Rugged Embedded Computer

cincoze

DA-1200

User Manual

Rugged Embedded Computer

Intel Alder Lake-N Processor N97 Rugged Embedded Computer

Version: V1.03

Contents

Preface

Revision

Revision	Description	Date
1.00	First Release	2024/04/12
1.01	Information about UL Certification Added	2024/10/11
1.02	System Power Spec Updated and Expansion Box Installation Added	2024/12/31
1.03	Correction Made	2025/06/11

Copyright Notice

Acknowledgement

Disclaimer

This manual is intended to be used as a practical and informative guide only and is subject to change without notice. It does not represent a commitment on the part of Cincoze. This product might include unintentional technical or typographical errors. Changes are periodically made to the information herein to correct such errors, and these changes are incorporated into new editions of the publication.

Declaration of Conformity

FCC

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the

instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CE

The product(s) described in this manual complies with all application European Union (CE) directives if it has a CE marking. For computer systems to remain CE compliant, only CE-compliant parts may be used. Maintaining CE compliance also requires proper cable and cabling techniques.

UL

A product that carries the "UL Listed" approval mark means that the product has been tested by UL to nationally recognized Safety Standards and has been found to be free from reasonably foreseeable risk of fire, electric shock and related hazards

Product Warranty Statement

Warranty

Cincoze products are warranted by Cincoze Co., Ltd. to be free from defect in materials and workmanship for 2 years from the date of purchase by the original purchaser. During the warranty period, we shall, at our option, either repair or replace any product that proves to be defective under normal operation. Defects, malfunctions, or failures of the warranted product caused by damage resulting from natural disasters (such as by lightening, flood, earthquake, etc.), environmental and atmospheric disturbances, other external forces such as power line disturbances, plugging the board in under power, or incorrect cabling, and damage caused by misuse, abuse, and unauthorized alteration or repair, and the product in question is either software, or an expendable item (such as a fuse, battery, etc.), are not warranted.

RMA

Before sending your product in, you will need to fill in Cincoze RMA Request Form and obtain an RMA number from us. Our staff is available at any time to provide you with the most friendly and immediate service.

- **RMA Instruction**
  - Customers must fill in Cincoze Return Merchandise Authorization (RMA) Request Form and obtain an RMA number prior to returning a defective product to Cincoze for service.
  - Customers must collect all the information about the problems encountered and note anything abnormal and describe the problems on the "Cincoze Service Form" for the RMA number apply process.

- Charges may be incurred for certain repairs. Cincoze will charge for repairs to products whose warranty period has expired. Cincoze will also charge for repairs to products if the damage resulted from acts of God, environmental or atmospheric disturbances, or other external forces through misuse, abuse, or unauthorized alteration or repair. If charges will be incurred for a repair, Cincoze lists all charges, and will wait for customer's approval before performing the repair.
- Customers agree to ensure the product or assume the risk of loss or damage during transit, to prepay shipping charges, and to use the original shipping container or equivalent.
- Customers can be sent back the faulty products with or without accessories (manuals, cable, etc.) and any components from the system. If the components were suspected as part of the problems, please note clearly which components are included. Otherwise, Cincoze is not responsible for the devices/parts.
- Repaired items will be shipped along with a "Repair Report" detailing the findings and actions taken.

Limitation of Liability

Cincoze' liability arising out of the manufacture, sale, or supplying of the product and its use, whether based on warranty, contract, negligence, product liability, or otherwise, shall not exceed the original selling price of the product. The remedies provided herein are the customer's sole and exclusive remedies. In no event shall Cincoze be liable for direct, indirect, special or consequential damages whether based on contract of any other legal theory.

Technical Support and Assistance

1. Visit the Cincoze website at www.cincoze.com where you can find the latest information about the product.
2. Contact your distributor or our technical support team or sales representative for technical support if you need additional assistance. Please have following information ready before you call:
   - Product name and serial number
   - Description of your peripheral attachments
   - Description of your software (operating system, version, application software, etc.)
   - A complete description of the problem
   - The exact wording of any error messages

Conventions Used in this Manual

WARNING (AVERTIR)

This indication alerts operators to an operation that, if not strictly observed, may result in severe injury.

(Cette indication avertit les opérateurs d'une opération qui, si elle n'est pas strictement observée, peut entraîner des blessures graves.)

CAUTION (ATTENTION)

This indication alerts operators to an operation that, if not strictly observed, may result in safety hazards to personnel or damage to equipment.

(Cette indication avertit les opérateurs d'une opération qui, si elle n'est pas strictement observée, peut entraîner des risques pour la sécurité du personnel ou des dommages à l'équipement.)

NOTE (NOTE)

This indication provides additional information to complete a task easily.

(Cette indication fournit des informations supplémentaires pour effectuer facilement une tâche.)

Safety Precautions

Before installing and using this device, please note the following precautions.

1. Read these safety instructions carefully.
2. Keep this User's Manual for future reference.
3. Disconnected this equipment from any AC outlet before cleaning.
4. For plug-in equipment, the power outlet socket must be located near the equipment and must be easily accessible.
5. Keep this equipment away from humidity.
6. Put this equipment on a reliable surface during installation. Dropping it or letting it fall may cause damage.
7. Make sure the voltage of the power source is correct before connecting the equipment to the power outlet.
8. Use a power cord that has been approved for using with the product and that it matches the voltage and current marked on the product's electrical range label. The voltage and current rating of the cord must be greater than the voltage and current rating marked on the product.
9. Position the power cord so that people cannot step on it. Do not place anything over the power cord.
10. All cautions and warnings on the equipment should be noted.
11. If the equipment is not used for a long time, disconnect it from the power source to avoid damage by transient overvoltage.
12. Never pour any liquid into an opening. This may cause fire or electrical shock.

13. Never open the equipment. For safety reasons, the equipment should be opened only by qualified service personnel.
    If one of the following situations arises, get the equipment checked by service personnel:
    - The power cord or plug is damaged.
    - Liquid has penetrated into the equipment.
    - The equipment has been exposed to moisture.
    - The equipment does not work well, or you cannot get it work according to the user's manual.
    - The equipment has been dropped and damaged.
    - The equipment has obvious signs of breakage.
14. CAUTION: Risk of Explosion if Battery is replaced by an Incorrect Type. Dispose of Used Batteries According to the Instructions.
    ATTENTION: Risque d'explosion si la batterie est remplacée par un type incorrect. Mettre au rebus les batteries usagées selon les instructions.
15. Equipment intended only for use in a RESTRICTED ACCESS AREA.
16. Output of the external power source shall be complied with ES1, PS3 requirements, output rating between 9-48 VDC, minimum 3.9-0.8A, with minimum rated maximum ambient temperature 70°C, and has to be evaluated according to UL/IEC/EN 60950-1 and/or UL/IEC/EN 62368-1. If need further assistance, please contact Cincoze for further information.
17. Ensure to connect the power cord of power adapter to a socket-outlet with earthing connection.
18. Dispose of used battery promptly. Keep away from children. Do not disassemble and do not dispose of in fire.

Package Checklist

Before installation, please ensure all the items listed in the following table are included in the package.

Item	Description	Q'ty
1	DA-1200 Embedded System	1
2	Thermal Pad (for CPU Thermal Block)	1
3	Screw Pack	1
4	M.2 Key B Type 3052 to 3042 Adapter Bracket	1
5	Wall Mounting Kit	1
6	Power Terminal Block Connector	1
7	Remote Function Terminal Block Connector	1

Note: Notify your sales representative if any of the above items are missing or damaged.

Ordering Information

Model No.	Description
DA-1200-N97	Intel Alder Lake-N Processor N97 Rugged Embedded Computer

Chapter 1
Product Introductions

1.1 Overview

The palm-sized DA-1200, equipped with an Intel® N97 processor (Alder Lake-N platform), is the smallest and an affordable model in the DIAMOND product line. It inherits the rugged features consistent throughout the Cincoze lineup and has passed or complies with many international certification standards, such as EMC standards in industrial environments (IEC 61000-6-2 and IEC 61000-6-4) and US military shock vibration standards (MIL-STD-810H). The DA-1200 is best for IoT gateway applications in smart manufacturing, smart logistics, and factory automation.

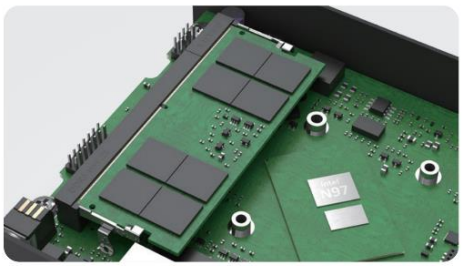
Key Features

- Onboard Intel ® Alder Lake-N Processor N97
- Ultra Compact Size (150 x 105 x 52.3 mm)
- 1 x DDR5 SO-DIMM Sockets, Supports Up to 4800MHZ, 16GB
- 1 x M.2 Key B Type 3052/3042 Socket for 5G/Storage/Add-on Card Expansion
- 1 x M.2 Key B Type 2242 Socket for Storage/Add-on Card Expansion
- Optional CMI modules for I/O expansion
- Wide Operating Temperature -40°C to 70°C
- Safety Standard: UL, cUL, CB, IEC, EN 62368-1

Certification

Palm-Sized

The DA-1200 measures 150 x 105 x 52.3 mm and can fit in the palm of your hand.



Affordable High Performance

The DA-1200 has an Intel® N97 processor based on the Intel® 7 process and up to 16GB of DDR5 memory, giving it excellent overall performance at a highly competitive price.

Easy Maintenance

Setup and adjustment of the DA-1200 is quick because key buttons and functions, including the reset switch, clear CMOS switch, AT/ATX switch, and SIM card slot, are all accessible on the front panel maintenance area.

Modular Expansion

The DA-1200 has two M.2 Key B slots (convertible to Key E with an optional M.2 Key B Adapter Card) for wireless cards (5G, Wi-Fi, and GNSS) and storage options that include 2.5” SSD, half-slim SSD, and M.2 SSD.

Various Installation

The DA-1200 supports various mounting methods, including wall mount, side mount, and DIN Rail mount, for installation in various applications.

1.2 Hardware Specification

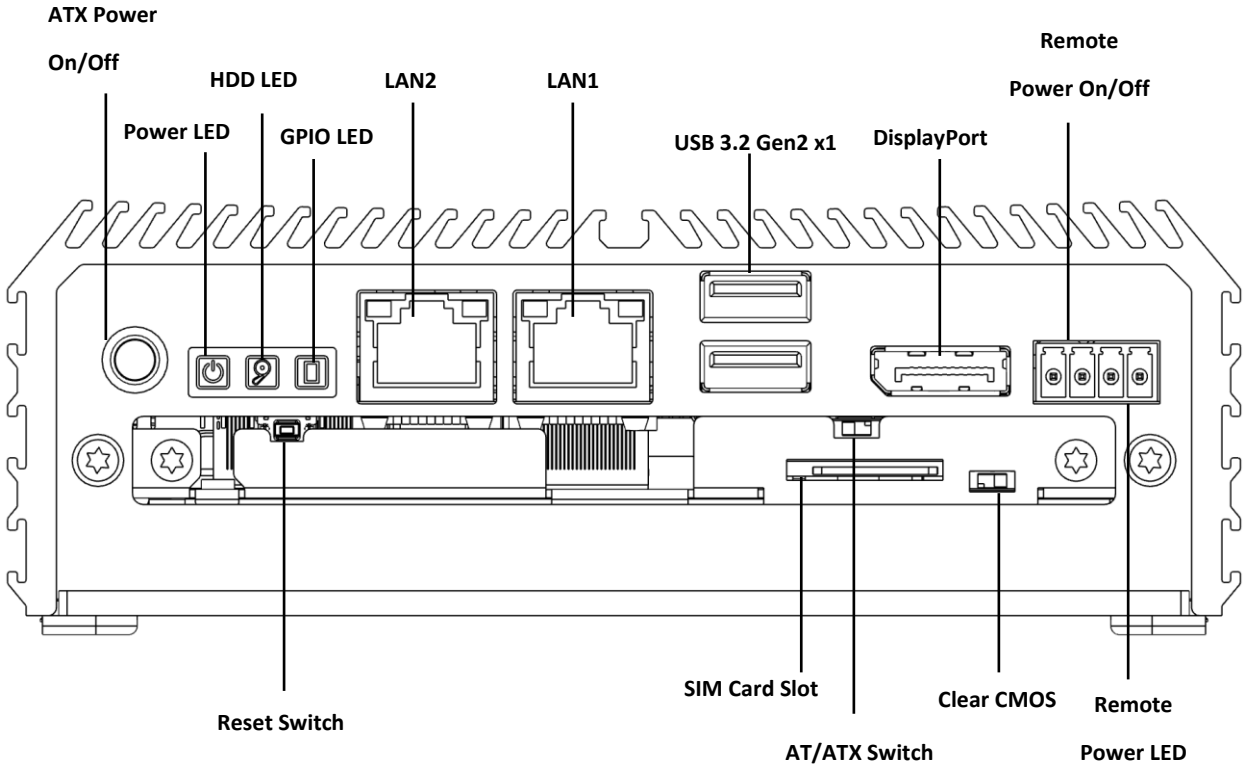
Model Name	DA-1200
System	
Processor	• Onboard Intel® Alder Lake-N Processor N97 Quad Core, up to 3.6 GHz
Memory	• 1x DDR5 SO-DIMM Socket • Supports DDR5 4800MHz Memory Up to 16GB (un-buffered and non-ECC)
BIOS	• AMI BIOS
Graphics	
Graphics Engine	• Integrated Intel® UHD Graphics
Maximum Display Output	• Supports Two Independent Display (Onboard 1x DisplayPort + Optional CMI 1x Display)
DP	• 1x DisplayPort Connector (4096 x 2304 @ 60Hz,According to CPU Specifications) * Verified maximum resolution: 3840 x 2160 @60Hz
I/O	
LAN	• 2x 2.5 GbE LAN, RJ45 - GbE1: Intel® I225 - GbE2: Intel® I225
USB	• 2x 10Gbps USB 3.2 Gen2x1, Type A
Storage	
SSD/HDD	• 1x 2.5" SATA HDD/SSD or 1x Half-Slim SSD (SATA 3.0)
M.2 SSD	• 1 x M.2 SSD shared by M.2 Key B Type 3042/3052 Socket, Support SATA SSD (SATA 3.0) • 1 x M.2 SSD shared by M.2 Key B Type 2242 Socket, Support NVMe SSD (PCIe Gen 3x2)
Expansion	
M.2 Key B Socket	• 1x M.2 Key B Type 3042/3052 Socket, Support 5G/Storage/Add-on Card Expansion • 1 x M.2 Key B Type 2242, Support Storage/Add-on Card Expansion
SIM Socket	• 1 x Front Accessible SIM Socket
CMI (Combined Multiple I/O) Interface	• 1x CMI Interface for optional CMI Module Expansion
Other Function	
Clear CMOS Switch	• 1x Clear CMOS Switch
Reset Button	• 1x Reset Button
Instant Reboot	• Support 0.2sec Instant Reboot Technology
Watchdog Timer	• Software Programmable Supports 256 Levels System Reset
Antenna	• 2x Antenna Holes
Power	
Power Button	• 1x ATX Power On/Off Button
Power Mode Switch	• 1x AT/ATX Mode Switch
Power Input	• 9-48VDC, 3-pin Terminal Block
Remote Power On/Off	• 1x Remote Power On/Off, 2-pin Terminal Block
Remote Power LED	• 1x Remote Power LED, 2-pin Terminal Block
Max. Power Consumption	• N97 CPU: 47.04W - Test conducted with CPU, 1x RAM, and 1x storage • - 100% load during burn-in testing.
Inrush Current (Peak)	• N97 CPU: 4.356 A@12V
Physical	
Dimension (W x D x H)	• 150 x 105 x 52.3 mm
Weight Information	• 0.81 KG
Mechanical Construction	• Extruded Aluminum with Heavy Duty Metal
Mounting	• Wall / Side / DIN-RAIL / VESA Mount
Physical Design	• Fanless Design • Cableless Design • Jumper-less Design • Unibody Design
Reliability & Protection	
Reverse Power Input Protection	• Yes

Over Voltage Protection	• Protection Range: 51-58V • Protection Type: shut down operating voltage, re-power on at the present level to recover
Over Current Protection	• 15A
CMOS Battery Backup	• SuperCap Integrated for CMOS Battery Maintenance-free Operation
MTBF	• 614,831 Hours - Database: Telcordia SR-332 Issue3, Method 1, Case 3
Operating System	
Windows	• Windows®11, Windows®10
Linux	• Ubuntu Desktop 22.04 LTS
Environment	
Operating Temperature	• -40°C to 70°C * PassMark BurnInTest: 100% CPU, 2D/3D Graphics (without thermal throttling) * With extended temperature peripherals; Ambient with air flow * According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14
Storage Temperature	• -40°C to 70°C
Relative Humidity	• 95%RH @ 70°C (non-Condensing)
Shock	• MIL-STD-810H
Vibration	• MIL-STD-810H
EMC	• CE, UKCA, FCC, ICES-003 Class A • EN IEC 61000-6-4 / EN IEC 61000-6-2 (24VDC Input Only)
EMI	• CISPR 32 Conducted & Radiated: Class A • EN/BS EN 55032 Conducted & Radiated: Class A • EN/BS EN IEC 61000-3-2 Harmonic current emissions: Class A • EN/BS EN61000-3-3 Voltage fluctuations & flicker • FCC 47 CFR Part 15B, ICES-003 Conducted & Radiated: Class A
EMS	• EN/IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV • EN/IEC 61000-4-3 RS: 80 MHz to 1000 MHz: 10 V/m • EN/IEC 61000-4-4 EFT: AC Power: 2 kV; DC Power: 1 kV; Signal: 1 kV • EN/IEC 61000-4-5 Surges: AC Power: 2 kV; Signal: 1 kV • EN/IEC 61000-4-6 CS: 10V • EN/IEC 61000-4-8 PFMF: 50 Hz, 30A/m • EN/IEC 61000-4-11 Voltage Dips & Voltage Interruptions: 1 cycles at 60 Hz
Safety	• UL, cUL, CB, IEC, EN 62368-1

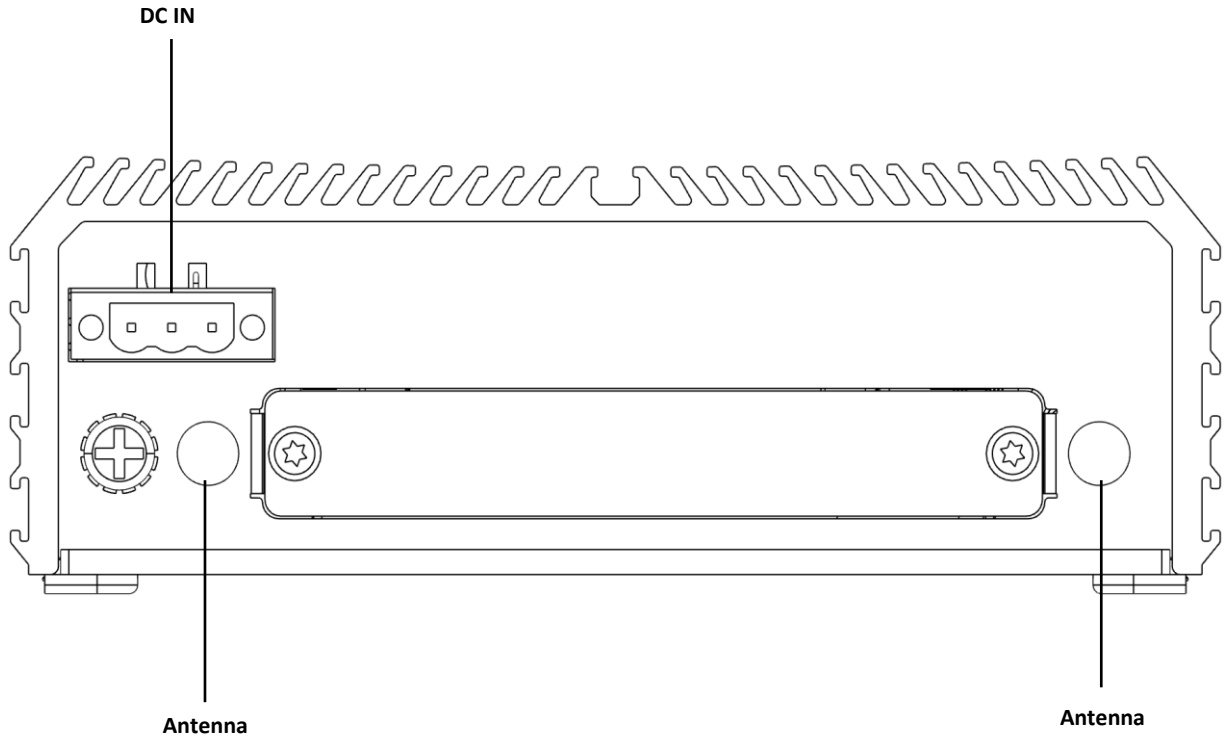
** Product Specifications and features are for reference only and are subject to change without prior notice. For more information, please refer to the latest product datasheet from Cincoze's website.*

1.3 External Layout

1.3.1 Front

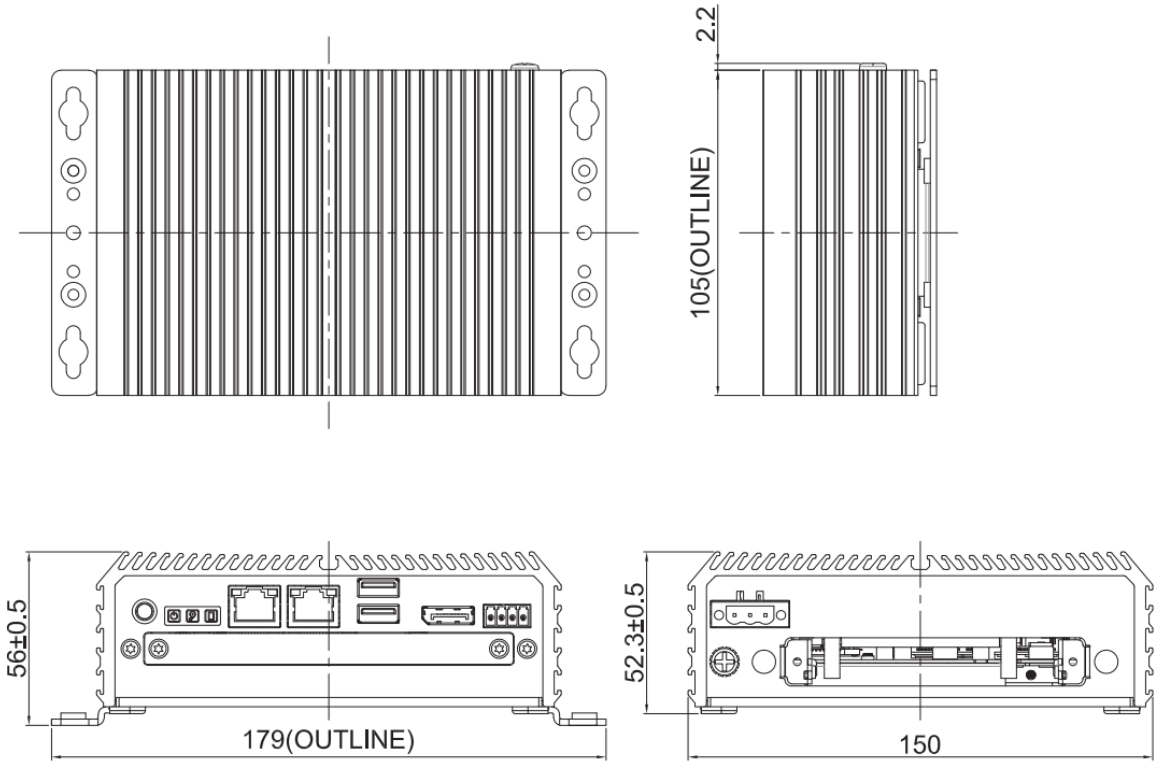


1.3.2 Rear



1.4 Dimensions

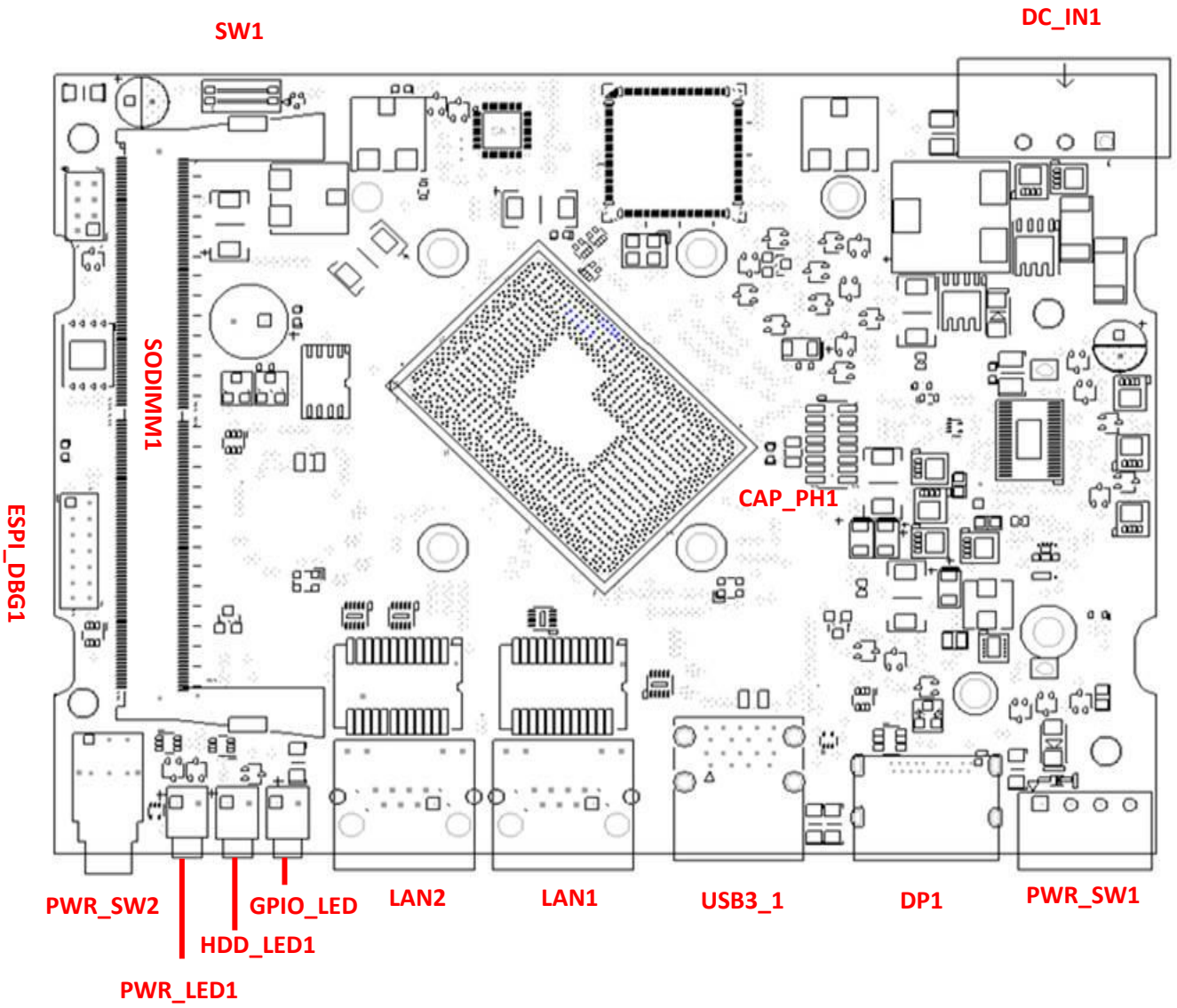
Unit: mm



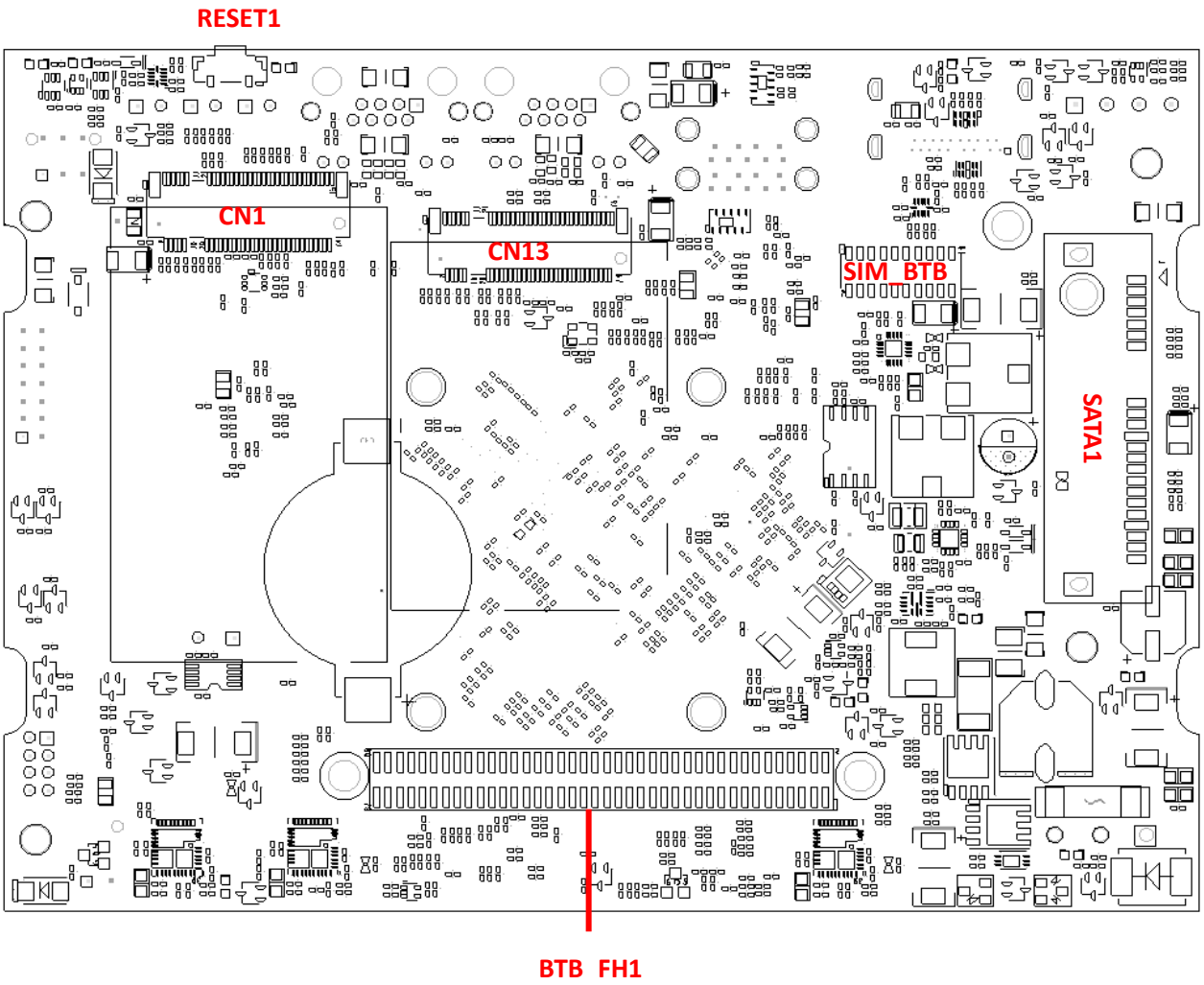
Chapter 2
Introduction to Switches & Connectors

2.1 Location of System Switches and Connectors

2.1.1 Top View



2.1.2 Bottom View



2.2 Switches and Connectors Definition

Location	Definition
AT_ATXA01	AT / ATX Power Mode Switch
BTB_FH1	CMI slot (Support External I/O Board：DP，VGA，DVI，HDMI，LPT，COM，DIO ，PS2)
CAP_PH1	Cap Board board-to-board Connector
CLR_CMOSA01	Clear CMOS Setting Switch
CN1	M.2 Key B Card Connector (Support PCIE/USB3.0/ SATA)
CN13	M.2 Key B Card Connector (Support PCIE type, only PCIE X2)
DC_IN1	3 Pins DC 9-48V Power Input Connector
DP1	Display Port Connector
ESPI_DBG1	Debug port Header
GPIO_LED	GPIO_LED
HDD_LED1	HDD LED
LAN1 / LAN2	LAN Connector
PWR_LED1	Power LED
PWR_SW1	Remote Power on/off Switch Connector and Remote Power LED Connector
PWR_SW2	System Power button
RESET1	System Reset button
SATA1	SATA connector
SIMA01	SIM Card socket
SIM_BTB	AT/ATX Power Mode Switch, Clear CMOS Switch, SIM Card socket board-to-board Connector
SODIMM1	DDR5 SO-DIMM Connector
SW1	Super CAP Control Switch
USB3_1	Two USB 3.2 Gen2 X1 Connector

2.3 Definition of Switches

AT_ATX1 : AT / ATX Power Mode Switch

Switch	Definition
Left	AT Power Mode
Right	ATX Power Mode (Default)

CLR_CMOS1 : Clear CMOS Setting Switch

Switch	Definition
Left	Clear CMOS
Right	Normal (Default)

GPIO_LED : LED for GPIO

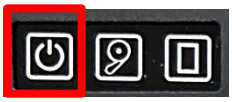
Switch	LED Color	Definition
GPIO LED	Green	GPIO Activity
	OFF	No Activity

HDD_LED1 : LED for HDD

Switch	LED Color	Definition
HDD LED	Yellow	HDD Read/Write
	OFF	No Operation

PWR_LED1 : LED for Power

Switch	LED Color	Definition
Power LED	Green	POWER ON
	Colorless	POWER OFF
	Blinking Green	Stand by



PWR_SW2 : System Power Button

Switch	Definition
Push	Power up the System

RESET1: System Reset Button

Switch	Definition
Push	Reset System

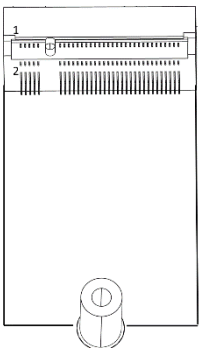
SW1: Super I/O Control Switch

Location	DIP1	DIP2
SW1	On : Normal Status (Default)	On : Normal Status (Default)
	Off : FW Program Enabled (Not Recommended)	Off : Super I/O VBAT Discharged (Not Recommended)

2.4 Definition of Connectors

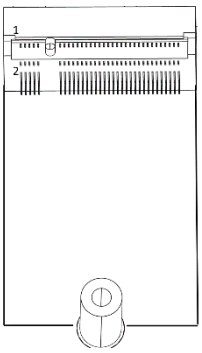
CN1 : M.2 Key B Card Connector (Support PCIE/USB3.0/ SATA)

Pin No.	PIN Name	Pin No.	Pin name
1	CFG3	2	+3.3V
3	GND	4	+3.3V
5	GND	6	PULL-UP
7	USB2-	8	PULL-UP
9	USB2+	10	LED
11	GND	12	KEY Pin
13	KEY Pin	14	KEY Pin
15	KEY Pin	16	KEY Pin
17	KEY Pin	18	KEY Pin
19	KEY Pin	20	M.2_BT_PCMCLK
21	CFG0	22	M.2_BT_PCMIN
23	NC	24	M.2_BT_PCMOUT
25	NC	26	NC
27	GND	28	M.2_BT_PCMFRM
29	PCIE2_RXN/USB3 RXN	30	USIM_RESET
31	PCIE2_RXP/USB3 RXP	32	USIM_CLK
33	GND	34	USIM_DATA
35	PCIE2_TXN/USB3 TXN	36	USIM_PWR
37	PCIE2_TXP/USB3 TXP	38	DEVSLP
39	GND	40	NC
41	PCIE1_RXN/SATA_RXP	42	NC
43	PCIE1_RXP/SATA_RXN	44	NC
45	GND	46	NC
47	PCIE1_TXN/SATA_TXN	48	NC
49	PCIE1_TXP/SATA_TXP	50	RESET#
51	GND	52	NC
53	100M_CLKN	54	WAKE#
55	100M_CLKP	56	NC
57	GND	58	NC
59	NC	60	NC
61	NC	62	NC
63	NC	64	NC
65	NC	66	SIM_DETECT
67	RESET2#	68	SUSCLK
69	CFG1	70	+3.3V
71	GND	72	+3.3V
73	GND	74	+3.3V
75	CFG2	76	NC



CN13 : M.2 Key B Card Connector (Support PCIE type, only PCIE X2)

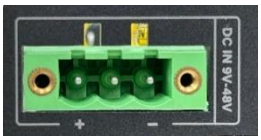
Pin No.	PIN Name	Pin No.	Pin name
1	CFG3	2	+3.3V
3	GND	4	+3.3V
5	GND	6	PULL-UP
7	USB2-	8	PULL-UP
9	USB2+	10	N/A
11	GND	12	KEY Pin
13	KEY Pin	14	KEY Pin
15	KEY Pin	16	KEY Pin
17	KEY Pin	18	KEY Pin
19	KEY Pin	20	M.2_BT_PCMCLK
21	NC	22	M.2_BT_PCMIN
23	NC	24	M.2_BT_PCMOUT
25	NC	26	NC
27	GND	28	M.2_BT_PCMFRM
29	PCIE2_RXN	30	NC
31	PCIE2_RXP	32	NC
33	GND	34	NC
35	PCIE2_TXN	36	NC
37	PCIE2_TXP	38	DEVSLP
39	GND	40	NC
41	PCIE1_RXN	42	NC
43	PCIE1_RXP	44	NC
45	GND	46	NC
47	PCIE1_TXN	48	NC
49	PCIE1_TXP	50	RESET#
51	GND	52	NC
53	100M_CLKN	54	WAKE#
55	100M_CLKP	56	NC
57	GND	58	NC
59	NC	60	NC
61	NC	62	NC
63	NC	64	NC
65	NC	66	NC
67	RESET2#	68	SUSCLK
69	NC	70	+3.3V
71	GND	72	+3.3V
73	GND	74	+3.3V
75	NC	76	NC



DC_IN1: 3 Pins DC 9-48V Power Input Connector

Connector Type: Terminal Block 1x3 3-pin, 5.0mm pitch

Pin	Definition
1	+9-48VIN
2	NA
3	GND



1 2 3

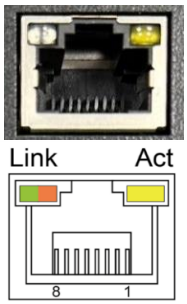
CAUTION (ATTENTION)

Please disconnect the power source before mounting the DC power cables or connecting the DC power connector to system.

(Veuillez débrancher la source d'alimentation avant de monter les câbles d'alimentation CC ou de connecter le connecteur d'alimentation CC au système.)

LAN1/ LAN2 LED Status Definition

Link Speed LED Status	Definition
Steady Green	2.5 Gbps Network Link
Steady Orange	1 Gbps Network Link
Off	100 Mbps/ 10 Mbps Network Link
Link Act LED Status	**Definition**
Blinking Yellow	Link and Data Activity
Steady Yellow	Link but No Activity
Off	No Link



PWR_SW1: Remote Power on/off Switch Connector and Remote Power LED Connector

Remote Power LED connector can connect an external LED indicator up to 10mA.

Connector Type: Terminal Block 1X4 4-pin, 3.5mm pitch

Pin	Definition
1	Remote Power Button
2	GND
3	Remote Power LED
4	GND

1 2 3 4

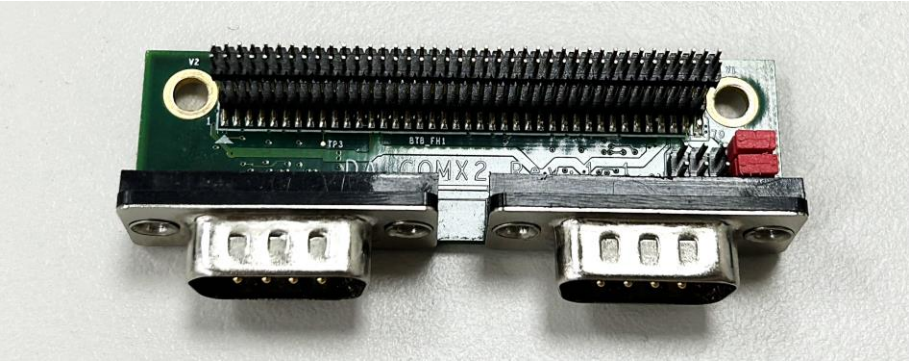
WARNING (AVERTIR)

For Remote Power on/off Switch Connector (pin 1 & pin 2) : Do not apply any power to this connector! This port is used to connect a SWITCH!

(Pour la télécommande de mise sous/hors tension (broche 1 et broche 2) : Ne fournissez aucune alimentation à ce connecteur ! Ce port est utilisé pour connecter un INTERRUPTEUR !)

2.5 Optional Module Pin Definition & Settings

2.5.1 CMI-COM102 Module



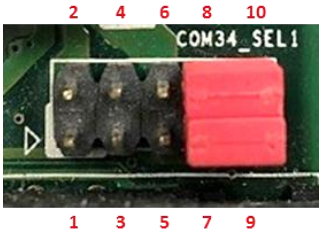
COM3 and COM4 (on the module) : COM Port Connector (Support RS232/RS422/RS485)

Connector Type: 9-pin D-Sub

Pin	RS232 Definition	RS422 / 485 Full Duplex Definition	RS485 Half Duplex Definition
1	DCD	TX-	DATA -
2	RXD	TX+	DATA +
3	TXD	RX+	
4	DTR	RX-	
5	GND		
6	DSR		
7	RTS		
8	CTS		
9	RI		

COM34_SEL1 : COM3 and COM4 Power Select Switch

Function		PIN
COM3	5V	1-3
	12V	3-5
	RI	7-9 (Default)
COM4	5V	2-4
	12V	4-6
	RI	8-10 (Default)

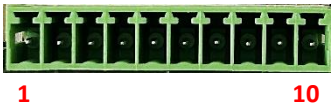


2.5.2 CMI-DIO100 Module

DIO1 (on the module): Digital IN Connector

Connector Type: Terminal Block 1X10 10-pin, 3.5mm pitch

Pin	Definition	Pin	Definition
1	XCOM+ (DC INPUT)	6	DO1
2	DI1	7	DO2
3	DI2	8	DO3
4	DI3	9	DO4
5	DI4	10	XCOM- (GND)



Chapter 3
System Setup

3.1 Removing Top Cover

WARNING (AVERTIR)

In order to prevent electric shock or system damage, must turn off power and disconnect the unit from power source before removing the chassis cover.
(Afin d'éviter tout risque d'électrocution ou d'endommagement du système, vous devez couper l'alimentation et débrancher l'appareil de la source d'alimentation avant de retirer le couvercle du châssis.)

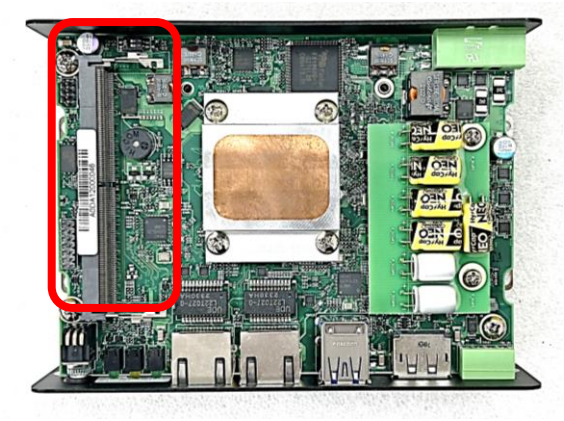
Step 1. Loosen the 4 screws on the bottom panel of the system.

Step 2. Remove the bottom panel and then the system body from the chassis.

Step 3. Place the system body aside gently.

3.2 Installing SO-DIMM Memory

Step 1. Locate the SO-DIMM sockets.



Step 2. Tilt the SO-DIMM module at a 45-degree angle and insert it to SO-DIMM socket until the gold-pated connector of module contacted firmly with the socket.

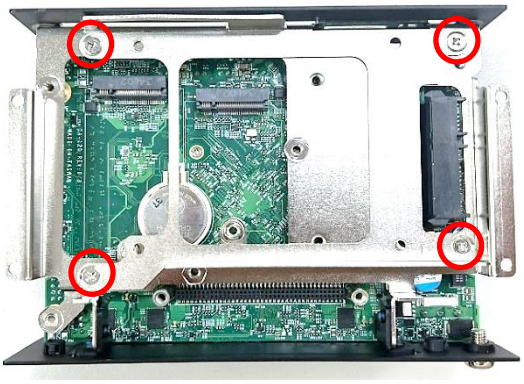
Step 3. Press the modules down until it’s fixed firmly by the two locking latches on each side.

3.3 Installing M.2 Key B Module

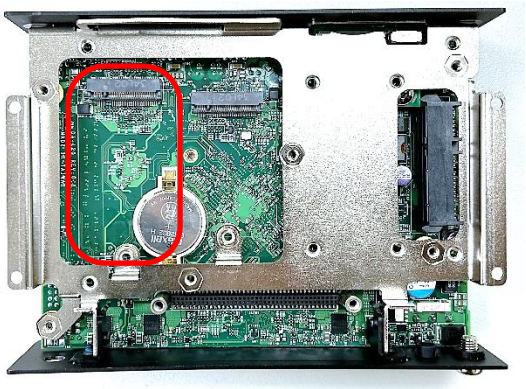
If there are installation and application requirements for the M.2 Key B Module, the hard drive selection must be the Bare Half-Slim PCB in case of any interference with the mechanism. For installation instructions of the Bare Half-Slim, please refer to Chapter 3.6.2.

3.3.1 M.2 Key B type 3052

Step 1. Loosen the screws to remove the HDD bracket.



Step 2. Locate the M.2 Key B 3052 slot (CN1).

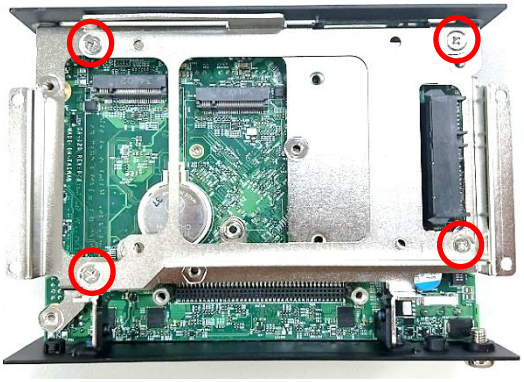


Step 3. Insert the M.2 Key B module at a 45-degree angle and insert it to the slot until the gold-pated connector of module contacted firmly with the slot.

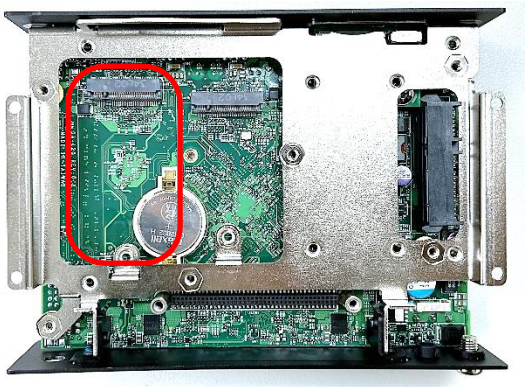
Step 4. Press down the module and fasten the screw to secure the module.

3.3.2 M.2 Key B type 3042

Step 1. Loosen the screws to remove the HDD bracket.



Step 2. Locate the M.2 Key B 3052 slot (socket CN1).



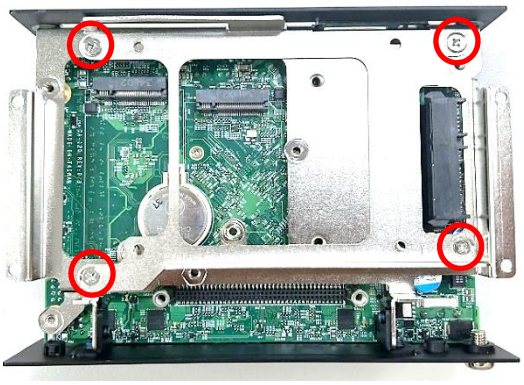
Step 3. Place the M.2 Key B Type 3052 to 3042 Adapter Bracket with aligning the corresponding screw hole, and then fasten the screw.

Step 4. Insert the M.2 Key B module at a 45-degree angle and insert it to the slot until the gold-pated connector of module contacted firmly with the slot.

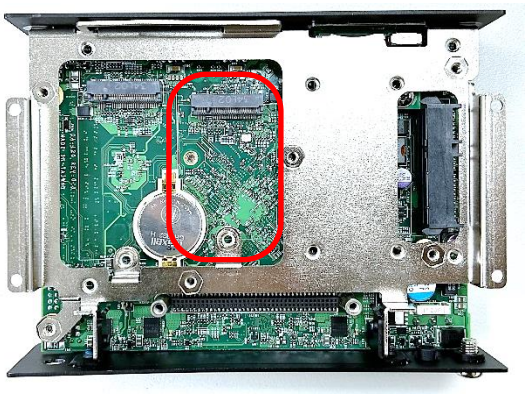
Step 5. Press down the module and fasten the screw to secure the module.

3.3.3 M.2 Key B type 2242

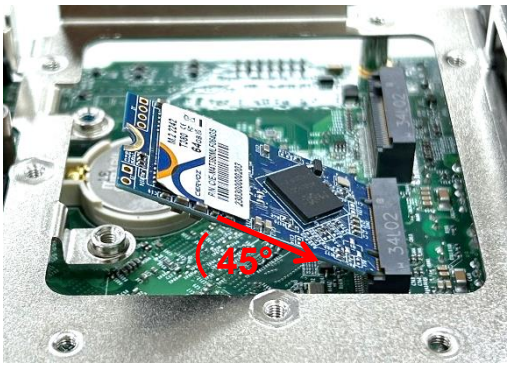
Step 1. Loosen the screws to remove the HDD bracket.



Step 2. Locate the M.2 Key B 2242 slot (socket CN13).



Step 3. Insert the M.2 Key B module at a 45-degree angle and insert it to the slot until the gold-pated connector of module contacted firmly with the slot.

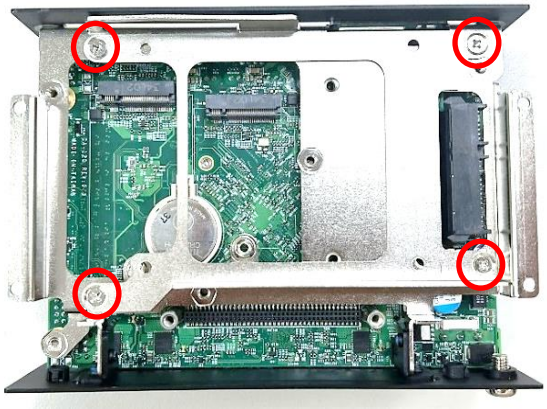


Step 4. Press down the module and fasten the screw to secure the module.

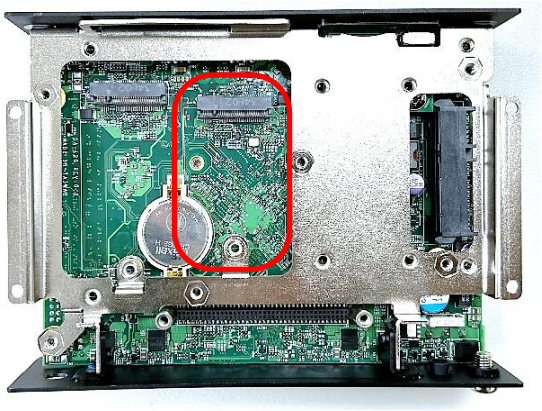
3.3.4 M.2 Key E type 2230

In this chapter, you'll learn how to install an M.2 Key E type 2230 device onto the DA-1200 system. To complete the installation, you'll need to purchase our M.2 Key B Type 2242 to M.2 Key E Type 2230 Adapter Card (Model: AC-BE01). This optional accessory enables you to seamlessly install the M.2 Key E type 2230 device onto the system.

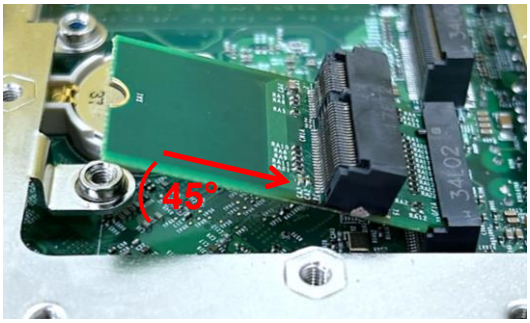
Step 1. Loosen the screws to remove the HDD bracket.



Step 2. Locate the M.2 Key B 2242 slot (socket CN13).



Step 3. Insert the M.2 Key B module at a 45-degree angle and insert it to the slot until the gold-pated connector of module contacted firmly with the slot.



Step 4. Press down the module and fasten the screw to secure the module.

Step 5. Insert the M.2 Key E module at a 45-degree angle and insert it to the slot until the gold-pated connector of module contacted firmly with the slot.

Step 6. Press down the module and fasten the screw to secure the module.

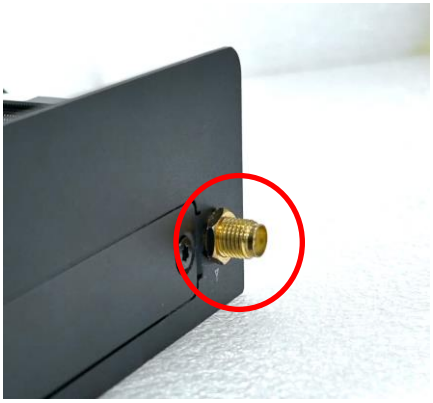
3.4 Installing Antenna(s)

Please refer to Chapter 3.3.1 to install a Wireless Module at connect CN1 before antenna installation.

Step 1. Remove the antenna hole cover(s) on the rear panel of the system.

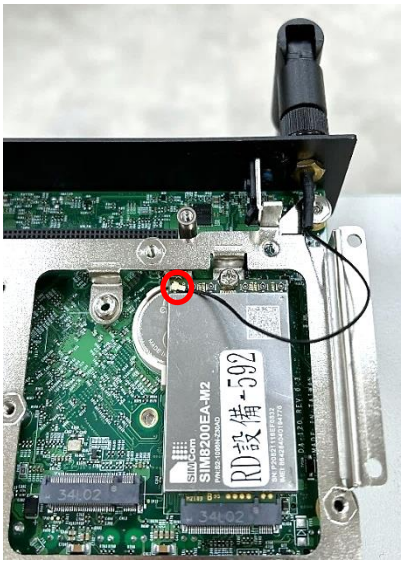
Step 2. Have the antenna jack penetrate through the hole.

Step 3. Put on the washer and fasten the nut with the antenna jack.



Step 4. Assemble the antenna and antenna jack together.

Step 5. Attach the RF connector at another end of cable onto the module.



3.5 Installing Antenna Cutout Universal Bracket

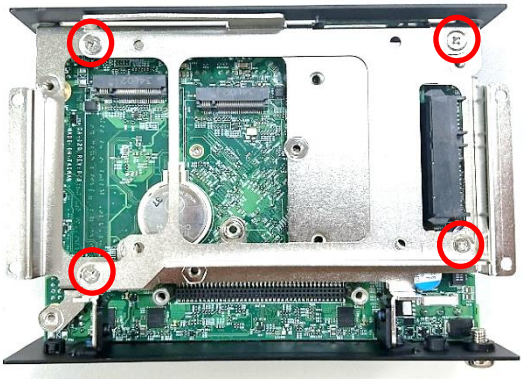
This is an optional Universal Bracket (Model No. UB0429) with 2x Antenna Cutouts designed for expanding the capabilities of 5G/4G cards. Installing this UB allows users to mount antennas on these two Antenna Cutouts. For instructions on how to install the antennas through the antenna holes, please refer to the previous chapter 3.4.

Step 1. Loosen the 2 screws on the rear panel without removing them to take off the cover plate.

Step 2. Attach the I/O bracket on to the system, and fasten the screws to fix it. For guidance on antenna installation methods, please refer to Chapter 3.4.

3.6 Installing SATA Hard Drive

Step 1. Loosen the screws to remove the HDD bracket.



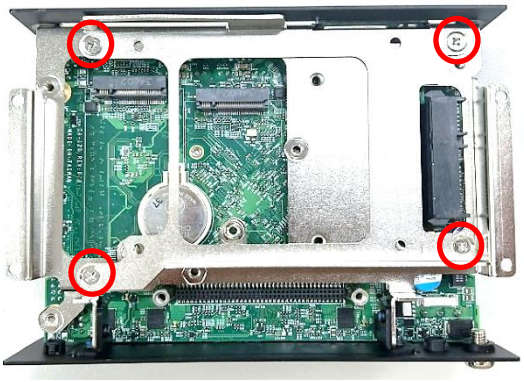
Step 2. Make the PCB side of the HDD face up, place the HDD bracket on it. Ensure the direction of bracket is correct and use 4 provided screws to assemble HDD and HDD bracket together.

Step 3: Flip the HDD bracket over and connect it to the SATA connector, then fasten the four screws.

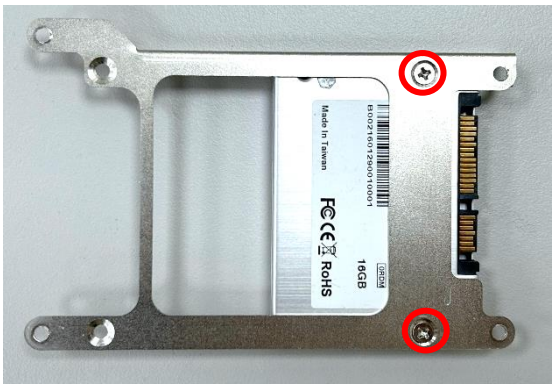
3.7 Installing a Half-Slim SSD

3.7.1 Half-Slim SSD with Enclosure

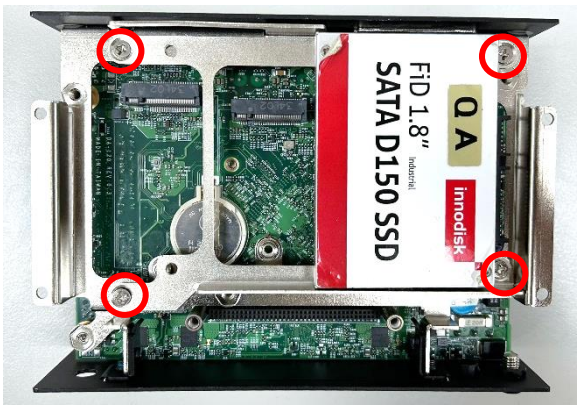
Step 1. Loosen the screws to remove the HDD bracket.



Step 2. Make the PCB side of the HDD face up, place the HDD bracket on it. Ensure the direction of bracket is correct and use 4 provided screws to assemble HDD and HDD bracket together.

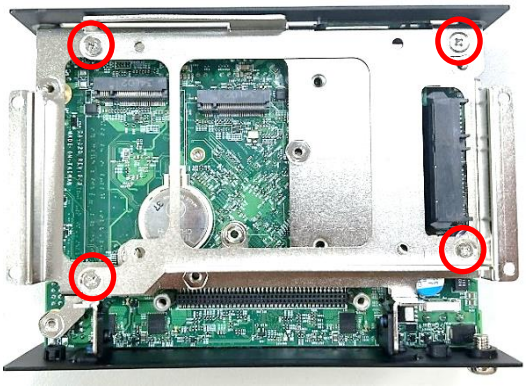


Step 3: Flip the HDD bracket over and connect it to the SATA connector, then fasten the four screws.

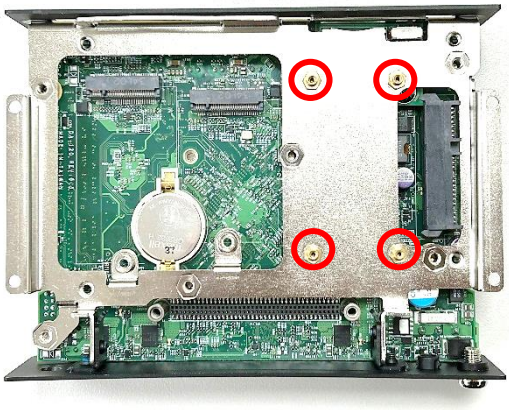


3.7.2 Bare Half-Slim SSD PCB

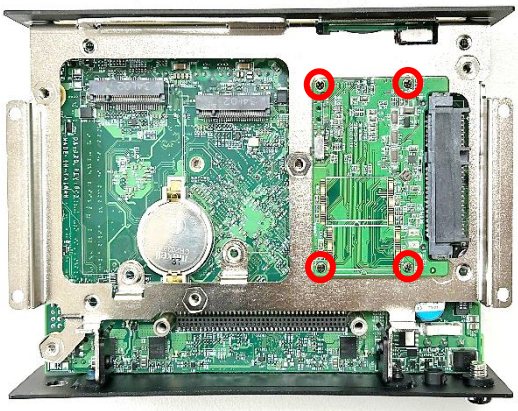
Step 1. Loosen the screws to remove the HDD bracket.



Step 2. Fasten the 4 copper pillars (M3X3, attached in the Screw Pack).

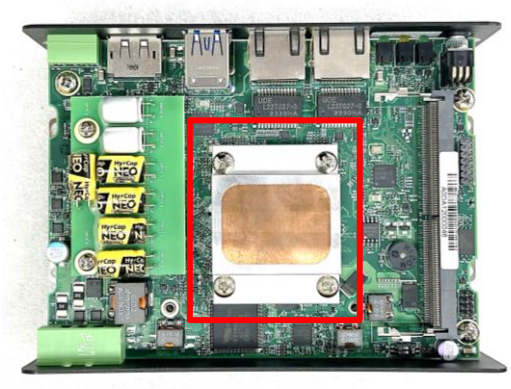


Step 3. Connect the Half Slim SSD to the SATA connector of the unit and fasten the 4 screws (M1.6x3, attached in the Screw Pack).



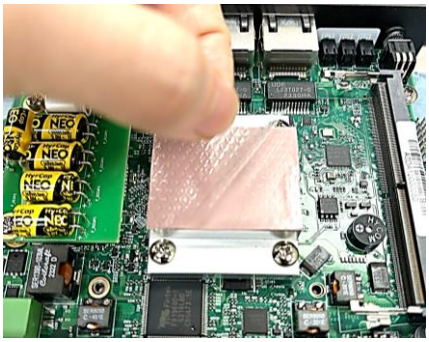
3.8 Installing CPU Heatsink Thermal Pad

Step 1. Locate the CPU heatsink.



Step 2. Remove the protective film from one side of the Thermal Pad and then place the thermal pad onto the CPU heatsink.

Step 3. Remove the protective film from the other side of the Thermal Pad to enable its proper function



CAUTION
(ATTENTION)

Before assembling the system's chassis cover, please make sure the protective films on the Thermal Pad have been removed!

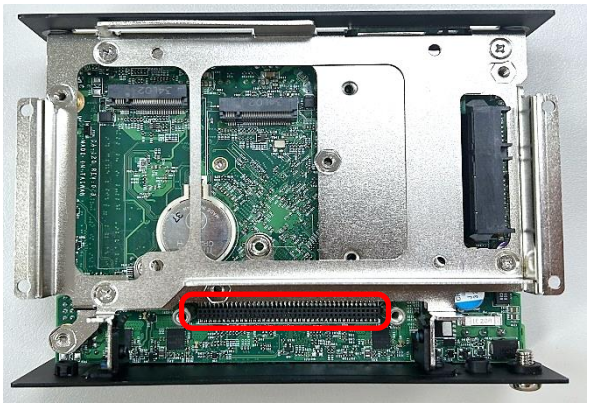
(Avant d'assembler le couvercle du châssis du système, assurez-vous que le film protecteur sur le coussin thermique a été retiré !)

3.9 Installing CMI Modules

3.9.1 CMI-COM102/UB0403

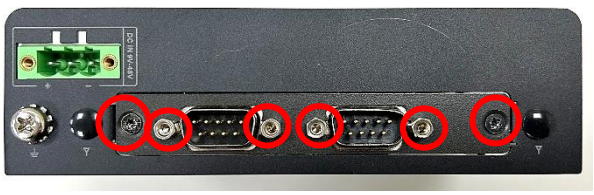
Step 1. Loosen the 2 screws on the rear panel without removing them to take off the cover plate.

Step 2. Locate the BTB_FH1 connector on the top side of system.



Step 3. Insert the CMI module vertically with aligning the pin holes. And then secure it with the two screws.

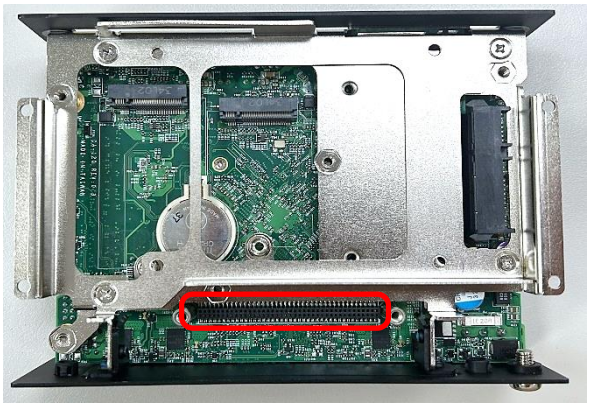
Step 4. Attach the I/O bracket and fasten the screws to fix it.



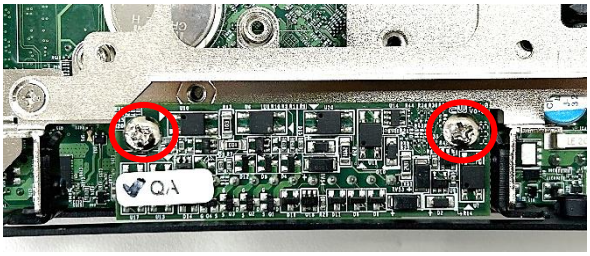
3.9.2 CMI-DIO100/UB0415

Step 1. Loosen the 2 screws on the rear panel without removing them to take off the cover plate.

Step 2. Locate the BTB_FH1 connector on the top side of system.



Step 3. Insert the CMI module vertically with aligning the pin holes. And then secure it with the two screws.

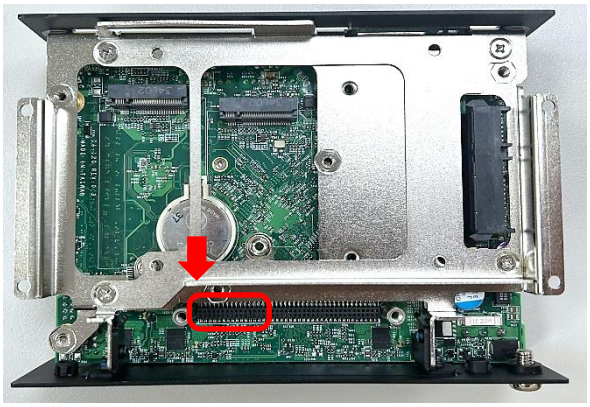


Step 4. Attach the I/O bracket and fasten the screws to fix it.

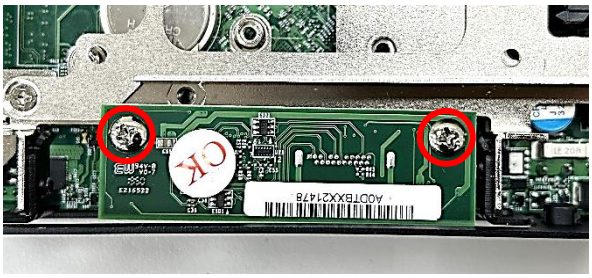
3.9.3 CMI-DP101/UB0406

Step 1. Loosen the 2 screws on the rear panel without removing them to take off the cover plate.

Step 2. Locate the left 30 pins of the BTB_FH1 connector on the top side of system.



Step 3. Insert the CMI module vertically with aligning the pin holes. And then secure it with the two screws.



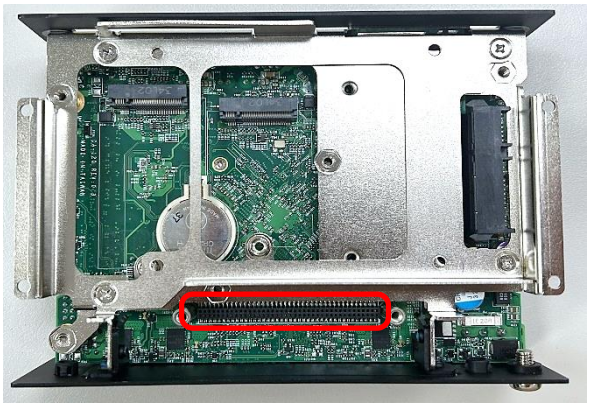
Step 4. Attach the I/O bracket on to the system, and fasten the screws to fix it.

Please ensure the Graphics Configuration in the BIOS is set appropriately for successful display from this module.

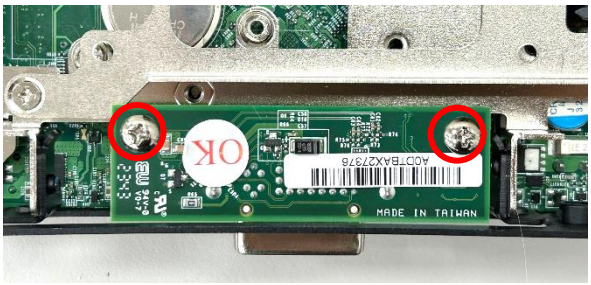
3.9.4 CMI-DVI101/UB0407

Step 1. Loosen the 2 screws on the rear panel without removing them to take off the cover plate.

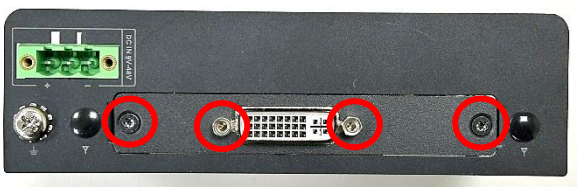
Step 2. Locate the BTB_FH1 connector on the top side of system.



Step 3. Insert the CMI module vertically with aligning the pin holes. And then secure it with the two screws.



Step 4. Attach the I/O bracket on to the system, and fasten the screws to fix it.

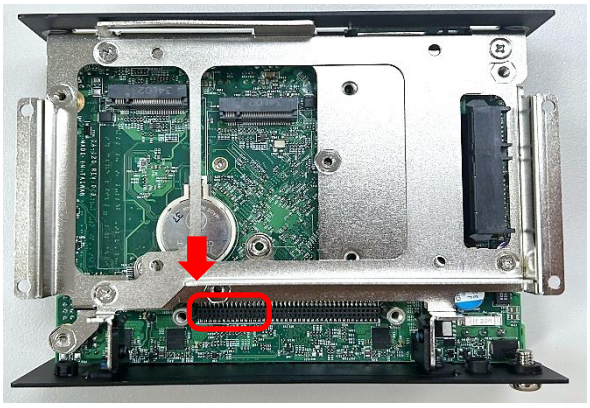


Please ensure the Graphics Configuration in the BIOS is set appropriately for successful display from this module.

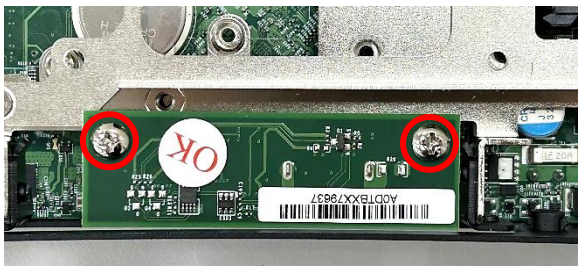
3.9.5 CMI-HD01/UB0408

Step 1. Loosen the 2 screws on the rear panel without removing them to take off the cover plate.

Step 2. Locate the left 30 pins of the BTB_FH1 connector on the top side of system.



Step 3. Insert the CMI module vertically with aligning the pin holes. And then secure it with the two screws.



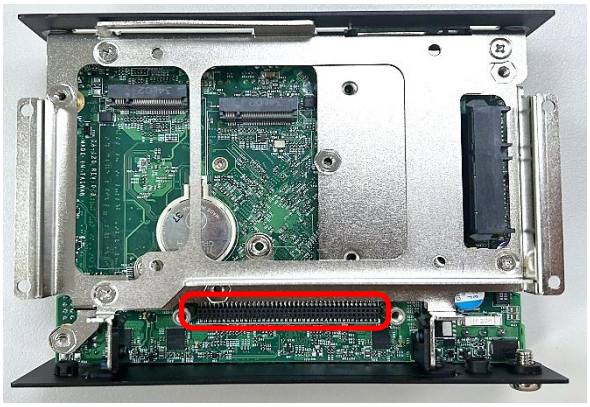
Step 4. Attach the I/O bracket on to the system, and fasten the screws to fix it.

Please ensure the Graphics Configuration in the BIOS is set appropriately for successful display from this module.

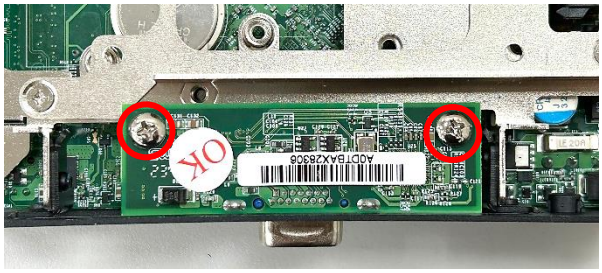
3.9.6 CMI-VGA101/UB0416

Step 1. Loosen the 2 screws on the rear panel without removing them to take off the cover plate.

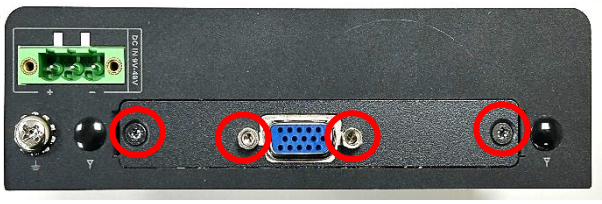
Step 2. Locate the BTB_FH1 connector on the top side of system.



Step 3. Insert the CMI module vertically with aligning the pin holes. And then secure it with the two screws.



Step 4. Attach the I/O bracket on to the system, and fasten the screws to fix it.

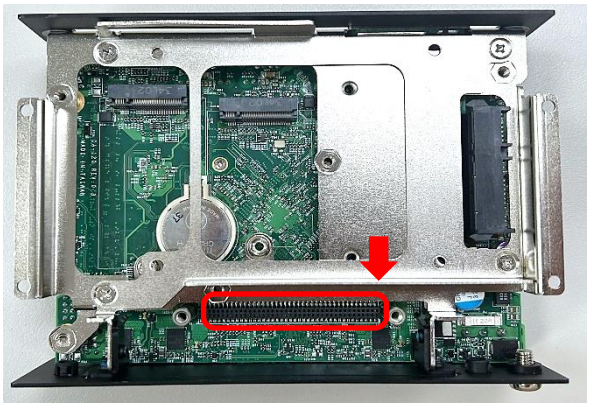


Please ensure the Graphics Configuration in the BIOS is set appropriately for successful display from this module.

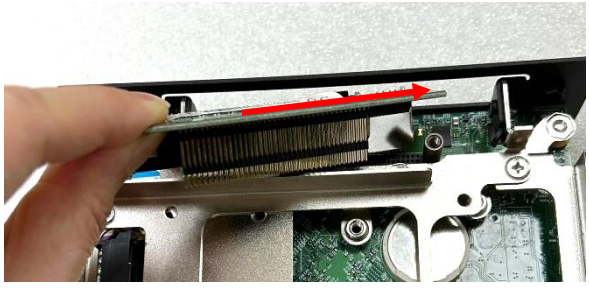
3.9.7 CMI-LPPS102/UB0409

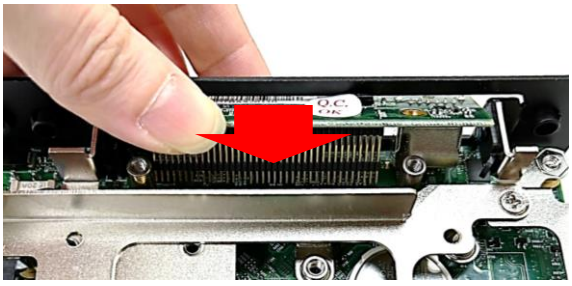
Step 1. Loosen the 2 screws on the rear panel without removing them to take off the cover plate.

Step 2. Locate the right 76 pins of the BTB_FH1 connector on the top side of system.

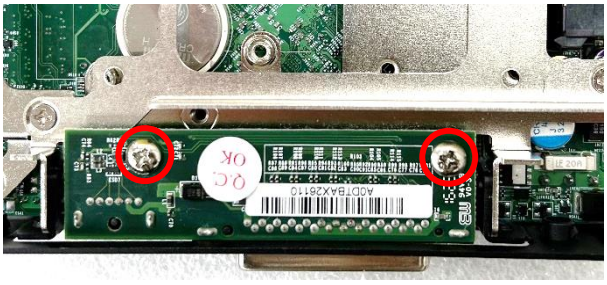


Step 3. Thread the module through the cavity designated for I/O bracket with an inclined angle and insert the CMI module vertically with aligning the right 76 pin holes.





Step 4. Secure it with the two screws.



Step 5. Attach the I/O bracket on to the system, and fasten the screws to fix it.

3.10 Installing Top Cover

Step 1. Put the system body back into the chassis and then put on the bottom panel.

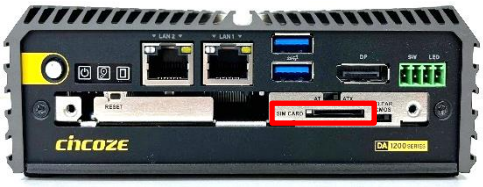
Step 2. Fasten the 4 screws back to the bottom panel of the system.

3.11 Installing SIM Card

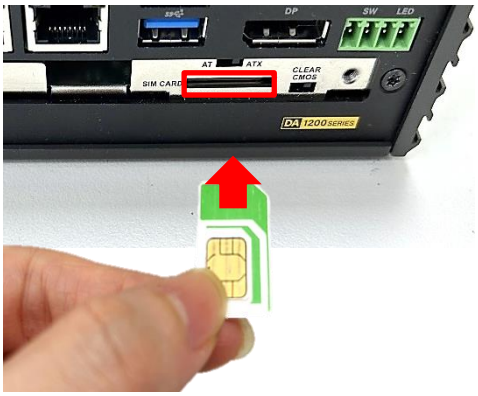
Please refer to **Chapter 3.3.1** to install a 5G/4G module at connect CN1 before the SIM card installation for the SIM application.

Step 1. Loosen the 2 screws on the front panel without removing them to take off the cover plate.

Step 2. Locate the SIM card slot.



Step 3. Insert the SIM card into the SIM slot(s) with the gold contacts facing up. Please pay attention to the insert orientation as illustrated.



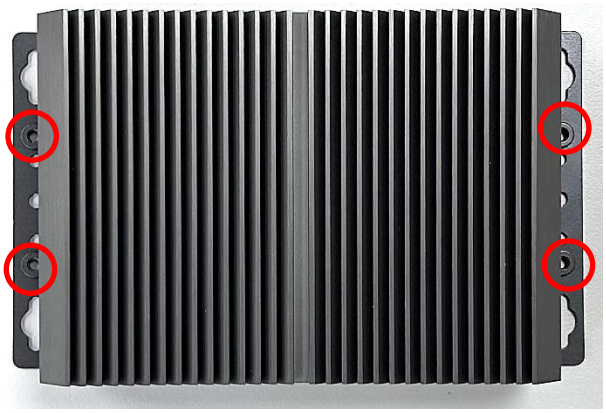
Step 4. Fasten the 2 screws on the front panel.

3.12 Installing Wall Mount

The DA-1200 series offers a wall mount kit included with the system (two wall brackets and one screw pack with size of M3x4L), allowing customers to install it on the wall in a convenient and economical way.

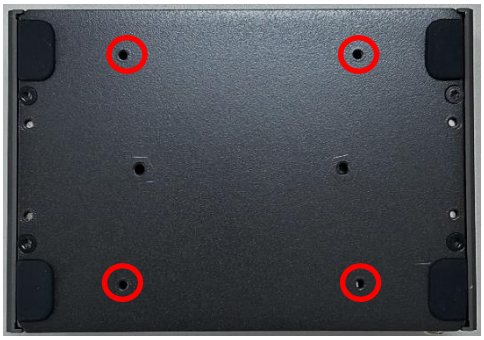
Step 1. Locate the four screw holes on the bottom panel of the system. Attach the brackets by aligning them with the four screw holes, and use the provided four screws to secure the brackets on both sides of the system.

Step 2. The indicated two mounting holes at left and right sides are designed to fix the system on the wall.

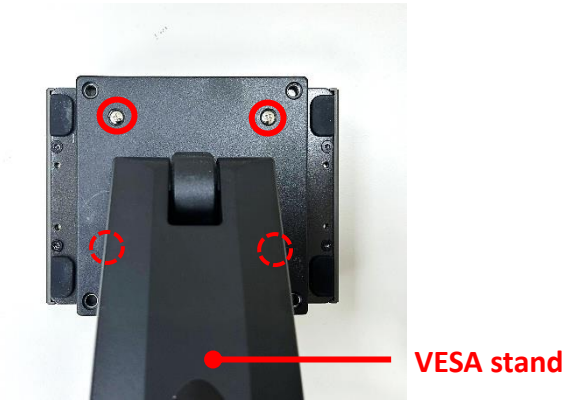


3.13 Installing VESA Mount

DA-1200 offers VESA Mount that customer can mount system with panel complying with VESA 75mm standard for various usage.



Step 1. Align the stand with the screw holes on the system, then secure it in place by tightening the corresponding number of screws as shown below. (Please note the VESA mounting holes deep 3 mm at the back of the terminal are provided with 4 x M3-type blind fasteners to fix the VESA mounting plate. A different screw length (L) should be selected.)

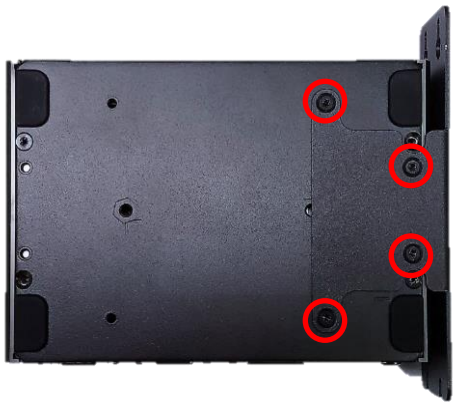


Step 2. Then, the VESA mount installation is complete.

3.14 Installing Side Mount

The DA-1200 series offers an optional accessory for side mounting, Side Mount Kit (Model No. SIDE02) as shown below. If you have acquired this accessory, please refer to the installation instructions hereafter.

Step 1. The mounting holes are at the bottom of system. Fasten the 4 screws (M3x4L) to fix the side mount bracket with system together.



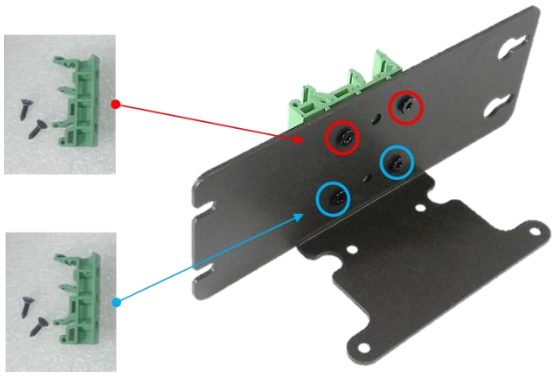
Step 2: Then it is feasible to secure the system to the wall by fastening the screws through the bracket mounting holes as indicated afterward.

3.15 Installing DIN-Rail Mount

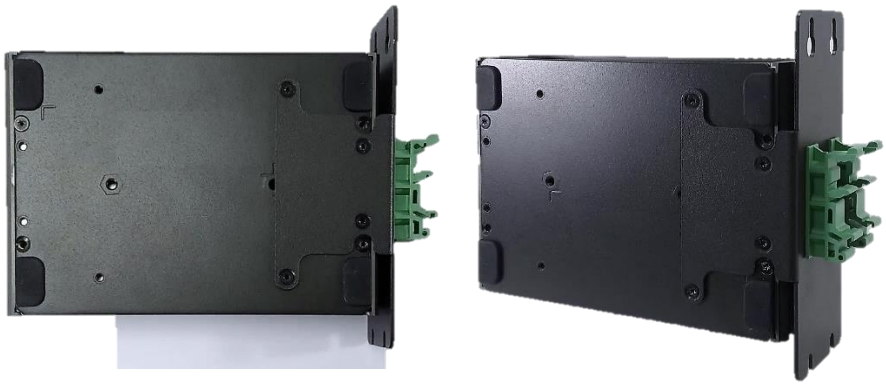
3.15.1 DIN-Rail Mount Clips (on Side Mount Bracket)

DA-1200 series offers DIN-Rail Mount Clips (KMRH-K175) and side mount bracket that customer can install system on the DIN Rail.

Step 1. Fasten 2 DIN rail mounting clips to the side mount bracket with provided 4 screws (screw size: T3x10.5) as illustrated.



Step 2. Refer to Chapter 3.14 to install the side mounting bracket at a side of system.



3.15.2 DIN-Rail Mounting Kit

DA-1200 series offers an optional accessory for DIN-Rail mounting, Side Mount Kit (Model No. DINRAIL) as shown below. If you have acquired this accessory, please refer to the installation instructions hereafter.

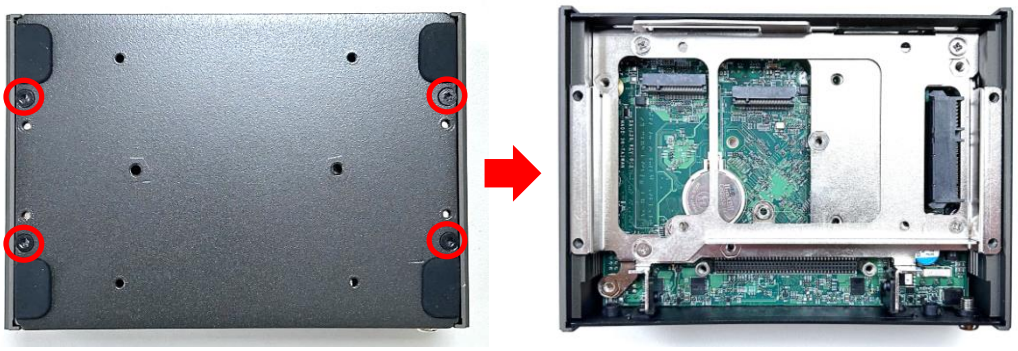
Step 1. Locate the two mounting holes for DIN-rail mounting on the bottom of system, and then fasten the 2 screws (with each screw size of P4x5L) to fix the DIN-Rail mounting bracket with the system together.

Step 2. Then user can clip the system through the mounting kit into DIN rail.

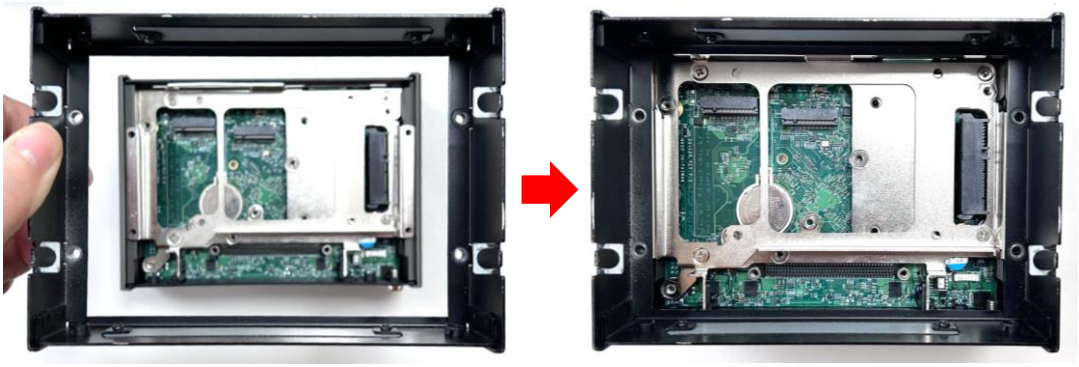
3.16 Installing Expansion Box

The DA-1200 series offers an expansion box (Model No.: SEB-DA01, an expansion box and four Male-Female Hex Standoff M3x30, allowing users to install optional MEC modules on the DA-1200 motherboard.

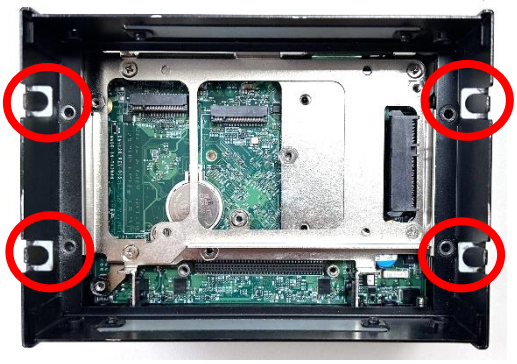
Step 1. Turn over the system unit to have the bottom side face up, loosen the 4 screws on the bottom cover then remove the bottom cover, and place them aside for later use.



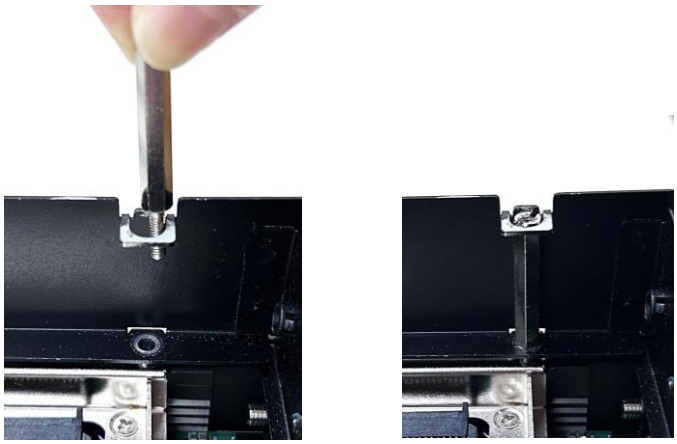
Step 2. Carefully place the expansion box onto the system unit according to the direction as shown below.



Step 4. Locate the four mounting holes on the unit.



Step 5. Align the four hex standoffs with the holes on the expansion box, insert them through, and fasten them into the mounting holes on the system unit using a flathead screwdriver.



Step 6. Place the bottom cover back onto the chassis.

Step 7. Fasten the 4 screws back onto the bottom cover.

Step 8. Then the installation process is complete.

Chapter 4
BIOS Setup

4.1 BIOS Introduction

The BIOS (Basic Input/ Output System) is a program located on a Flash Memory on the motherboard. When you start the computer, the BIOS program will gain control. The BIOS first operates an auto-diagnostic test called POST (power on self-test) for all the necessary hardware, it detects the entire hardware device and configures the parameters of the hardware synchronization.

BIOS Setup

Power on the computer and by pressing <Del> immediately allows you to enter Setup. If the message disappears before your respond and you still wish to enter Setup, restart the system to try again by turning it OFF then ON or pressing <Ctrl>, <Alt> and <Delete> keys.

Control Keys	
<←> <→>	Move to select screen
<↑> <↓>	Move to select item
<Esc>	Quit the BIOS Setup
<Enter>	Select item
<Page Up/+>	Increases the numeric value or makes changes
<Page Down/->	Decreases the numeric value or makes changes
<Tab>	Select setup fields
<F1>	General help
<F2>	Previous value
<F3>	Load Optimized defaults
<F10>	Save configuration and Exit

Main Menu

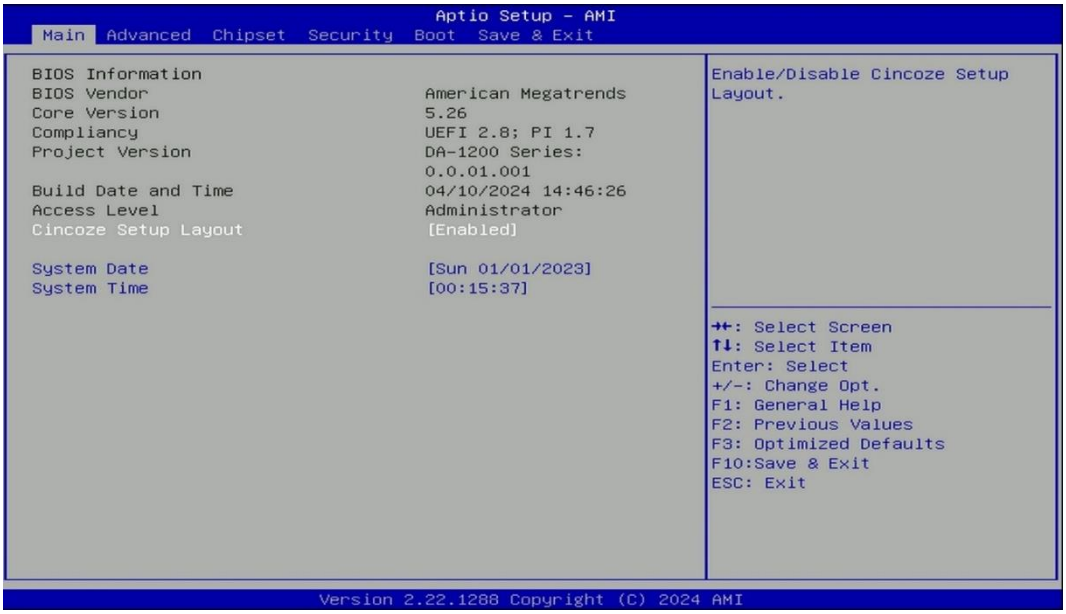
The main menu lists the setup functions you can make changes to. You can use the arrow keys (↑↓) to select the item. The on-line description of the highlighted setup function is displayed at the bottom of the screen.

Sub-Menu

If you find a right pointer symbol appears to the left of certain fields that means a sub-menu can be launched from this field. A sub-menu contains additional options for a field parameter. You can use arrow keys (↑↓) to highlight the field and press <Enter> to call up the sub-menu. Then you can use the control keys to enter values and move from field to field within a sub-menu. If you want to return to the main menu, just press the <Esc >.

4.2 Main Setup

Press <Del> to enter BIOS CMOS Setup Utility, the Main Menu (as shown below) will appear on the screen. Use arrow keys to move among the items and press <Enter> to accept or enter a sub-menu.



- **System Date**

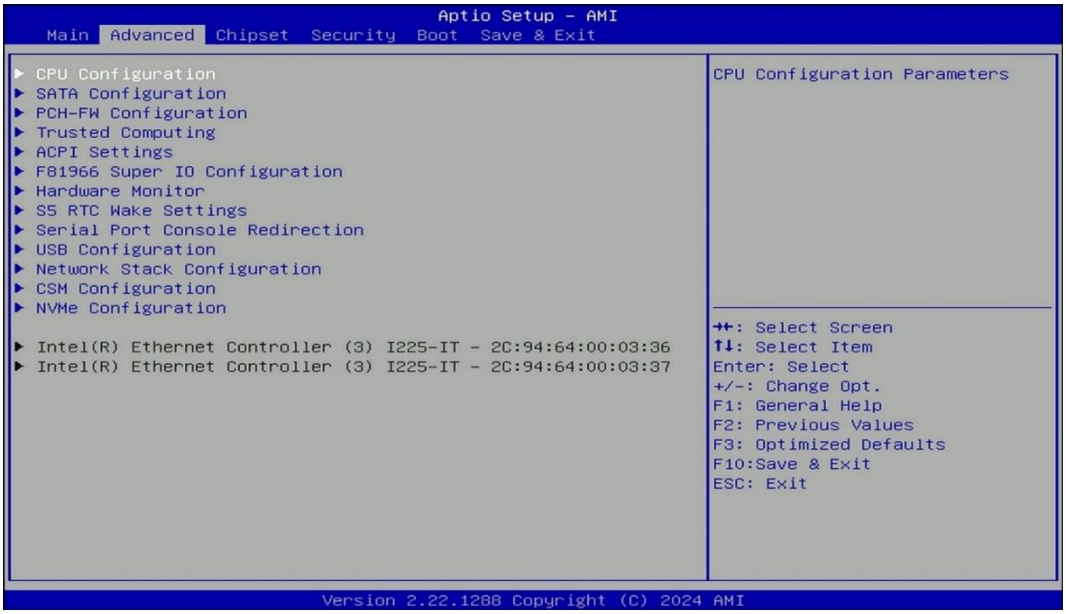
Set the date. Please use <Tab> to switch between date elements.

- **System Time**

Set the time. Please use <Tab> to switch between time elements.

4.3 Advanced Setup

This section allows you to configure and improve your system and allows you to set up some system features according to your preference.



4.3.1 CPU Configuration

- **Intel (VMX) Virtualization Technology [Enabled]**

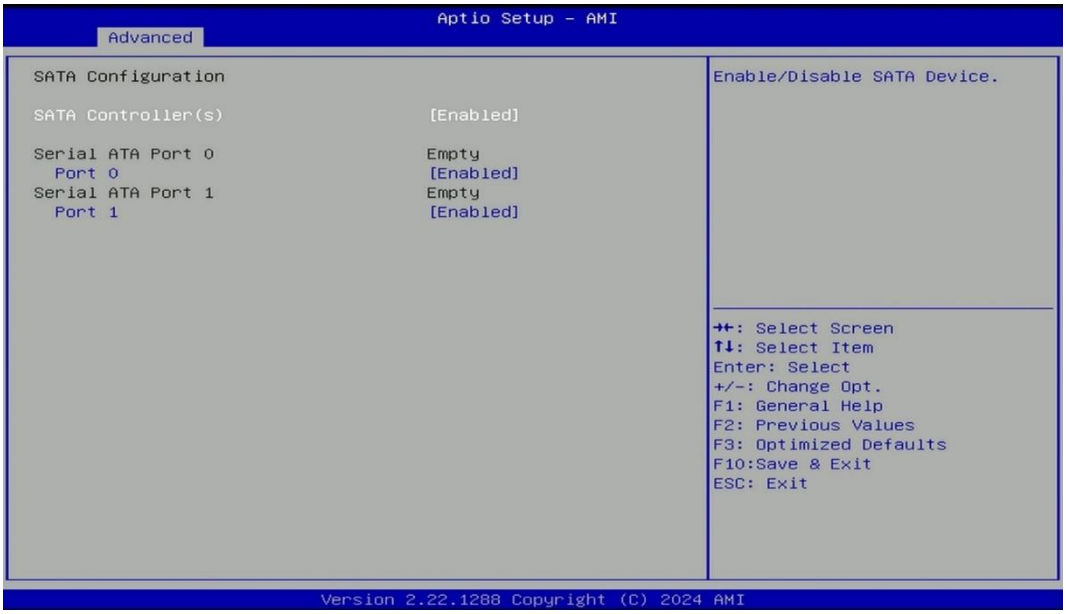
Enables or disables Intel Virtualization Technology. Virtualization enhanced by Intel Virtualization Technology will allow a platform to run multiple operating systems and applications in independent partitions. With virtualization, one computer system can function as multiple virtual systems.

- **Active Efficient-cores**

Allows you to choose the number of active efficient cores.

Configuration options: [All] [3] [2] [1] [0].

4.3.2 SATA Configuration



- **SATA Controller(s) [Enabled]**

Enables or disables SATA device.

- **Serial ATA Port 0**

Port 0 [Enabled]

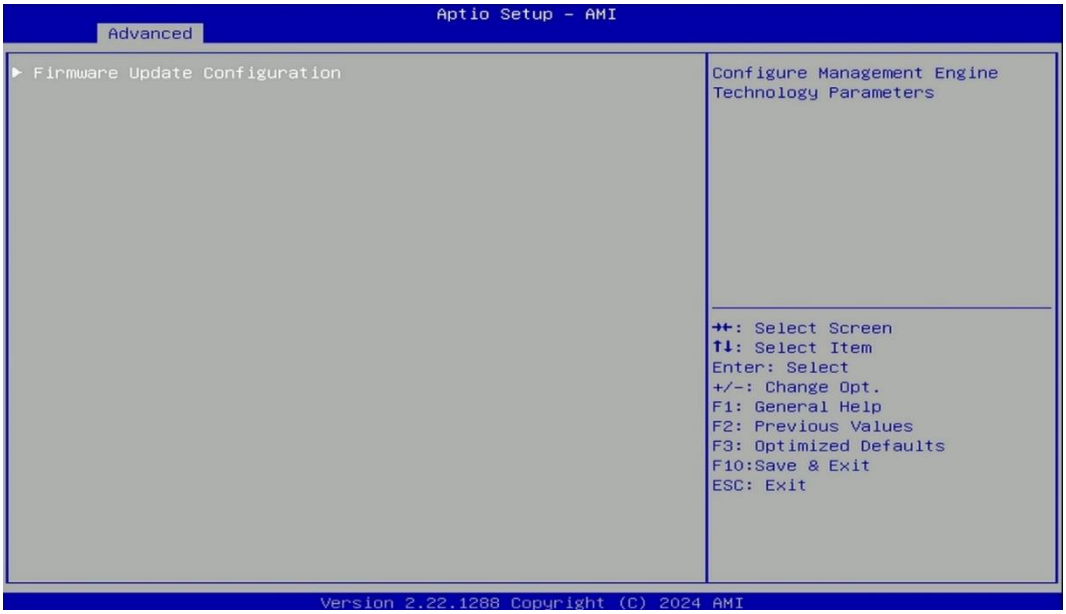
Enables or disables SATA Port 0.

- **Serial ATA Port 1**

Port 1 [Enabled]

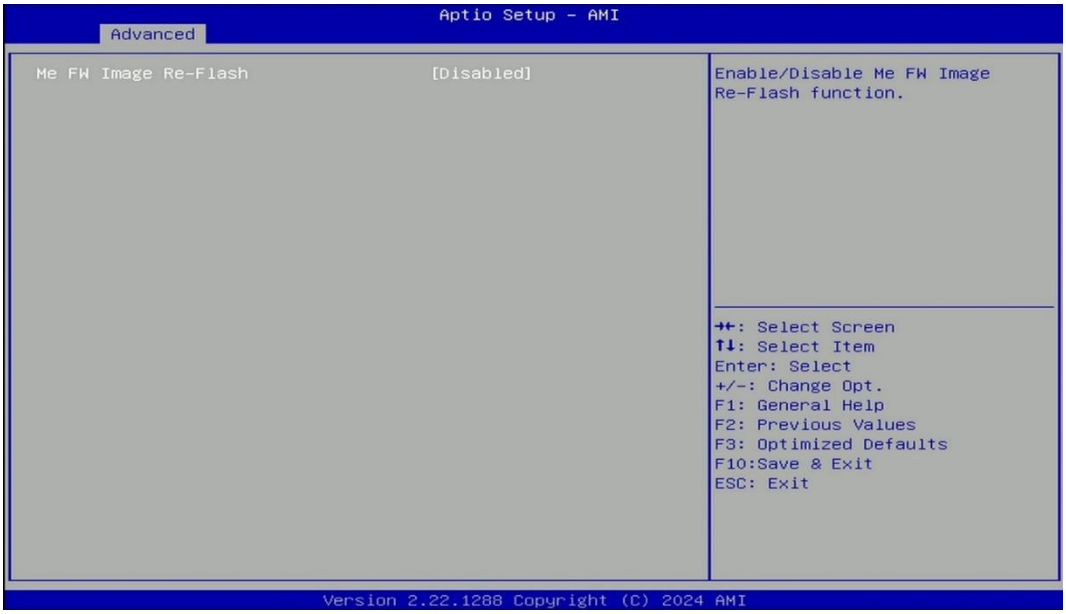
Enables or disables SATA Port 1.

4.3.3 PCH-FW Configuration



■ **Firmware Update Configuration**

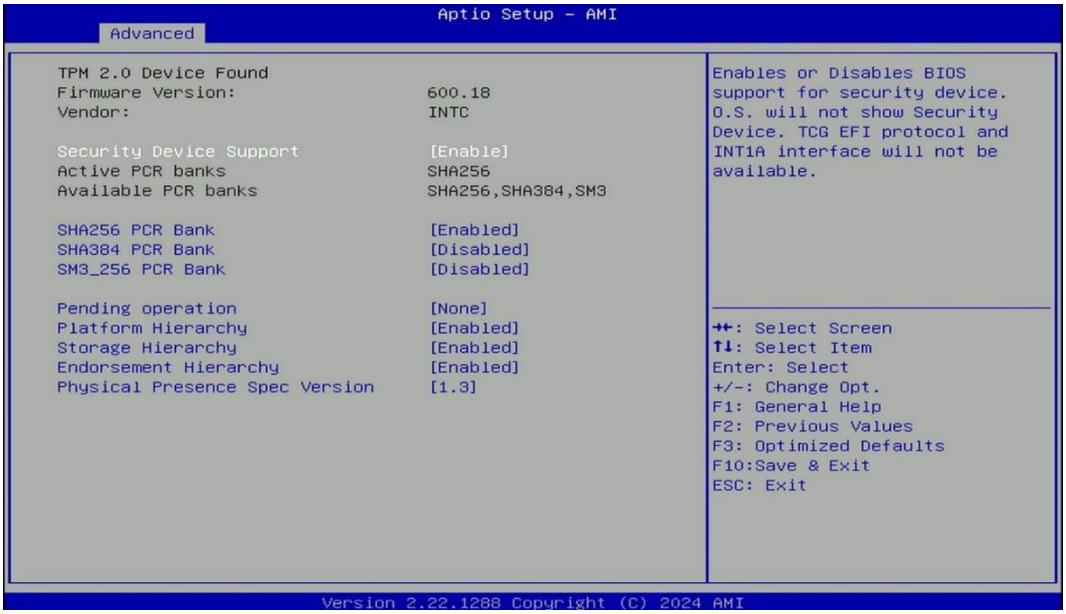
Configure Management Engine Parameters



■ **Me FW Image Re-Flash [Disabled]**

Enables or disables ME firmware Image Re-Flash function.

4.3.4 Trusted Computing Settings



- **Security Device Support [Enabled]**

Enables or disables Security Device Support function.

- **SHA256 PCR Bank [Enabled]**

Enables or disables SHA256 PCR Bank function.

- **SHA384 PCR Bank [Disabled]**

Enables or disables SHA384 PCR Bank function.

- **SM3_256 PCR Bank [Disabled]**

Enables or disables SM3_256 PCR Bank function.

- **Pending Operation [None]**

Allows you to select which mode Pending Operation will operate.

Configuration options: [None], [TPM Clear]

- **Platform Hierarchy [Enabled]**

Enables or disables Platform Hierarchy function.

- **Storage Hierarchy [Enabled]**

Enables or disables Storage Hierarchy function.

- **Endorsement Hierarchy [Enabled]**

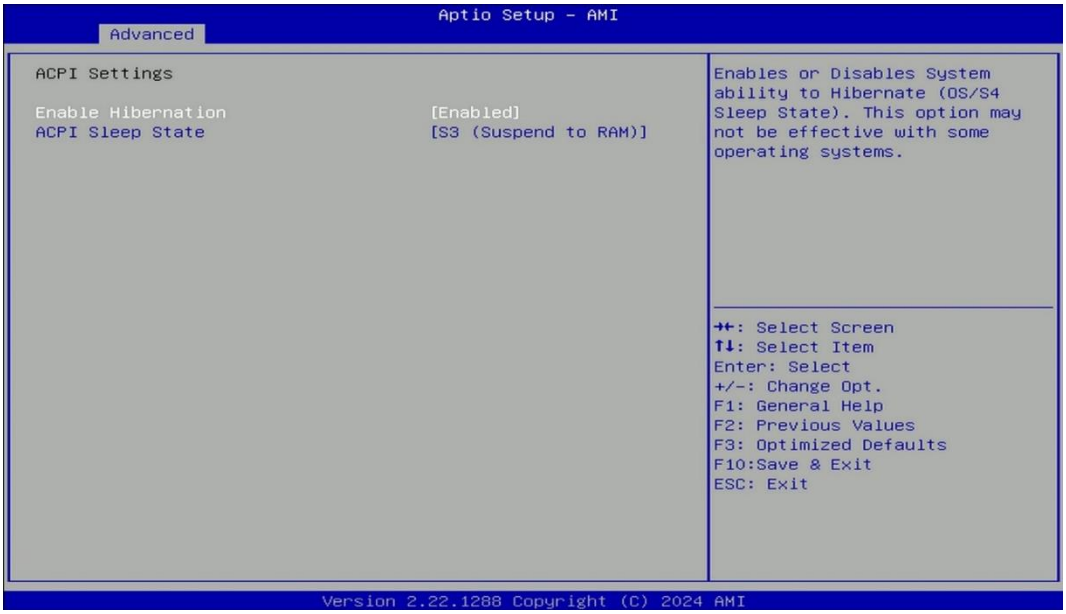
Enables or disables Endorsement Hierarchy function.

- **Physical Presence Spec Version [1.3]**

Allows you to select which mode Physical Presence Spec Version will operate.

Configuration options: [1.2], [1.3]

4.3.5 ACPI Settings



- **Enable Hibernation [Enabled]**

Enables or disables system ability to hibernate state (OS/S4 state). This option may not be effective with some OS.

- **ACPI Sleep State [S3 (Suspend to RAM)]**

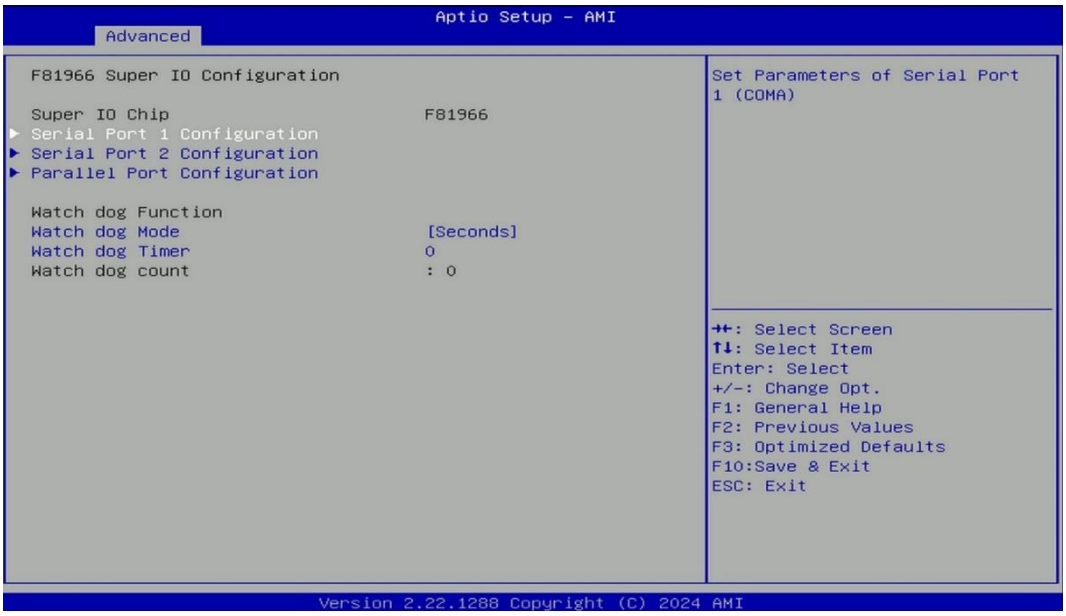
Allows users to select the highest Advanced Configuration Power Interface® (ACPI) sleep state that system will enter when suspend button is pressed.

[Suspend Disabled]: Disables entering suspend state.

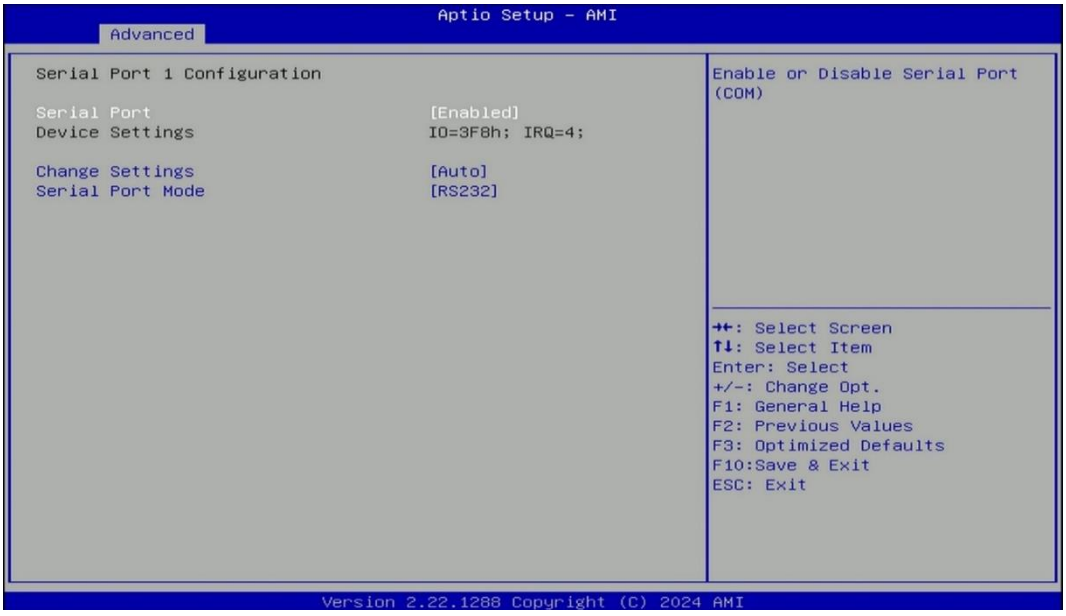
[S3 (suspend to RAM)]: Enables suspend to RAM state.

4.3.6 F81966 Super IO Configuration

Set Parameters of Serial Ports. User can Enable/Disable the serial port and select an optimal setting for the Super IO Device.



- **Serial Port 1 Configuration.**



- **Serial Port [Enabled]**

Enables or disables serial port.

- **Change Settings [Auto]**

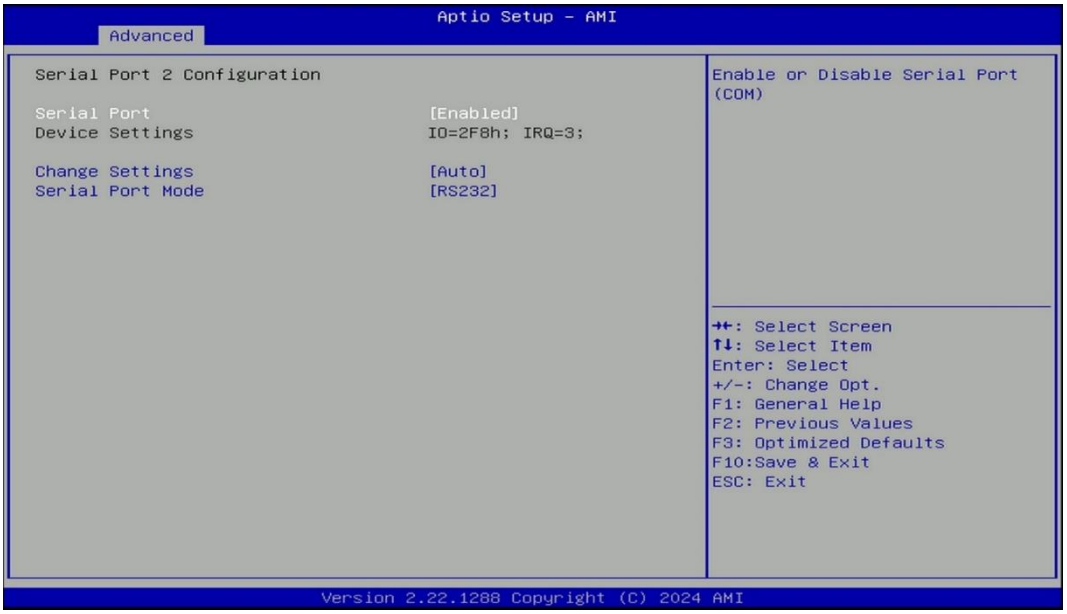
Allows you to change the IO Address & IRQ settings of the specified serial port.

- **Serial Port Mode [RS232]**

Allows you to select Serial Port Mode.

Configuration options: [RS232] [RS422/RS485 Full Duplex] [RS485 Half Duplex]

- **Serial Port 2 Configuration.**



- **Serial Port [Enabled]**

Enables or disables serial port.

- **Change Settings [Auto]**

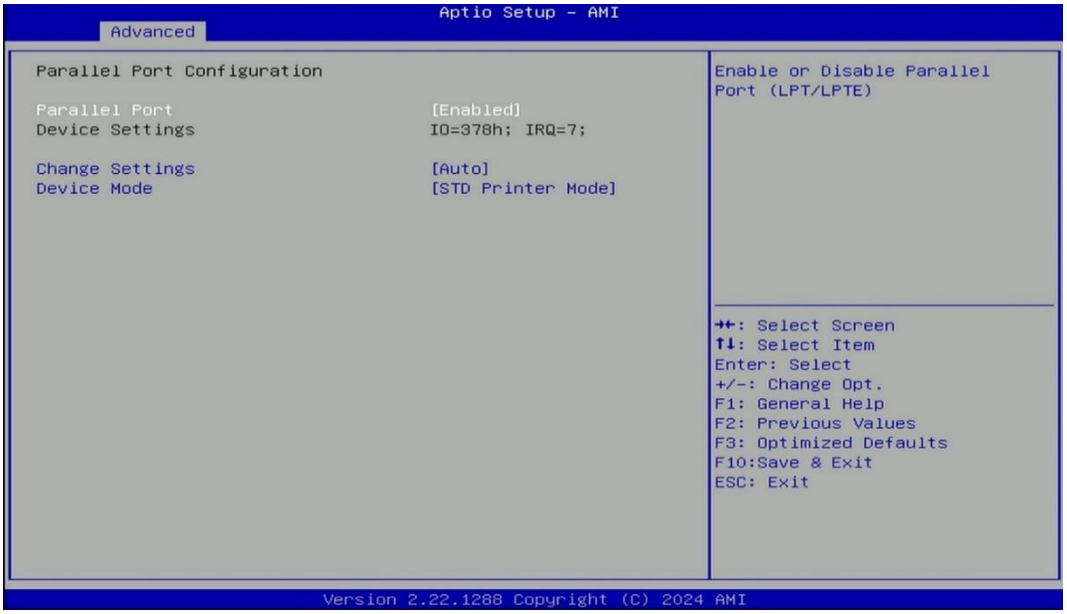
Allows you to change the IO Address & IRQ settings of the specified serial port.

- **Serial Port Mode [RS232]**

Allows you to select Serial Port Mode.

Configuration options: [RS232] [RS422/RS485 Full Duplex] [RS485 Half Duplex]

- **Parallel Port Configuration.**



- **Parallel Port [Enabled]**

Enables or disables serial port.

- **Change Settings [Auto]**

Allows you to change the IO Address & IRQ settings of the specified serial port.

- **Device Mode [STD Printer Mode]**

Allows you to select the Device Mode.

Configuration options: [STD Printer Mode] [SPP Mode] [EPP-1.9 and SPP Mode] [EPP-1.7 and SPP Mode] [ECP Mode] [ECP and EPP 1.9 Mode] [ECP and EPP 1.7 Mode]

- **Watch Dog Mode [Sec]**

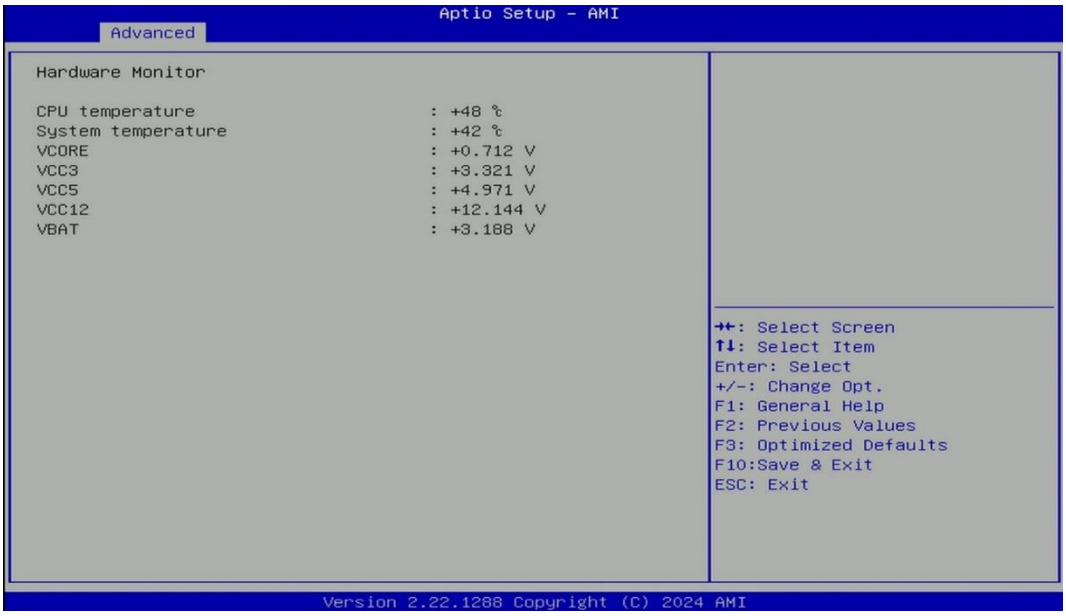
Allows to set watchdog timer unit <Sec> or <Min>.

- **Watch Dog Timer [0]**

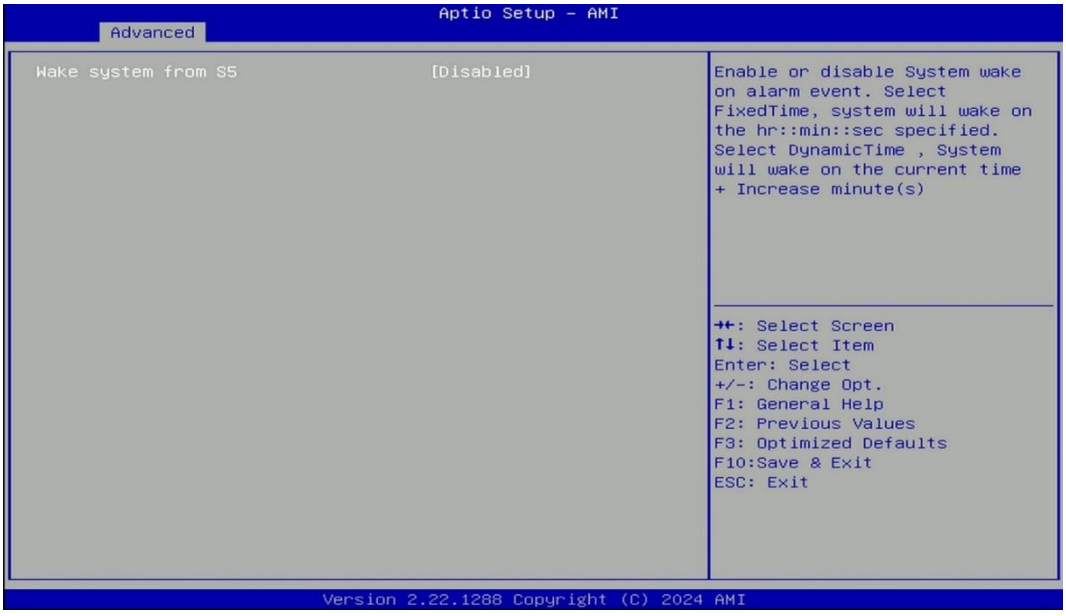
Allows you to set watchdog timer’s value in the range of 0 to 255.

4.3.7 Hardware Monitor

This screen displays the current status of all monitored hardware devices/components such as voltages, temperatures.



4.3.8 S5 RTC Wake Settings



■ **Wake system from S5 [Disabled]**

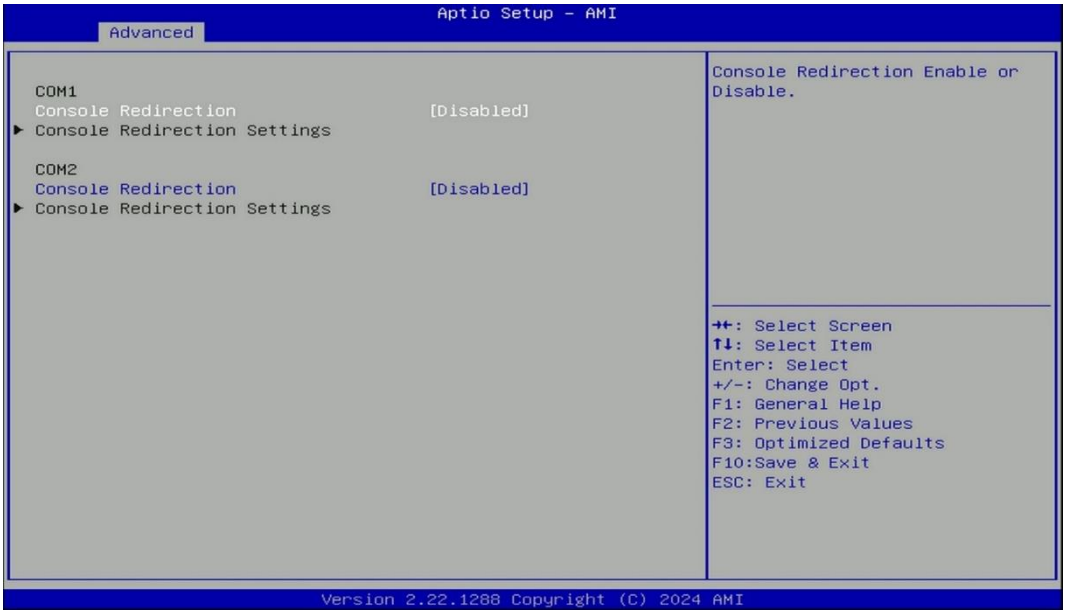
Enables or disables wake system from S5 (soft-off state).

[Disabled]: Disables wake system from S5.

[Fixed Time]: Sets a fixed time (HH:MM:SS) to wake system from S5.

[Dynamic Time]: Sets an increase minute(s) from current time to wake system from S5.

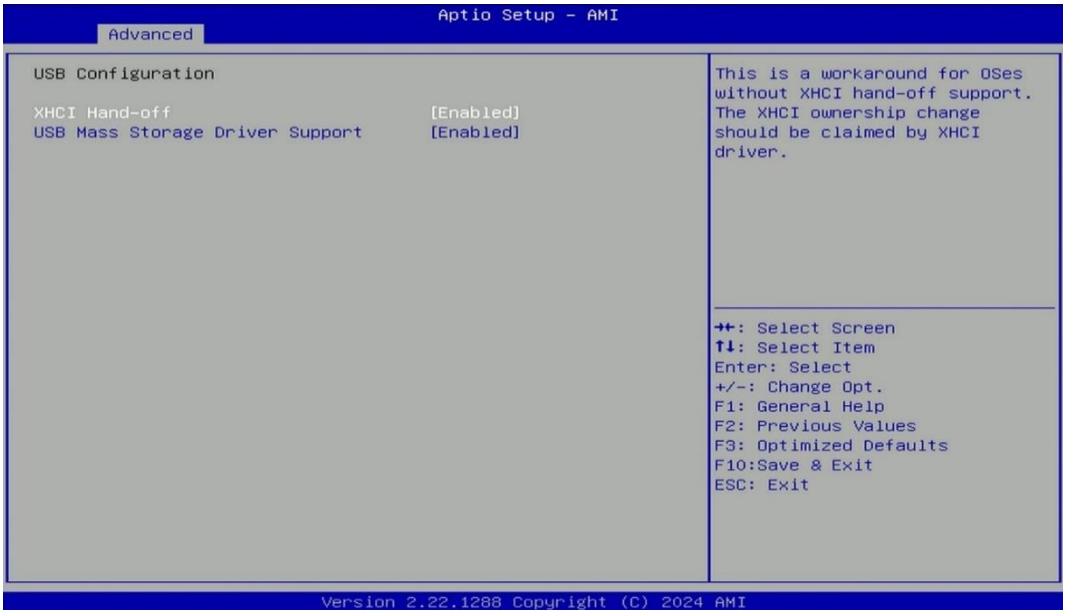
4.3.9 Serial Port Console Redirection



■ **Console Redirection [Disabled]**

Allow users to enable or disable COM1, COM2 console redirection function.

4.3.10 USB Configuration



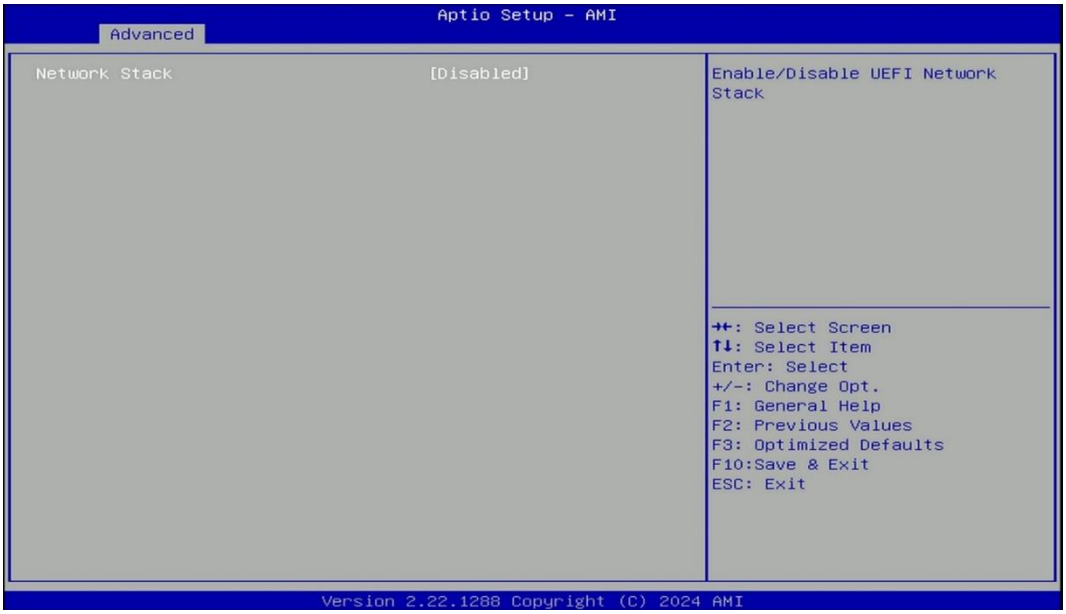
■ **XHCI Hand-off [Enabled]**

Enables or disables XHCI (USB3.0) hand-off function. Use this feature as a workaround for operating systems without XHCI hand-off support.

■ **USB Mass Storage Driver Support [Enabled]**

Enables or disables USB mass storage driver support.

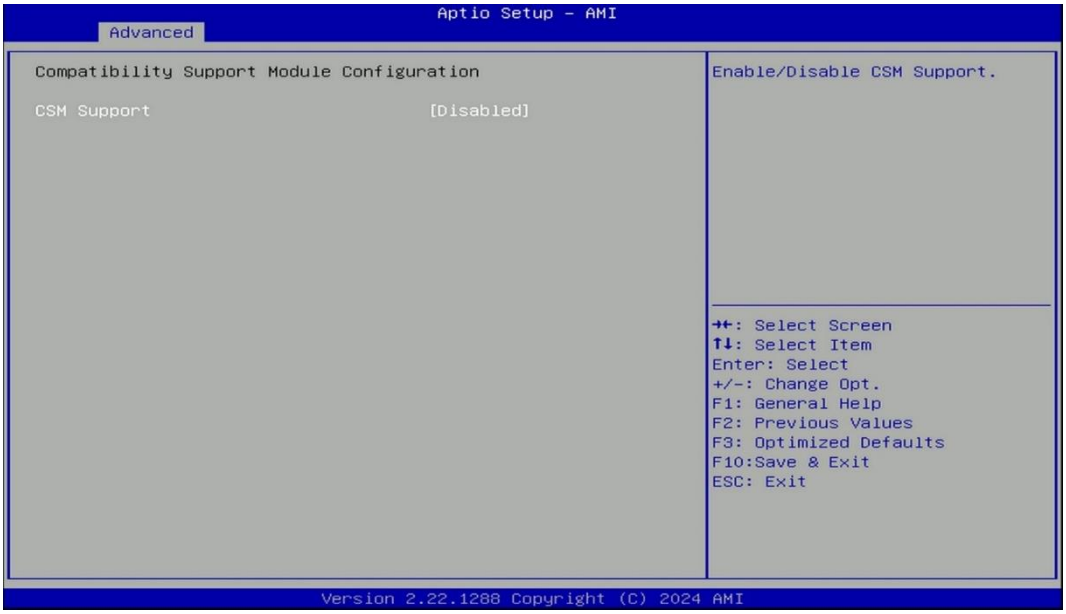
4.3.11 Network Stack Configuration



■ **Network Stack [Disabled]**

Enables or disables UEFI Network Stack.

4.3.12 CSM Configuration



■ **CSM Support [Disabled]**

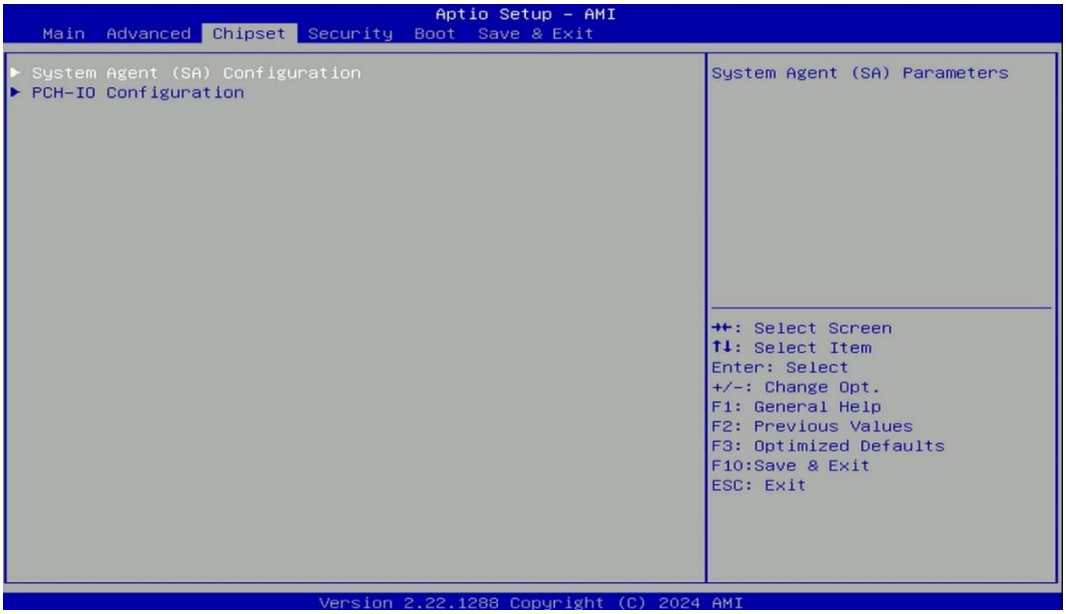
Enables or disables compatibility support module.

4.3.14 NVMe Configuration

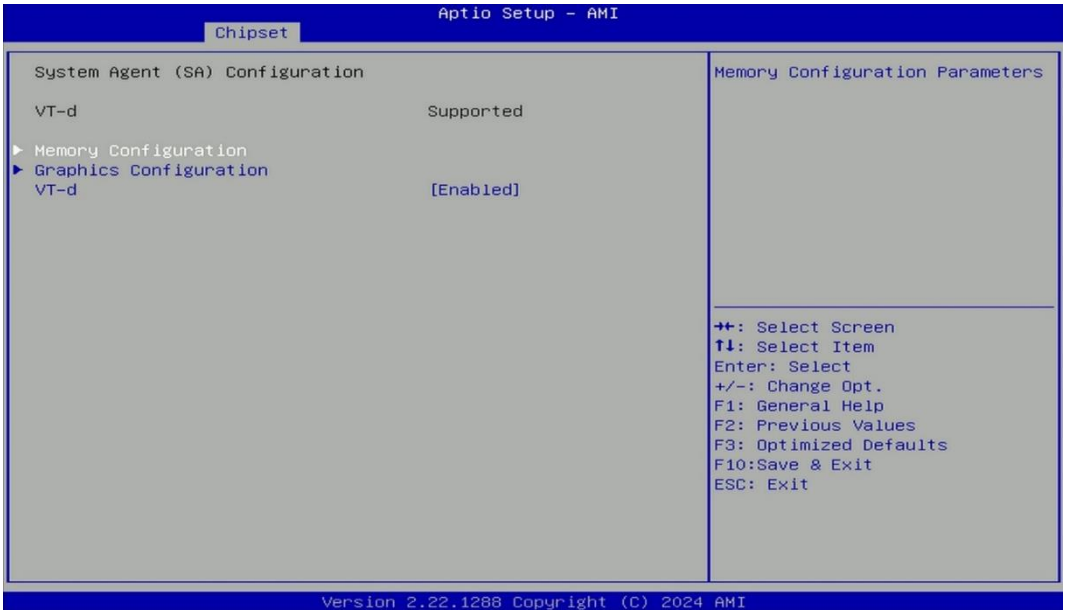
The screen allows users to select options for the NVMe configuration, and change the value of the selected option. If there is NVMe Device detected, the options will show as the NVMe Device is found.

4.4 Chipset Setup

This section allows you to configure chipset related settings according to user's preference.

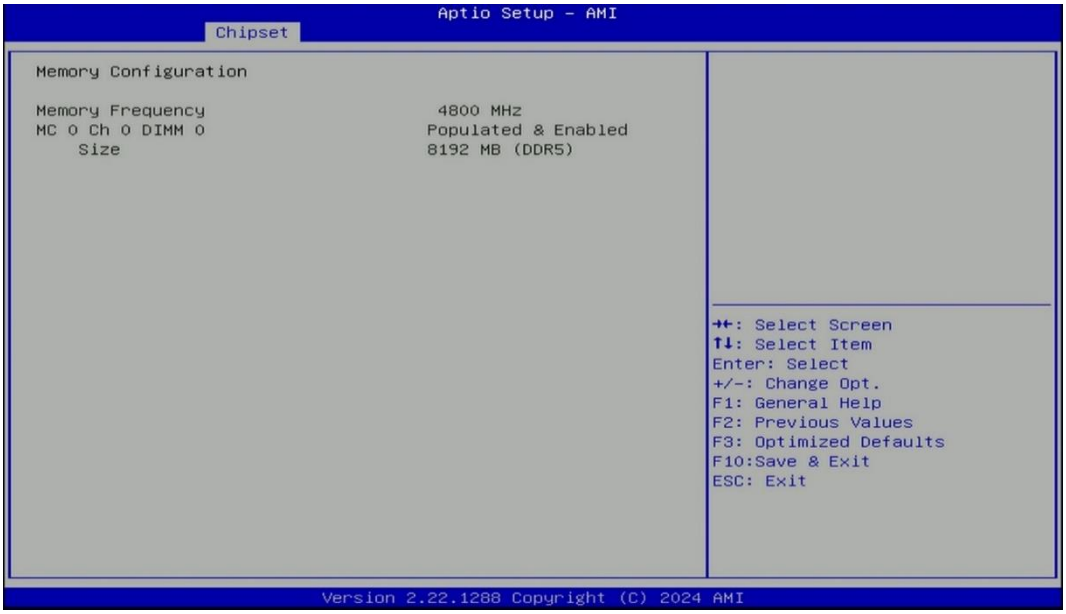


4.4.1 System Agent (SA) Configuration

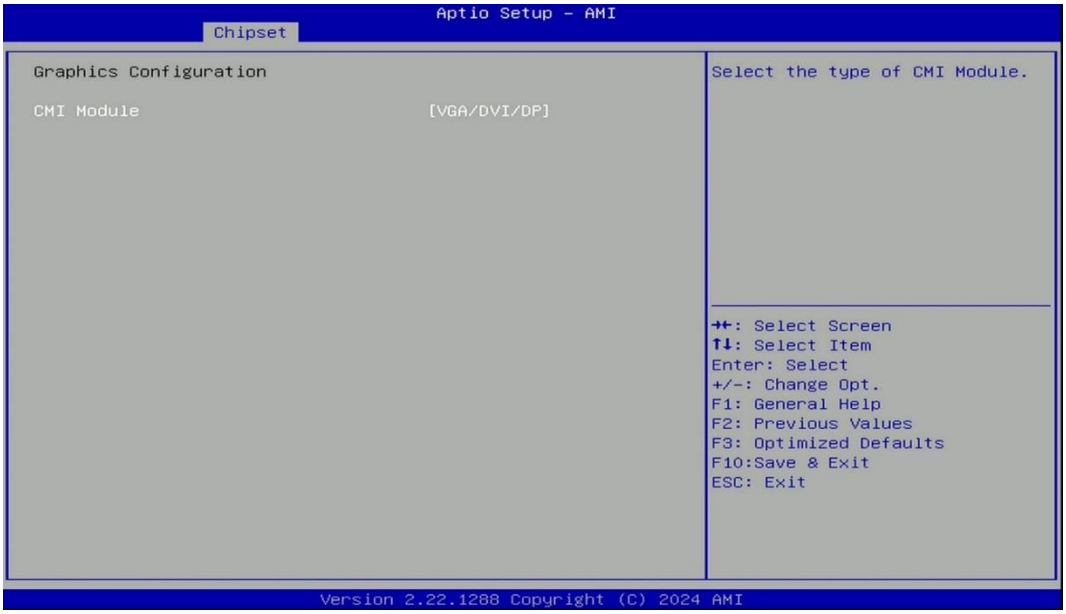


■ **Memory Configuration**

This item displays detailed memory configuration in the system.



■ Graphics Configuration

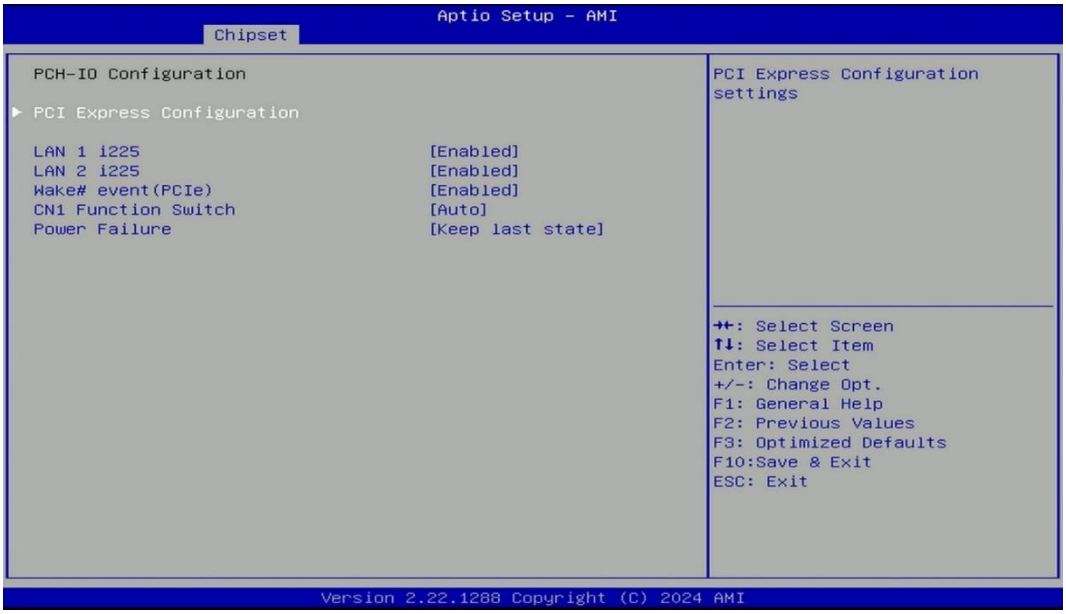


■ CMI Module [VGA/DVI/DP]

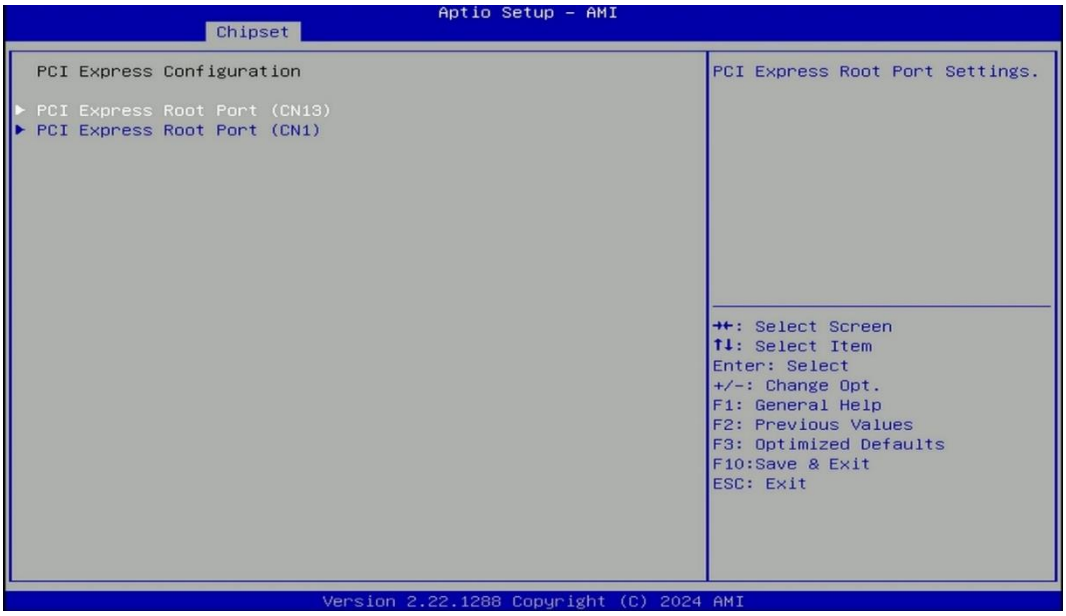
This option enables users to choose the type of CMI Module. The default setting is VGA/DVI/DP. If the CMI-HDMI module is utilized, kindly ensure to configure this function as [HDMI] to ensure successful display from the CMI-HDMI module.

Configuration options: [VGA/DVI/DP] [HDMI]

4.4.2 PCH-IO Configuration



- **PCI Express Configuration**



- **PCI Express Root Port (CN13)**
  - **PCI Express Root Port [Enabled]**

    Enables or disables PCI Express Root Port.
  - **PCIe Speed [Auto]**

    Allows you to select PCI Express interface speed.

    Configuration options: [Auto] [Gen1] [Gen2] [Gen3].
- **PCI Express Root Port (CN1)**
  - **PCI Express Root Port [Enabled]**

    Enables or disables PCI Express Root Port.

- **PCIe Speed [Auto]**
  Allows you to select PCI Express interface speed.
  Configuration options: [Auto] [Gen1] [Gen2] [Gen3].

- **LAN 1 i225 [Enabled]**

Enables or disables I225 LAN Controller.

- **LAN 2 i225 [Enabled]**

Enables or disables I225 LAN Controller.

- **Wake# event (PCIe) [Enabled]**

Enables or disables Wake# event (PCIe).

- **CN1 Function Switch [Auto]**

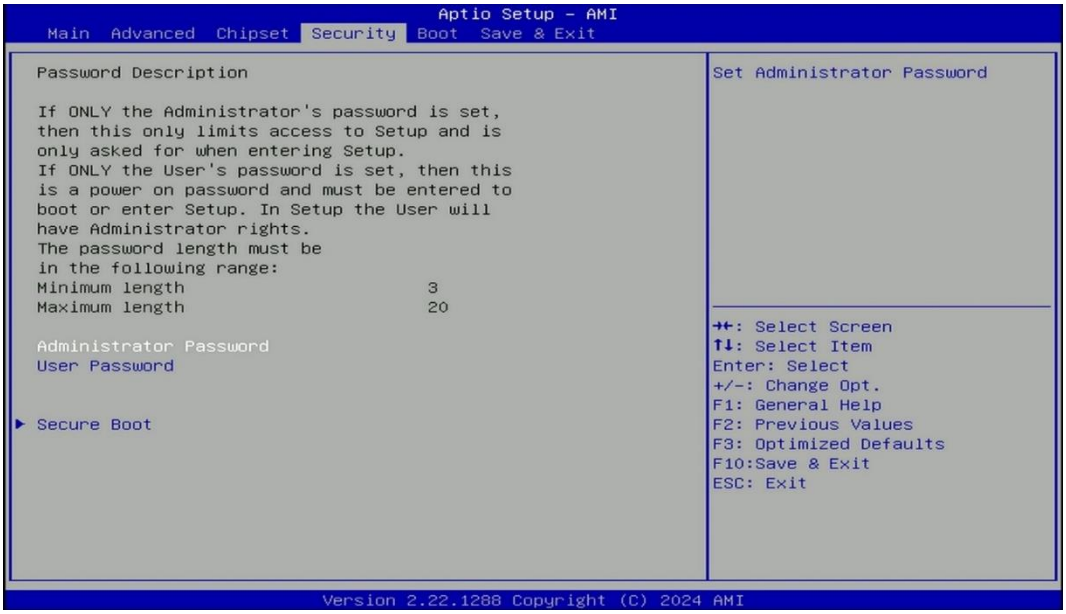
Allows you to change **CN5 Function** as [Auto], [SSD-SATA], [SSD-PCIe], [WWAN-PCIe], or [WWAN-USB3].

- **Power Failure [Keep last state]**

Allows you to specify which power state system will enter when power is resumed after a power failure (G3 state).
[Always on]: Enters to power on state.
[Always off]: Enters to power off state.
[Keep last state]: Enters to the last power state before a power failure.

4.5 Security Setup

This section allows users to configure BIOS security settings.



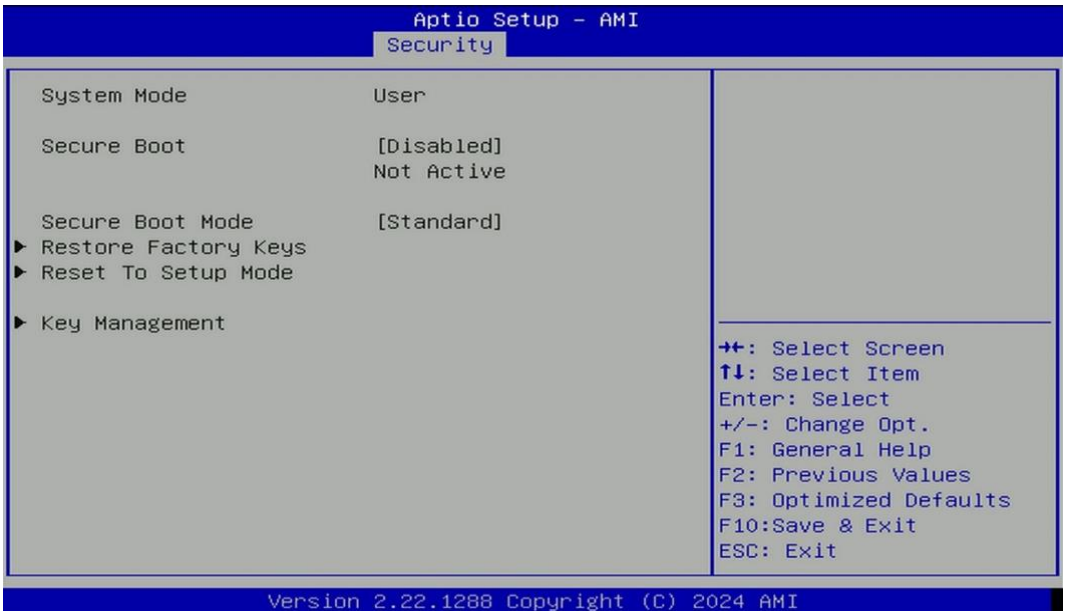
- **Administrator Password**

Administrator Password controls access to the BIOS Setup utility.

- **User Password**

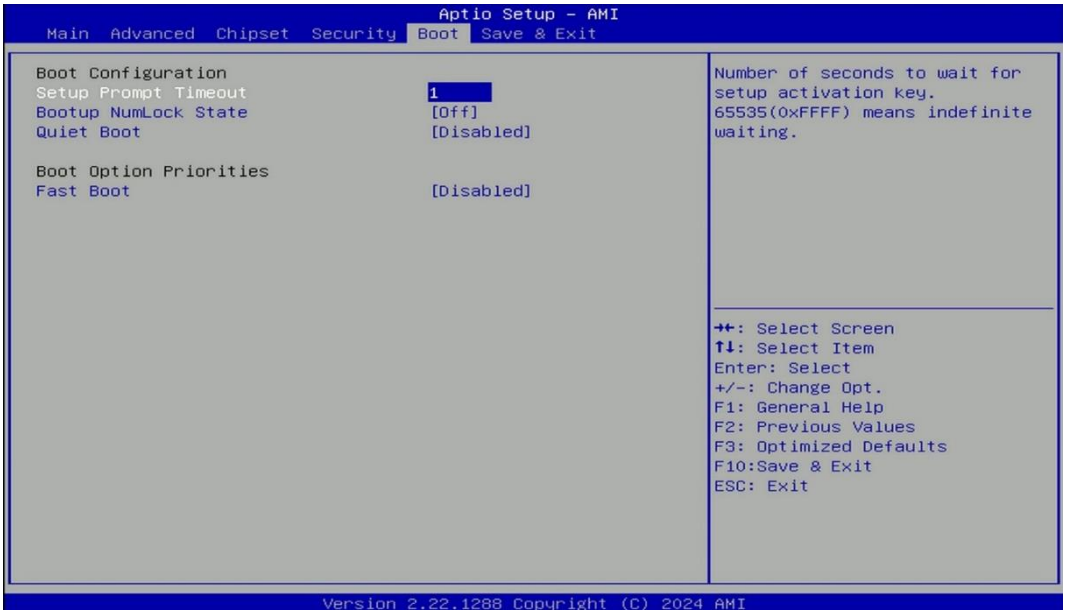
User Password controls access to the system at boot and to the BIOS Setup utility.

- **Security Boot**



4.6 Boot Setup

This section allows you to configure Boot settings.



- **Setup Prompt Timeout [1]**

Use this item to set number of seconds (1..65535) to wait for setup activation key.

- **Bootup NumLock State [Off]**

Allows you to set NumLock key to [On] or [Off] state when system boots up.

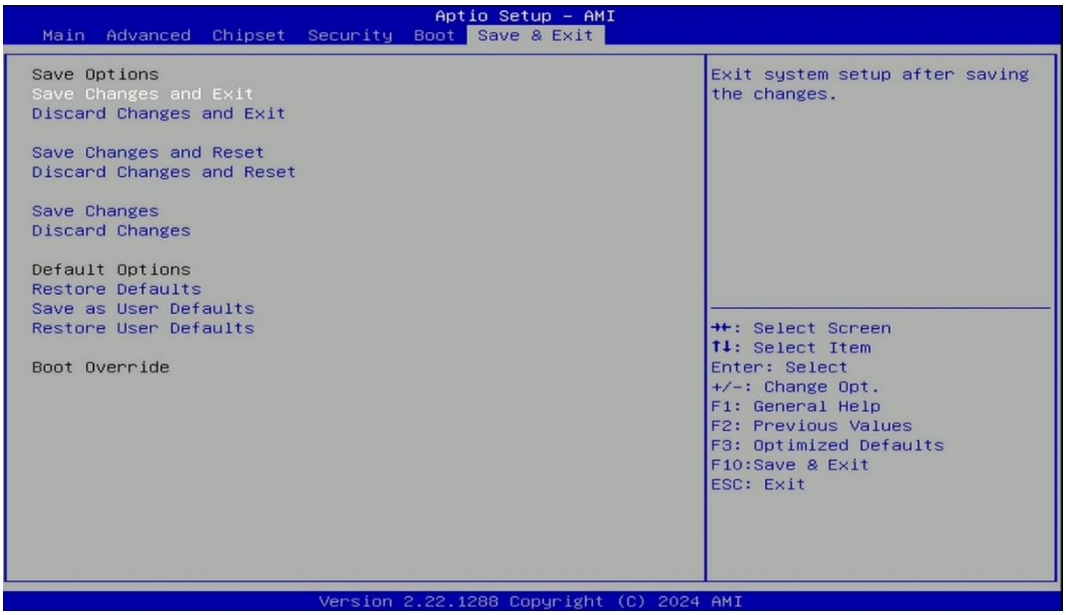
- **Quiet Boot**

Allows you to enable or disable Quiet Boot function.

- **Fast Boot**

Allows you to enable or disable Fast Boot function. If enabled, system boots with initialization of a minimal set of devices required to launch active boot option.

4.7 Save & Exit



- **Save Changes and Exit**

This item allows you to exit the system after saving changes.

- **Discard Changes and Exit**

This item allows you to exit system setup without saving any changes.

- **Save Changes and Reset**

This item allows you to reset the system after saving changes.

- **Discard Changes and Reset**

This item allows you to reset system setup without saving any changes.

- **Save Changes**

This item allows you to save changes.

- **Discard Changes**

This item allows you to discard changes.

- **Restore Defaults**

This item allows you to restore/ load default values for all the setup options.

- **Save as User Defaults**

This item allows you to save the changes done so far as user defaults.

- **Restore User Defaults**

This item allows you to restore the user defaults to all the setup options.

Chapter 5
Product Application

5.1 Where to download drivers?

Drivers for the DA-1200 Series can be downloaded from the CINCOZE website.

5.2 Where to find the technical documents?

The following documents are the most relevant technical references for the DA-1200 Series. All documents can be accessed via the CINCOZE Partner Zone:

- **Application Notes**: Navigate to *Home > Partner Zone > Technical Support > Application Notes*.
- **Configure & Installation**: Navigate to *Home > Partner Zone > Technical Support > Configure & Installation*.
- **Other Product Information**: Navigate to *Home > Partner Zone > Product Center > Product Information > Rugged Embedded Computers > Entry Performance & Basic I/O (DA Series) > DA-1200 Series*.

Catalog	Document Tile
Application Notes	DIO Application Guide
	DIO Technical Guide
	Instant Reboot Application Guide
	WDT Application Guide
	WDT Technical Guide
Configure & Installation	AT ATX Power Mode Function Manual
	BIOS Administrator User Password
	Clear CMOS Function Manual
	COM Port Function Manual
	CSM Function Manual
	Digital I/O Function Manual
	How to import Secure Boot Key?
	How to restore Windows image with Clonezilla?
	How to set TPM function under Windows?
	How to stop automatic driver update in Windows
	How to Update BIOS and ME under UEFI shell?
	How to Update BIOS under UEFI shell?
	How to Update BIOS under Windows?
	Intel AMT with KVM Remote Control
	PXE Function Manual
	Remote Switch Function Manual
	Wake On LAN Function Manual
	WDT Function Manual