	Enabled /Disabled	PL1 Power Limit Switch
Power Limit 1	125000	125W
Power Limit 2 Override	Enabled /Disabled	PL2 Power Limit Switch
Power Limit 2	125000	125W

3.4.3.3 Super IO Configuration

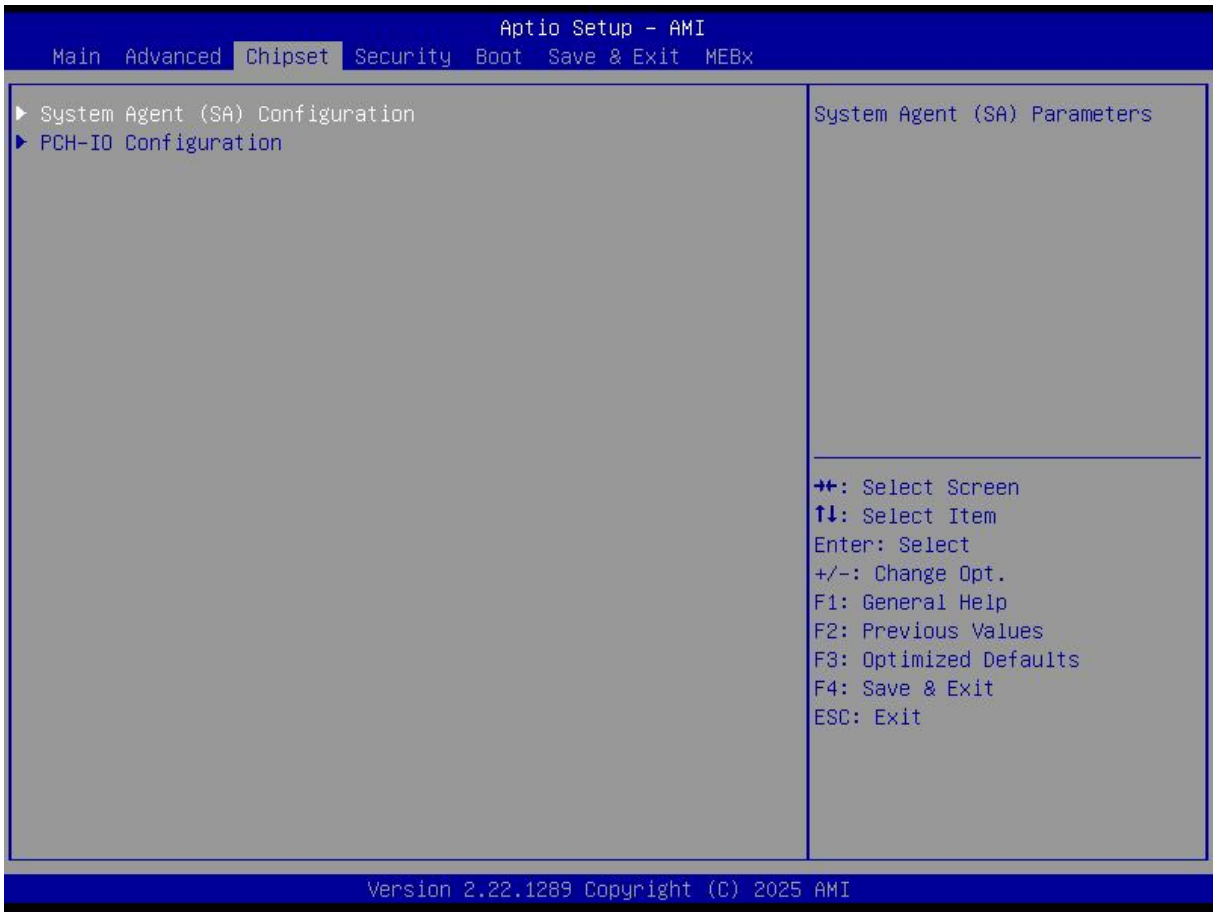
This page is mainly used for I/O configuration. The RS485 flow control function for COM5 and COM6 can be enabled in BIOS.



Picture 3.4-5 BIOS-IT8786 Super IO Configuration

3.4.4 *Chipset*

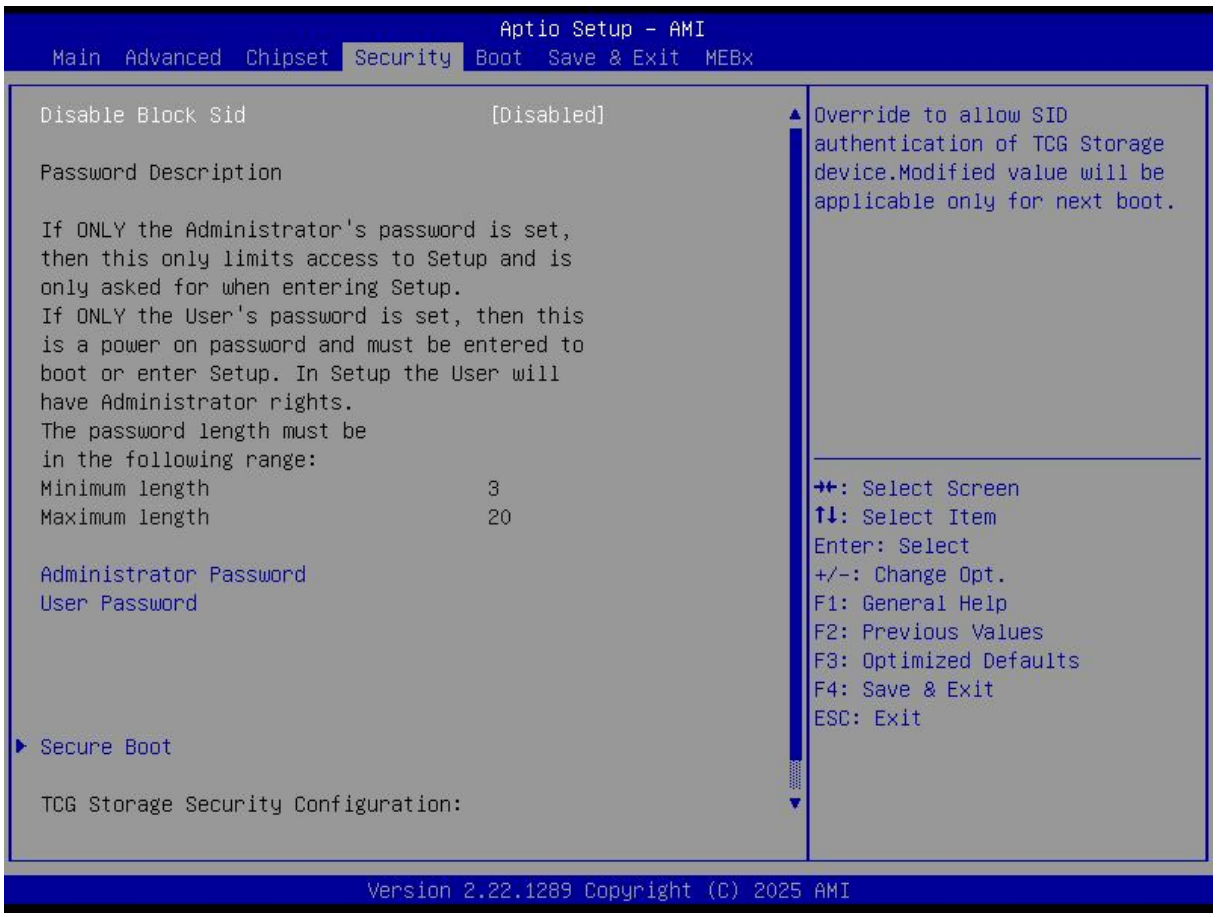
This page is mainly used for system proxy configuration and detailed I/O function setup.



Picture 3.4-6 BIOS-**Chipset**

3.4.5 Security

This interface is mainly used for key settings related to system security protection.



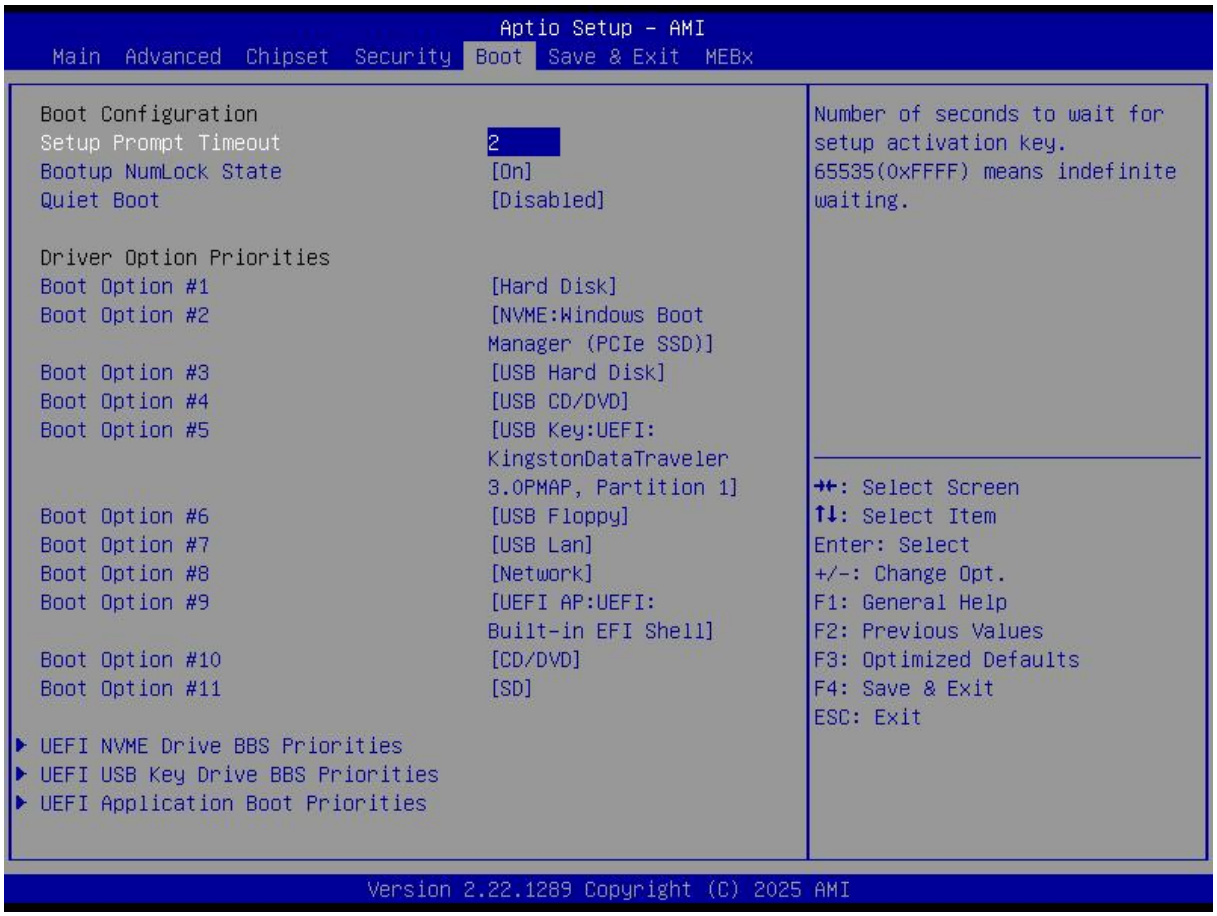
Picture 3.4-7 BIOS-Security

- Administrator Password
  - Set the administrator password.
- User Password
  - Set the user password.

: Once the password is set, it is necessary to remember the password, otherwise it may result in inability to access the system due to lack of permission! Additional maintenance costs may arise.

3.4.6 Boot

This interface is mainly used to set parameters related to BIOS system startup and device loading sequence.



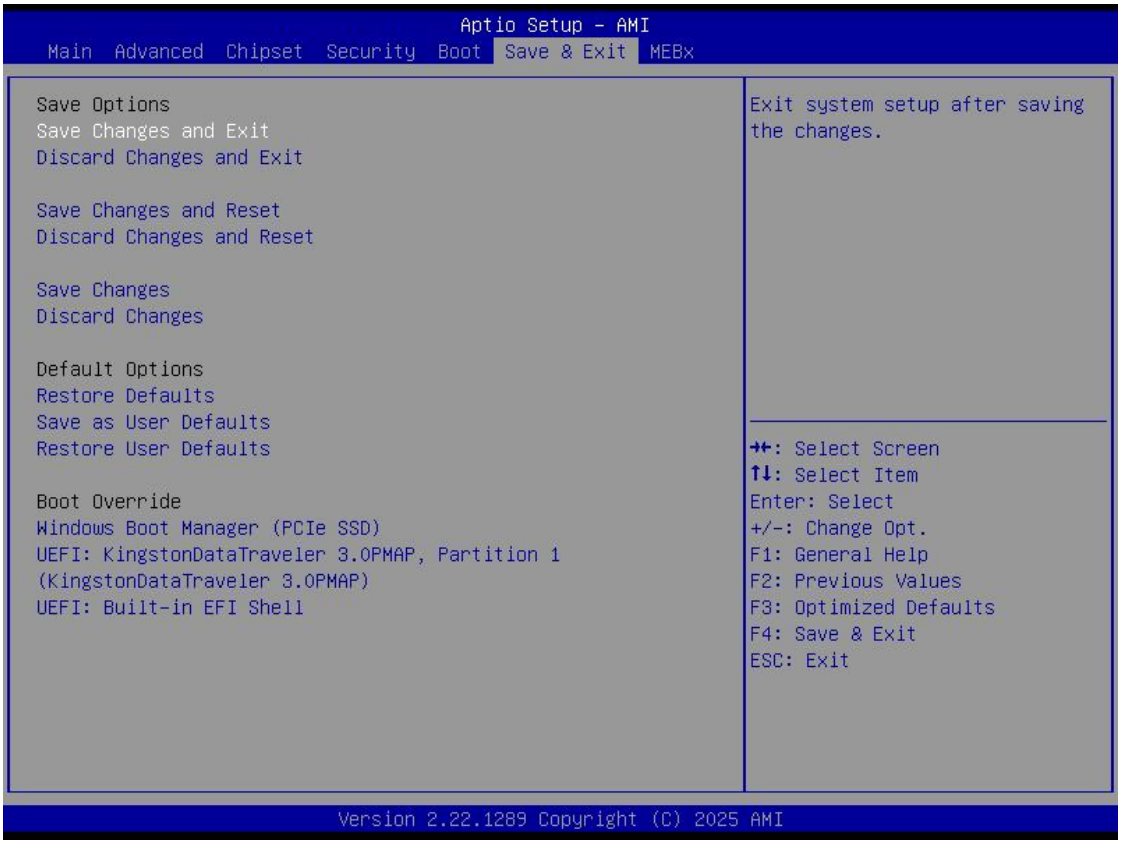
Picture 3.4-8 BIOS-Boot

- **Boot Configuration:**

Project	Content	Describe
Setup Prompt Timeout	2	The time, in seconds, to wait for the BIOS to set the button when the system starts
Bootup NumLock State	On / Off	The state of the numeric keypad at system startup.
Quiet Boot	Enabled / Disabled	Do not change this setting!
Boot Option #1	XXXXXXXX	System First Boot Device
Boot Option #2	XXXXXXXX	System second boot device

3.4.7 Save & Exit

This menu is used to save settings or load default configuration parameters, exit BIOS settings, etc.



Picture 3.4-9 BIOS-Save&Exit

- Save Changes and Reset
  - Save the settings and restart the system.
- Discard Changes and Reset
  - Discard setting changes and restart the system.
- Save Changes and Reset
  - Save Settings and Restart System
- Discard Changes and Reset
  - Discard configuration changes and reboot the system.
- Save Changes
  - Save configuration changes
- Discard Changes
  - Discard configuration changes
- Restore Defaults
  - Restore default configuration parameters
- Save as User Defaults
  - Save default configuration parameters
- Restore User Defaults
  - Restore user-defined configuration parameters
- Boot Override
  - Select the corresponding system storage medium here if you need to temporarily boot from an alternative connected storage device. This operation will not alter the boot priority configured in the Boot menu. Upon subsequent system reboot, the device will start up following the boot sequence predefined in the Boot menu.

Chapter 4 System Installation

This chapter mainly introduces the hardware installation and related driver software installation of the system.

4.1 Driver Installation

1. Go to the official website of www.nodka.com to download the corresponding driver

2. Select the corresponding machine model and click Find, download the corresponding driver, and install the driver software according to the installation wizard.

Chapter 5 List of Optional Accessories

5.1 List of optional accessories

Name	Package	Describe
CPU	LGA1700	12500T/13500T ... ...
Memory	DDR4 3200	4GB,8GB,16GB,32GB
SSD	M.2 SATA	128G,256G ... ...
Expansion Card	miniPCIe	4G or WIFI ... ...

chapter 6 Safety Prevention And Maintenance

 ：The preventive measures outlined in this chapter should be strictly followed. Failure to follow such preventive measures may result in serious damage to the machine.

6.1 Safety Precautions

Please follow the safety precautions outlined in this section below.

6.1.1 General safety precautions

Please ensure that the following safety precautions are always followed.

- Always follow the electrostatic prevention measures outlined below when turning on the machine.
- Once it is necessary to install, move, or modify the machine, ensure that the power is turned off and the power cord is disconnected.
- It is prohibited to apply voltage levels that exceed the specified voltage range. Otherwise, it may cause a fire or electric shock.
- When the machine is in operation, electric shock may occur once the chassis of the machine is opened.
- Do not drop or insert any object into the ventilation opening of the machine.
- Once a large amount of dust, water, or liquid enters the machine, the power should be immediately turned off, the power cord should be unplugged, and the machine supplier should be contacted.
- The following activities are prohibited:
  - Do not drop the machine onto hard ground.
  - It is prohibited to strike the machine or apply excessive force to it.
  - It is prohibited to use the machine in places where the ambient temperature exceeds the rated temperature.

6.1.2 Antistatic precautions

：Failure to take ESD preventive measures during machine installation may result in permanent damage to the machine and serious injury to the user. Electrostatic discharge (ESD) can cause serious damage to machine electrical components. Dry climates are more prone to ESD generation. Therefore, once the machine is opened and any electrical components need to be handled, the following anti-static precautions must be strictly followed:

- Wearing an anti-static wrist strap: Wearing a simple anti-static wrist strap helps to avoid ESD damage to any electrical components.
- Self grounding: Before handling any electrical components, touch any grounded conductive material. During the handling of electrical components, any conductive substances that are grounded should be frequently touched.
- Use anti-static pads: When configuring electrical components or engaging in related work, they should be placed on the anti-static pad. This can reduce the likelihood of ESD damage occurring.
- Only touching the edges of electrical components: When handling electrical components, it is advisable to hold them by grasping the edges.

6.1.3 Product disposal method

：If the wrong type of battery is replaced, there may be an explosion risk, and only certified engineers can replace the onboard battery. Dispose of waste batteries in accordance with relevant instructions and local laws and regulations.

Outside the EU - If you need to dispose of waste electrical and electronic products outside the EU, please contact your local regulatory authority to ensure the correct disposal method is taken. Within the EU:

EU-wide legislation implemented by member states requires that waste electrical and electronic equipment (WEEE) be disposed of separately from general household waste, with the exception of products marked with a left-hand symbol. This includes monitors and electrical components such as cords or power cables. To dispose of your product, follow the guidelines provided by your local authorities or ask the store where you purchased the product. The marking on electrical and electronic products is only applicable within the current EU member states. Please follow the relevant national guidelines for the disposal of electrical and electronic products.

6.2 Maintenance and cleaning precautions

Please follow the following guidelines to maintain or clean the machine.

6.2.1 Maintenance and cleaning

Before cleaning any parts or components of the machine, please read the following details first.

It is prohibited to directly spray or spray liquid onto any other components.

- Internal cleaning is not required. Avoid liquid entering the interior.
- Be careful to avoid damaging small, detachable components inside.
- Please turn off the power before cleaning.
- It is prohibited to drop any object or allow any liquid to enter the equipment through the opening.
- When cleaning, be careful of any allergic reactions that the human body may have to solvents or chemicals.
- Avoid eating, drinking, and smoking near the work area.
- Regularly clean the dust around the fan and its surroundings.

6.2.2 Cleaning Tools

Only specially designed specialized products can be used to clean certain components. In such cases, the cleaning prompt will clearly indicate such products. The following is a list of items that can be used for cleaning.

- **Cloth - Although tissue or tissue paper can be used, it is recommended to use a soft, clean cloth.**
- **Water or external alcohol - A cloth dipped in water or external alcohol should be used.**
- **Using solvents - It is recommended not to use solvents as they may cause damage to plastic components.**

- Vacuum cleaner - Using a vacuum cleaner specifically designed for computers is the best cleaning method. Dust and dirt may restrict airflow, leading to corrosion of the circuit.
- Cotton swab - A cotton swab dipped in external alcohol or water is an excellent tool for wiping areas of equipment that are difficult to touch.
- Foam tags – if possible, it is better to use foam tags and other non rough tags for cleaning

Chapter 7 FAQ

7.1 Technical Support and Services

Please visit the official website of www.nodka.com to download the documents and related driver software, or directly contact your local distributor to provide support and services.