

WTP-9H66

Industrial Panel PC



V1.0

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Version Change History

Date	Version	Description	Remark
2023/6/14	1.0	First release	

Acknowledgments

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FCC Class B

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 18 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential environment. This equipment generates, uses and can radiate radio frequency energy. If not installed and used in accordance with this user manual, it may cause harmful interference to radio communications.

Note that even when this equipment is installed and used in accordance with this user manual, there is still no guarantee that interference will not occur. If this equipment is believed to be causing harmful interference to radio or television reception, this can be determined by turning the equipment on and off. If interference is occurring, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and the receiver
- Connect the equipment to a power outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

Warning:

Any changes or modifications made to the equipment which are not expressly approved by the relevant standards authority could void your authority to operate the equipment.

To avoid risk of electric shock, this equipment must only be connected to a supply mains with protective earth.

Do not modify this equipment without authorization of the manufacturer.

Safety Instructions

Intended use

The WTP-9H66 is intended to serve as an industrial monitor which is designed for general purpose for industrial environment.

Intended User profile

The equipment is intended for infant or adults by profession Health care professionals.

Greeting & Setup

Thank you for purchasing the WTP-9H66 unit. We wish that this unit will be durable and reliable in providing your industrial application needs. Please follow the instructions below to ensure the unit continues to have high performance.

Unpacking

After opening the carton, there will be a industrial panel PC unit with an accessory box. Examine the contents to see if there are damages to the unit and if all accessories are present.

Setting up

Please read this manual carefully and remember to keep this manual for future reference.

Safety Instructions & Cleaning

The unit has undergone various tests in order to comply with safety standards. Inappropriate use of the open frame unit may be dangerous. Please remember to follow the instructions below to insure your safety during the installation and operating process.

Transporting & Placement of unit

1. When moving the unit on a cart; be very cautious. Quick stops, excessive forces and uneven surfaces may cause the cart to overturn thus risking the unit to fall to the ground.
2. If the industrial panel PC unit does fall to the ground, immediately turn the power off and disconnect cords. Then

contact a service technician for repairs. Continual use of the unit may result cause a fire or electric shock. Also, do not repair the unit on your own.

3. Having two or more people transporting the display unit is recommended. In addition, when installing the unit by suspending it also requires two or more people.
4. Before suspending the unit, make sure the material used for suspension is sturdy and stable. If not properly suspended, the display unit may fall and cause serious injury to people standing nearby as well as to the unit itself.
5. If you wish to mount the display unit, remember to use only the mounting hardware recommended by the manufacturer.

Electrical and Power Source Related

1. This industrial panel PC unit must operate on a power source as shown on the specification label. If you are not sure what type of power supply used in the area, consult your dealer or local power supplier.
2. The power cords must not be damaged. Applied pressure, added heat, and tugging may damage the power cord.
3. The power cord must be routed properly when setup takes place. We advise that this aspect measure is to prevent people from stepping on the cords or while the unit is suspended to prevent flying objects from getting tangled with the unit.
4. For plug-in equipment, the power outlet socket must be located near the equipment and must be easily accessible.
5. Do not overload the AC outlets or extension cords. Electrical shocks or fires may occur from overloading.
6. Do not touch the power source during a thunderstorm.
7. If your hands are wet, do not touch the plug.
8. Use your thumb and index finger, grip firmly on the power cord to disconnect from the electrical socket. By pulling the power cord, may result in damaging it.

9. If the unit is not going to be in use for an extended period of time, remember to disconnect the unit.
10. The industrial panel PC unit uses voltage between 100-240VAC. Connect the unit to a power source with the same numerical value as shown. Please use only the power cord provided by the dealer to ensure safety and EMC compliance.

Various Factors of Environment

1. Do not insert objects into the openings.
2. Do not have liquids seep into the internal areas of the industrial panel PC unit.
3. Having liquids seep in or inserting objects into the unit may result in electric shocks from taking and/or short circuiting the internal parts.
4. Do not place the industrial panel PC unit in the presence of high moisture areas.
5. Do not install the industrial panel PC unit in a wet environment.
6. Do not place near unit near heat generating sources.
7. Do not place the unit in a location where it will come in contact with fumes or steam.
8. Remember to keep the industrial panel PC unit away from the presence of dust.
9. If water has flow in or seep in, immediately disconnect the open frame unit. Then contact a service technician for repairs.

Ventilation Spacing

1. Do not cover or block the openings on the top and back sides of the display unit. Inadequate ventilation may cause overheating thus reducing the lifespan of the unit.
2. Unless proper ventilation is present, do not place unit in an enclosed area; such as a built-in shelf. Keep a minimum distance of 10 cm between the display unit and wall.

Operating principle

- A Industrial Panel PC has four main components: the arithmetic logic unit (ALU), the control unit, the memory, and the input and output devices (collectively termed I/O). These parts are interconnected by buses, often made of groups of wires.
- The control unit, ALU, and registers are collectively known as a central processing unit (CPU).
- Inside each of these parts are thousands to trillions of small electrical circuits which can be turned off or on by means of an electronic switch. Each circuit represents a bit (binary digit) of information so that when the circuit is on it represents a "1", and when off it represents a "0" (in positive logic representation). The circuits are arranged in logic gates so that one or more of the circuits may control the state of one or more of the other circuits.

Cleaning the unit

1. Remember to turn off the power source and to unplug the cord from the outlet before cleaning the unit.
2. Carefully dismount the unit or bring the unit down from suspension to clean.
3. Please use a dry soft cloth to clean the unit.
4. Take a dry cloth and wipe the unit dry. Remember to avoid having liquids seep into the internal components and areas of the industrial panel PC unit.

Error message / Troubleshooting

No power	<ol style="list-style-type: none">1. Connect the AC adapter to the computer, and then plug it into an AC outlet.2. Turn on the computer.
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Servicing, Repairing, Maintenance & Safety Checks

1. If the unit is not functioning properly, observe the performance level of the display closely to determine what type of servicing is needed.
2. Do not attempt to repair the industrial panel PC unit on your own. Disassembling the cover exposes users' to high voltages and other dangerous conditions. Notify and request a qualified service technician for servicing the unit.
3. To avoid risk of electric shock, this equipment must only be connected to a supply mains with protective earth.
4. If any of the following situations occur turn the power source off and unplug the unit. Then contact a qualified service technician.
 - (a) A liquid was spilled on the unit or objects have fallen into the unit.
 - (b) The unit is soaked with liquids.
 - (c) The unit is dropped or damaged.
 - (d) If smoke or strange odor is flowing out of the operating unit.
 - (e) If the power cord or plug is damaged.
 - (f) When the functions of the unit are dysfunctional.
5. When replacement parts are needed for the industrial panel PC unit, make sure service technicians use replacement parts specified by the manufacturer, or those with the same characteristics and performance as the original parts. If unauthorized parts are used it may result in starting a fire, electrical shock and/or other dangers.



EU-wide legislation, as implemented in each Member State, requires that waste electrical and electronic products carrying the mark (left) must be disposed of separately from normal household waste. This includes monitors and electrical accessories, such as signal cables or power cords. When you need to dispose of your display products, please follow the guidance of your local authority, or ask the shop where you purchased the product, or if applicable, follow any agreements made between yourself.

The mark on electrical and electronic products only applies to the current European Union Member States.

Caution:

DO NOT LEAVE THIS EQUIPMENT IN AN UNCONTROLLED ENVIRONMENT WHERE THE STORAGE TEMPERATURE IS BELOW -20° C (-4° F) OR ABOVE 60° C (140° F). THIS MAY DAMAGE THE EQUIPMENT.

This equipment shall not be used in life support systems.

The user is not to touch SIP/SOPs and the patient at the same time.

Caution – Use suitable mounting apparatus to avoid risk of injury.

Caution - Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions. (If battery pack is not used for 1 month, it is recommended to remove the battery pack from equipment.)

The sound pressure level at the operator's position according to IEC 704-1:1982 is no more than 70dB (A).

- A) Grounding reliability can only be achieved when the equipment is connected to an equivalent receptacle marked "Hospital Only" or "Hospital Grade".
- B) Use a power cord that matches the voltage of the power outlet, which has been approved and complies with the safety standard of your particular country.
- C) Caution: This adapter Sinpro SPU61A-107 is a forming part of the industrial device

Contact information:

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Hsinchu, Taiwan 300, R.O.C
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Table of Contents

Acknowledgments.....	iii
FCC Class B.....	iv
Safety Instructions.....	v
Introduction	1
Product Description.....	1
Package list.....	2
Features	3
Specifications	4
Getting Started	8
System Set Up.....	8
Dimension 9H66-15.....	9
Dimension 9H66-19.....	9
Dimension 9H66-22.....	10
Dimension 9H66-24.....	10
System View.....	11
Disconnect Device	13
BIOS Setup.....	14
Appendix	27
A. Jumper settings and Connectors.....	27

Introduction

Product Description

The WTP-9H66 Industrial Panel PC is based on Intel Alder Lake-P MCP processors , it accommodates 1 x M.2 Key E, 1 x M.2 Key M, 1 x M.2 Key B, 6 x COM, 2 x SATA3 and up to 64GB DDR4 2X260-pin SODIMM.

The high brightness LCD, Fanless solution, integrated multimedia functions and extensive expansion options make them the perfect platform upon which to build comprehensive lifestyle computing applications.

The WTP-9H66 includes all the features of a powerful computer into a slim and attractive chassis.

The WTP-9H66 is compact, Giga LAN and selectable WLAN network compatible PC with full safety and industrial approval and features to control a dedicated system with a wide variety of applications. Combining the WTP-9H66 into your system can achieve both cost-saving and efficient improvements.

Common applications and Electronic Industrial Record. The WTP-9H66 are definitely your perfect choices.

Package list

Before you begin installing your Industrial Station, please make sure that the following items have been shipped:

- The WTP-9H66 Industrial Panel PC unit
- User's manual, chipset drivers
- Power Adapter x 1 (type/model: LSU120A-108)
- Power cord –US type, or other type in UK, EU...etc.

Features

- Intel® 12th Alder Lake-P Panel PC
- Low Power Fanless Thermal Solution
- Stainless panel PC Full Flat Resistive or P-Cap Touch
- CE, FCC, VCCI Class B Certified
- Full Flat Design Easy Clean & IP66 Front
- Wide Range DC Input
- Optional WLAN with External Antenna

Specifications

Hardware Specifications

Display	15" 350 nits 1024 x 768 TFT LCD 19" 350 nits 1280 x 1024 TFT LCD 22" 250 nits 1920 x 1080 TFT LCD 24" 250nits 1920 x 1080 TFT LCD
CPU Support	Intel® 12th Gen Alder Lake-P MCP Processors, 15 W
Disk Drive Space	4 x M.2 (KEY M, 2242/2260/2280) with PCIe Gen4 for SSD 1 x 2.5 SATA3
Expansion	1 x M.2 (KEY E, 3042/3052) with PCIe x1 and USB3.2, USB2.0 and SIM ofr 4G/5G 1 x SIM socket connected to M.2 key B X 1 1 x M.2 (Key E, 2230) with PCIe, USB2.0 and CNVi for Wireless
Rear I/O	USB - 2 x USB 2.0, 2 x USB 3.2 Gen2, 2xUSB 3.2 Gen2(Type-C, Support DP1.4a display ,Power output 5V/3A) COM - RS232//RS422/RS485 x2 LAN – 2 x Intel® I225LM (Support AMT/vPro) Audio – Realtek ALC897 HD, High Definition Audio., 3 watts power amplifier
TPM2.0	TPM2.0(on board IC)

LCD Specifications

Display Type	15"
Max. Resolution	1024x768 XGA
Contrast Ratio	800:1
Pixel Pitch (um)	0.297(H) × 0.297(V)
Luminance (cd/m2)	350
Viewing Angle	160°(H)
	160°(V)

Display Type	19"
Max. Resolution	1280 x 1024
Contrast Ratio	1000:1
Pixel Pitch (um)	0.294(H) x 0.294(V)
Luminance (cd/m2)	350
Viewing Angle	170°(H)
	160°(V)

Display Type	22"
Max. Resolution	1920x1080 Full HD
Contrast Ratio	1000:1
Pixel Pitch (um)	248.25 (H)×248.25(V)
Luminance (cd/m2)	250
Viewing Angle	170°(H)
	160°(V)

Display Type	23.8
Max. Resolution	1920x1080 Full HD
Contrast Ratio	3000:1
Pixel Pitch (um)	274.5 (H)×274.5(V)
Luminance (cd/m2)	250
Viewing Angle	178°(H)
	178°(V)

Power Adapter Specifications

Power	Close-frame
MFR	Sinpro
Input Rating	AC 100 ~ 277 V, 47 ~ 63 Hz
Output Rating	DC 24V/5A (MAX 120W)
MTBF	100K hrs operation at 25°C
Classification	Power by Class I certified power adapter. No applied part.
Mode of operation	Continuous operation
System input rating	DC 24V, 5A

Mechanical Specifications

Architecture	Close-frame
Front Bezel	PCT touch screen or RES touch screen With stainless (304)
Color	Sliver
Mounting / Holder	VESA 100X100 mm
Dimension (WxHxD)	15" - 398 x 309.5 x 58 (mm) 19" - 458 x 386 x 64 (mm) 21.5" - 557 x 348.5 x 58.5 (mm) 24" - 626.6 x 396.1 x 64.0 (mm)
Net Weight	15" - 8.4 kg (w/o power adapter) 19" - 11.5 kg (w/o power adapter) 21.5" - 12 kg (w/o power adapter) 24" - 14.8 kg (w/o power adapter)
Packing Filler	PE

Environmental Specifications

Temperature	Operating: 0°C to 40°C by HDD. 0°C to 50°C by SSD Storage, Transportation: -20°C to 60°C (-4°F ~140°F)
Vibration	Operating: 15g/0.53 oz, 11 ms, half sine wave Non-operating: 50g/1.76 oz, 11 ms, half sine wave
Shock	Operating: 5 ~ 17 Hz , Amplitude : 0.117 ~ 500Hz , Acceleration : 1.0G Non-operating: 10~55Hz/0.15g, 55~500Hz/2.0g

Altitudes	Operational: up to 3000 m (9842 feet) Shipping: up to 12192 m (40000 feet)
Pressure	700 – 1060 hPa (Operation) 186 – 1060 hPa (Storage) 186 – 1060 hPa (Transportation)
EMI / Safety	CE / FCC / VCCI Class B
IP	IP66 front
Noise	Fanless

Touch Screen

P.cap Touch

Type	Full flat projective capacitive touch panel
Interface	Controller with USB interface, 5V
Hardness	$\geq 7H$
Light Transmission	$\geq 86\%$
Life Time	100M times

Res touch

Type	Full flat resistive touch panel
Interface	Controller with USB interface, 5V
Hardness	$\geq 3H$
Light Transmission	$80\% \pm 5\%$
Life Time	35M times

Getting Started

System Set Up

The following is a summary of the steps in setting up the system for use.

- (1). You can fix the system to a mounting fixture using the screw holes on the sides of the system.
- (2). Make any required external connections such as the display, keyboard, and LAN.
- (3). Plug the appropriate end of the power cord into the power connector on the rear of the system and the plug to an electrical outlet.
- (4). ***Waiting for 3 seconds*** then press the power switch on the front panel of the system once to turn on the system power.
- (5). If necessary, run the BIOS SETUP programs to configure the system.

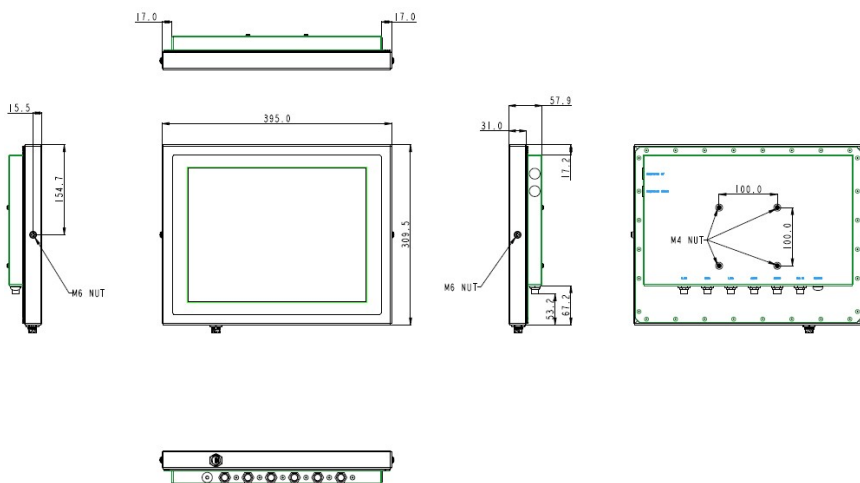
Caution:

In order to boot up system from USB-CD/DVD drive, please connect USB-CD/DVD drive, turn on computer power, keep on pressing "F11" key, go into BIOS quick boot menu, select "USB-CD ROM", WAIT FOR 20 SECONDS, then press enter, system OS will boot up from USB-CD/DVD drive directly.

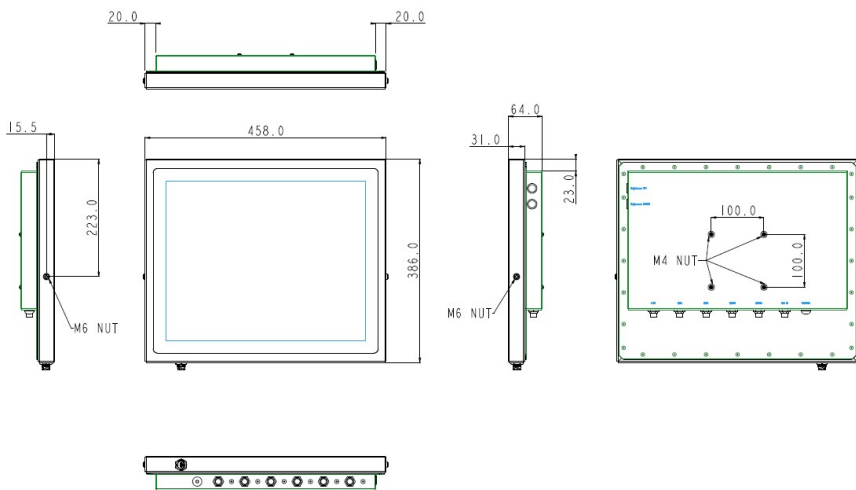
Notice:

The installation is only to be carried out by manufacturer trained and authorized personnel.

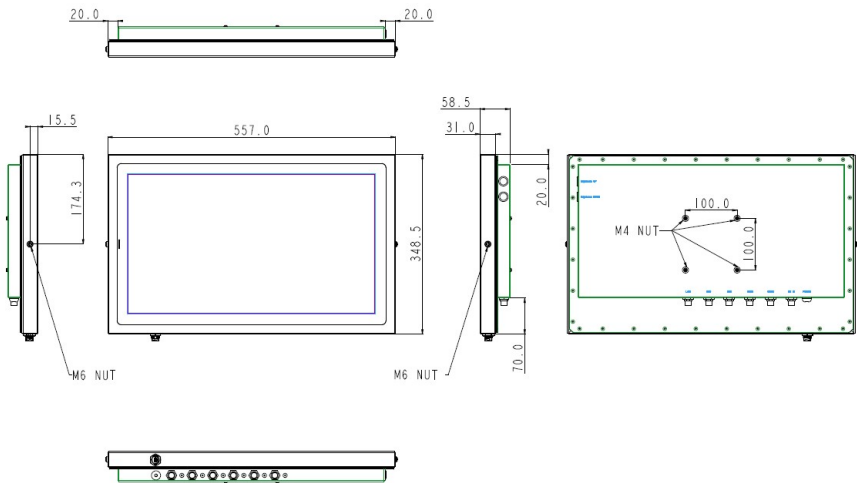
Dimension 9H66-15



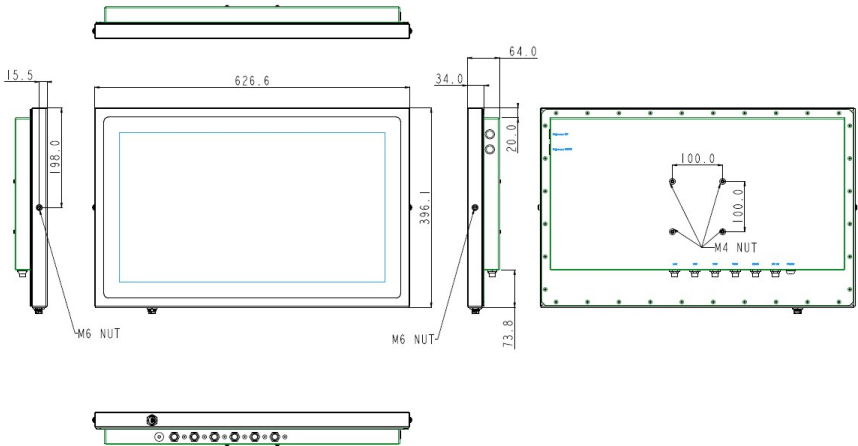
Dimension 9H66-19



Dimension 9H66-22



Dimension 9H66-24



System View

Front View

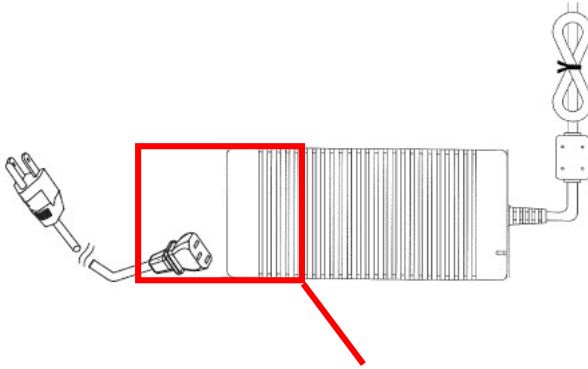


I/O parts



- | | |
|-------------------|-----------------------|
| 1 Giga LAN | 5 DC-in |
| 2 USB 1/2 | 6 Power on/off |
| 3 USB 3/4 | 7 USB Type C |
| 4 COM x 2 | |

Disconnect Device



Unplug the power cord from the power adapter jack to disconnect the device.

Turn off the system:

Turning off WTP-9H66 properly is important for system reliability.

1. On the start menu, click "Shut down" and select "OK"

BIOS Setup

BIOS Introduction

The AMI BIOS (Basic Input / Output System) installed in your computer system's ROM supports Intel processors. The BIOS provides critical low-level support for a standard device such as disk drives, serial ports and parallel ports. It also adds virus and password protection as well as special support for detailed fine-tuning of the chipset controlling the entire system.

BIOS Setup

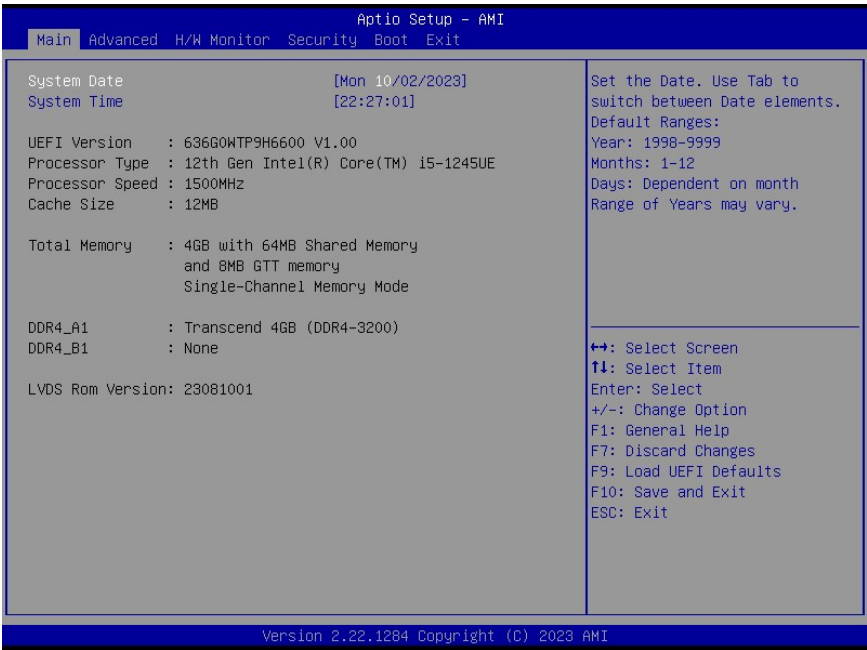
The AMI BIOS provides a Setup utility program for specifying the system configurations and settings. The BIOS ROM of the system stores the Setup utility. When you turn on the computer, the AMI BIOS is immediately activated. Pressing the key immediately allows you to enter the Setup utility. If you are a little bit late pressing the key, POST (Power On Self Test) will continue with its test routines, thus preventing you from invoking the Setup. If you still wish to enter Setup, restart the system by pressing the "Reset" button or simultaneously pressing the <Ctrl>, <Alt> and <Delete> keys. You can also restart by turning the system Off and back On again. The following message will appear on the screen:

Press to Enter Setup

In general, you press the arrow keys to highlight items, <Enter> to select, the <PgUp> and <PgDn> keys to change entries, <F1> for help and <Esc> to quit.

When you enter the Setup utility, the Main Menu screen will appear on the screen. The Main Menu allows you to select from various setup functions and exit choices.

Main



System Date

Set the Date. Use Tab to switch between Date elements.

Default Ranges:

Year: 1998-9999

Months: 1-12

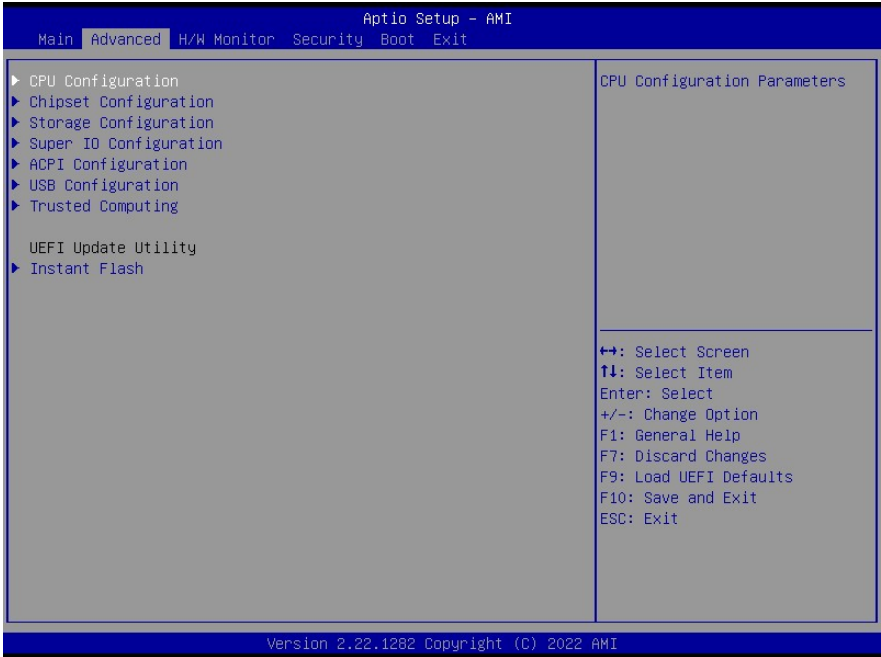
Days: Dependent on month

Range of Years may vary.

System Time

Set the Time. Use Tab to switch between Time elements.

Advanced



CPU Configuration

CPU Configuration parameters

Active Processor Cores

Select the number of cores to enable in each processor package.

CPU C States Support

Enable CPU C States Support for power saving. It is recommended to keep C3, C6 and C7 all enabled for better power saving.

Intel Virtualization Technology

Intel Virtualization Technology allows a platform to run multiple operating systems and applications in independent partitions, so that one computer system can function as multiple virtual systems.

Intel SpeedStep Technology

Allows more than two frequency ranges to be supported.

Intel Turbo Boost Technology

Intel Turbo Boost Technology enables the processor to run above its base operating frequency when the operating system requests the highest performance state.

CPU Thermal Throttling

Enable CPU internal thermal control mechanisms to keep the CPU from overheating.

Chipset Configuration

Configure Chipset settings

Above 4G Decoding

Enable/Disable above 4G MemoryMappedIO decoding

This is disabled automatically when Aperture Size is set to 2048MB.

VT-d

VT-d Capability

PCIe1 Link Speed

Configure PCIe Slot Link Speed.

Share Memory

Configure the size of memory that is allocated to the integrated graphics processor when the system boots up.

Render Standby

Check to enable render standby support.

Active LVDS

Enable: Enable the LVDS

Disable: Disable the LVDS

Panel Type Selection

Select Panel Type

Onboard LAN1

Enable or disable the onboard LAN1 network interface controller.

Onboard LAN2

Enable or disable the onboard LAN2 network interface controller.

Onboard HD Audio

Enable/disable onboard HD audio.

Restore on AC/Power Loss

Select the power state after a power failure. If [Power Off] is selected, the power will remain off when the power recovers. If [Power On] is selected, the system will start to boot up when the power recovers.

Storage Configuration

Configure Storage devices.

SATA Controllers(s)

Enables/disable the SATA controllers.

SATA Mode Selection

AHCI: Supports new features that improve performance.

Intel RST Premium(RAID):

Combine multiple disk drives into a logical unit.

Please press <CTRL - I> to enter RAID ROM during UEFI POST process.

SATA Aggressive Link Power Management

SATA Aggressive Link Power Management allows SATA devices to enter a low power state during periods of inactivity to save power. It is only supported by AHCI mode.

Hard Disk S.M.A.R.T

S.M.A.R.T stands for self-Monitoring, Analysis, and Reporting Technology, It is a monitoring system for computer hard disk drives to detect and report on various indicators of reliability.

SATA3_1:

M2M_1/SATA3_2:

Super IO Configuration

Configure Super IO Settings.

COM1

Enable or Disable COM1 IO=3F8h; IRQ=4;

COM2

Enable or Disable COM2 IO=2F8h; IRQ=3;

Type Select

Set COM TYPE.

COM3

Enable or Disable COM3 IO=3E8h; IRQ=7;

Type Select

Set COM TYPE.

COM4

Enable or Disable COM4 IO=2E8h; IRQ=7;

Type Select

Set COM TYPE.

WDT Timeout Reset

Enable/Disable Watch Dog Timer timeout to reset system.

ACPI Configuration

Configure ACPI Settings.

Suspend to RAM

It is recommended to select auto for ACPI S3 power saving.

PCIe Devices Power On

Allow the system to be waked up by a PCIe device and enable wake on LAN.

RTC Alarm Power On

Allow the system to be waked up by the real time clock alarm. Set it to By OS to let it be handled by your operating system.

USB Configuration

Configure the USB support.

USB Power Control

Always enabled: Enable USB power in S0/S3/S4/S5, Default setting: Enable USB power in S0/S3, disable USB power in S4/S5.

M.2 Key_B USB Function

Enable/Disable M.2 Key_B USB Function

Trusted Computing

Trusted Computing Settings.

Security Device Support

Enables or Disables BIOS support for security device. O.S. will not show Security Device. TCG EFI protocol and INT1A interface will not be available

SHA256 PCR Bank

Enable or Disable SHA256 PCR Bank

SHA384 PCR Bank

Enable or Disable SHA384 PCR Bank

SM3_256 PCR Bank

Enable or Disable SM3_256 PCR Bank

Pending operation

Schedule an Operation for the Security Device. NOTE: Your Computer will reboot during restart in order to change State of Security Device.

Platform Hierarchy

Enable or Disable Platform Hierarchy

Storage Hierarchy

Enable or Disable Storage Hierarchy

Endorsement Hierarchy

Enable or Disable Endorsement Hierarchy

TPM 2.0 UEFI Spec Version

Select the TCG2 Spec Version Support, TCG_1_2: the Compatible mode for Win8/Win10, TCG_2: Support new TCG2 protocol and event format for Win10 or later

Physical Presence Spec Version

Select to Tell O.S. to support PPI Spec Version 1.2 or 1.3. Note some HCK tests might not support 1.3.

TPM 2.0 InterfaceType

Select the Communication Interface to TPM 20 Device.

Device Select

TPM 1.2 will restrict support to TPM 1.2 devices, TPM 2.0 will restrict support to TPM 2.0 devices, Auto will support both with the default set to TPM 2.0 devices if not found, TPM 1.2 devices will be enumerated

Instant Flash

Save UEFI files in your USB storage device and run Instant Flash to update your UEFI. Please note that your USB storage device must be FAT32/16/12 file system.

H/W Monitor

Aptio Setup - AMI

Main Advanced **H/W Monitor** Security Boot Exit

Hardware Health Event Monitoring

CPU Temperature : +37.5 °C
M/B Temperature : +36.0 °C

CPU_FAN1 Speed : 5844 RPM
CHA_FAN1 Speed : N/A

+3V : +3.344 V
+3VSB : +3.344 V
VBAT : +3.024 V
+5V : +5.136 V
VCCORE : +1.664 V
VCCM : +1.248 V
DC_IN : +19.000 V

CPU_FAN1 Setting [Full On]
CHA_FAN1 Setting [Full On]
Case Open Feature [Disabled]

Quiet Fan Function Control

F4: Select Screen
F5: Select Item
Enter: Select
+/-: Change Option
F1: General Help
F7: Discard Changes
F9: Load UEFI Defaults
F10: Save and Exit
ESC: Exit

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CPU_FAN1 Setting

Quiet Fan Function Control

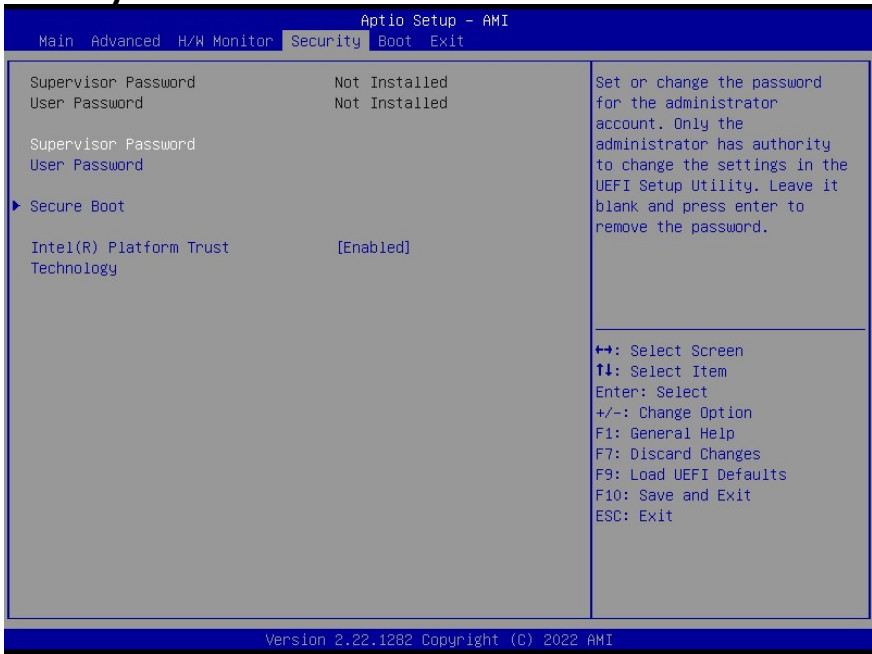
CHA_FAN1 Setting

Quiet Fan Function Control

Case Open Feature

Enable or disable the feature of Case Open.

Security



Supervisor Password

Set or change the password for the administrator account. Only the administrator has authority to change the settings in the UEFI setup Utility. Leave it blank and press enter to remove the password

User Password

Set or change the password for the user account. Users are unable to change the settings in the UEFI Setup Utility. Leave it blank and press enter to remove the password.

Secure Boot

Secure Boot configuration

Secure Boot

Secure Boot feature is Active if Secure Boot is Enabled, Platform Key(PK) is enrolled and the System is in User mode. The mode change requires platform reset

Secure Boot Mode

Secure Boot mode options: Standard or Custom. In Custom mode, Secure Boot Policy variables can be configured by a

physically present user without full authentication

Install default Secure Boot keys

Please install default secure boot keys if it's the first time you use secure boot.

Clear Secure Boot keys

Force System to Setup Mode - clear all Secure Boot Variables. Change takes effect after reboot

Key Management

Enables expert users to modify Secure Boot Policy variables without full authentication

Intel(R) Platform Trust Technology

Enabled/Disabled Intel PTT function,

Enabled: Enable Intel PTT in ME,

Disabled: Disable Intel PTT in ME, Use discrete TPM Module.

Boot



Boot Option #1

Sets the system boot order

Boot Option #2

Sets the system boot order

Boot Option #3

Sets the system boot order

Boot Option #4

Sets the system boot order

Boot From Onboard LAN

Boot From Onboard LAN

Setup Prompt Timeout

Configure the number of seconds to wait for the UEFI setup utility.

Bootup Num-Lock

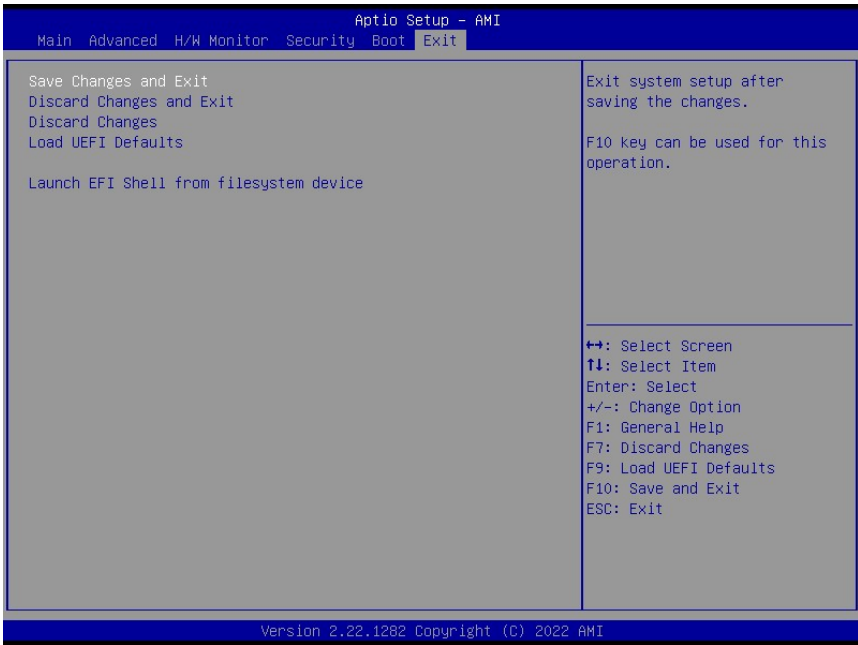
Select whether Num Lock should be turned on or off when the

system boots up.

Full Screen Logo

Enable to display the boot logo or disable to show normal POST messages

Exit



Save Changes and Exit

Exit system setup after saving the changes.
F10 key can be used for this operation.

Discard Changes and Exit

Exit system setup without saving any changes.
ESC key can be used for this operation.

Discard Changes

Discard Changes done so far to any of the setup options.
F7 key can be used for this operation.

Load UEFI Defaults

Load UEFI Default values for all the setup questions.
F9 key can be used for this operation.

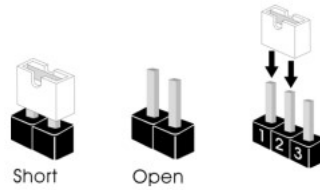
Launch EFI Shell from filesystem device




Copy shellx64.efi to the root directory to launch EFI Shell.

Appendix

A. Jumper settings and Connectors

The illustration shows how jumpers are setup. When the jumper cap is placed on pins, the jumper is “Short.” If no jumper cap is placed on pins, the jumper is “Open.” The illustration shows a 3-pin jumper whose pin1 and pin2 are “Short” when jumper cap is placed on these 2 pins.



Jumper	Setting	Description
Brightness Control Mode (3-pin BLT_PWM2) (see p. 5, No. 6)		1-2 : +3V (eDP) 2-3 : +5V (LVDS)
Brightness Control Mode (3-pin BLT_PWM1) (see p. 5, No. 7)		1-2 : From eDP PWM to CON_LBKLT_CTL 2-3 : From LVDS PWM to CON_LBKLT_CTL
Clear CMOS Jumpers (3-pin CLRMOS1) (see p. 5, No. 14)		CLRMOS1: 1-2 : Auto Clear CMOS 2-3 : Clear CMOS

Please set to 1-2 when adjusting brightness by Brightness Control bar under OS.
Please set to 2-3 when adjusting brightness by BLT_VOL1.

COM Port PWR Setting Jumpers
(3-pin PWR_COM1-6 (For COM Port1-6))
(see p. 5, No. 18)



1-2 : +5V
2-3 : +12V

Digital Input / Output Default Value Setting
(3-pin JGPIO_SET1)
(see p. 5, No. 19)



1-2 : Pull-High
2-3 : Pull-Low

Digital Input / Output Power Select
(5-pin JGPIO_PWR1)
(see p. 5, No. 21)



1-2 : +12V
2-3 : +5V

DACC1
(2-pin DACC1)
(see p. 5 No. 22)



Open : No ACC
ACC Short : ACC

Auto clear CMOS when system boot improperly.

ATX/AT Mode Jumper
(2-pin SIO_AT1)
(see p. 5, No. 24)



Open : ATX Mode
Short : AT Mode

Chassis Intrusion Jumpers (CI1, CI2)
(2-pin CI1, CI2)
(see p. 4 No. 25)



CI1 :
Open : Normal
Short : Active Case Open
CI2 :
Open : Active Case Open
Short : Normal