19”/ 21.5”/ 23.8”/ 27”/32”
AI Panel PC

Intel® 14th Generation Core i7/i9 Processor

Model No. R19IAD7T-GPM1
W22IAD7T-GPA3
W24IAD7T-GPA2
W27IAD7T-GPA1
W32IAD7T-GPA3

Quick Start Guide

Document Version 1.1
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Contents

Preface

Copyright Notice

Trademark Acknowledgement

Disclaimer

We reserve the right to make changes, without notice, to any product, including circuits and/or software described or contained in this manual in order to improve design and/or performance. We assume no responsibility or liability for the use of the described product(s) conveys no license or title under any patent, copyright, or masks work rights to these products, and make no representations or warranties that these products are free from patent, copyright, or mask work right infringement, unless otherwise specified. Applications that are described in this manual are for illustration purposes only. We make no representation or guarantee that such application will be suitable for the specified use without further testing or modification.

Warranty

Our warranty guarantees that each of its products will be free from material and workmanship defects for a period of one year from the invoice date. If the customer discovers a defect, we will, at his/her option, repair or replace the defective product at no charge to the customer, provide it is returned during the warranty period of one year, with transportation charges prepaid. The returned product must be properly packaged in its original packaging to obtain warranty service. If the serial number and the product shipping data differ by over 30 days, the in-warranty service will be made according to the shipping date. In the serial numbers the third and fourth two digits give the year of manufacture, and the fifth digit means the month (e. g., with A for October, B for November and C for December).

For example, the serial number 1W20Axxxxxxxx means October of year 2020.

Customer Service

We provide a service guide for any problem by the following steps: First, visit the website of our distributor to find the update information about the product. Second, contact with your distributor, sales representative, or our customer service center for technical support if you need additional assistance.

You may need the following information ready before you call:

- Product serial number
- Software (OS, version, application software, etc.)
- Description of complete problem
- The exact wording of any error messages

In addition, free technical support is available from our engineers every business day. We are always ready to give advice on application requirements or specific information on the installation and operation of any of our products.

Advisory Conventions

Five types of advisories are used throughout the Quick Start Guide to provide helpful information or to alert you to the potential for hardware damage or personal injury. These are Notes, Important, Cautions, and Warnings. The following is an example of each type of advisory.

NOTE:
A note is used to emphasize helpful information

IMPORTANT:
An important note indicates information that is important for you to know.

CAUTION/ ATTENTION
A Caution alert indicates potential damage to hardware and explains how to avoid the potential problem.
Une alerte d'attention indique un dommage possible à l'équipement et explique comment éviter le problème potentiel.

WARNING!/ AVERTISSEMENT!
An Electrical Shock Warning indicates the potential harm from electrical hazards and how to avoid the potential problem.
Un Avertissement de Choc Électrique indique le potentiel de chocs sur des emplacements électriques et comment éviter ces problèmes.

ALTERNATING CURRENT / MISE À LE TERRE!
The Protective Conductor Terminal (Earth Ground) symbol indicates the potential risk of serious electrical shock due to improper grounding.
Le symbole de Mise à Terre indique le risqué potential de choc électrique grave à la terre incorrecte.

Safety Information

WARNING! / AVERTISSEMENT!

Always completely disconnect the power cord from your chassis whenever you work with the hardware. Do not make connections while the power is on. Sensitive electronic components can be damaged by sudden power surges. Only experienced electronics personnel should open the PC chassis.

Toujours débrancher le cordon d'alimentation du chassis lorsque vous travaillez sur celui-ci. Ne pas brancher de connections lorsque l'alimentation est présente. Des composantes électroniques sensibles peuvent être endommagées par des sauts d'alimentation. Seulement du personnel expérimenté devrait ouvrir ces chassis.

CAUTION/ATTENTION

Always ground yourself to remove any static charge before touching the CPU card. Modern electronic devices are very sensitive to static electric charges. As a safety precaution, use a grounding wrist strap at all times. Place all electronic components in a static-dissipative surface or static-shielded bag when they are not in the chassis.

Toujours verifier votre mise à la terre afin d'éliminer toute charge statique avant de toucher la carte CPU. Les équipements électroniques modernes sont très sensibles aux décharges d'électricité statique. Toujours utiliser un bracelet de mise à la terre comme précaution. Placer toutes les composantes électroniques sur une surface

conçue pour dissiper les charge, ou dans un sac anti-statique lorsqu'elles ne sont pas dans le chassis.

Safety Precautions

For your safety carefully read all the safety instructions before using the device. Keep this Quick Start Guide for future reference.

- Always disconnect this equipment from any AC outlet before cleaning. Do not use liquid or spray detergents for cleaning. Use a damp cloth.
- For pluggable equipment, the power outlet must be installed near the equipment and must be easily accessible.
- Keep this equipment away from humidity.
- Put this equipment on a reliable surface during installation. Dropping it or letting it fall could cause damage.
- The openings on the enclosure are for air convection and to protect the equipment from overheating.

CAUTION/ATTENTION
Do not cover the openings!
Ne pas couvrir les ouvertures!

- Before connecting the equipment to the power outlet make sure the voltage of the power source is correct.
- Position the power cord so that people cannot step on it. Do not place anything over the power cord.
- If the equipment is not used for a long time, disconnect it from the power source to avoid damage by transient over-voltage.
- Never pour any liquid into an opening. This could cause fire or electrical shock.
- Never open the equipment. For safety reasons, only qualified service personnel should open the equipment.
- All cautions and warnings on the equipment should be noted.

***Let service personnel to check the equipment in case any of the following problems appear:**

  - 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 to work according to the Quick Start Guide.
  - The equipment has been dropped and damaged.
  - The equipment has obvious signs of breakage.

- Do not leave this equipment in an uncontrolled environment where the storage temperature is below -10°C (14°F) or above 60°C (140°F). It may damage the equipment.

CAUTION/ATTENTION
Use the recommended mounting apparatus to avoid risk of injury.
Utiliser l'appareil de fixation recommandé pour éliminer le risque de blessure.

WARNING! / AVERTISSEMENT!
Only use the connection cords that come with the product. When in doubt, please contact the manufacturer.
Utiliser seulement les cordons d'alimentation fournis avec le produit. Si vous doutez de leur provenance, contactez le manufacturier.

WARNING!/ AVERTISSEMENT!
Always ground yourself against electrostatic damage to the device.
Toujours vérifier votre mise à la terre afin que l'équipement ne se décharge pas sur vous.

- Cover workstations with approved anti-static material. Use a wrist strap connected to a work surface and properly grounded tools and equipment.
- Use anti-static mats, heel straps, or air ionizer for added protection.
- Avoid contact with pins, leads, or circuitry.
- Turn off power and input signals before inserting and removing connectors or test equipment.
- Keep the work area free of non-conductive materials, such as ordinary plastic assembly aids and Styrofoam.
- Use filed service tools, such as cutters, screwdrivers, and vacuum cleaners that are conductive.
- Always put drivers and PCB's component side on anti-static foam.

Important Information

Federal Communications Commission Radio Frequency Interface Statement

This device complies with part 15 FCC rules.
Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a class "B" 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 him own expense.

EC Declaration of Conformity

This equipment is in conformity with the requirement of the following EU legislations and harmonized standards. Product also complies with the Council directions.
Electromagnetic Compatibility Directive (2014/30/EU)

- EN 55035: 2017 /A11: 2020
- EN 55032: 2015+A11:2020
  - IEC61000-4-2: 2008
- EN 61000-3-2: 2019+A1:2021
  - IEC61000-4-3: 2020
- EN 61000-3-3: 2013+A2:2021
  - IEC61000-4-4: 2012
  - IEC61000-4-5: 2014/A1:2017
  - IEC61000-4-6: 2013+COR1:2015
  - IEC61000-4-8: 2009
  - IEC61000-4-11:2020

Low Voltage Directive (2014/35/EU)

- EN 62368-1:2014 + A11:2017

About This Guide

This Guide applies to the AI Panel PC series with 14th generation Raptor Lake S processor and provides description on how to use the AI PPC, its components and features.

NOTE:
Some pictures in this guide are samples and can differ from actual product.

Chapter 1: Introduction

Welcome to Winmate® AI Panel PC series, where innovation meets practicality to redefine human-machine interaction. Our AI Panel PCs are designed to seamlessly integrate cutting-edge artificial intelligence technologies with robust industrial-grade hardware, empowering industries to optimize their operations, enhance productivity, and drive efficiency like never before.

With a focus on versatility and performance, our AI Panel PC series offers a range of features tailored to meet the diverse needs of industrial applications. From intelligent edge computing capabilities to intuitive touchscreen interfaces, each device is engineered to deliver reliability and performance in even the most demanding environments.

1.1 Product Features

- Winmate® AI Panel PC Series features:
- Size: 19”, 21.5”, 23.8”, 27”, 32”
- Supports single NVIDIA RTX™
- Supports Intel® 14th generation Raptor Lake S processor
- Supports Intel® vPro
- Up to 2 x 260pin SODIMM DDR5 4800MHz up to 64GB (32GB per Slot)
- 2 x Intel 2.5 Gigabit LAN, 4 x USB3.2 Gen 2x1
- Supports Two display, 1 x HDMI 2.0b, 1 x DP 1.4a
- Power Input
    - For models R19IAD7T-GPM1, W22IAD7T-GPA3 & W24IAD7T-GPA2
        - 80 ~ 264V AC Power Input with 3 Pin AC Plug
    - For models W27IAD7T-GPA1 & W32IAD7T-GPA3
        - 90 ~ 264V AC Power Input with 3 Pin AC Plug

1.2 Package Contents

Carefully remove the box and unpack your device. Please check if all the items listed below are inside your package. If any of these items are missing or damaged contact us immediately.

Standard factory shipment list:

Quick Start Guide

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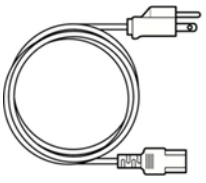
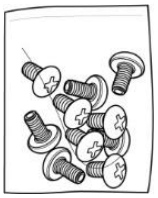


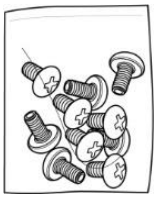
Power Cord

Varies by country



Mounting Screws

Varies by product specifications



VESA Screws

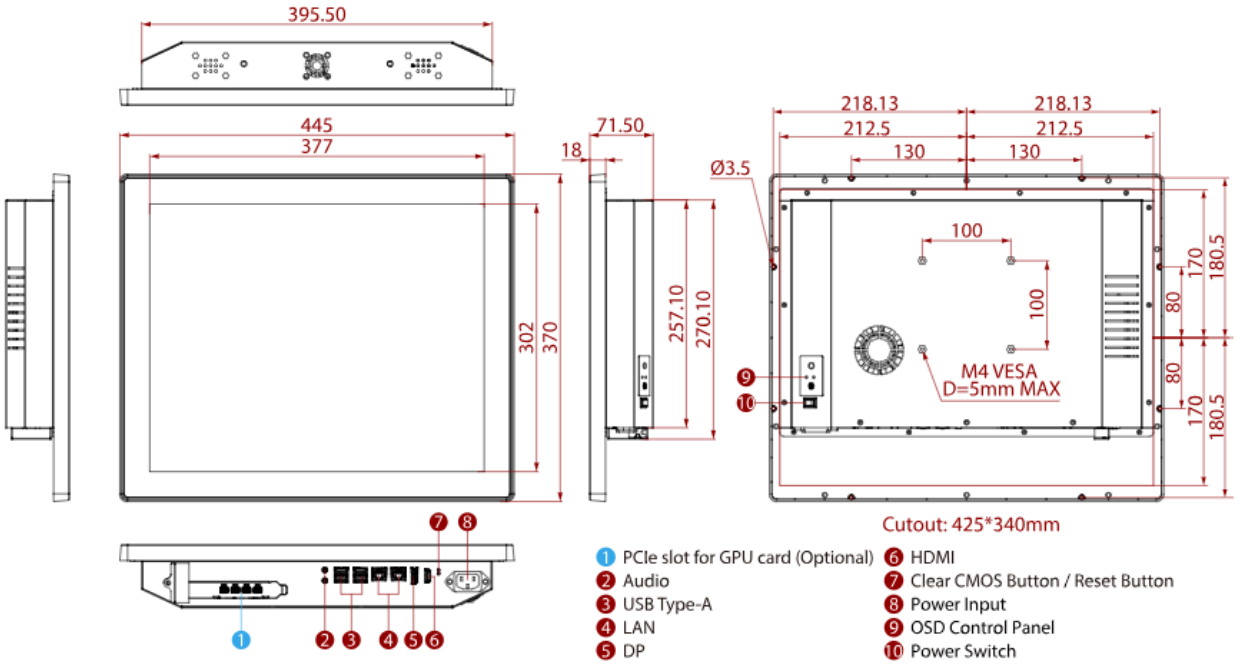
Varies by product specifications

**Package content may vary based on your order.*

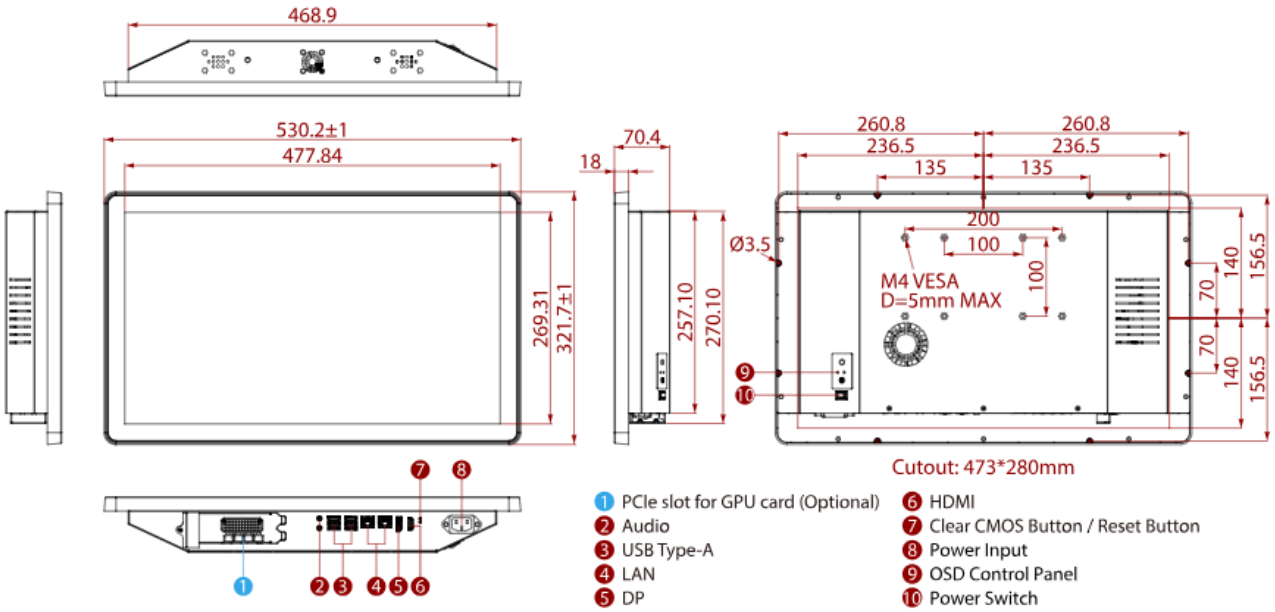
1.3 Description of Parts

This section describes appearance, connectors' layout and mechanical dimensions of AI Panel PC series. Notice that this is a simplified drawing and some components are not marked in detail. Please contact our sales representative if you need further product information.

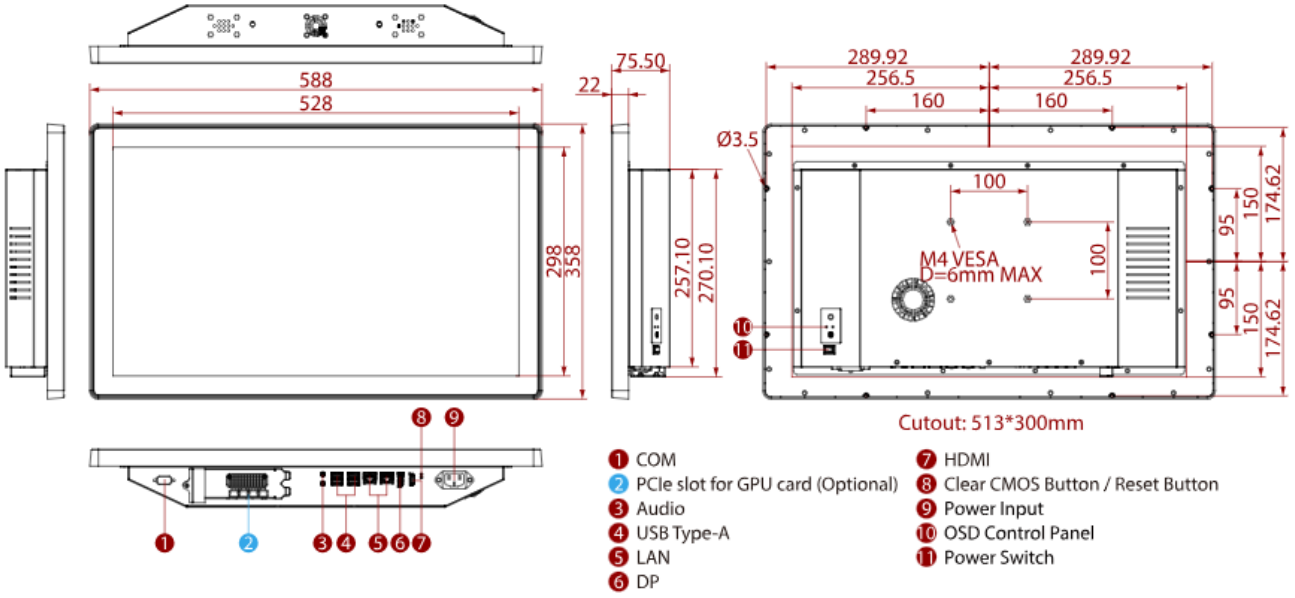
R19IAD7T-GPM1 *Unit: mm*



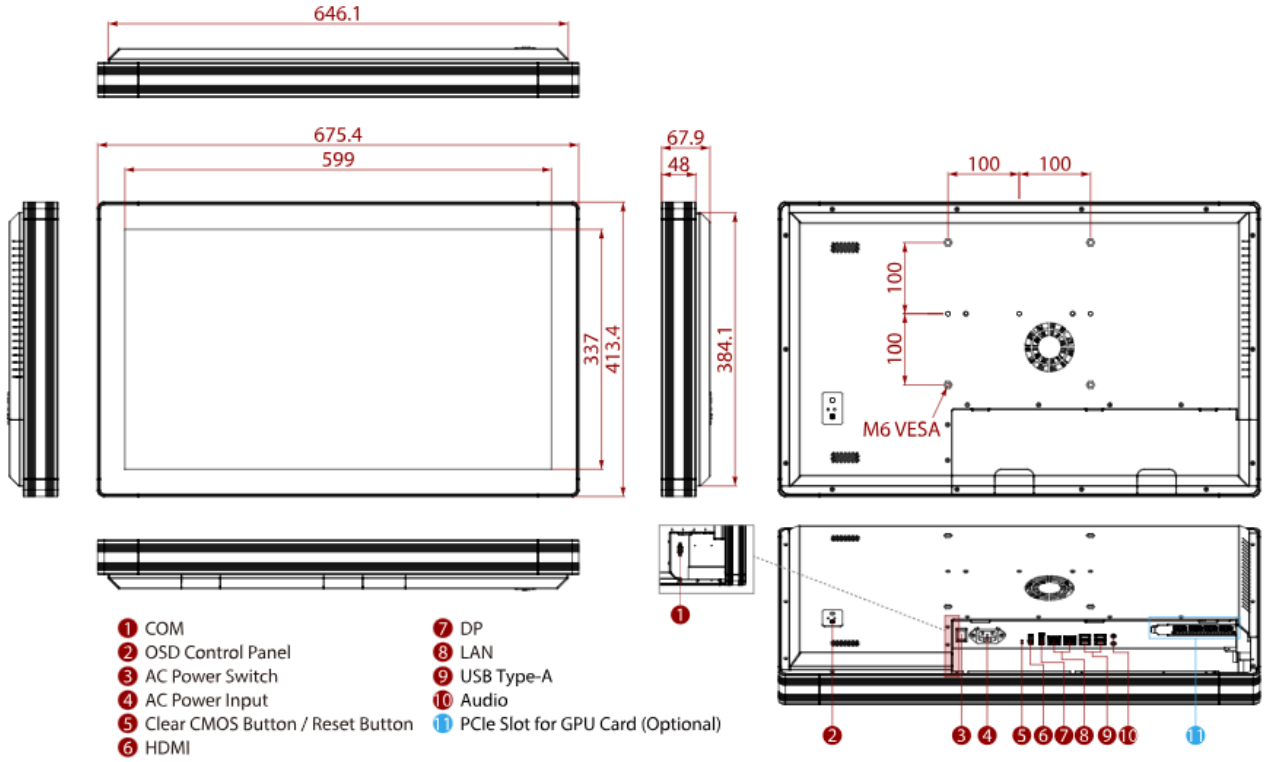
W22IAD7T-GPA3 *Unit: mm*



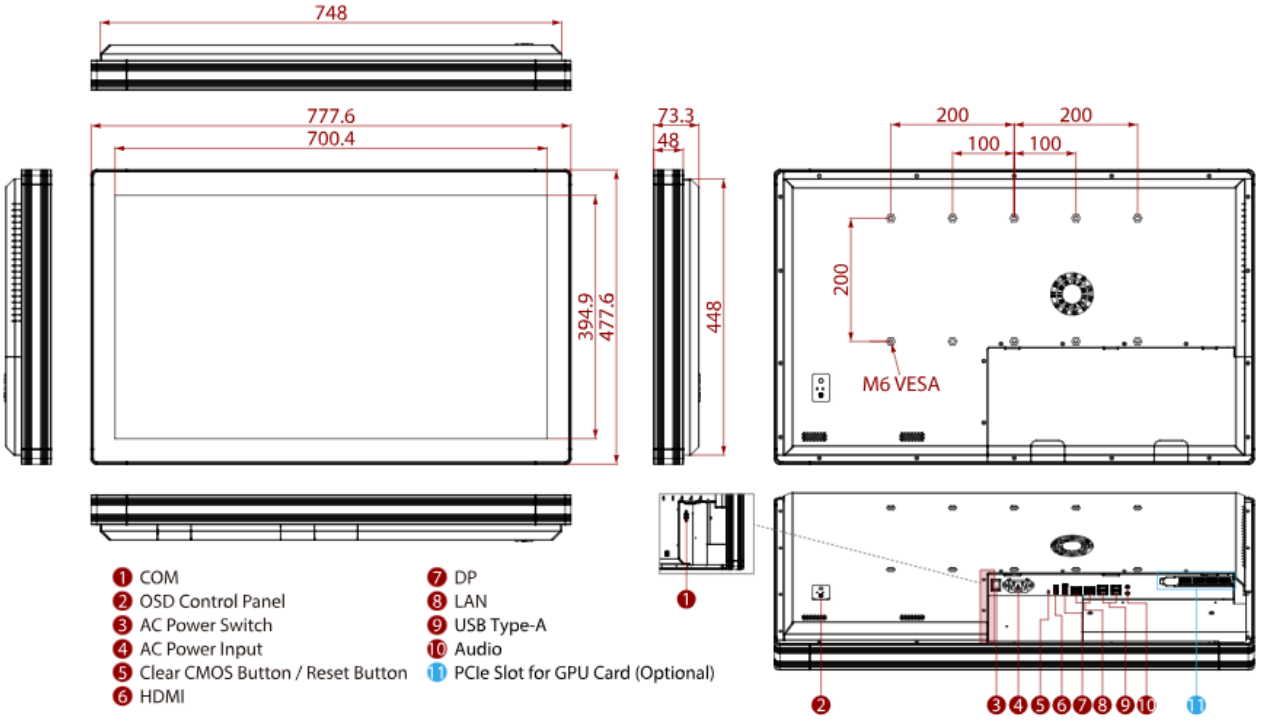
W24IAD7T-GPA2 *Unit: mm*



W27IAD7T-GPA1 *Unit: mm*



W32IAD7T-GPA3 *Unit: mm*



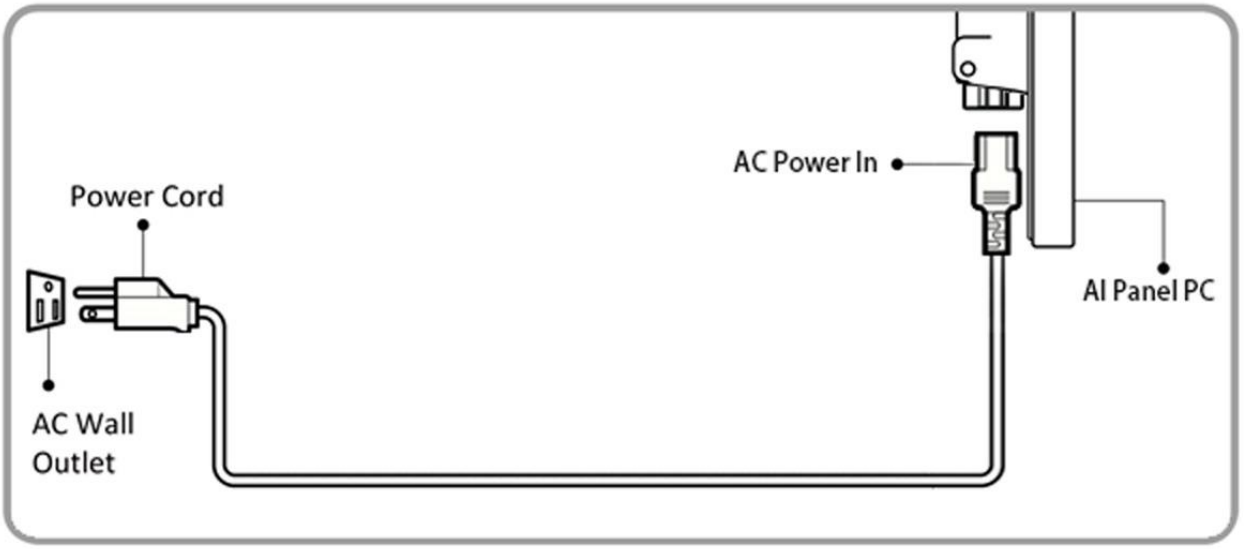
Chapter 2: Getting Started

This chapter provides information on how to connect the AI Panel PC series to the source of power, connector pinouts and the guideline to turn on/off the AI Panel PC series.

2.1 Connecting the Power

Installation Instruction:

1. Connect power cord to the AC power input on the AI Panel PC.
2. Plug in the power cord to a working AC wall outlet.



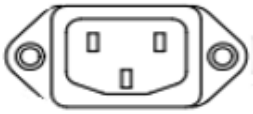
Note:

1. Power cords vary in appearance by region and country.

2.2 Connector Pinouts

2.2.1 AC Power Input

For models R19IAD7T-GPM1, W22IAD7T-GPA3 and W24IAD7T-GPA2, the AC power input is 80 ~ 264V AC.
For models W27IAD7T-GPA1 and W32IAD7T-GPA3, the AC power input is 90 ~ 264V AC.

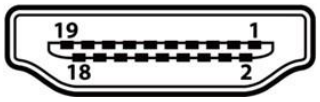


Voltage

Minimum Voltage 80V AC
Maximum Voltage 264V AC
Maximum Current 2.2A

2.2.2 HDMI 2.0b Type A

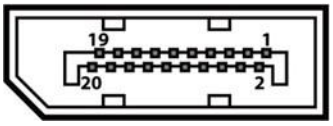
Use HDMI connector to transmits audio/video from a panel PC to an output device.



Pin №	Signal Name	Pin №	Signal Name
1	HDMI_DET	2	NV
3	HDMI_D2P	4	GND
5	HDMI_D2M	6	HDMI_D1P
7	GND	8	HDMI_D1M
9	HDMI_D0P	10	GND
11	HDMI_D0M	12	HDMI_CLKP
13	GND	14	HDMI_CLKM
15	HDMI_CEC_OUT	16	GND
17	DDC_CLOCK	18	DDC_DATA
19	+5V	20	GND

2.2.3 Display Port 1.4a DP++

Transmits video from a panel PC to an output device



Pin №	Signal Name	Pin №	Signal Name
1	Lane 0+	2	GND
3	Lane 0-	4	Lane 1+
5	GND	6	Lane 1-
7	Lane 2+	8	GND
9	Lane 2-	10	Lane 3+
11	GND	12	Lane 3-
13	AUX_EN_N	14	GND
15	AUX+	16	GND
17	AUX-	18	Hot Plug
19	GND	20	+3.3V

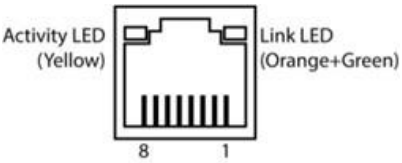
2.2.4 Audio Jack

There are two stereo audio ports with phone jack connectors, one is Line-out, and the other one is Mic-in.

Pin №	Signal Name	Pin №	Signal Name
1	Line-out	2	Mic-in

2.2.5 2.5 Gigabit Ethernet

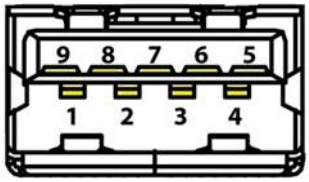
It has two Ethernet connectors located on the front. Ethernet ports provide a standard RJ45 jack connector with LED indicators on the front side to show its Active/ Link status and Speed status.



Pin №	Signal Name	Pin №	Signal Name
1	TX1+	2	TX1-
3	TX2+	4	TX2-
5	TX3+	6	TX3-
7	TX4+	8	TX4-

2.2.6 USB 3.2 Gen2x1

4 x USB 3.2 Gen2x1 (10Gbps, Type A)



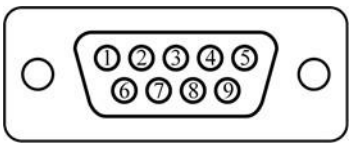
Pin №	Signal Name	Pin №	Signal Name
1	+5V	2	USB_D-
3	USB_D+	4	GND
5	STDA_SSRX-	6	STDA_SSRX+
7	GND_DRAIN	8	STDA_SSTX-
9	STDA_SSTX+		

2.2.7 Serial Port Connector

(Only W24IAD7T-GPA2/ W27IAD7T-GPA1/W32IAD7T-GPA3 have COM Port)

You can configure serial port RS-232/422/485 settings in BIOS. Please refer to Chapter 4 for more details.

Pin assignment and connector description of serial port connector



Pin №	RS-232	RS-422	RS-485
1	DCD	TxD-	D-
2	RXD	TxD+	D+
3	TXD	RxD+	NC
4	DTR	RxD-	NC
5	GND	GND	GND
6	DSR	NC	NC
7	RTS	NC	NC
8	CTS	NC	NC
9	RI	NC	NC

Chapter 3: Mounting

This chapter provides mounting guide for all available mounting options. Pay attention to cautions and warning to avoid any damages.

3.1 Cable Mounting Considerations

For a nice look and safe installation, make sure cables are neatly hidden behind the AI Panel PC device. Refer to Chapter 2.1 for the cable installation instruction.

CAUTION/ ATTENTION

Observe all local installation requirements for connection cable type and protection level.

Suivre tous les règlements locaux d'installations, de câblage et niveaux de protection.

CAUTION/ ATTENTION

Turn off the device and disconnect other peripherals before installation.

Éteindre l'appareil et débrancher tous les périphériques avant l'installation.

ALTERNATING CURRENT / MISE À LE TERRE !

To prevent electrical shock, the Safety Ground location on the rear must be bonded to the local earth ground through a minimum 12 AWG wire as short as possible

Pour éviter les chocs électriques, l'emplacement de la prise terre à l'arrière doit être lié à terre locale, à travers un 12 AWG minimum et aussi court que possible.

3.2 Safety Precautions

Observe the following common safety precautions before installing any electronic device:

- Use separate, non-intersecting paths to route power and networking wires. If power wiring and device wiring paths must be crossed make sure the wires are perpendicular at the intersection point.
- Keep the wires separated according to the interface. Wires that share similar electrical characteristics must be bundled together.
- Do not bundle input wiring with output wiring. Keep them separate.
- When necessary, it is strongly advised that you label wiring to all devices in the system.

3.3 Mounting Guide

AI Panel PC comes with different mounting options suitable for most of the industrial and commercial applications. The main mounting approach is rear mount - very user-friendly in terms of installation. Refer to sub-sections below for more details.

CAUTION/ ATTENTION

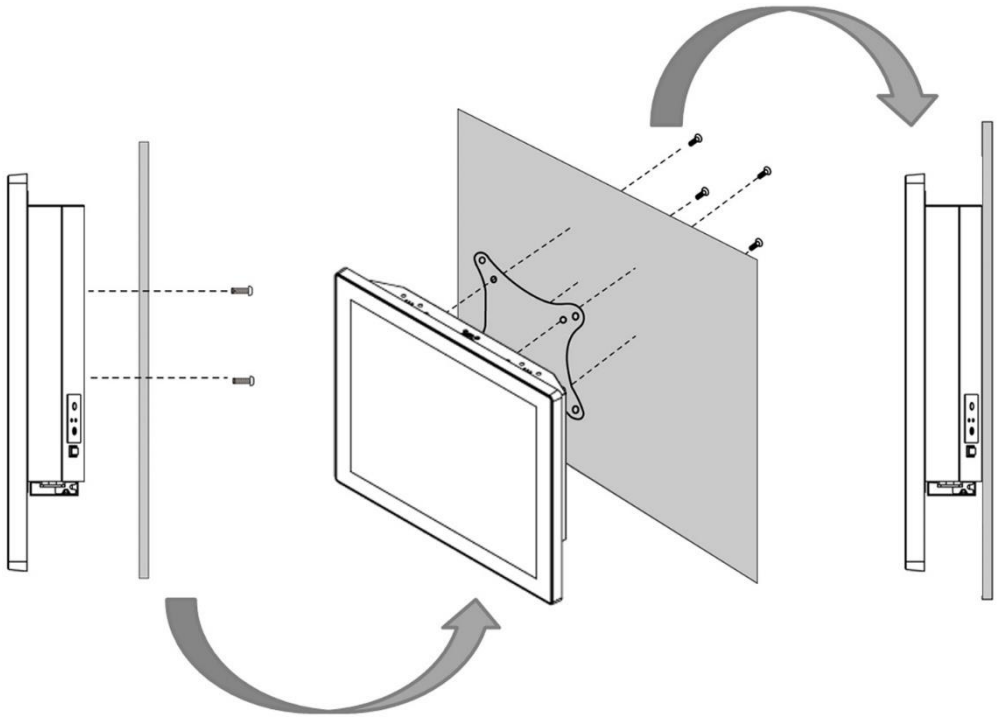
Follow mounting instructions and use recommended mounting hardware to avoid the risk of injury.

Suivez les instructions de montage et d'utilisation recommandé le matériel de montage pour éviter le risque de blessure.

3.3.1 VESA Mount

VESA Mount is a widely used mounting solution suitable for all kinds of industrial applications.

Model Name	Dimensions	Screw Hole Diameter
R19IAD7T-GPM1	100 x 100 mm	VESA M4 x 5 mm
W22IAD7T-GPA3	100 x 100 mm	VESA M4 x 5 mm
W24IAD7T-GPA2	100 x 100 mm	VESA M4 x 6 mm
W27IAD7T-GPA1	100 x 100 mm	VESA M6 x 5 mm
W32IAD7T-GPA3	100 x 100 mm	VESA M6 x 5 mm



**with customer's bracket*

Mounting Steps:

1. Screw VESA bracket to the fixture (ex. wall) with four VESA screws. There are different screw hole diameter for different AI Panel PC. Please refer 3.3.1 table.
2. Place the device on VESA bracket.

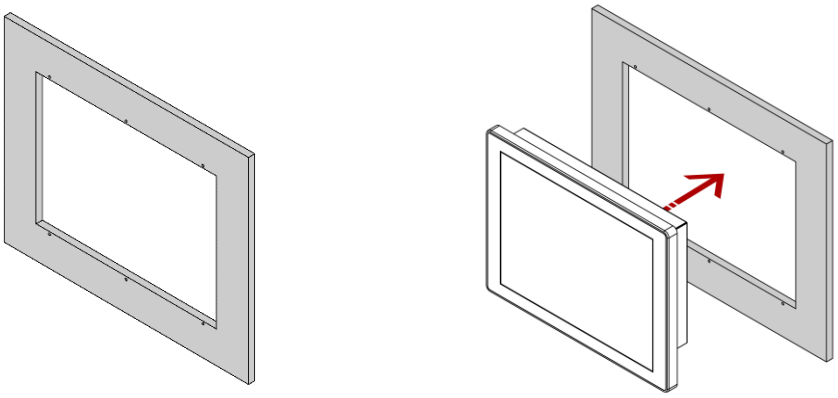
3.3.2 Wall Mount

Wall Mount solution is suitable for industrial settings where space optimization is paramount, allowing you to maximize floor space utilization. In addition to elegant design, rear mount solution is making the AI Panel PC unit easy to clean and maintain. The AI Panel PC is secured to the fixture from the rear by using the mounting brackets included in the package.

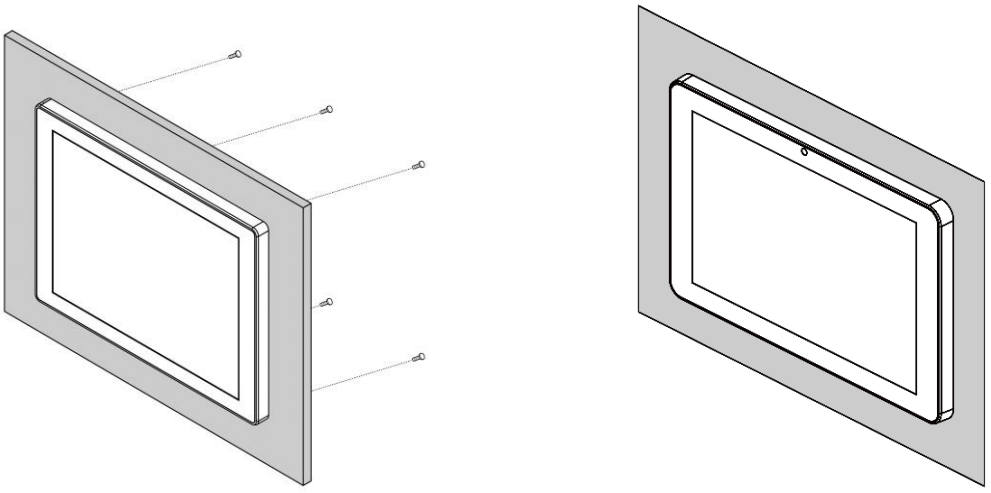
Size	19”	21.5”	23.8”
Cutout dimension (W x D in mm)	425 x 340	473 x 280	513 x 300

Mounting Steps:

2. Start by removing the mounting screws from your AI Panel PC. Prepare a cutout on a fixture according to the cutout dimensions. Carefully position the AI Panel PC onto the fixture.



3. Secure the AI Panel PC firmly to the fixture using the screws provided with the device. Once securely mounted, connect the power and any other peripherals to your AI Panel PC.

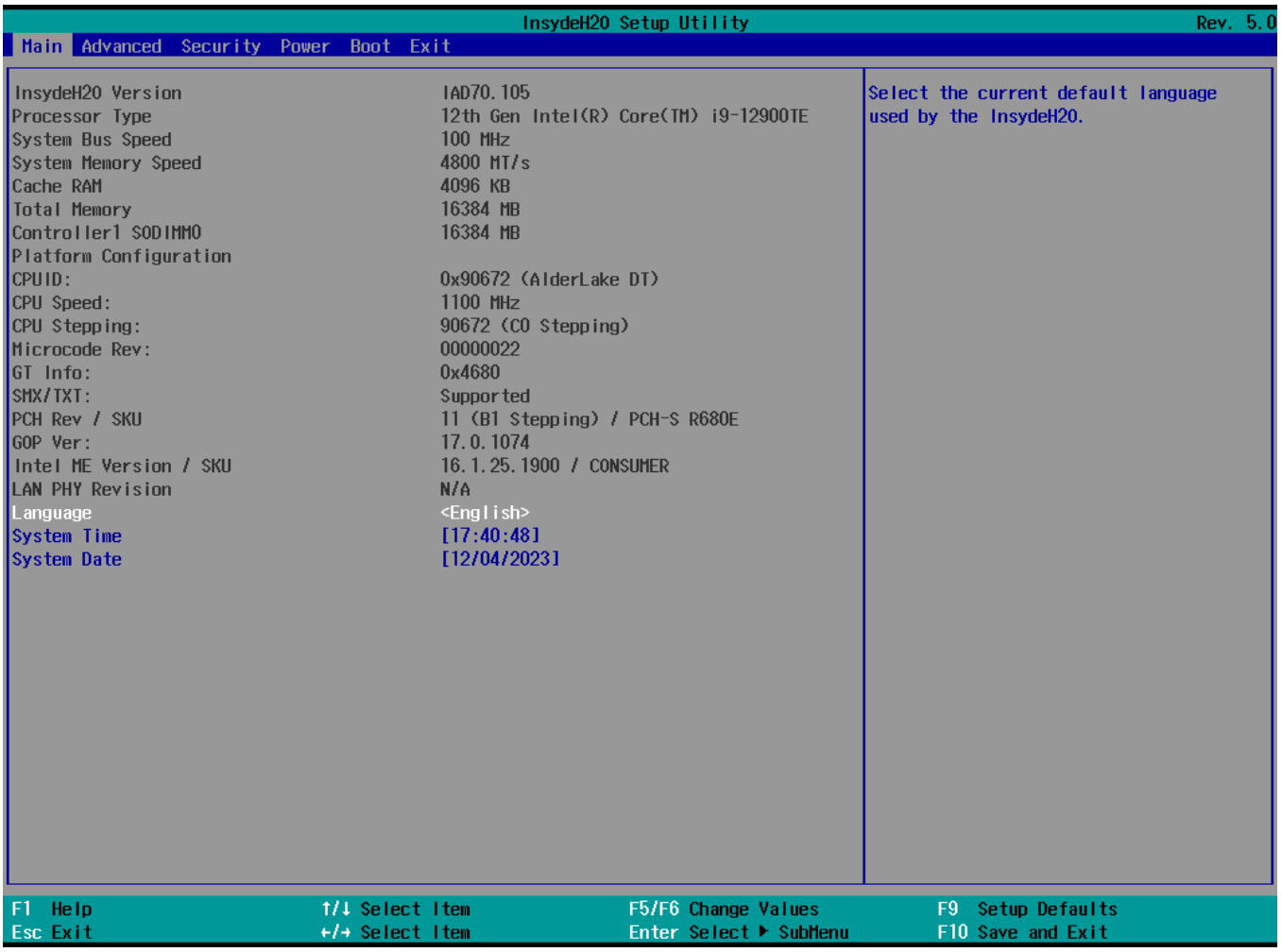


Chapter 4: Insyde H20 BIOS Setup

4.1 Main Menu

The Main menu displays the basic information about your system including BIOS version, processor RC version, system language, time, and date.

When you enter BIOS setup, the first menu that appears on the screen is the main menu. It contains the system information including BIOS version, processor RC version, system language, time, and date.



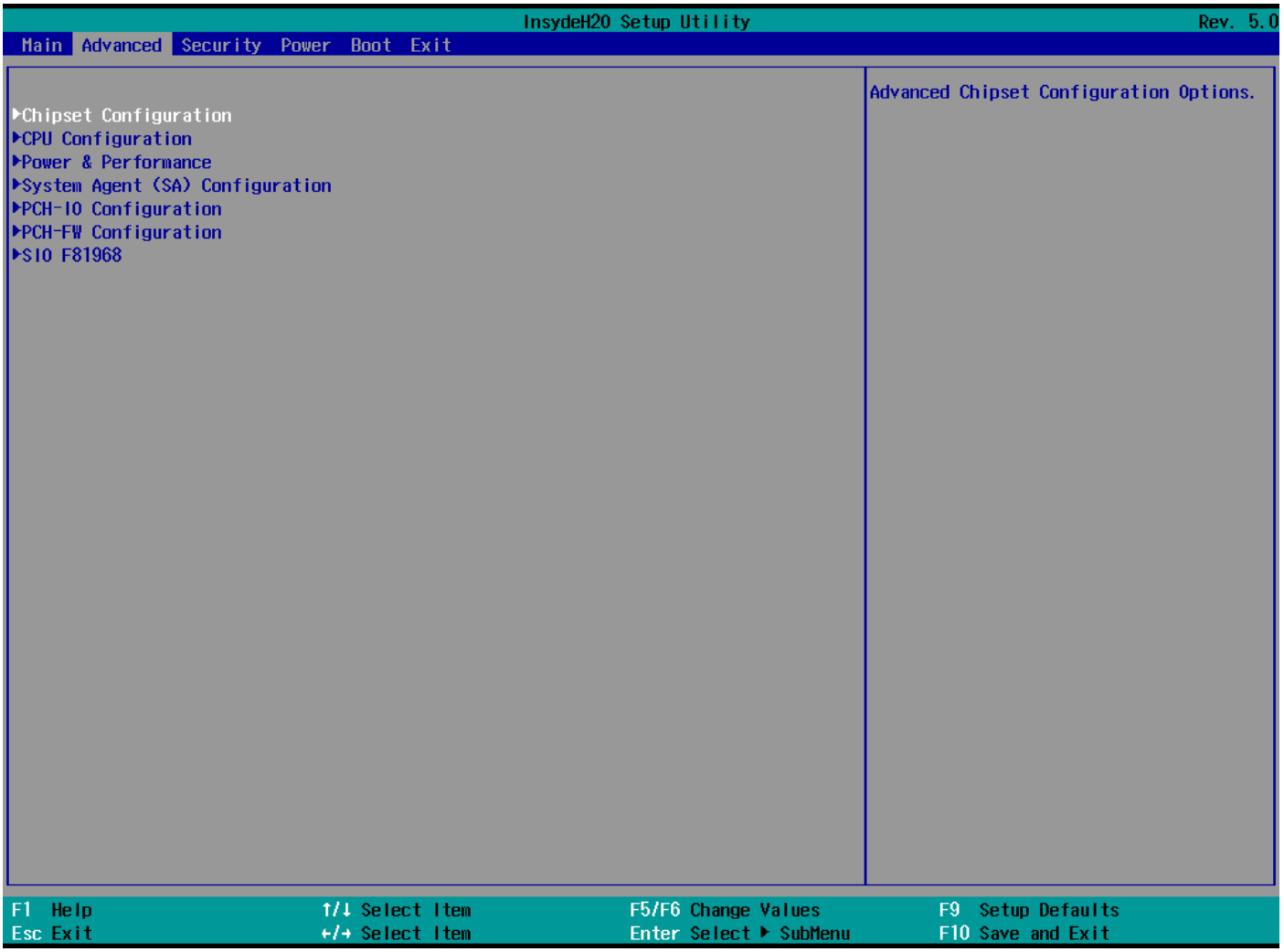
BIOS Setting	Description	Setting Option	Effect
Language	Displays the system language. [English] is set up by default.	Adjustment of the language	Set the language in other language. The language in this device is English.
System Time	This is current time setting. The time is maintained by the battery when the device is turned off.	Date and time changes.	Set the time in the format: [hh/mm/ss]
System Date	This is current date setting.	Date and time changes.	Set the date in the format [mm/dd/yyyy];

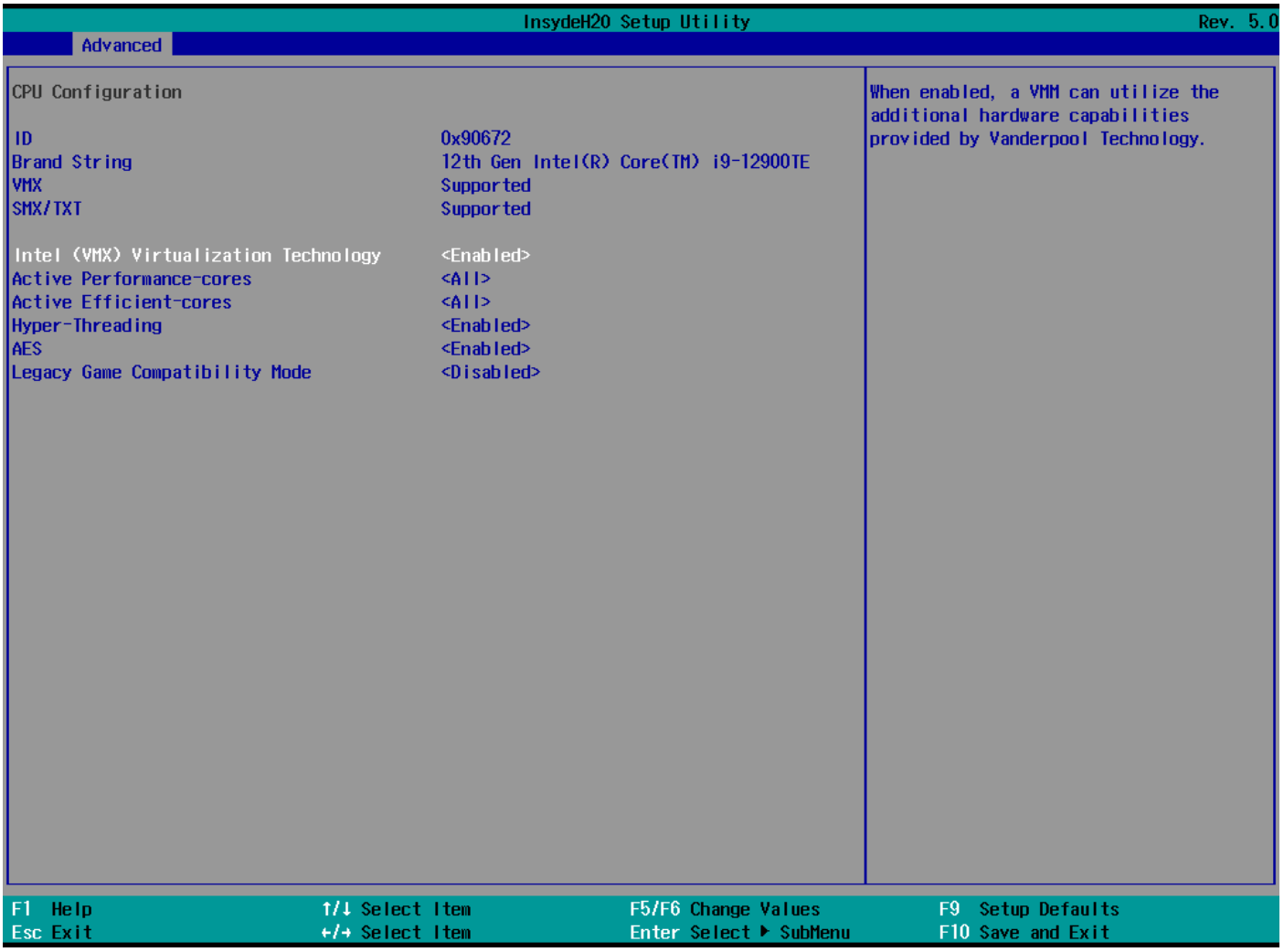
4.2 Advanced

Select the Advanced Tab from the setup menu to enter the advanced BIOS setup screen. You can select any of the items on the left frame of the screen to go to the sub menu for the item, such as CPU Configuration. You can use the <Arrow> keys enter all advanced BIOS setup options. The advanced BIOS setup menu is shown below. The submenus described on the following pages.

CAUTION

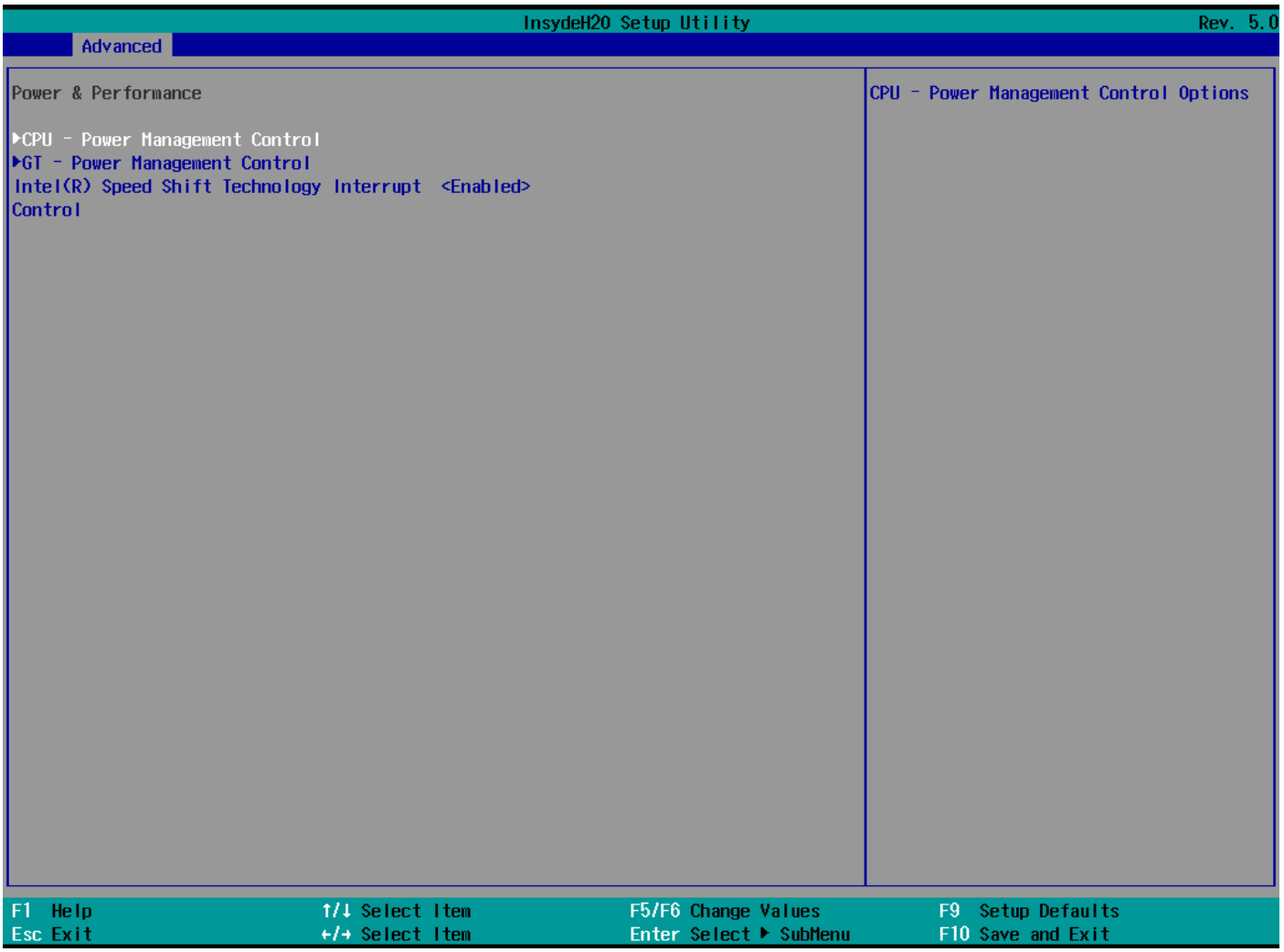
Handle advanced BIOS settings page with caution. Any changes can affect the operation of your computer.



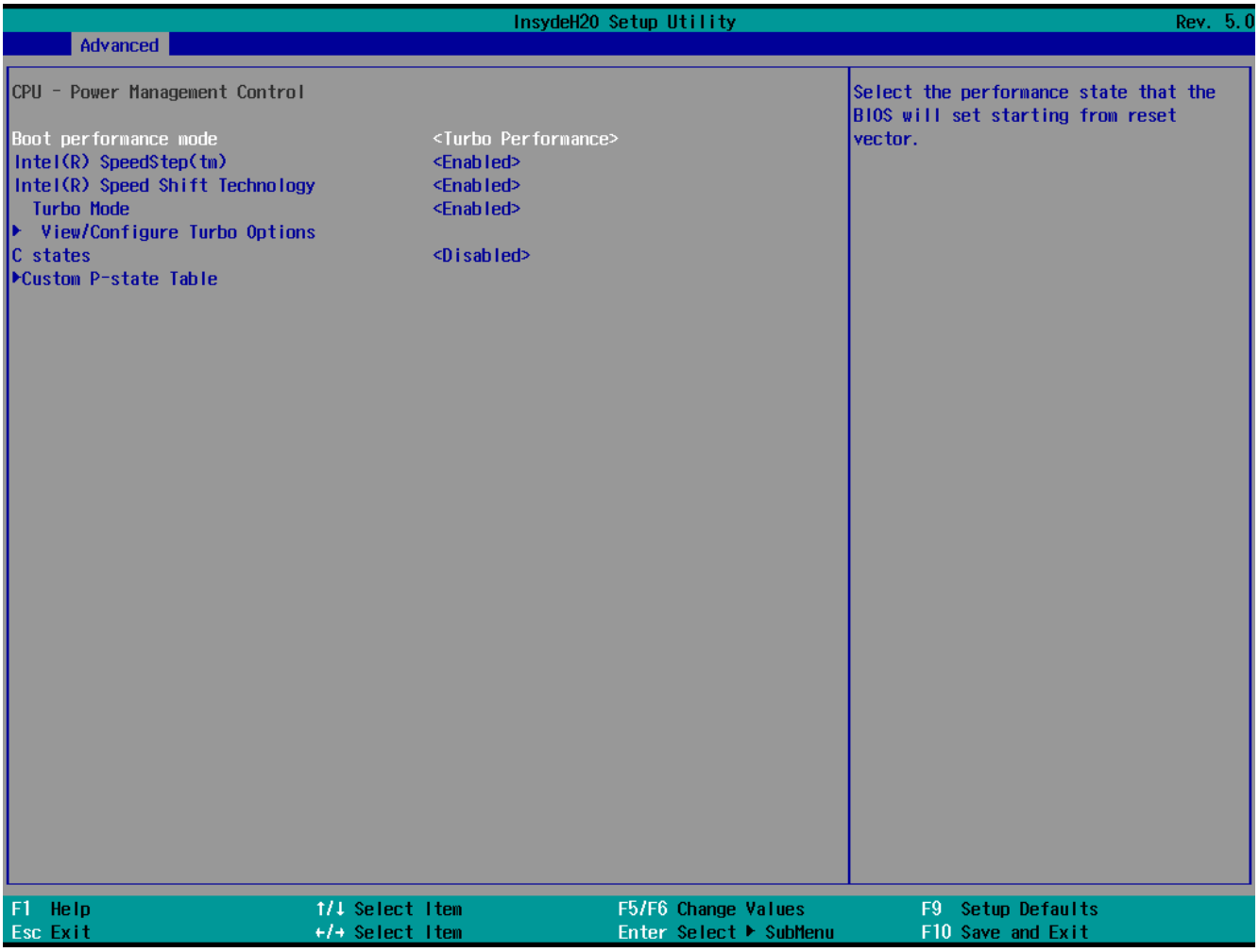


BIOS Setting	Description	Setting Option	Effect
CPU Configuration	Configures Trusted Computing parameters	Enter	Opens submenu
Power & Performance	Configures Power & Performance parameters	Enter	Opens submenu
System Agent Configuration	Configures System Agent Configuration parameters	Enter	Opens submenu
PCH-OI Configuration	Configures PCH-OI parameters	Enter	Opens submenu
PCH-FM Configuration	Configures PCH-FM parameters	Enter	Opens submenu
SIO F81968	Configures SIO F81968 parameters	Enter	Opens submenu
Console Redirection	Configures Console Redirection parameters	Enter	Opens submenu

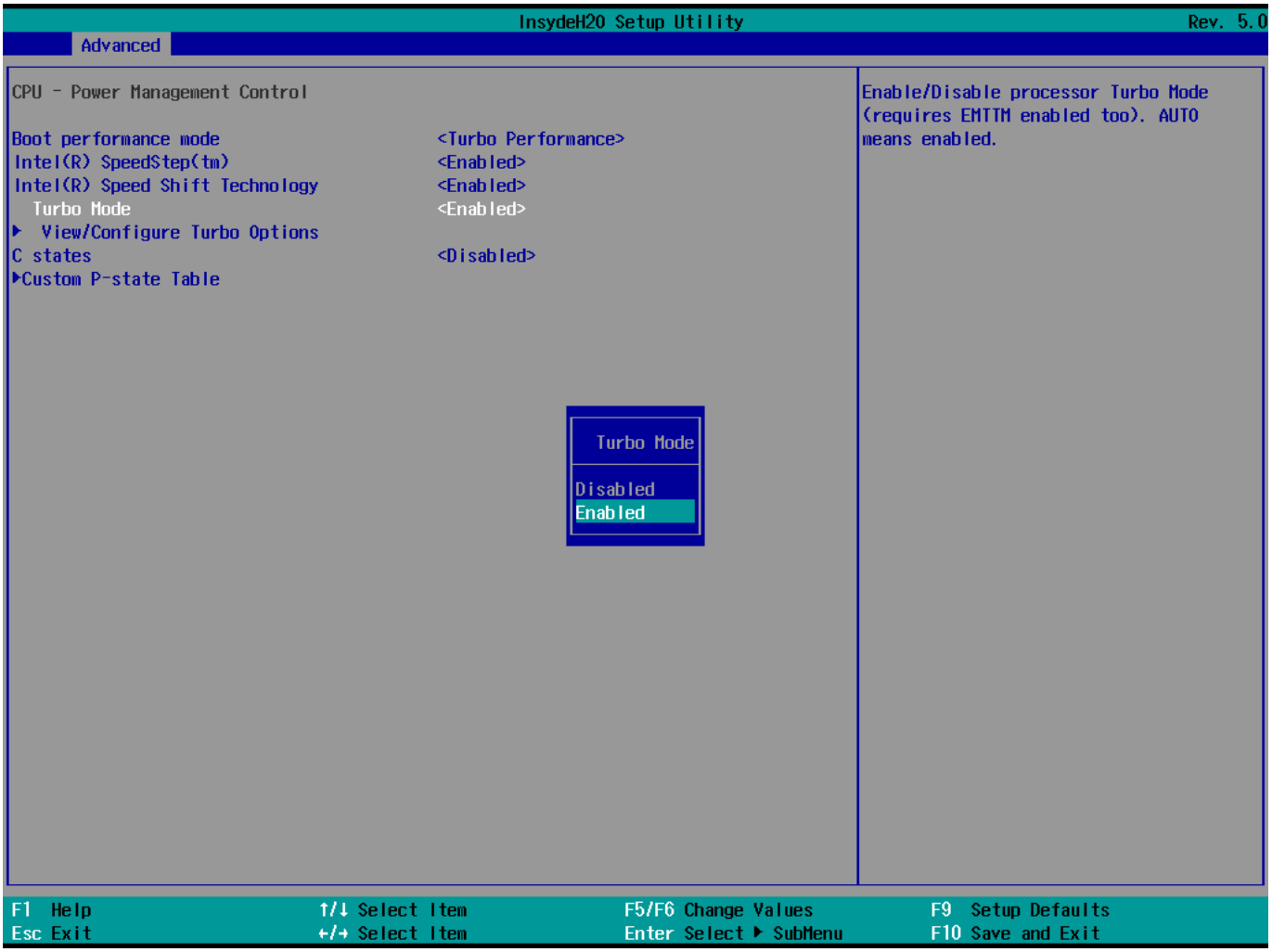
4.2.1 Power & Performance



BIOS Setting	Description	Setting Option	Effect
CPU – Power Management Control	Configure CPU – Power Management Control parameters	Enter	Enters sub-menu

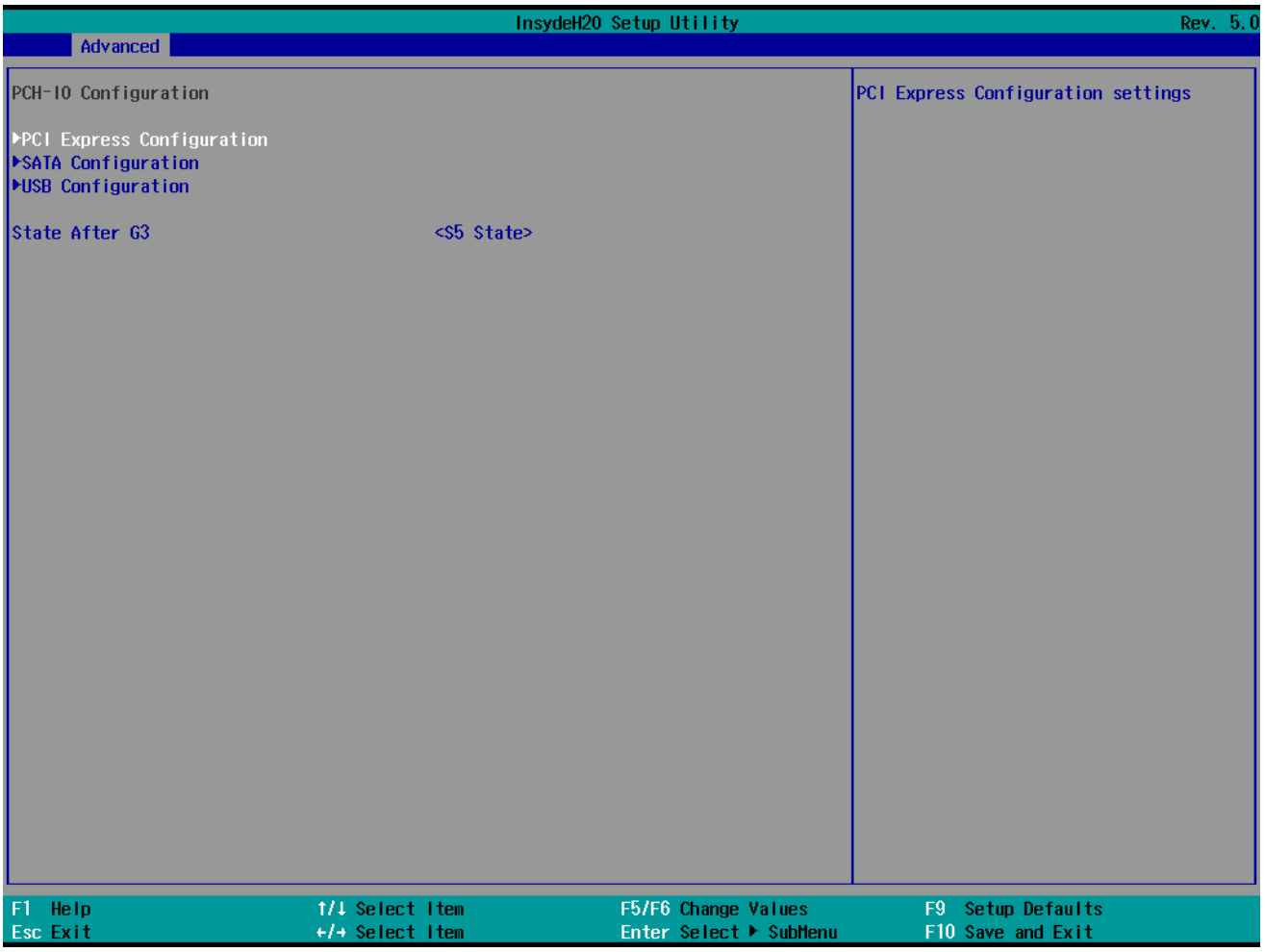


BIOS Setting	Description	Setting Option	Effect
Boot Performance Mode	Configure Boot Performance Mode parameters	- Max non-turbo performance - Max battery - Turbo Performance	Select the performance state that the BIOS will set starting from reset vector
Intel SpeedStep (ta)	Configure Intel SpeedStep (ta) parameters	Enabled/ Disabled	Allows more than two frequency ranges to be supported
Intel Speed Shift Technology	Configure Intel Speed Shift Technology parameters	Enabled/ Disabled	Enable/ Disable Intel Speed Shift Technology support. Enabling will expose the CPP v2 interface to allow for hardware controlled P- states



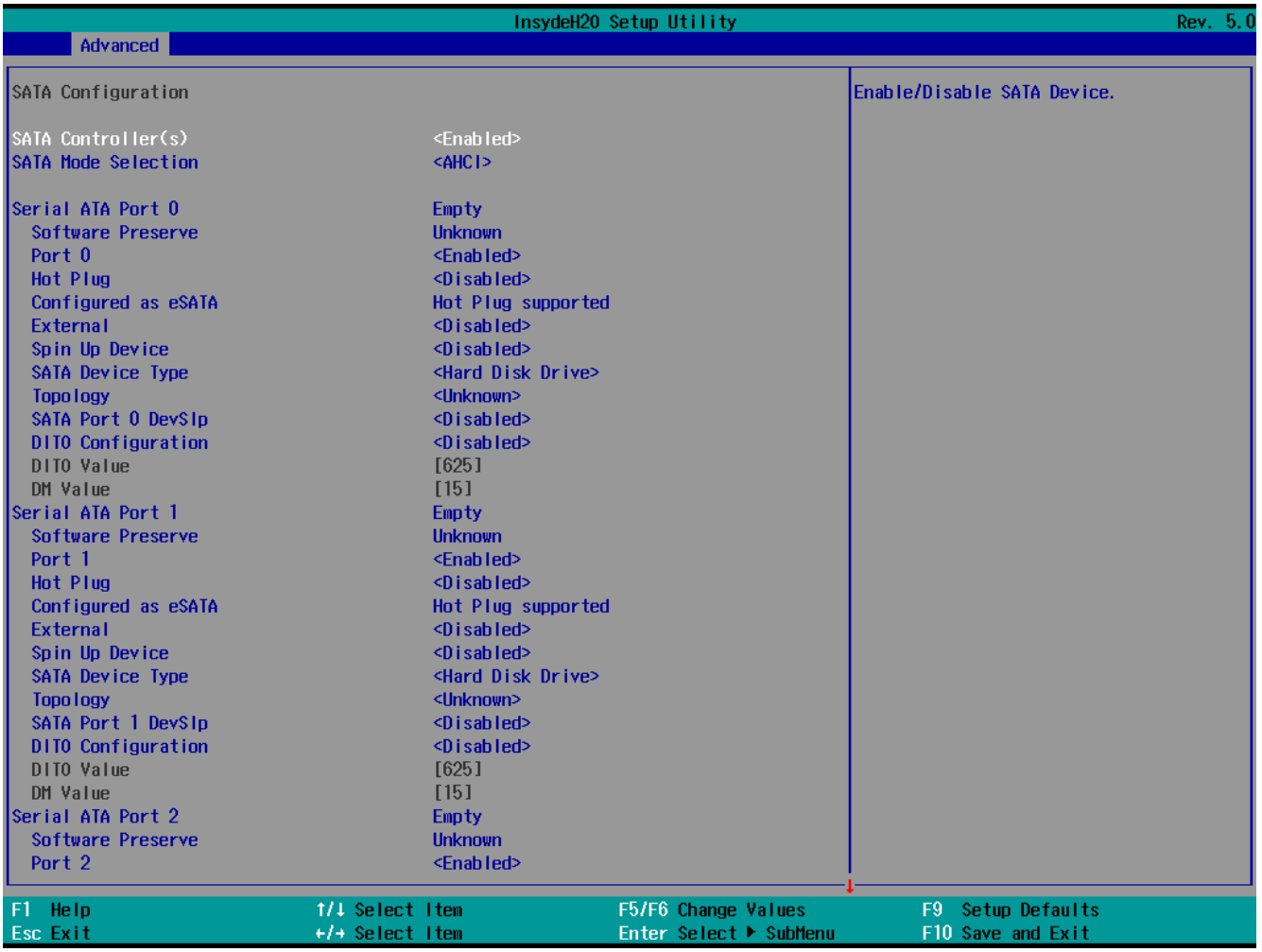
BIOS Setting	Description	Setting Option	Effect
-Turbo Mode	*Enable or disable Turbo Mode*	*Enabled/ Disabled*	*Enable/ Disable processor Turbo Mode (requires EMTTM enabled too). Auto means enabled, unless max turbo ratio is bigger than 16 – SKL AO W/A*

4.2.1.1 PCH-IO Configuration

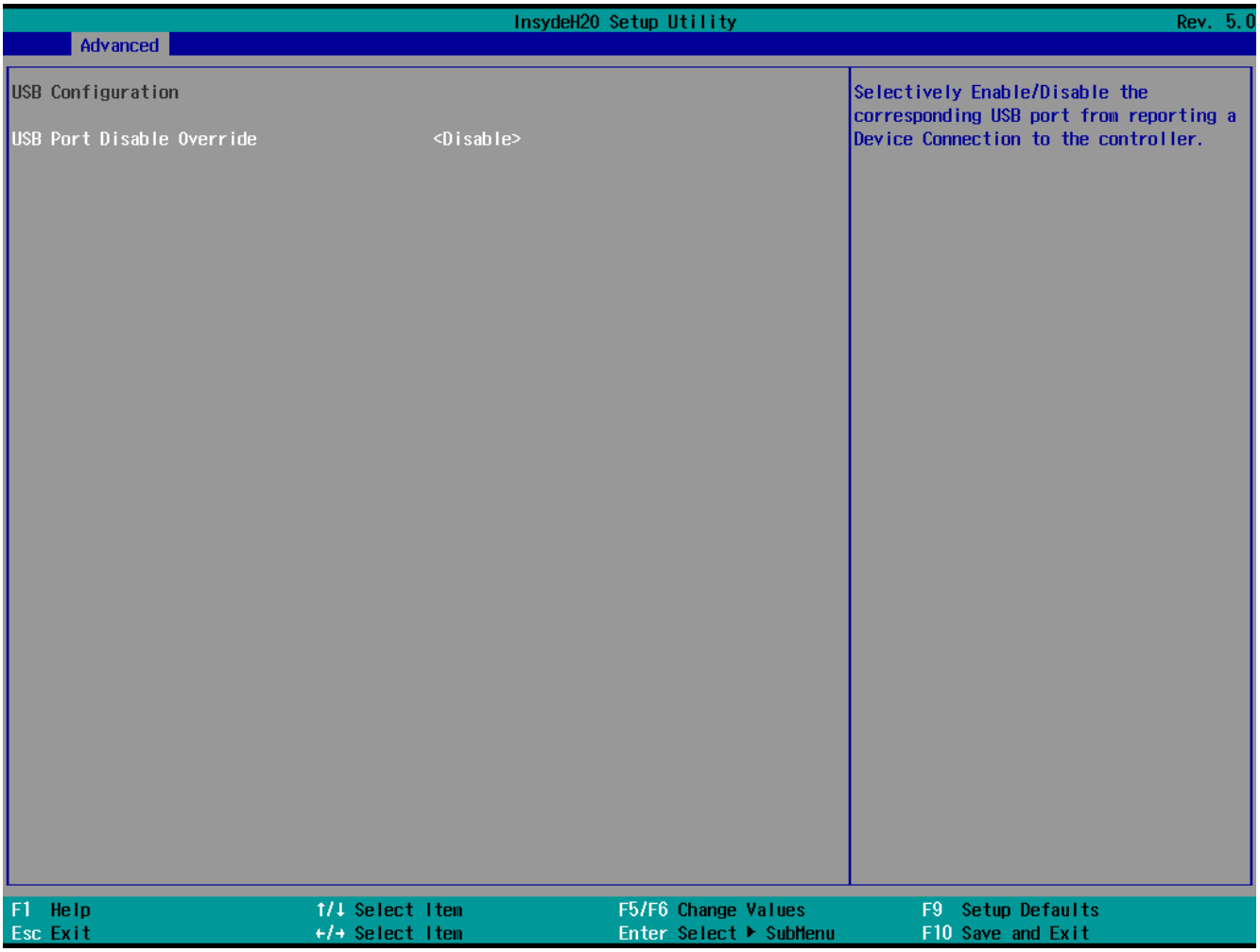


BIOS Setting	Description	Setting Option	Effect
PCI Express Configuration	Configure PCI Express settings	Enter	Opens sub-menu
SATA And RST Configuration	Configure SATA And RST settings	Enter	Opens sub-menu
USB Configuration	Configure USB settings	Enter	Opens sub-menu
State After G3			

4.2.1.2 SATA and RST Configuration

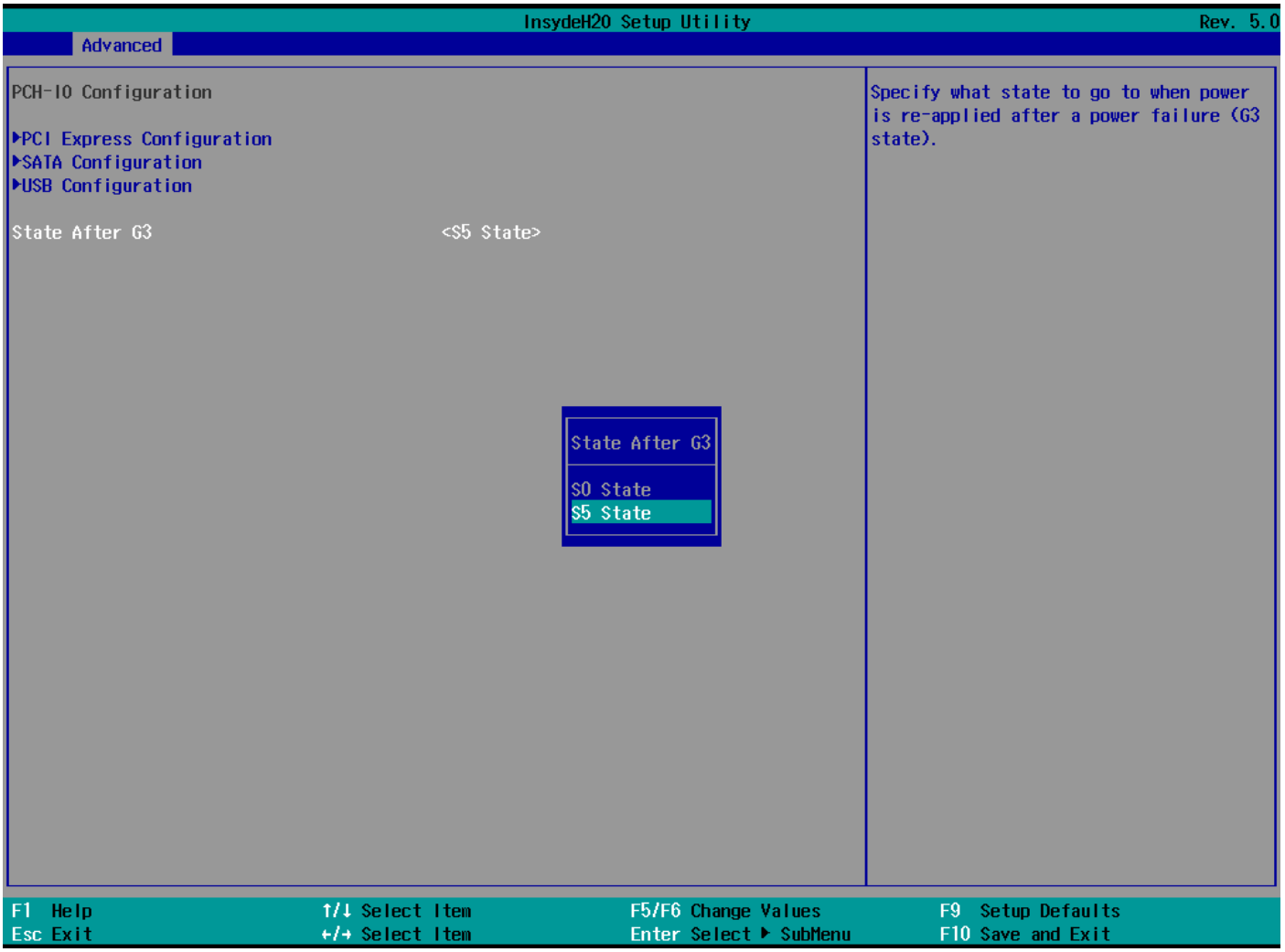


4.2.1.3 USB Configuration



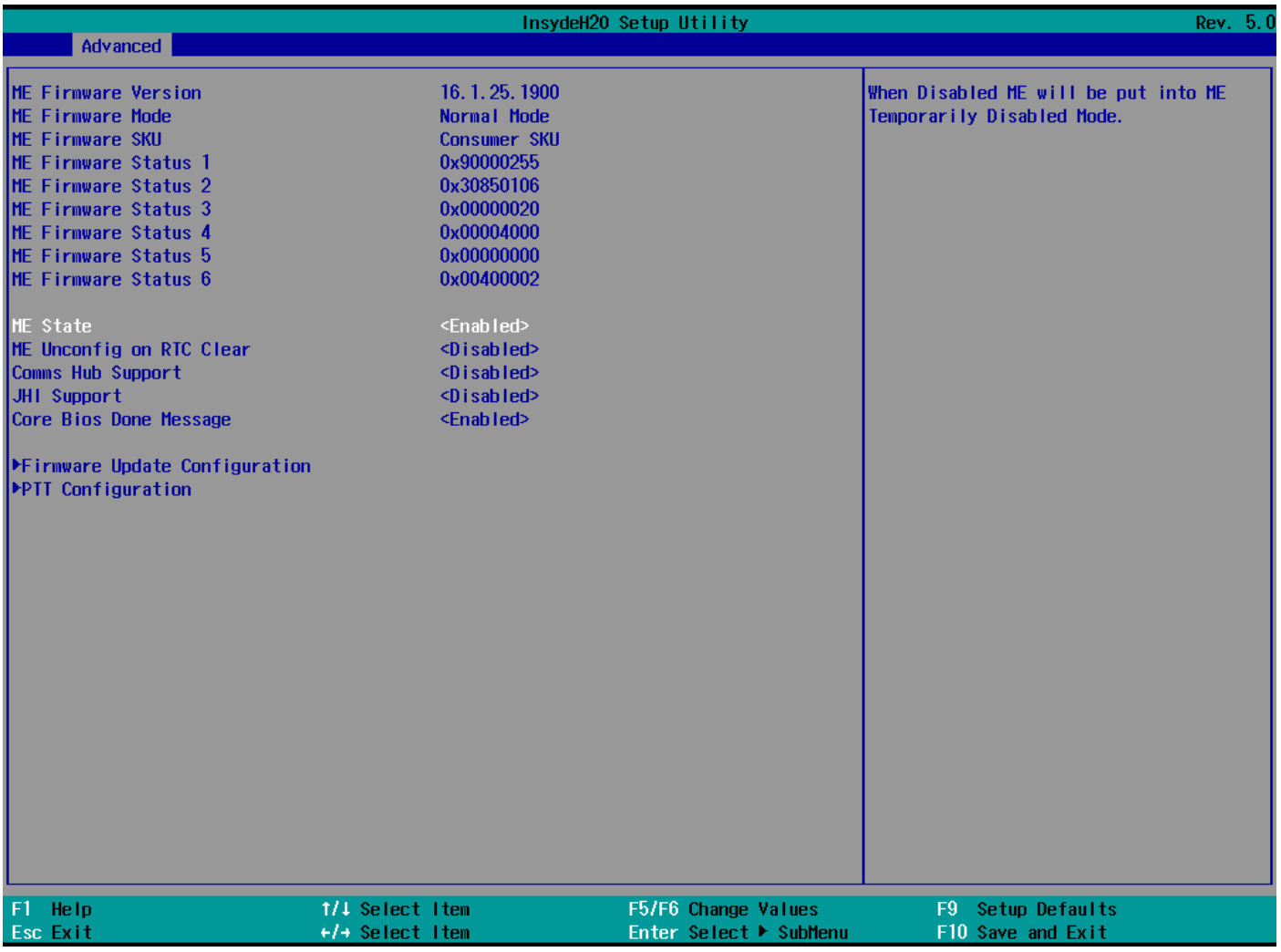
BIOS Setting	Description	Setting Option	Effect
USB Port Disable Override	USB Port Disable Override configuration	Disable Select Per-Pin	Selectively Enable/ Disable the corresponding USB port from reporting a Device Connection to the controller

4.2.1.4 State After G3



BIOS Setting	Description	Setting Option	Effect
State After G3	State After G3 configuration	S0 State S5 State	Specify what state to go to when power is re-applied after a power failure (G3 state)

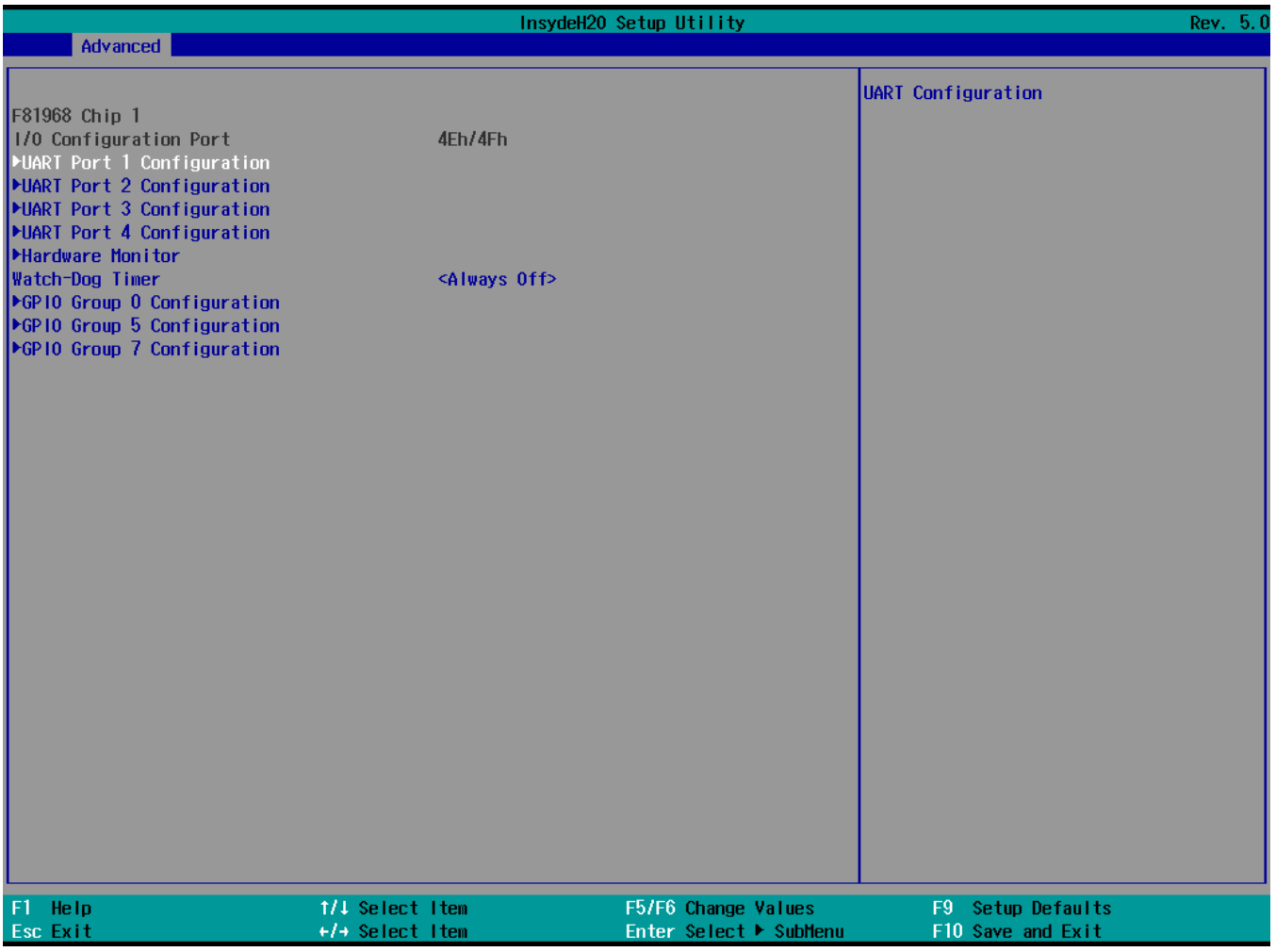
4.2.1.5 PCH-FW Configuration



BIOS Setting	Description	Setting Option	Effect
ME State	ME State configuration	Disabled Enabled	When Disabled ME will be put into ME Temporarily Disabled Mode
Manageability Features State	Manageability Features State configuration	Disabled Enabled	Enable/ Disable Intel Manageability Features Note: this option disabled/ enables Manageability Features support in FW. To disable support platform must be in an unprovisioned state first.
AMT BIOS Features	AMT BIOS Features	Disabled Enabled	Enable/ Disable Intel Active Management Technology BIOS Extension. Note: iAMT H/W Is always enabled. This option just controls the BIOS Extension execution.
AMT Configuration	AMT Configuration	Enter	Opens sub-menu

ME Unconfig on RTC Clear State	ME Unconfig on RTC Clear State	Disabled Enabled	Disabling this option will cause ME not to unconfigure on RST clear
Comms Hub Support	Comms Hub Support	Disabled Enabled	Enable/Disable support for Comms Hub
JHI Support	JHI Support	Disabled Enabled	Enable/Disable Intel DAL Host Interface Service (JHI)
Core BIOS Done Message	Core BIOS Done Message	Disabled Enabled	Enable /Disable Core BIOS Done message sent to ME
Firmware Update Configuration	Firmware Update Configuration	Enter	Opens sub-menu
PTT Configuration		Enter	Opens sub-menu
ME Debug Configuration			

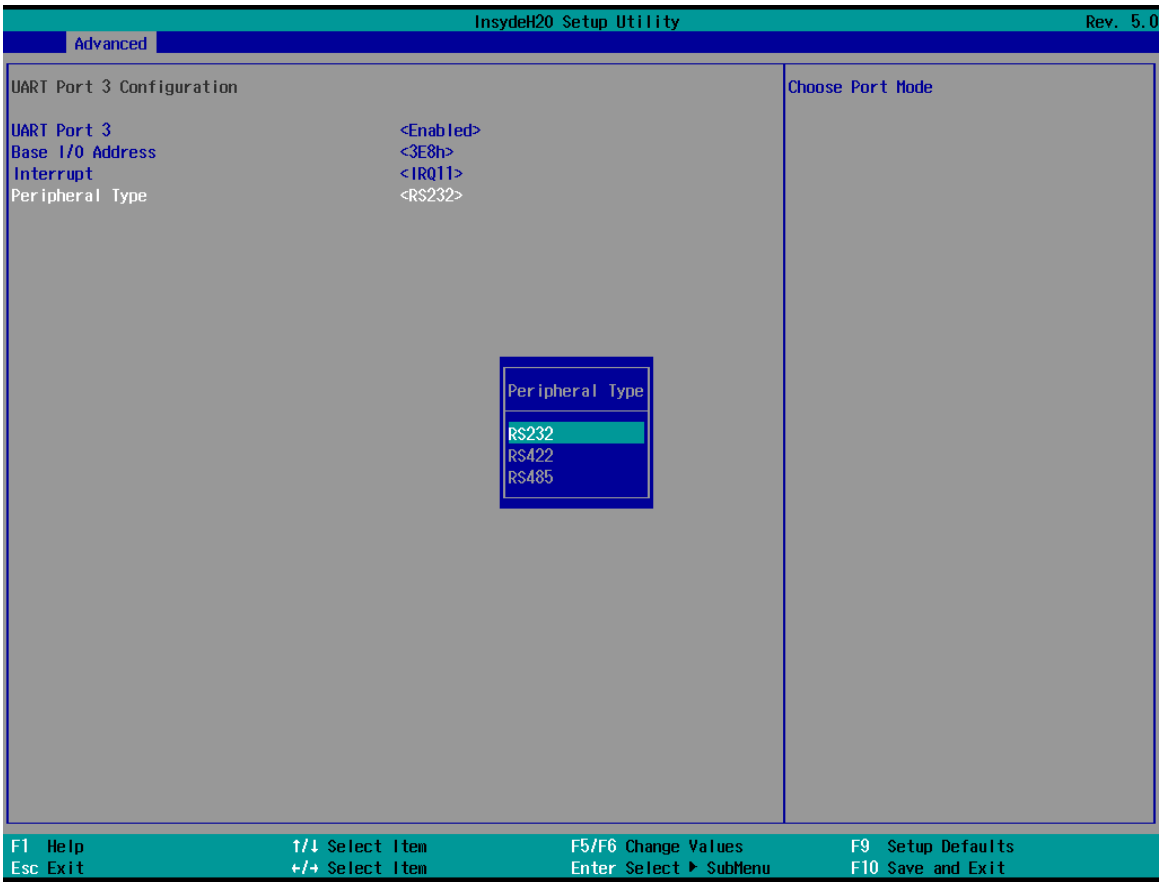
4.2.1.6 SIO F81968



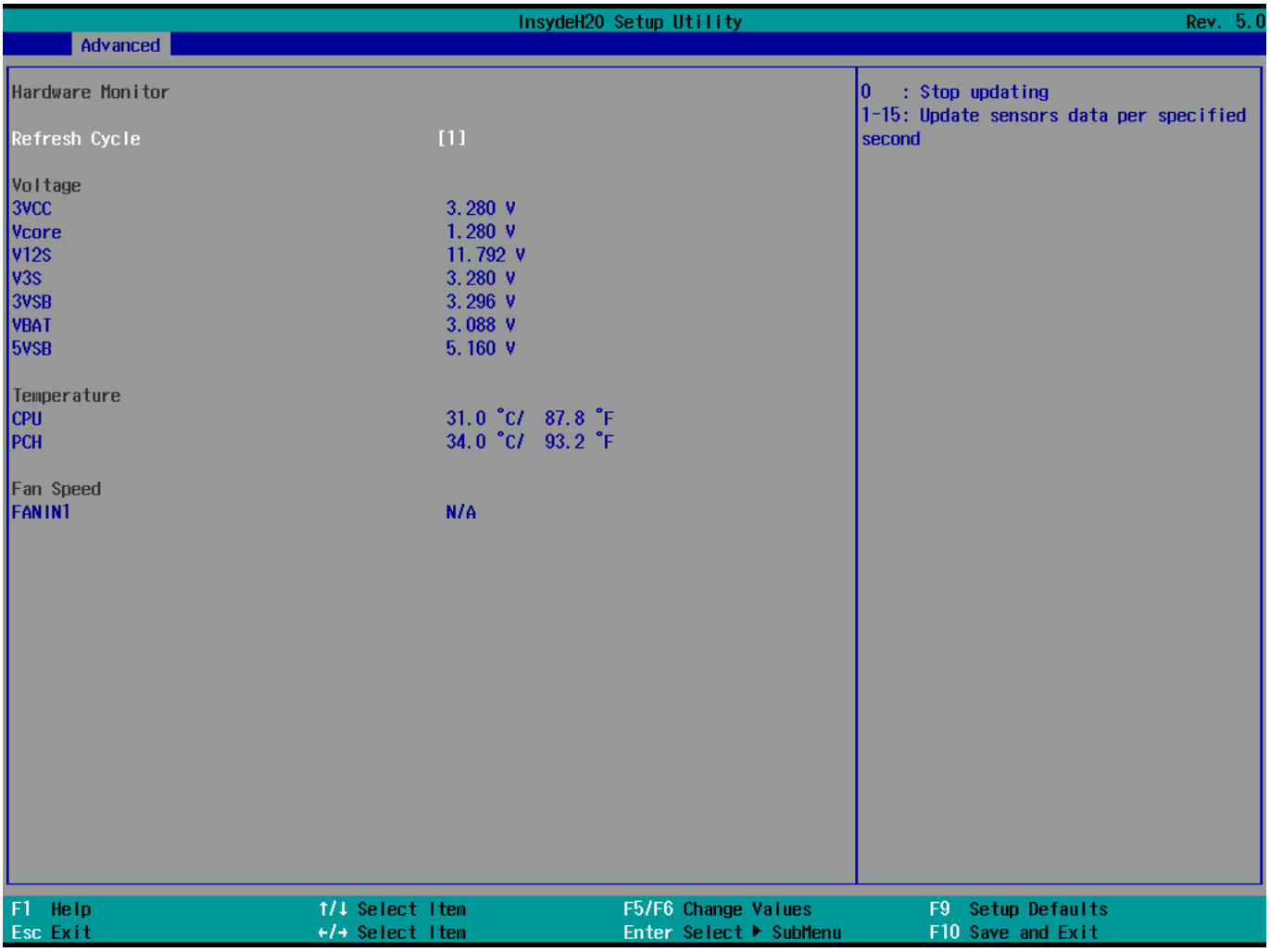
BIOS Setting	Description	Setting Option	Effect
UART Port 1 ~		Disable	No configuration

UART Port 4	Configure Serial port settings	Enable	User configuration
		Auto	EFI/OS chooses configuration
WDT	Watchdog Timer configuration	Disable Enable	Enable or disable Watchdog Timer
Hardware Monitor	Hardware Monitor	Enter	Opens sub-section
GPIO Group 0 Configuration	GPIO Group 0 Configuration	Enter	Opens sub-section

4.2.1.6.1 COM Port Setting



4.2.1.6.2 Hardware Monitor



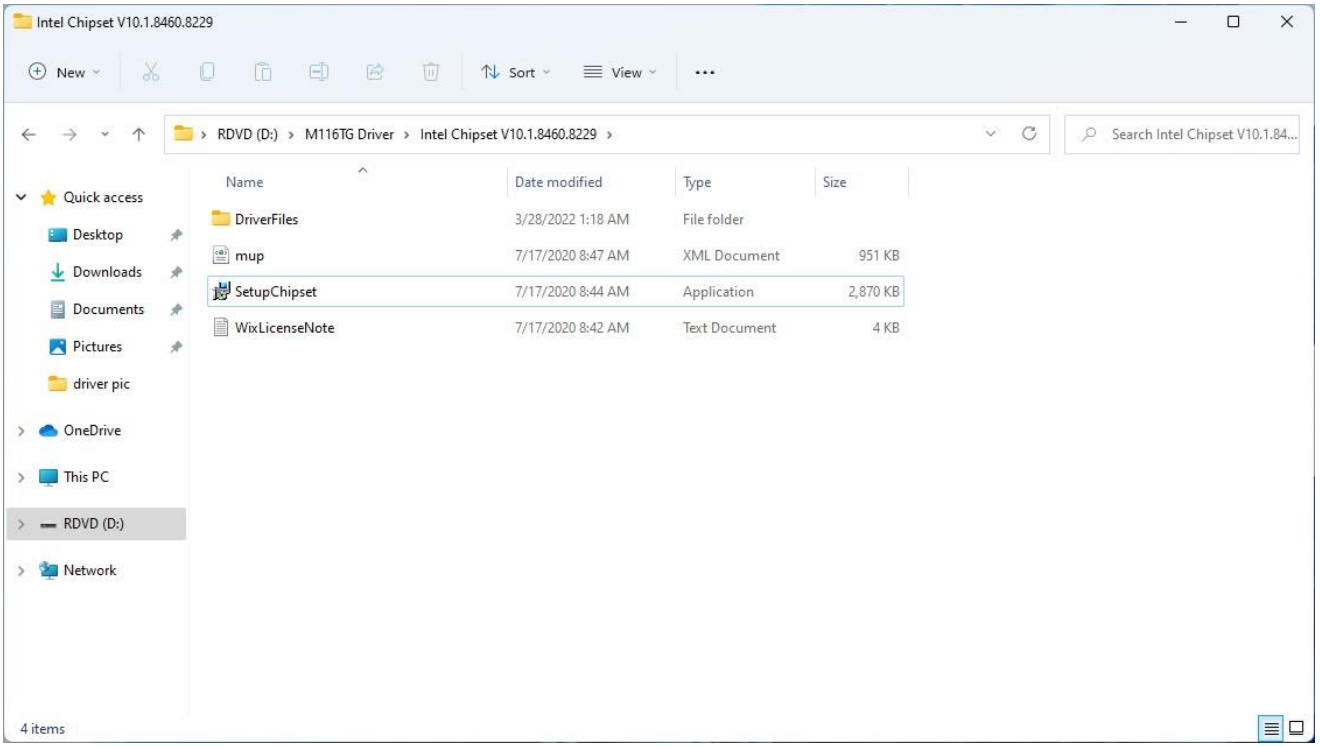
BIOS Setting	Description	Setting Option	Effect
FAN1 Mode	FAN1 Mode configuration	Manual Linear Stage	Select FAN1 Mode configuration

Chapter 5: Driver Installation

5.1 Chipset Driver

Follow instructions below to install Chipset driver.

1. Open the Driver (Download from Winmate Download Center) and select **SetupChipset** driver.



2. Installation window will pop up, select **Next**.

3. Select **Accept** to agree with the terms of license agreement.

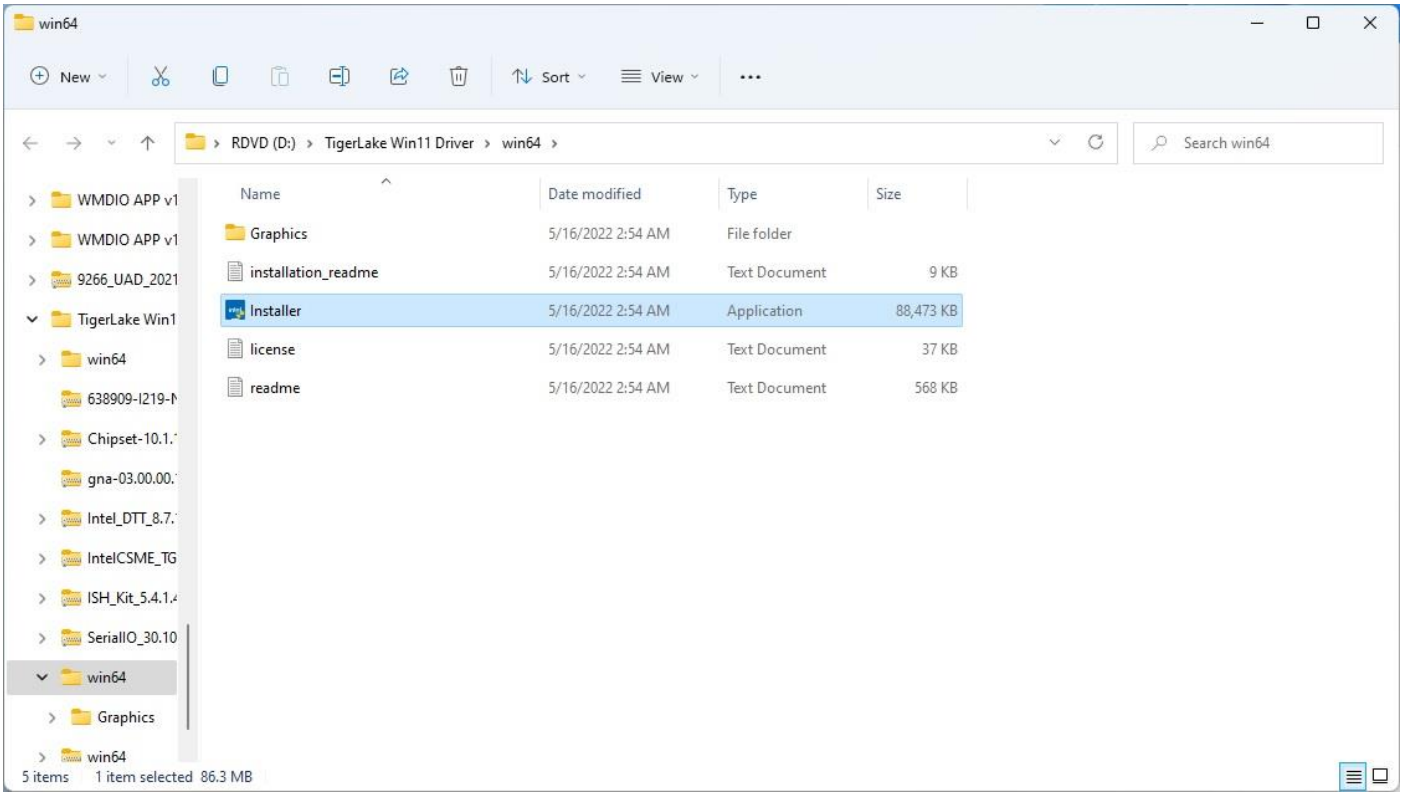
4. Check the ReadMe file information, select **Install** to continue.

5. Wait for the driver to be installed. When installation completed, select **Restart Now** to restart your computer.

5.2 Graphics Driver

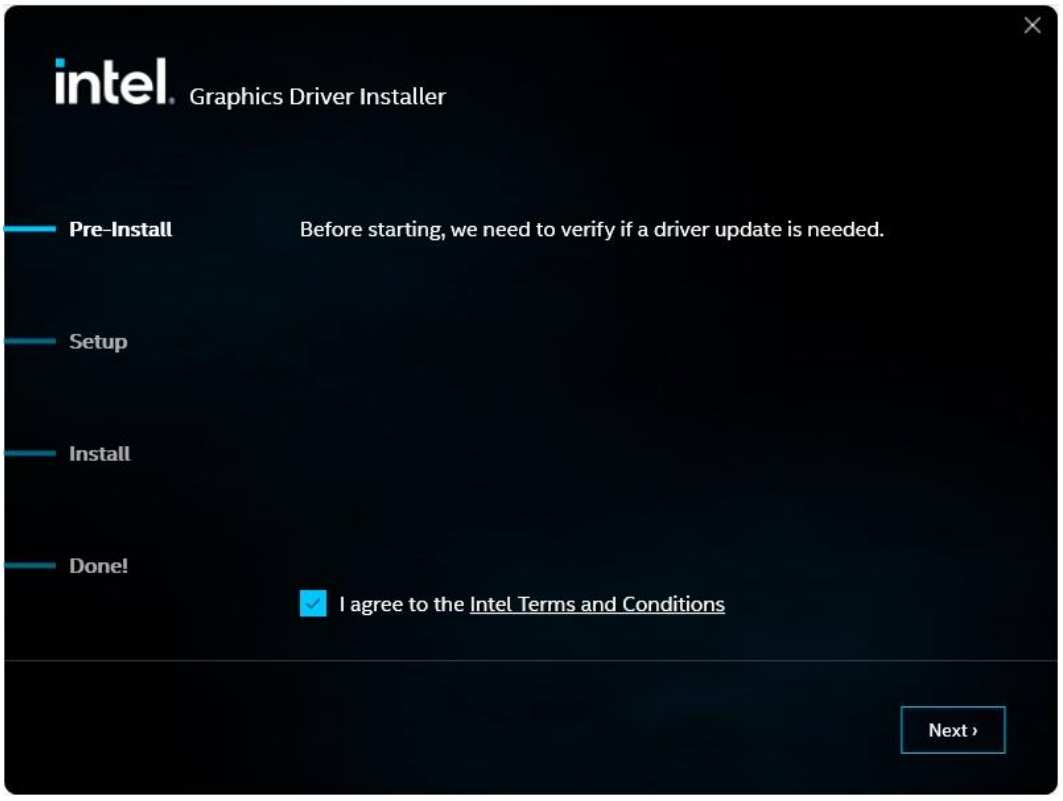
Follow instructions below to install Graphic driver.

1. Open the Driver (Download from Winmate Download Center) and select **Installer** driver.

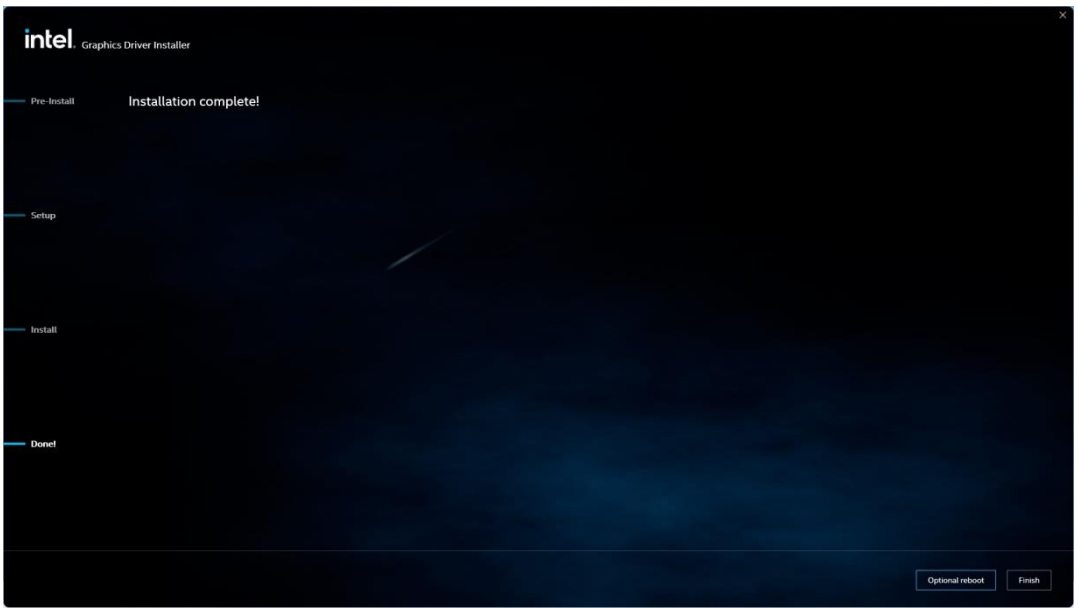


2. Installation window will pop up, click **Begin installation**

3. Check the **I agree to the Intel Terms and Conditions**, then click **Next >**



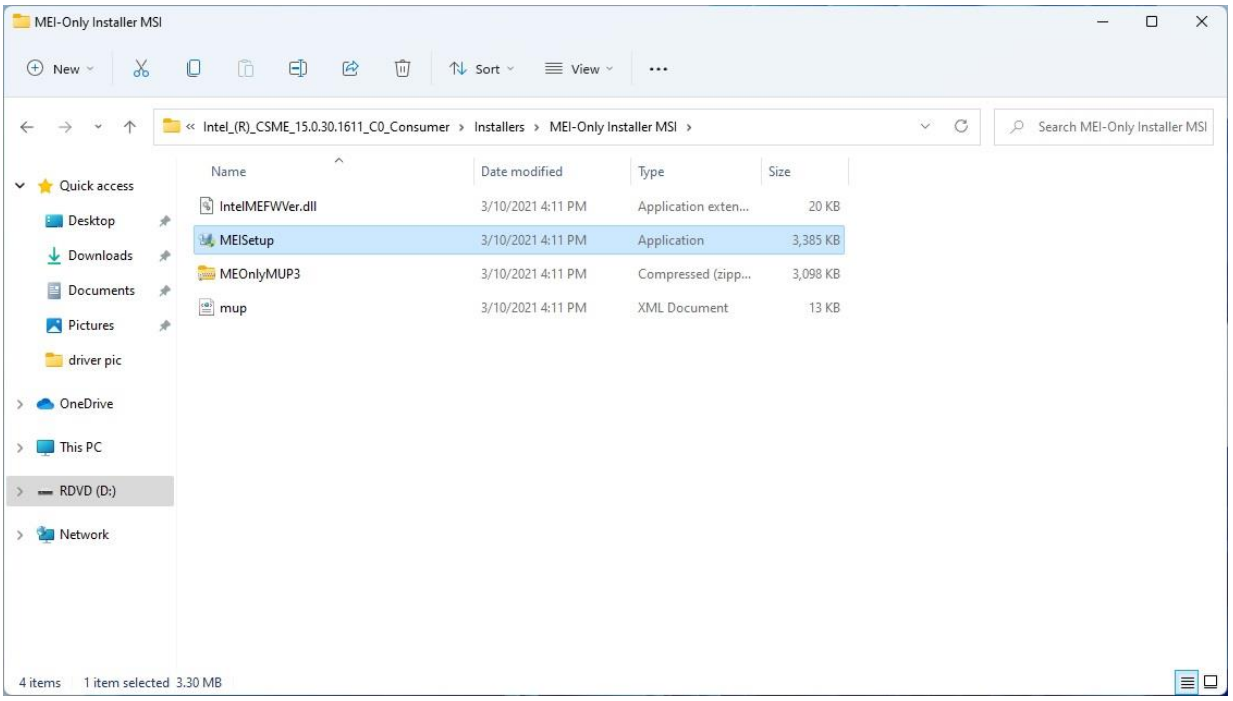
4. After installation is completed, click Finish.



5.3 Management Engine (ME)

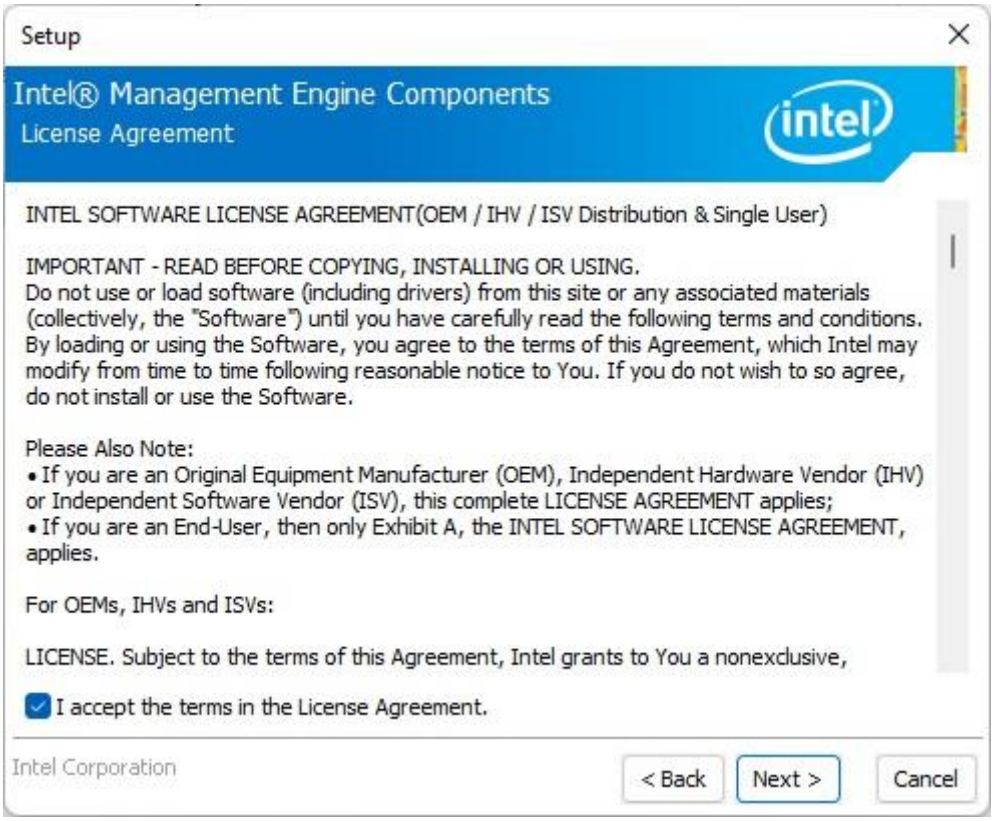
Follow instructions below to install Management Engine (ME).

1. Open the Driver (Download from Winmate Download Center) and select **MEISetup** driver.

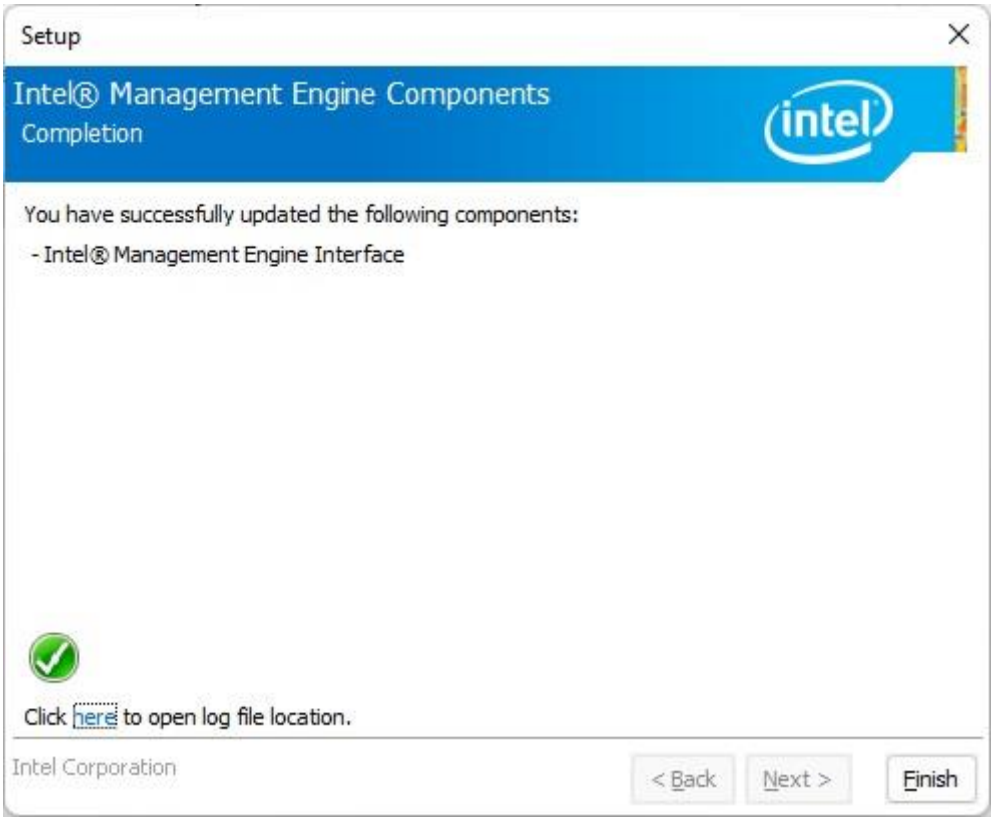


2. Select **Next** to start the installation.

3. Select **Next** to agree with the terms of license agreement.



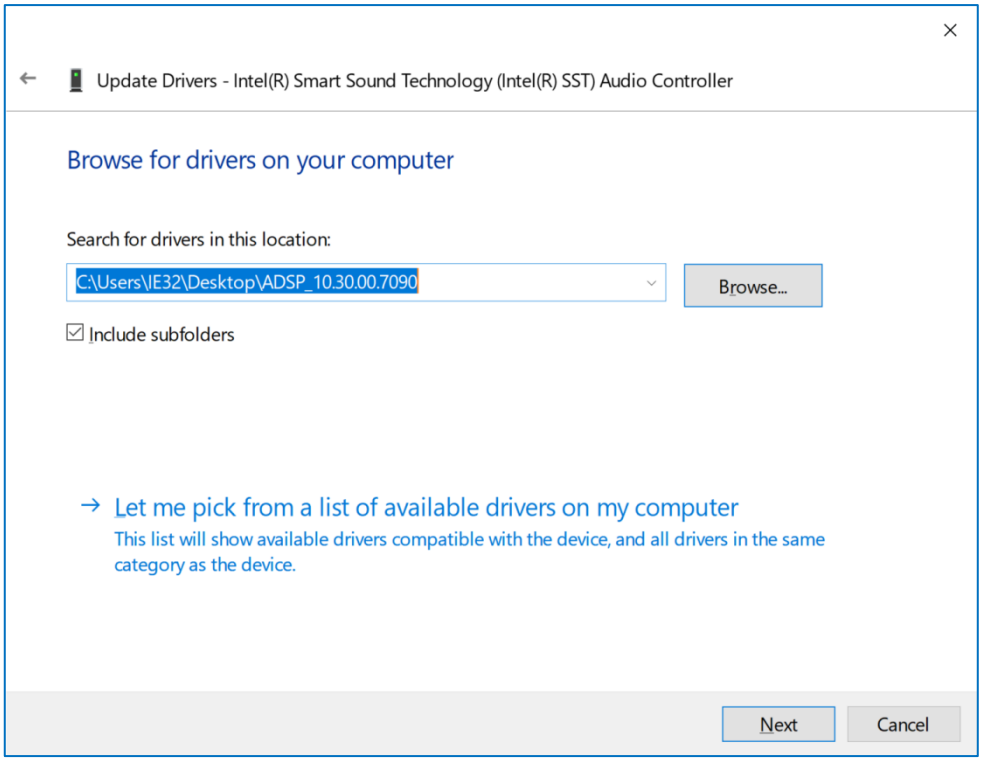
4. When installation completed, select **Finish** complete installation.



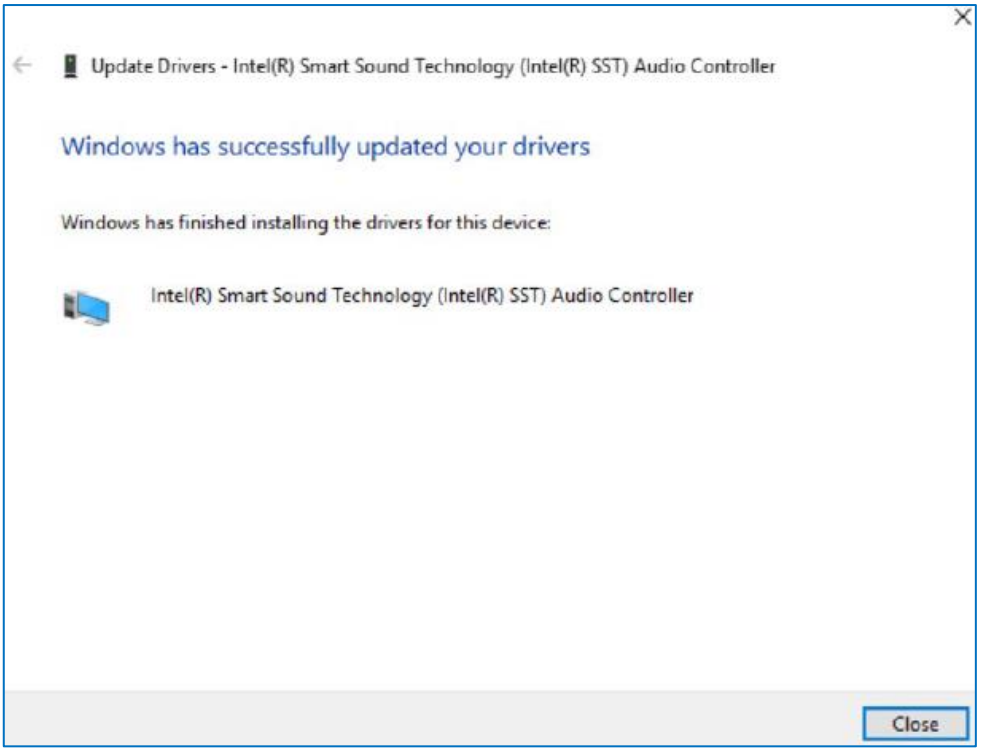
5.4 SST Driver

Follow instructions below to install SST driver.

1. Update Drivers > Browse “My computer” for driver software > Next



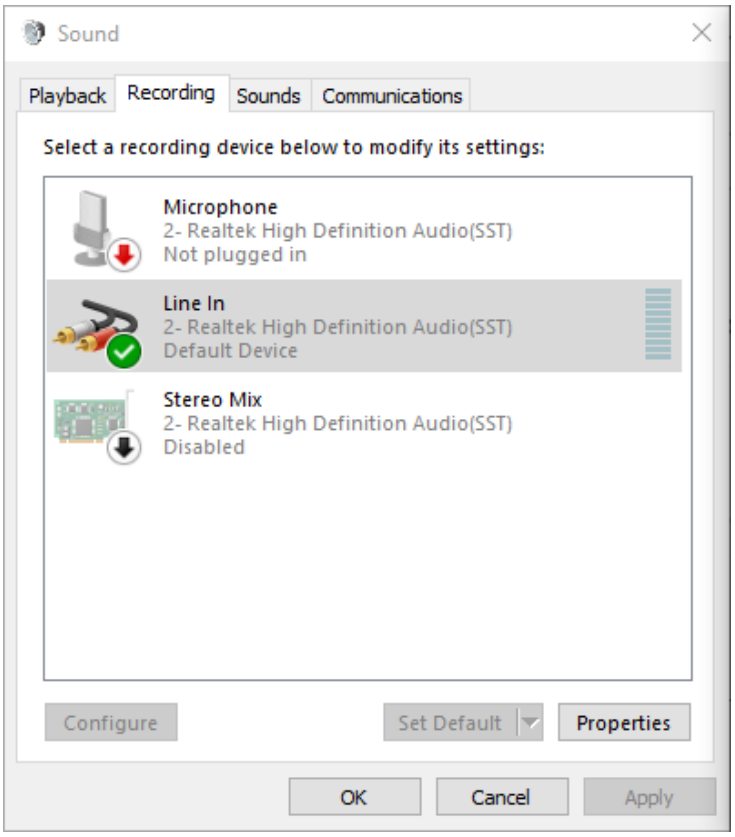
2. Wait for driver installation to complete.



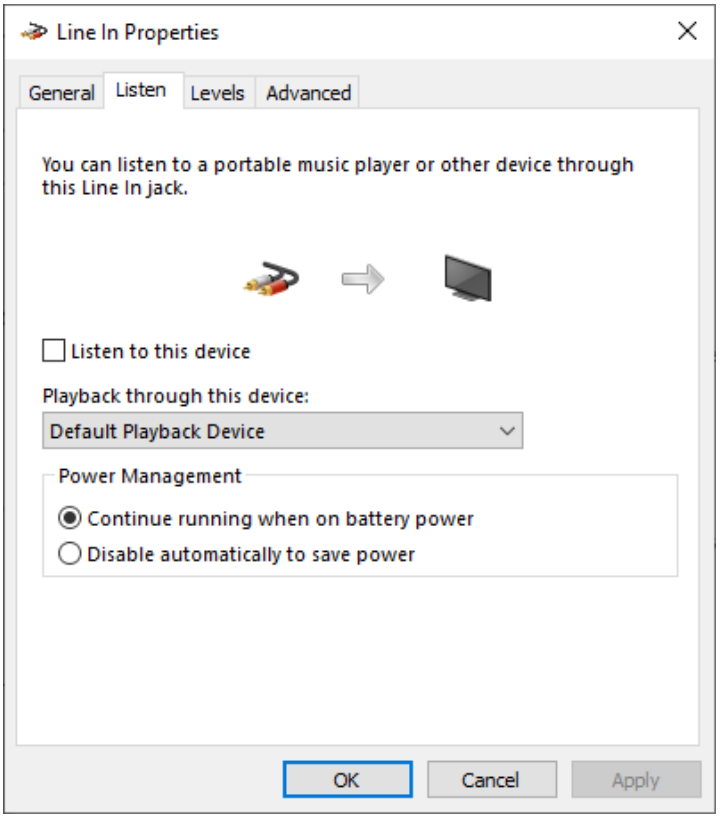
Note:
This product is equipped with SST Driver, when the line-in function of Audio is used, the product will automatically enter D3 sleep mode. To solve this problem, you must enter the line in setting and turn on the sync output. When the sync output setting is turned on, the line-out will output the sound synchronously.

Therefore, if you only need to use the line-in function, please turn off the volume of the line-out device. When the line-out volume is turned off, HDMI will also have no audio output. If you will not use the line-in function, please keep the Winmate default setting. When you need to use the line-in function, please follow the steps below to turn on the sync output.

Step 1:



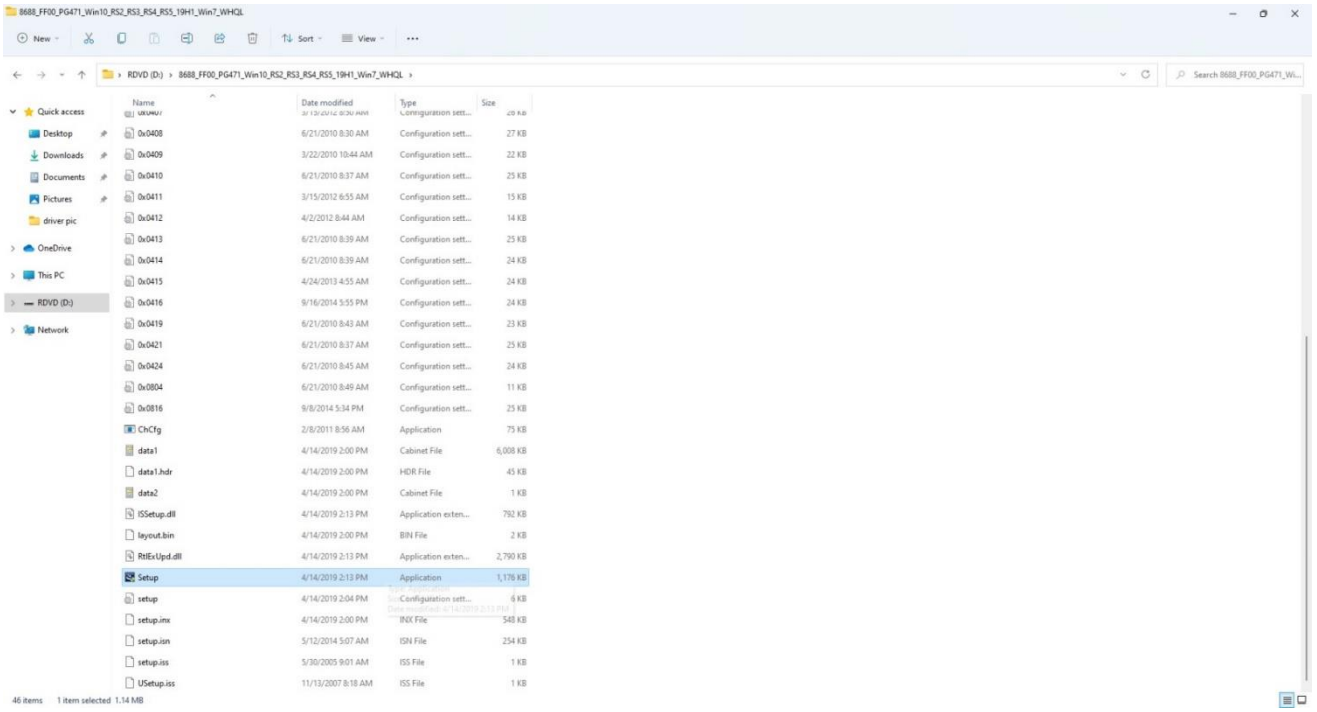
Step 2:



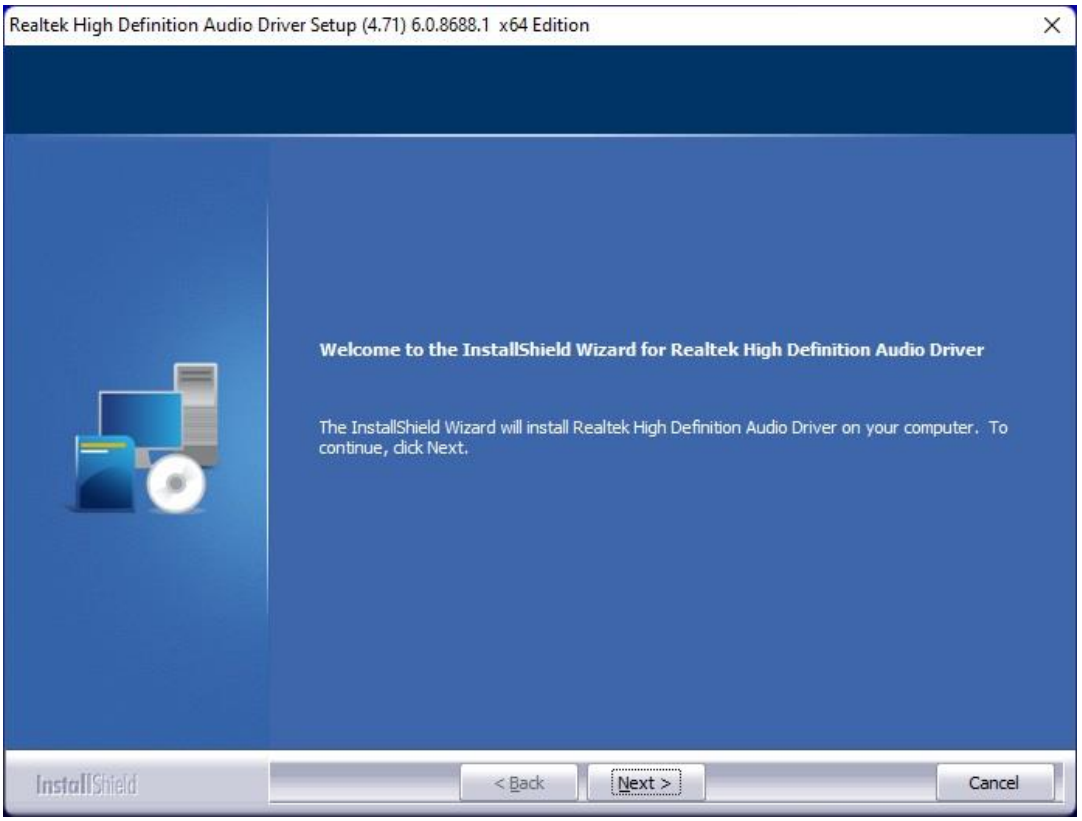
5.5 Audio Driver

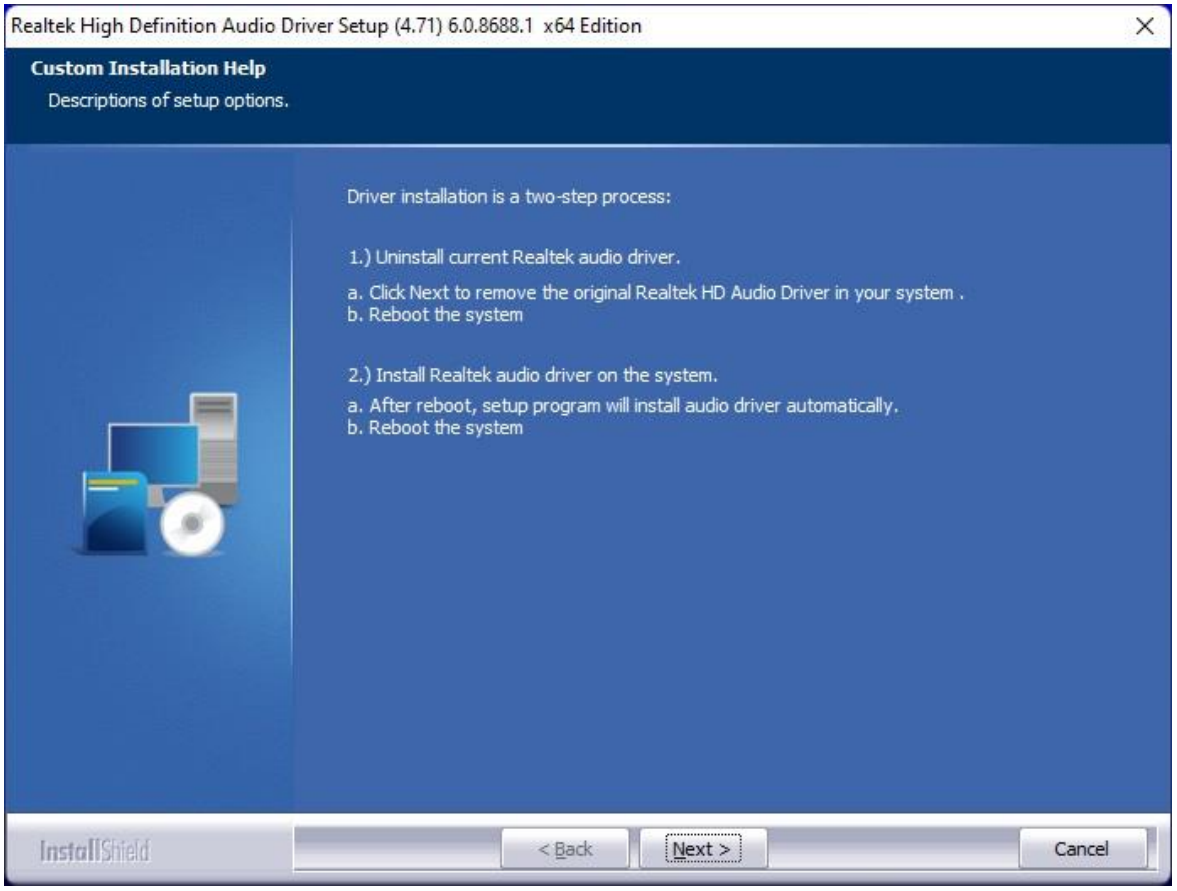
Follow instructions below to install Audio driver.

1. Open the Driver (Download from Winmate Download Center) and select **Setup** driver.

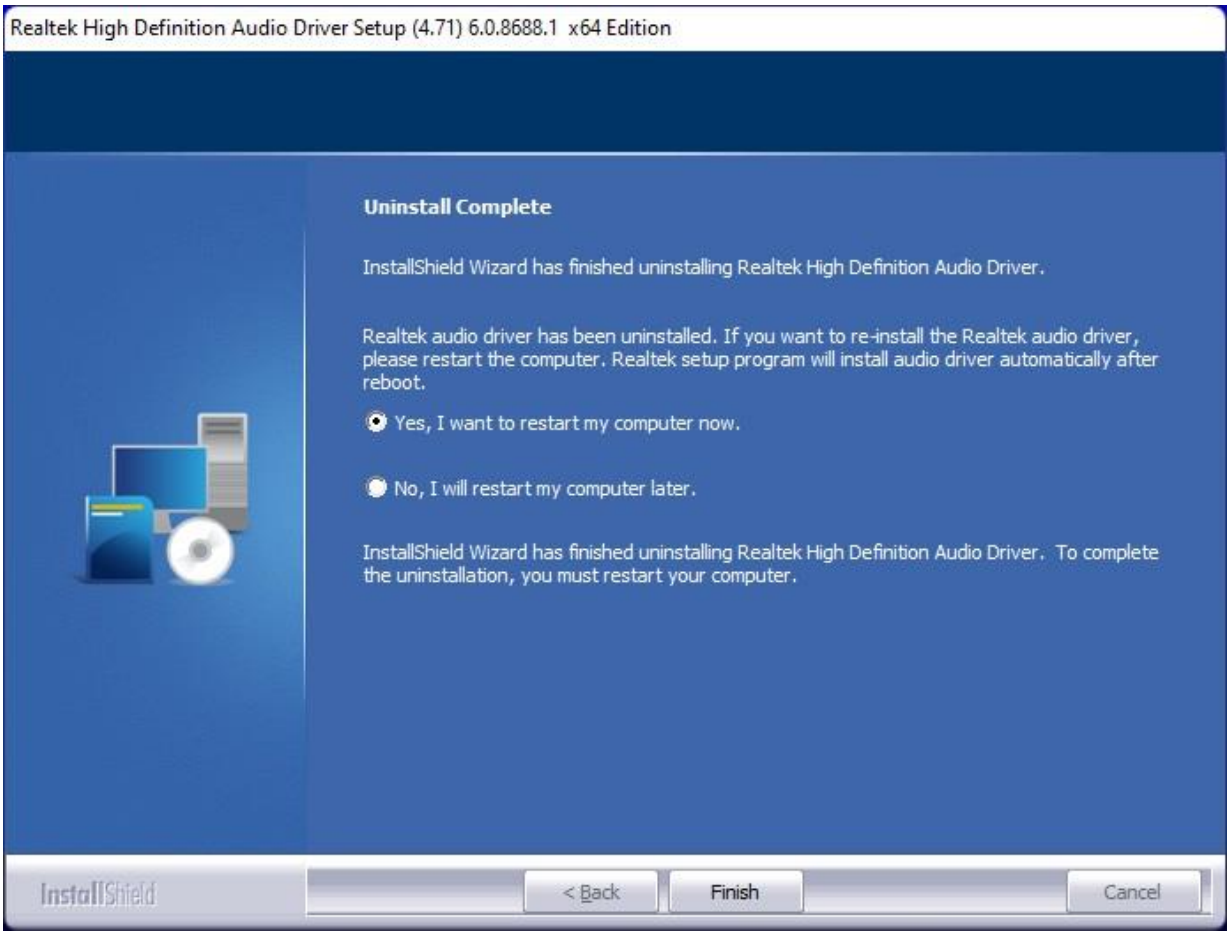


2. Select **Next** to continue.





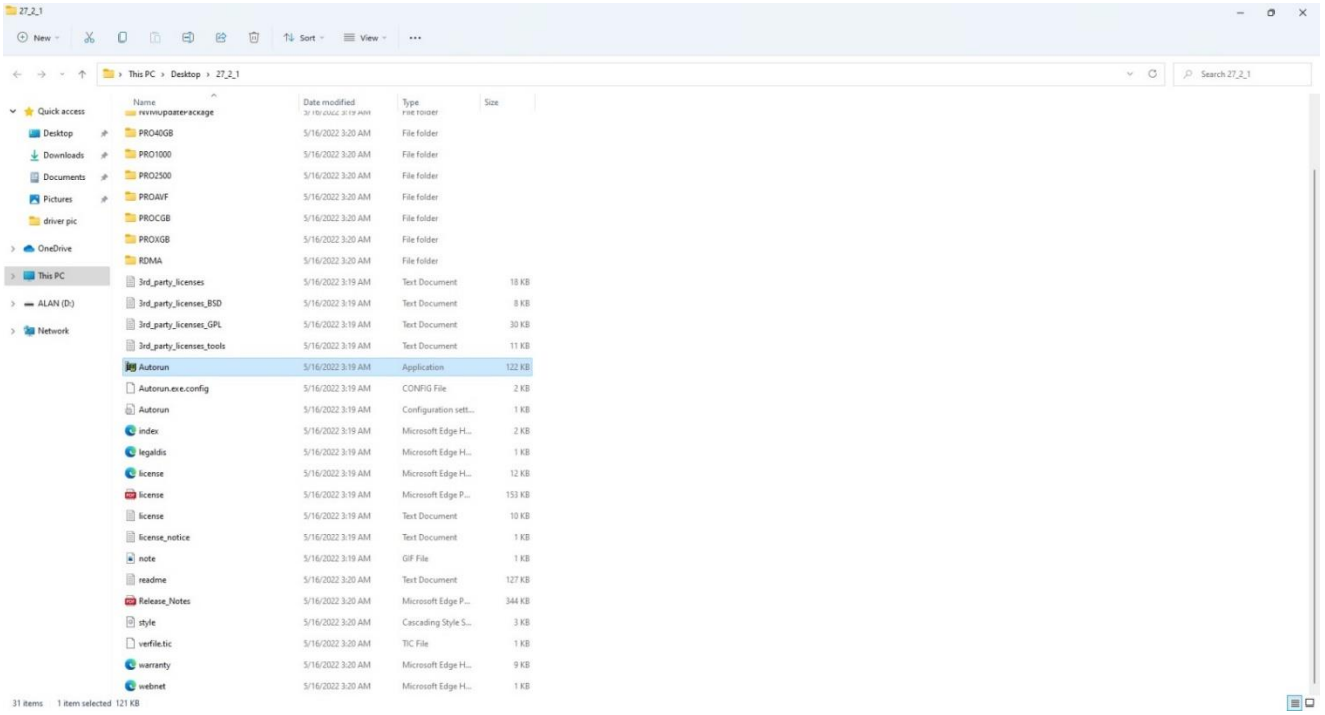
3. When installation completed, select **Yes, I want to restart my computer now**. Then click **Finish**.



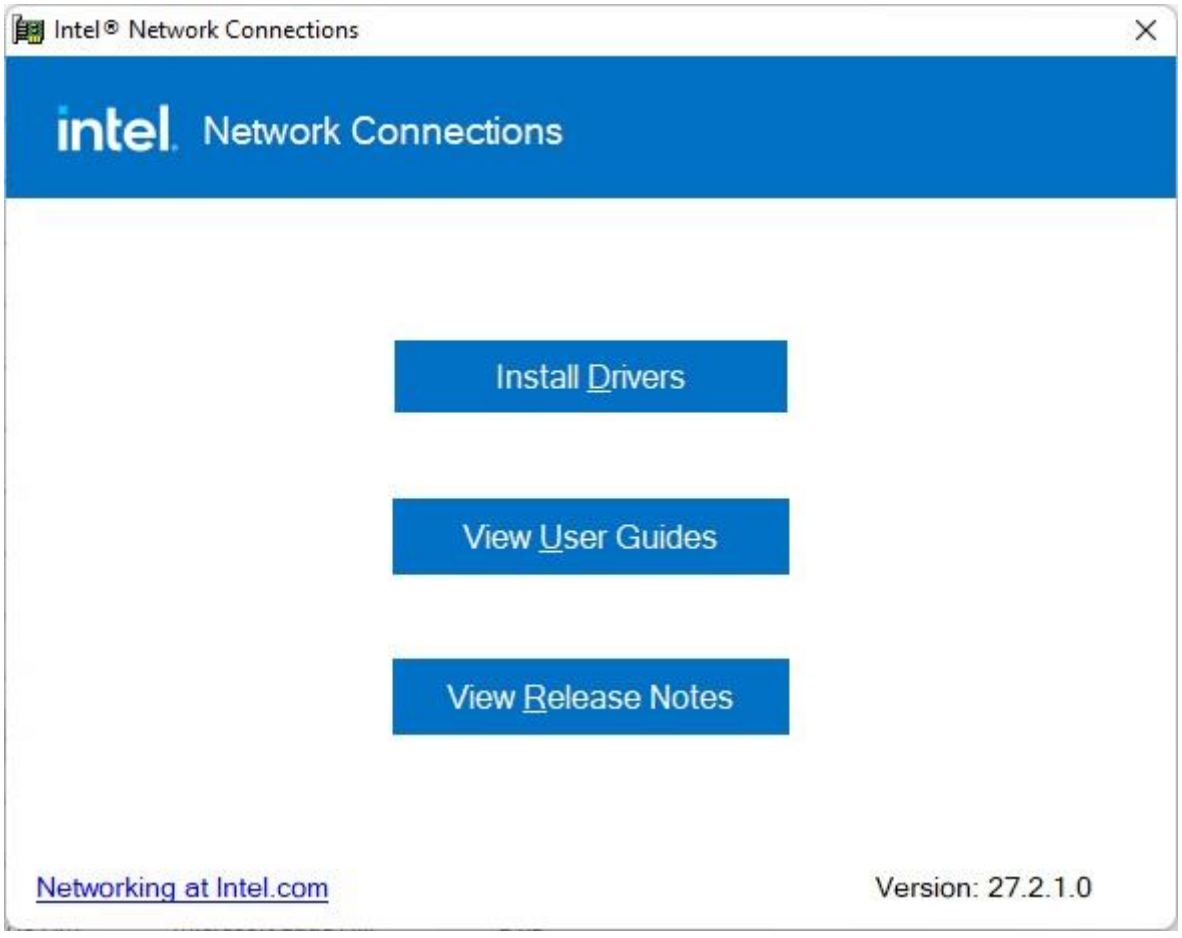
5.6 Ethernet Driver

Follow instructions below to install LAN driver.

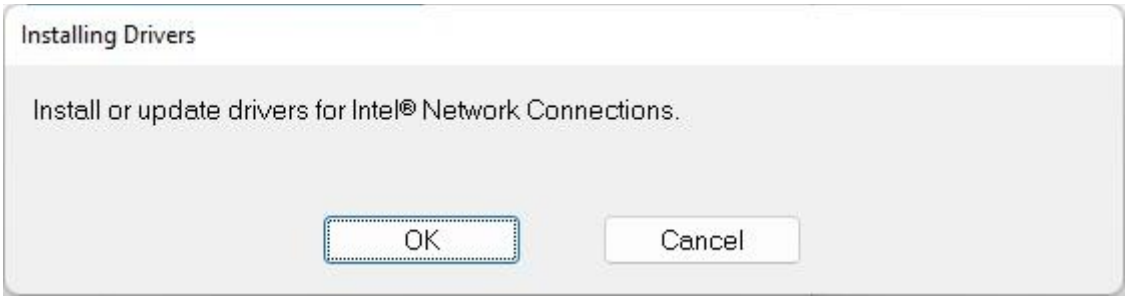
1. Open the Driver (Download from Winmate Download Center) and select **LAN** driver.



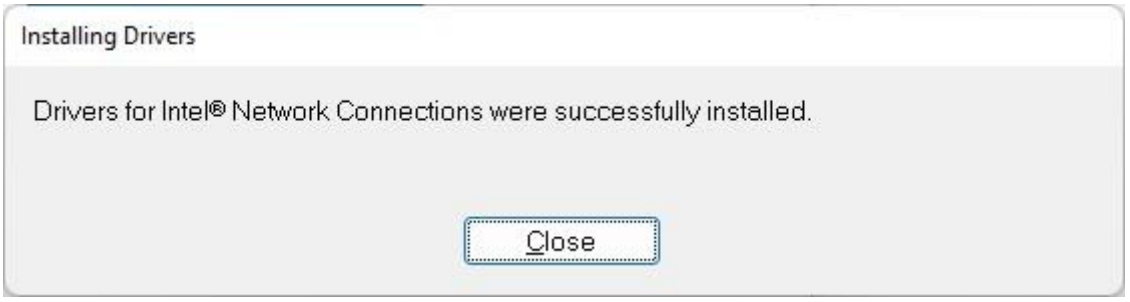
2. When compression is complete, select **Install Drivers**.



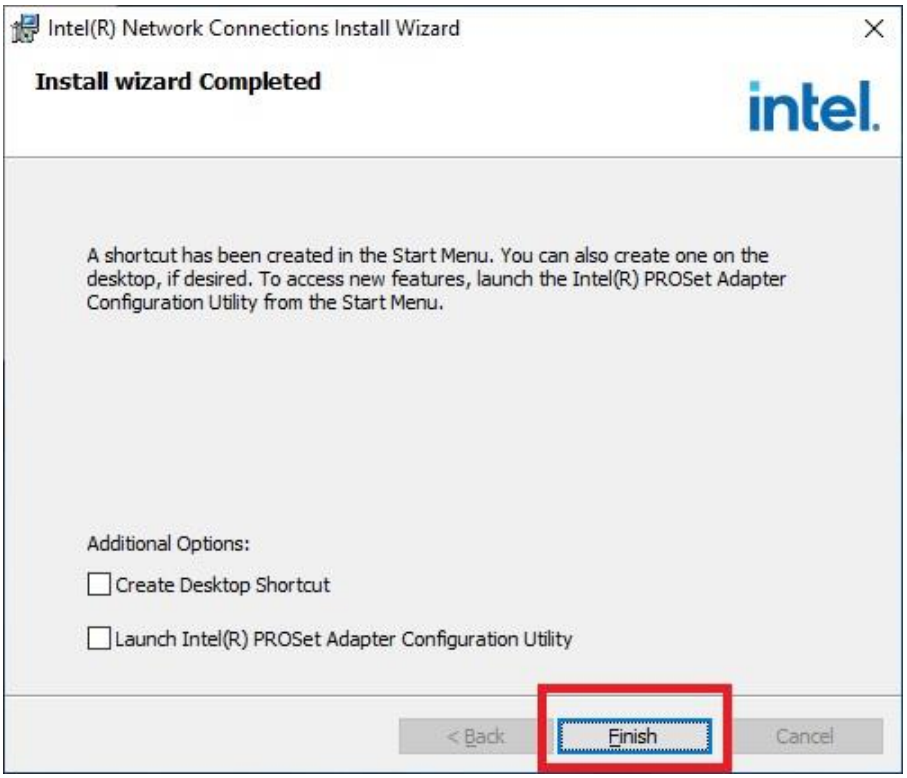
3. Select **OK**.



4. Select **Close** to close the window.



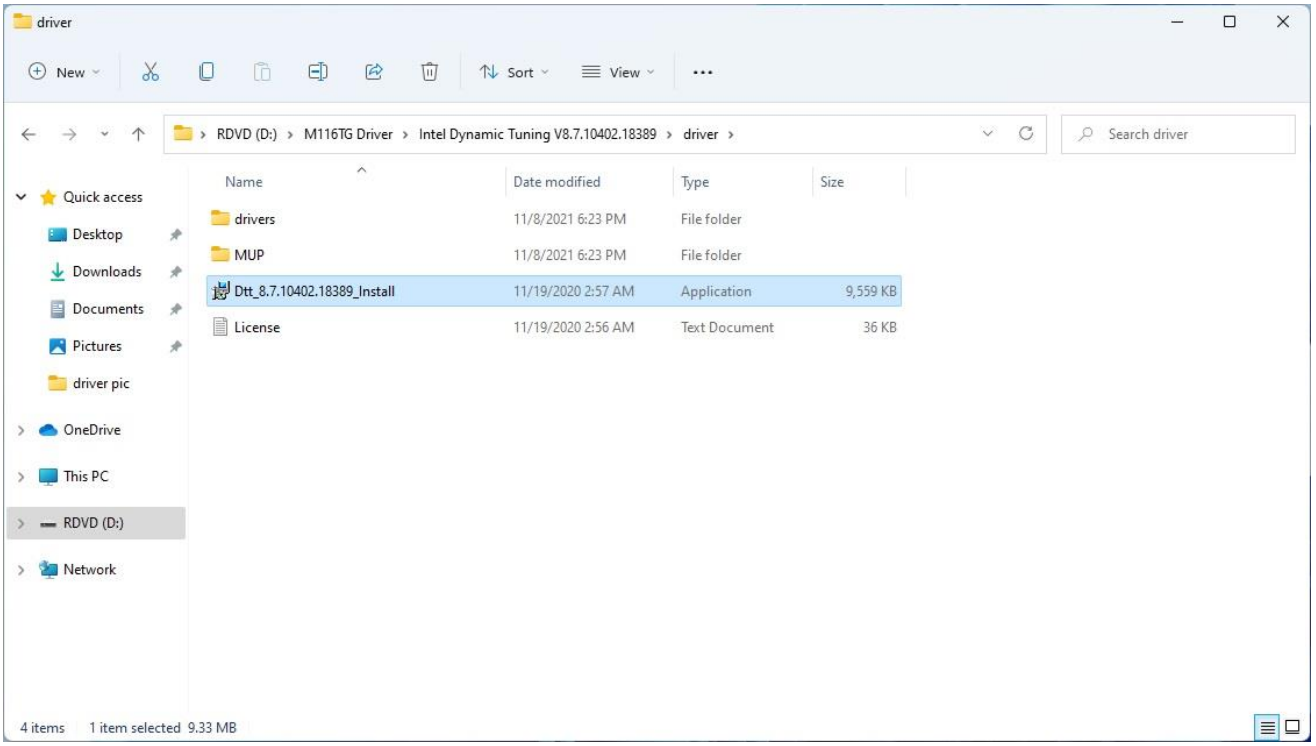
5. When installation is completed, select **Finish** to close the window.



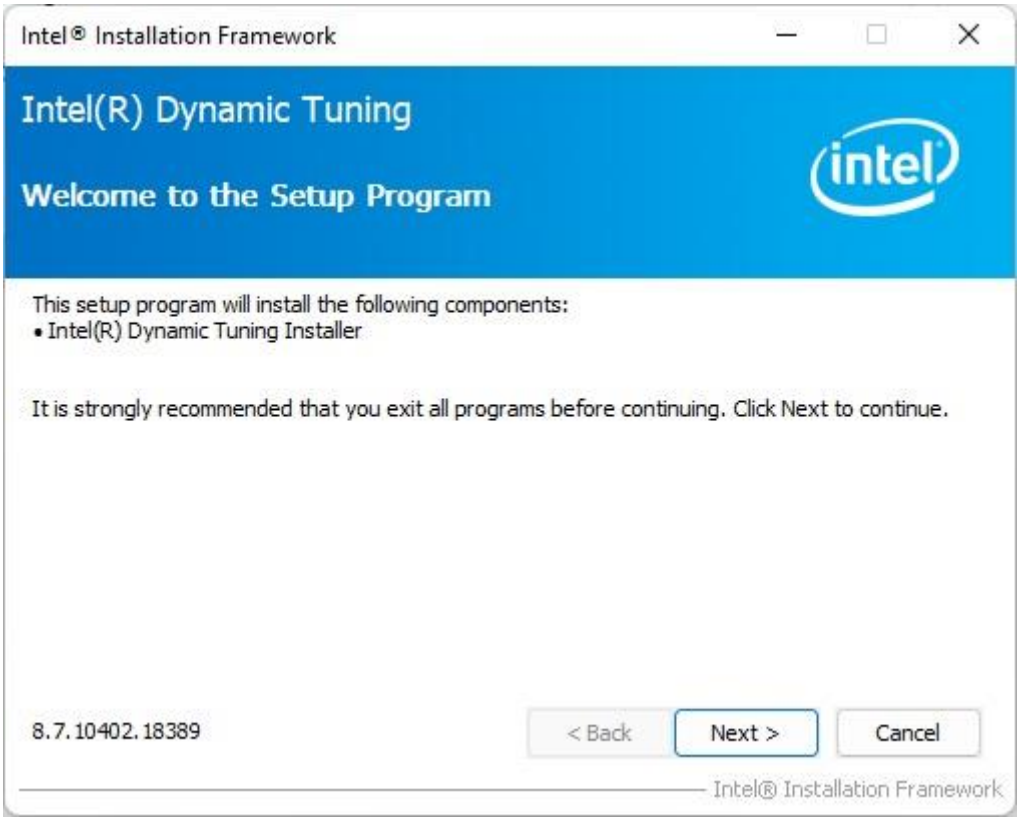
5.7 DTT Driver

Follow instructions below to install DTT driver.

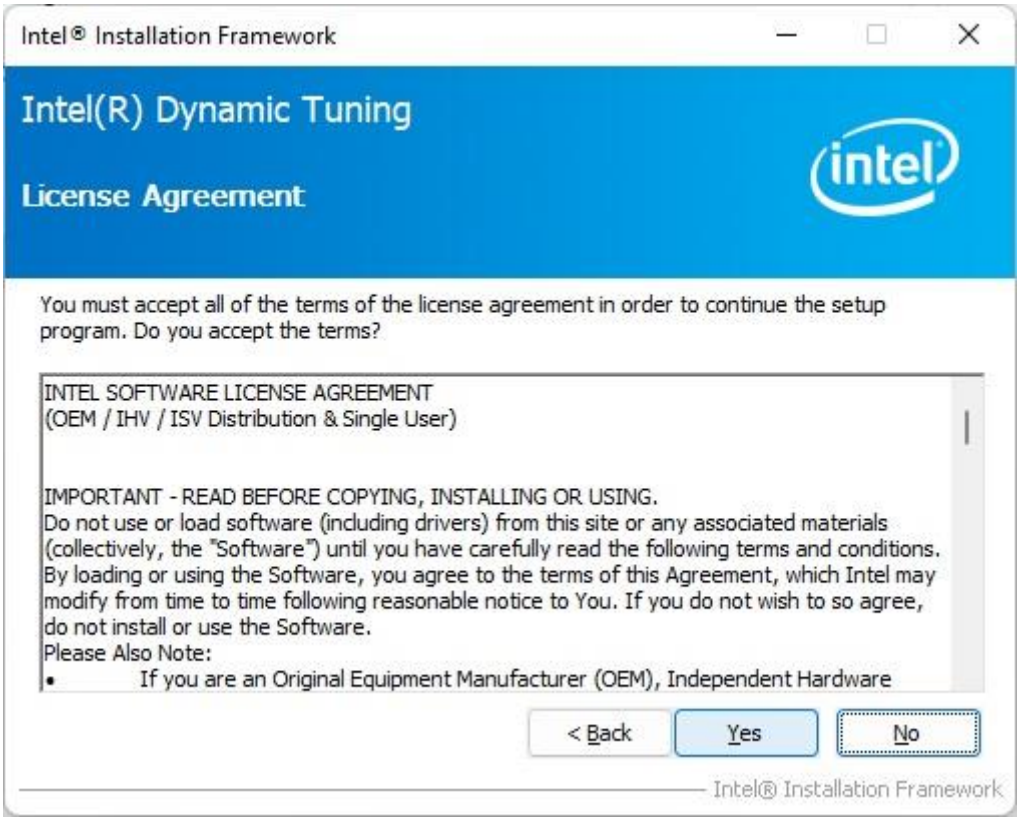
1. Open the Driver (Download from Winmate Download Center) and select **DTT** driver.



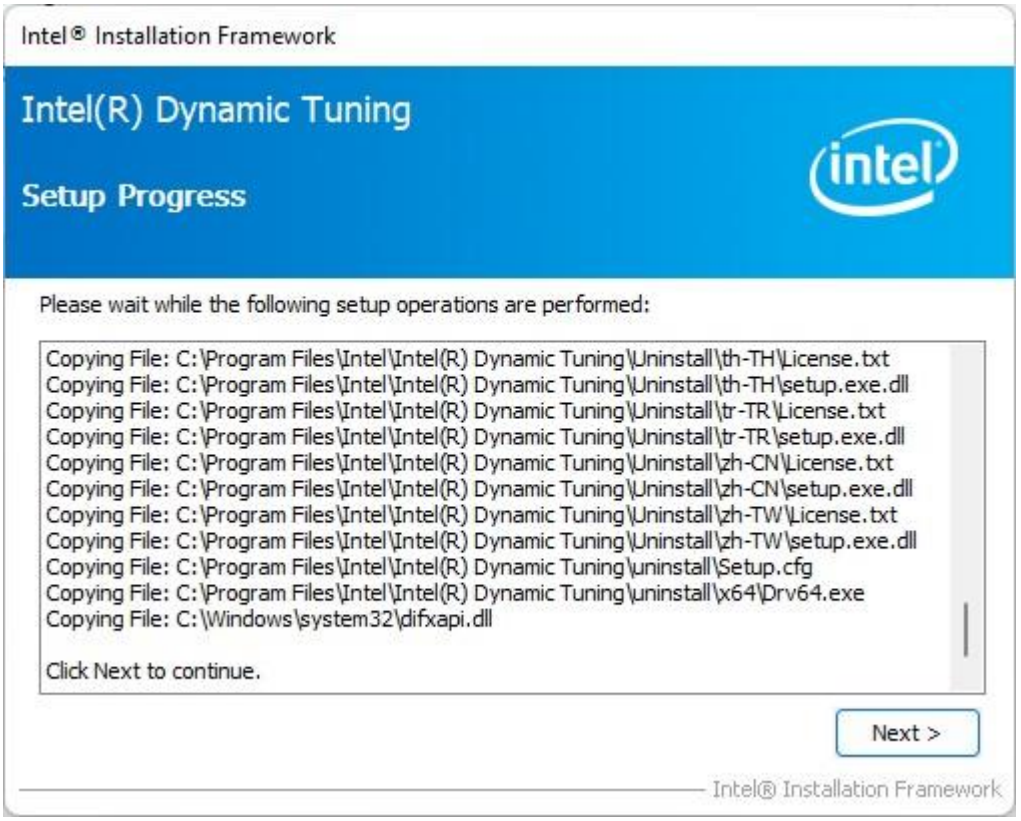
2. When compression is complete, select Next.



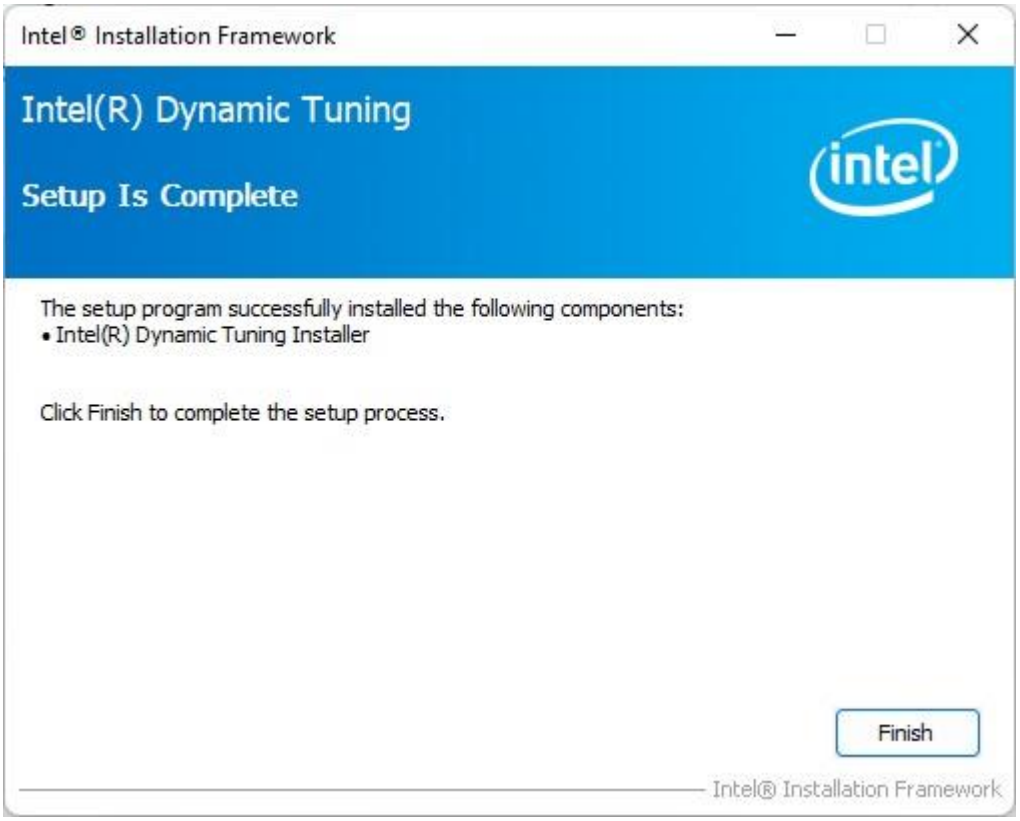
3. Read the license agreement, and then select Yes.



4. System displays the installed packages, select Next.



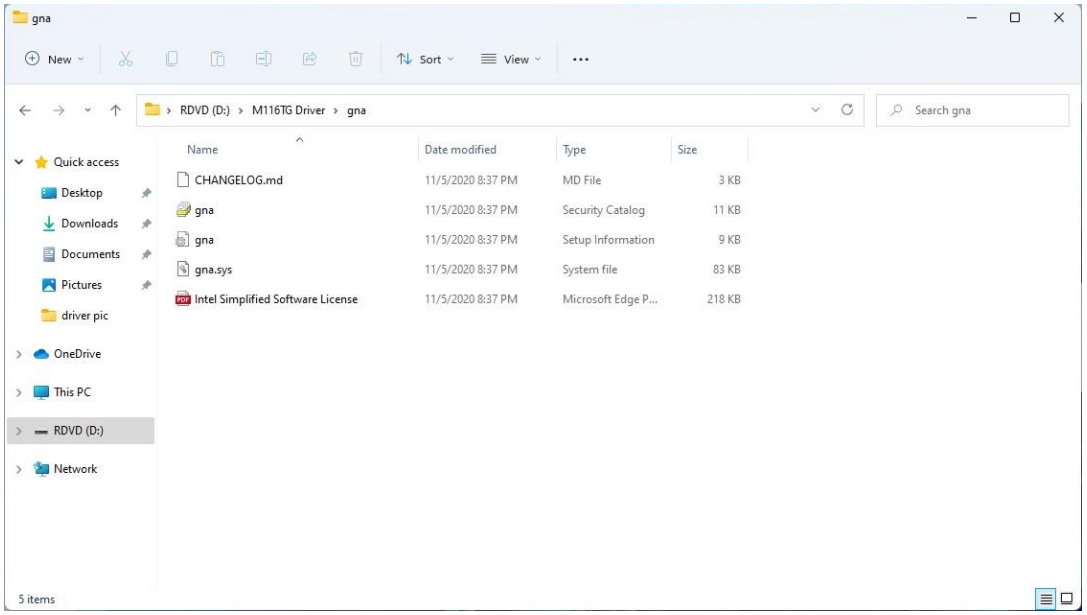
5. When installation is completed, select Finish to close the window.



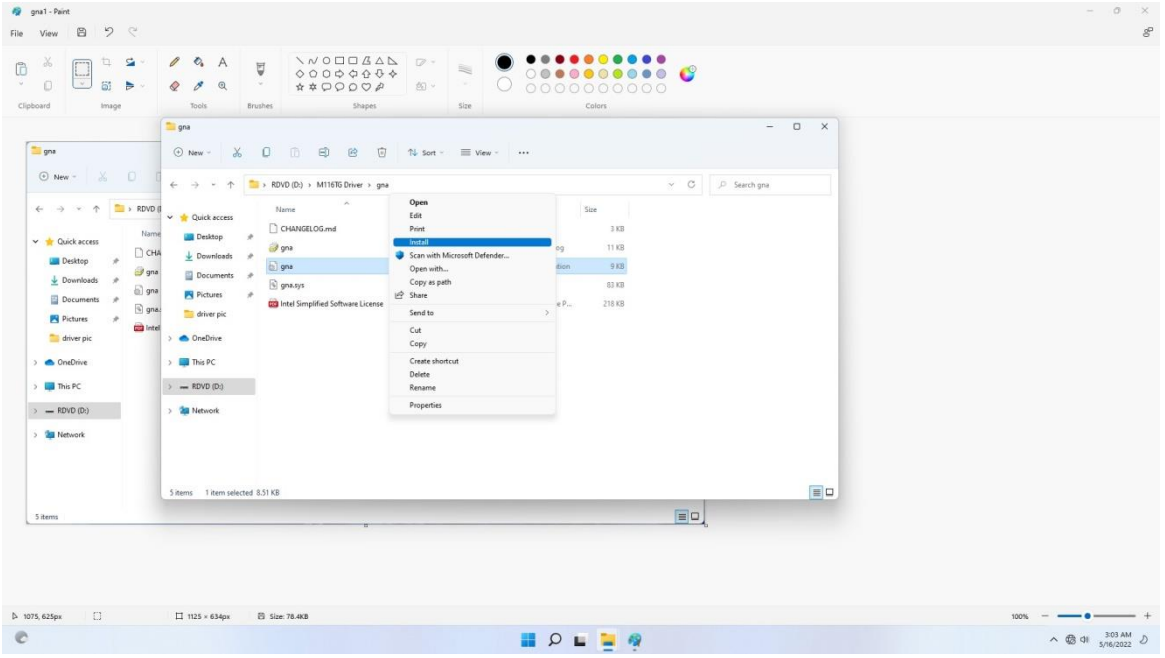
5.8 GNA Driver

Follow instructions below to install GNA driver.

1. Open the Driver (Download from Winmate Download Center) and select **GNA** driver.



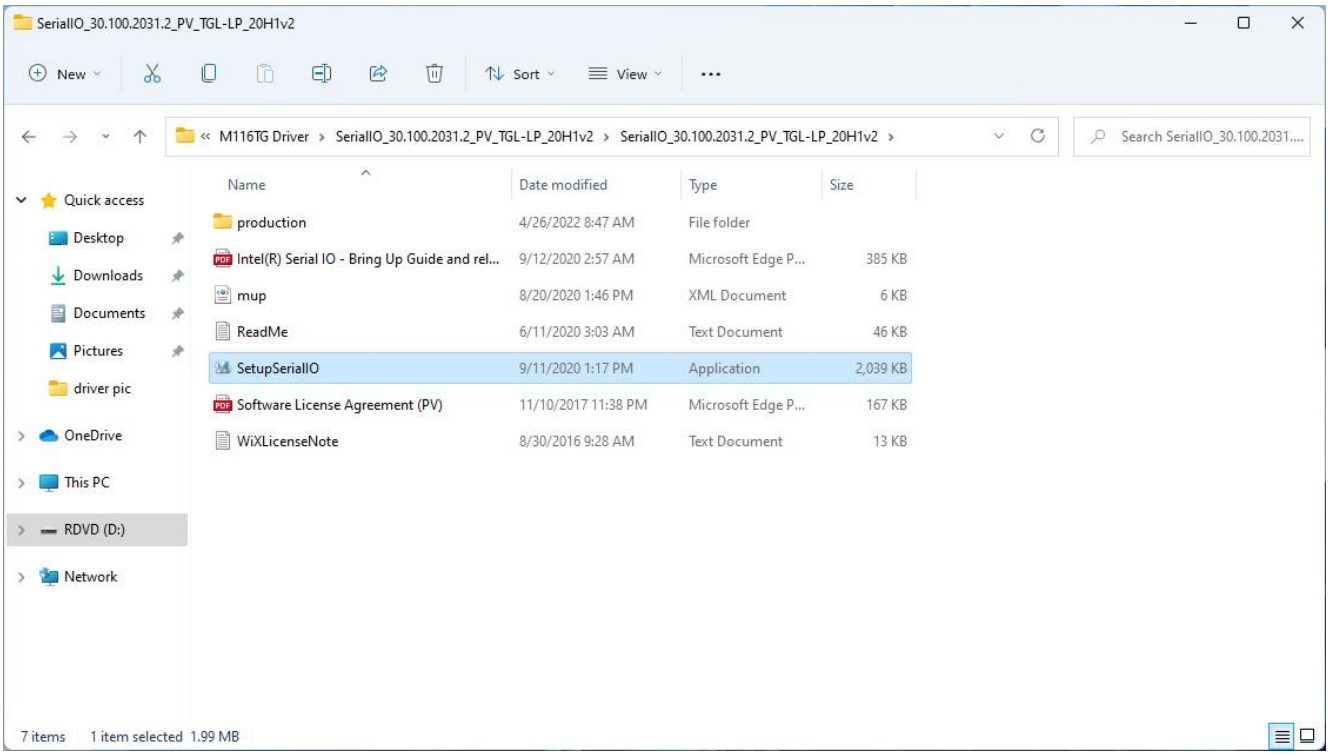
2. Right click, select **Install**.



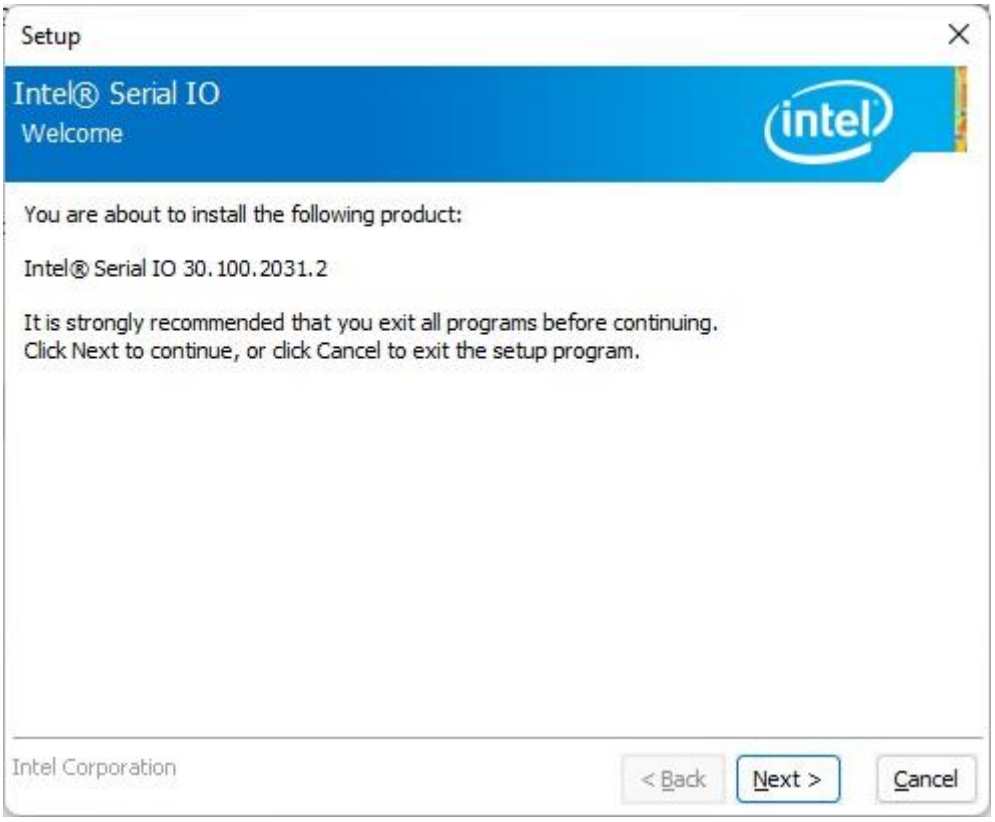
5.9 Serial IO Driver

Follow instructions below to install SIO driver.

1. Open the Driver (Download from Winmate Download Center) and select **SetupSerialIO** driver.

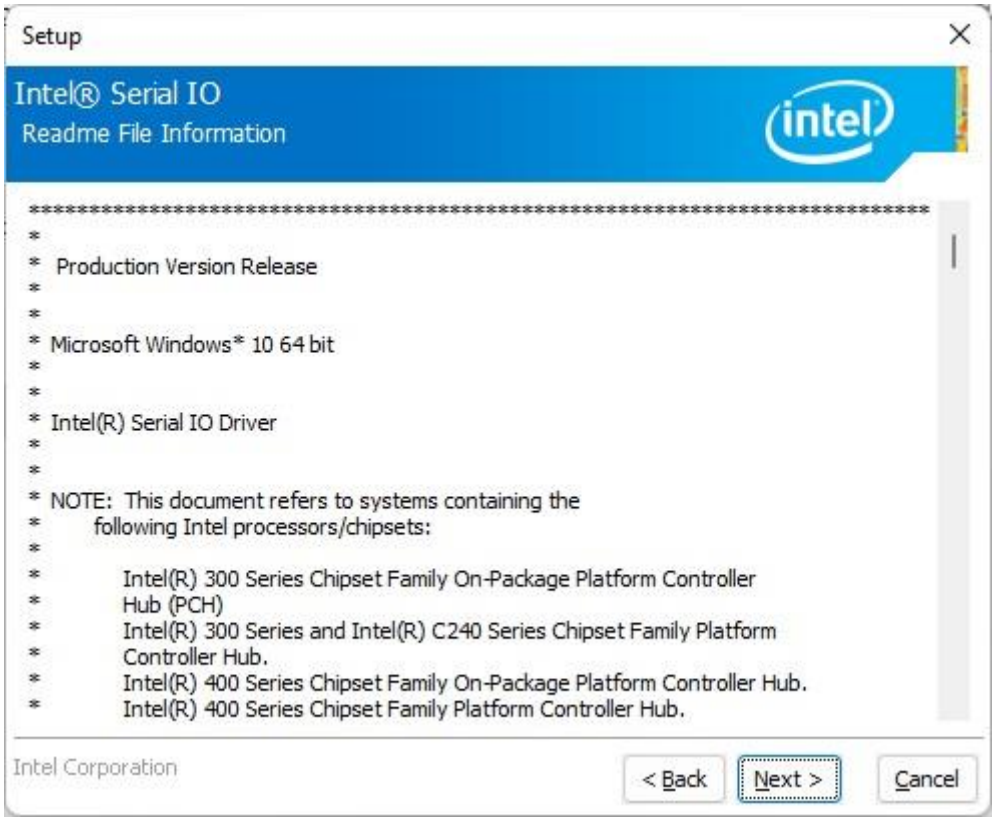


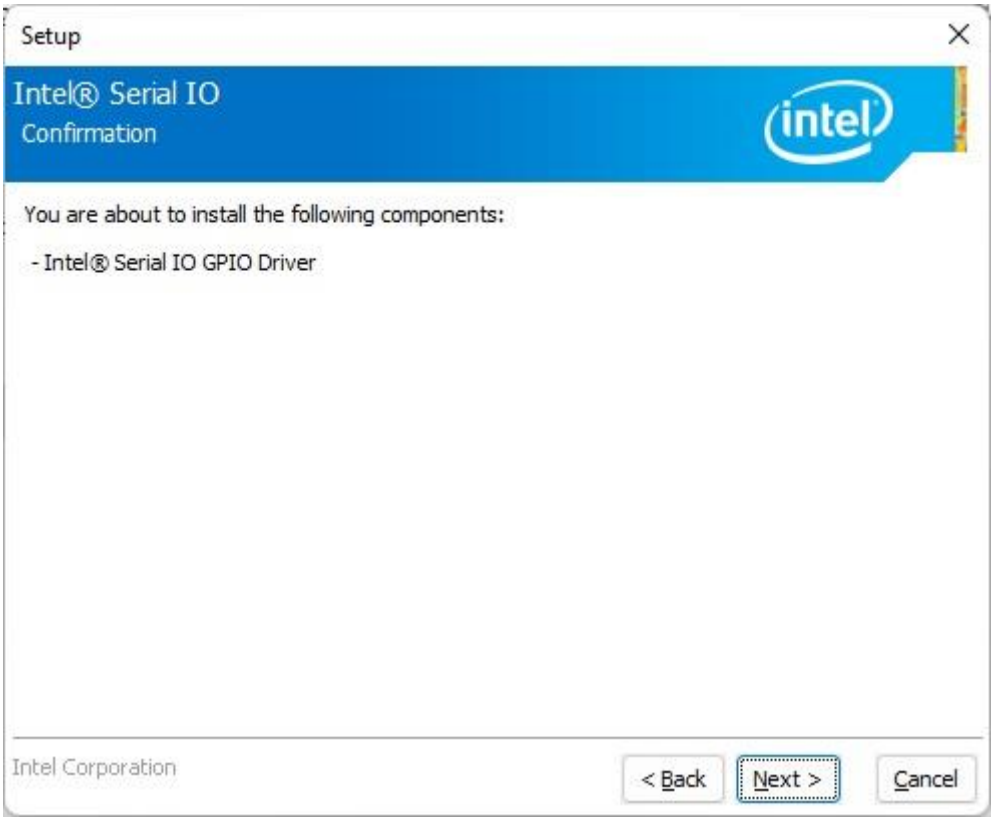
2. Select **Next** to start the installation.



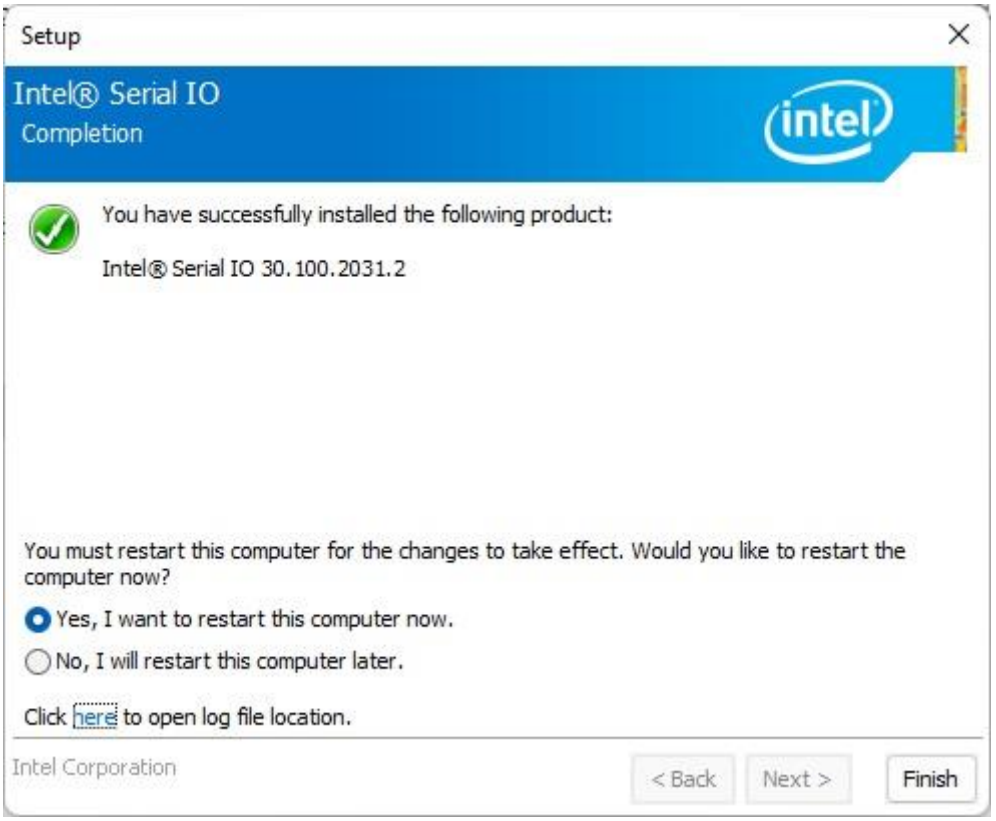
3. Select **Next** to agree with the terms of license agreement.

4. Click **Next**.





5. When installation completed, select **Yes, I want to restart my computer now**. Then click **Finish**.

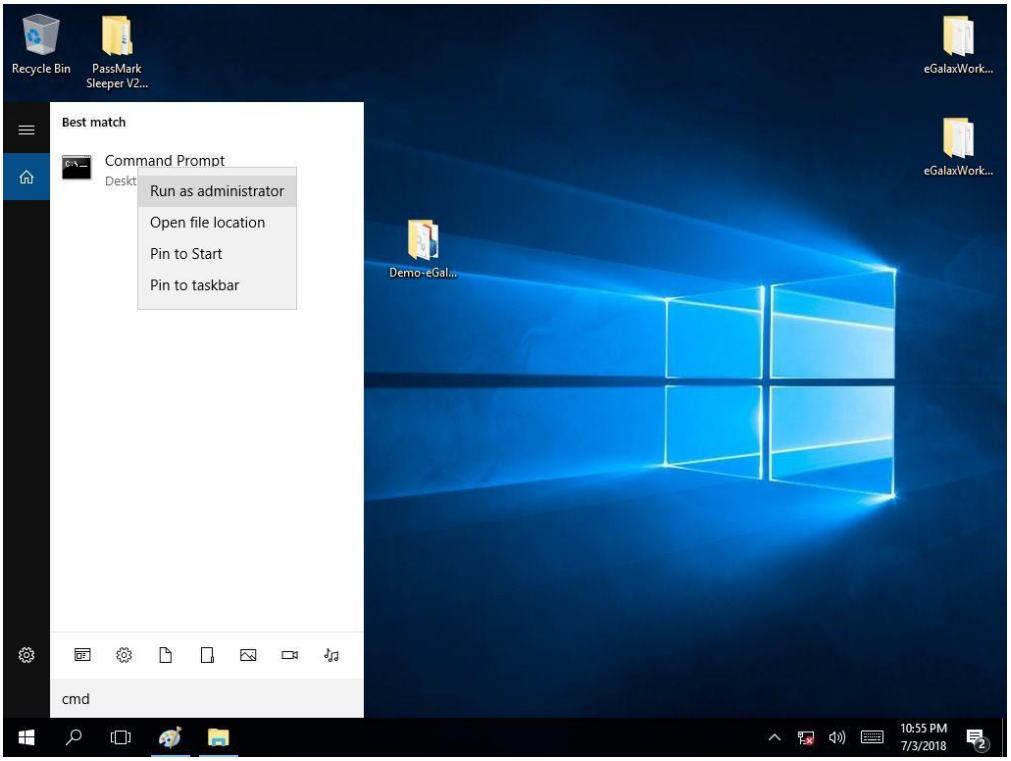


5.10 Watchdog Driver Installation

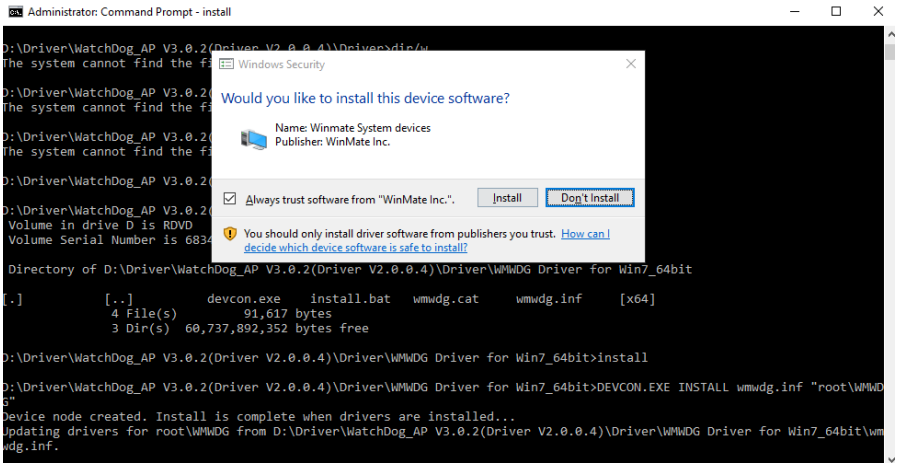
For more details about Winmate Watchdog, please download Watchdog Guide from Winmate Downloads Center.

Follow instructions below to install **Watchdog** driver.

1. Type “cmd” in the run box then the cmd.exe will appear in programs.
2. Right click on the cmd.exe and click on “Run as administrator” to start

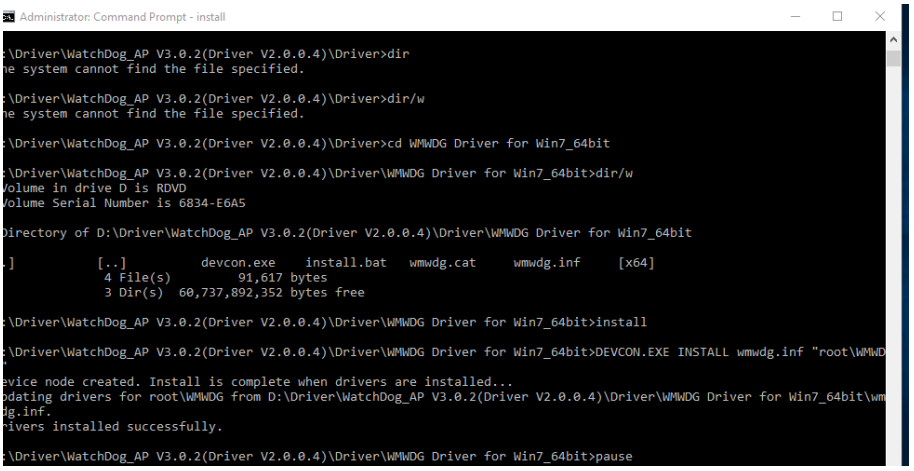


3. Open the Driver (Download from Winmate Download Center) and select Watchdog driver.

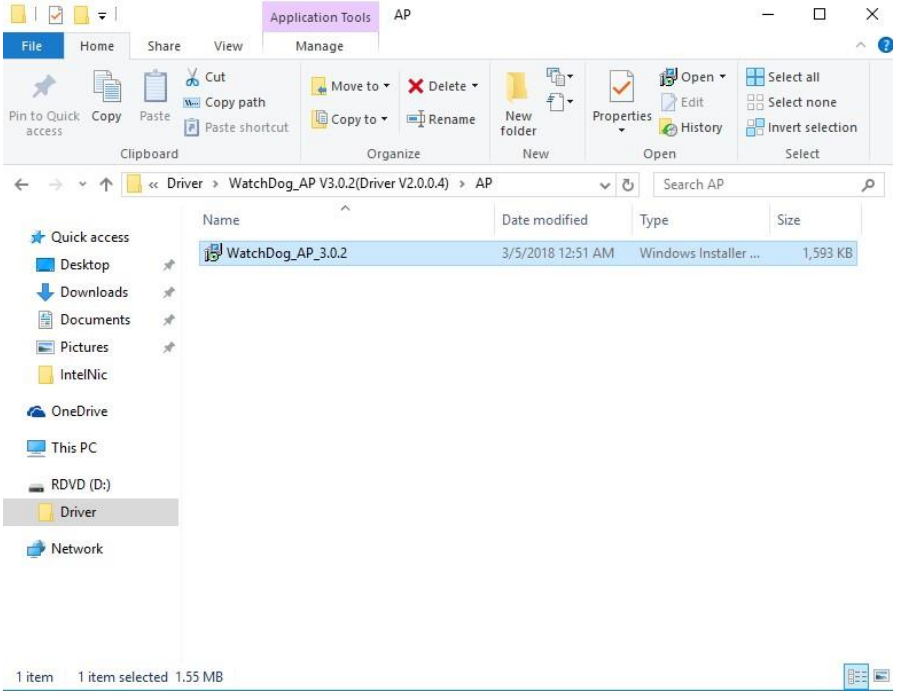


4. When Windows Security dialog appear, select **install** to continue the Installation.

5. Wait for installation to complete. When installation is complete, press any key to close.

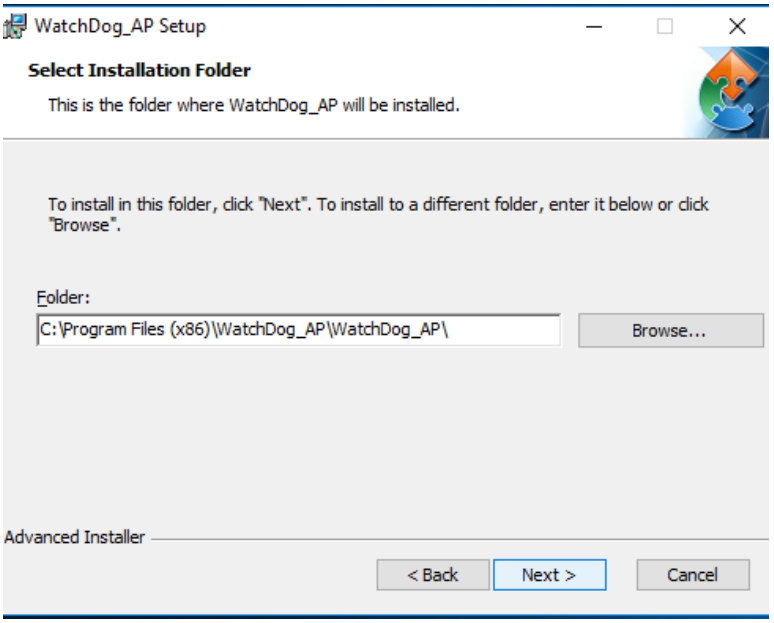


6. Open the Driver (Download from Winmate Download Center) and select **Watchdog AP**.

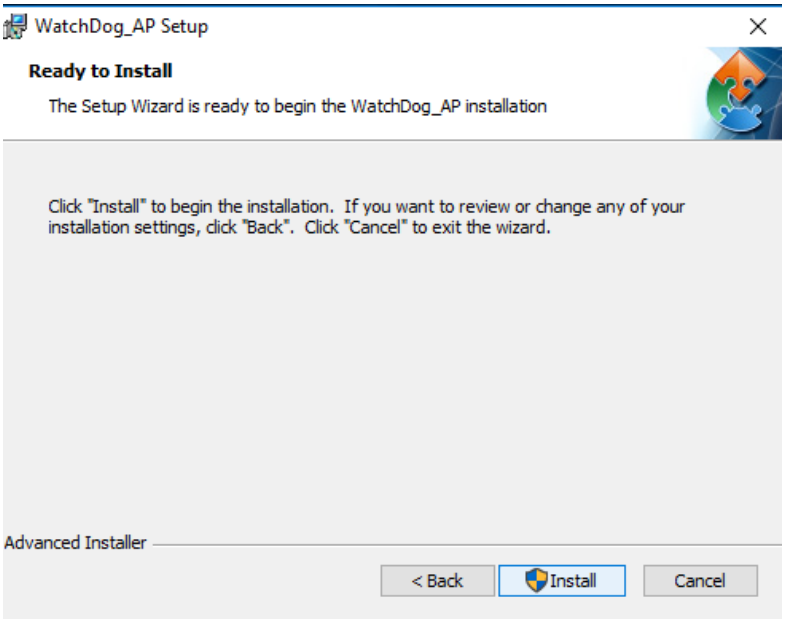


7. Select **Next**.

8. The installed storage location is displayed, select **Next** to continue.



9. Select **Next** to start the installation.

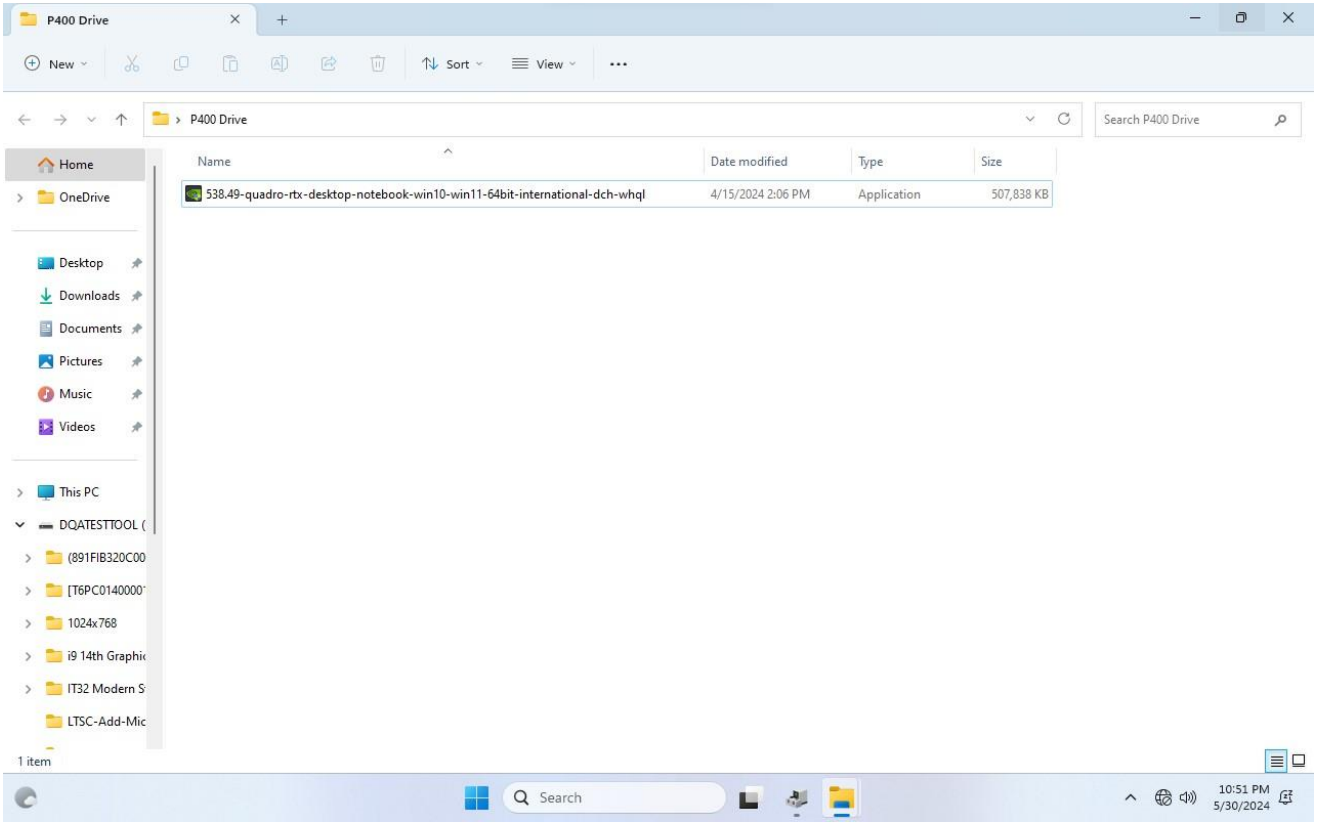


10. When installation is completed, select **Finish** to close the window.

5.11 Graphic Card Driver

Follow instructions below to install NVDIA Graphic Card Driver

1. Click the driver

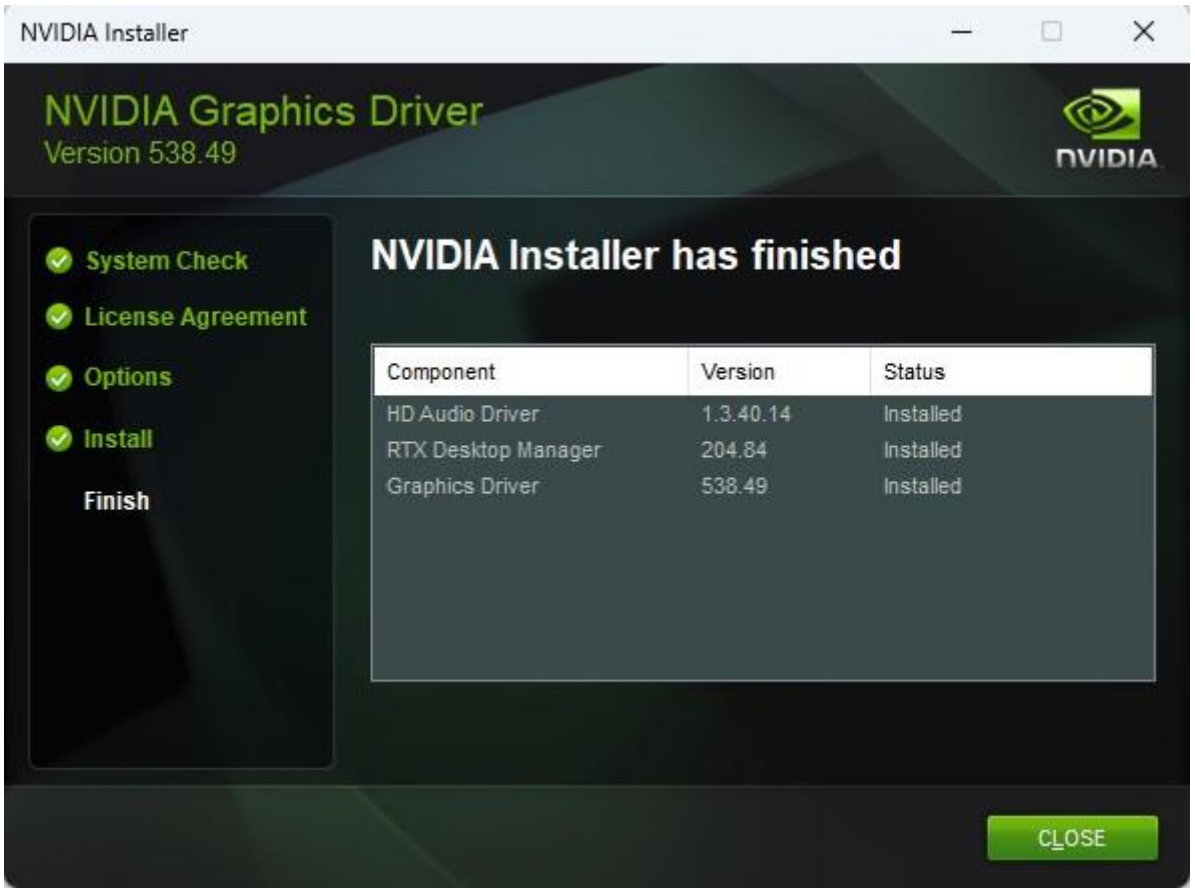


2. Select **OK** to download the driver

3. Select **Agree and Continue**

4. Select **Next** to continue.

5. You will finish to download the driver. Then click **Close.**



5.12 Using Recovery Wizard to Restore Computer

Note:

Before starting the recovery process, make sure to backup all user data. The data will be lost after the recovery process.

Important:

Before starting the recovery process, remove any expansion card.

To enable quick one-key recovery procedure:

1. Connect the computer to the power source. Make sure the computer stays plugged in to power source during the recovery process.
2. Turn on the computer, and when the boot screen shows up, press **F6** to initiate the Recovery Wizard.
3. The following screen shows the Recovery Wizard. Click **Recovery** button to continue.

4. A warning message about data loss will show up. Make sure the data is backed up before recovery, and click **Yes** to continue.

5. Wait the recovery process to complete. During the recovery process, a command prompt will show up to indicate the percent of recovery process complete. After complete the recovery process, the system will be turned off automatically. Please restart your system manually to complete the OS initialize process.

Appendix A: Product Specifications

	Model Name		
	R19IAD7T-GPM1	**W22IAD7T-GPA3**	**W24IAD7T-GPA2**
Display			
Size/ Type	19"	21.5"	23.8"
Resolution	1280x1024	1920x1080	1920x1080
Brightness	250nits	250nits	250nits
Contrast Ratio	1000:1	3000:1	3000:1
Viewing Angle	85,85,80,80	89,89,89,89	89,89,89,89
Touch	Projected Capacitive Multi-Touch		
Mechanical Specifications			
Dimensions, mm	445 x 370 x 71.5	530.2 x 321.7 x 70.4	588 x 358 x 75.5
Cut out, mm	425 x 340	473 x 280	513 x 300
Mounting	Panel mount		
	VESA Mount/ Wall Mount		
Cooling	Fan design		
Enclosure	Metal housing		
System Specifications			
Processor	Intel® Core™ i7-14700T (up to 5.2GHz) Intel® Core™ i9-14900T (up to 5.5GHz) (Optional)		
System Memory	1 x SODIMM, DDR5 480000 MHz, 8+8GB 16+16GB(Optional) /32+32GB(Optional)		
Operating System	Windows 11 IoT Enterprise (64 bit) (Optional) Windows 11 Pro 64 bit (Optional) Linux Ubuntu 22.04 (Optional)		
Security	TPM 2.0		
Storage	1 x M.2 2280 M-Key NVMe SSD 512GB 1TB(Optional)/ 2TB(Optional)		
Ethernet controller	2 x Intel®2.5 Gigabit Ethernet Controller		
BT	Support (Optional)		
WLAN	Support (Optional)		
AI Accelerator	Hailo-8™ AI accelerator module, up to 26 TOPS (When using this feature, WLAN will not be supported)		
Graphic Card	NVDIA® RTX A2000 12GB Graphic Card (Optional) NVDIA® T1000 8GB Graphic Card (Optional)		
Input / Output			
Power Input	1 x 3 Pin AC Plug		
USB Ports	4x USB 3.2 Gen 2x1 (10Gbps, Type A)		
Video	1 x DP1.4a DP++, Max resolution up to 4096x2160@60HZ 1 x HDMI 2.0b, Max resolution up to 4096x2160@60HZ (Optional)		
Audio	Mic in		
	Line out		
Expansion Port	1 x M.2 2230 E-Key Slot (for Wi-Fi module or Hailo-8™ AI accelerator module)		
	1 x PCIe 5.0(x16) slot		

	Model Name		
	R19IAD7T-GPM1	**W22IAD7T-GPA3**	**W24IAD7T-GPA2**
LAN	2 x 2.5 Giga LAN RJ45 Connector		
Indicator	1 x LED Indicator for power		
	1 x LED Indicator for storage		
Power Specifications			
Power Input	80 ~ 264V AC		
Environment Considerations			
Operating Temp.	0 ~ 55 °C		
Operating Humidity	10 ~ 90% (non-condensing)		
Storage Temperature	-10 ~ 60 °C		
Certification			
Certification	CE, FCC		

Note:

1. The product shown in this datasheet is a standard model. For diagrams that contain customized or optional I/O, please contact the Winmate Sales Team for more information.
2. All specifications are subject to change without prior notice.

	Model Name	
	W27IAD7T-GPA1	**W32IAD7T-GPA3**
Display		
Size/ Type	27"	32"
Resolution	1920x1080	1920x1080
Brightness	300nits	400nits
Contrast Ratio	3000:1	4000:1
Viewing Angle	89,89,89,89	89,89,89,89
Touch	Projected Capacitive Multi-Touch	
Mechanical Specifications		
Dimensions, mm	675.4 x413.4 x 67.9	777.6 x477.6 x 73.3
Mounting	VESA Mount	
Cooling	Fan design	
Enclosure	Metal housing	
System Specifications		
Processor	Intel® Core™ i7-14700T (up to 5.2GHz) Intel® Core™ i9-14900T (up to 5.5GHz) (Optional)	
System Memory	1 x SODIMM, DDR5 480000 MHz, 8+8GB 16+16GB(Optional) /32+32GB(Optional)	
Operating System	Windows 11 IoT Enterprise (64 bit) (Optional) Windows 11 Pro 64 bit (Optional) Linux Ubuntu 22.04 (Optional)	
Security	TPM 2.0	
Storage	1 x M.2 2280 M-Key NVMe SSD 512GB 1TB(Optional)/ 2TB(Optional)	
Ethernet controller	2 x Intel® 2.5 Gigabit Ethernet Controller	
BT	Optional	
WLAN	Optional	
AI Accelerator	Hailo-8™ AI accelerator module, up to 26 TOPS (When using this feature, WLAN will not be supported)	
Graphic Card	NVDIA® RTX A4000 16GB Graphic Card (Optional) NVDIA® RTX A2000 12GB Graphic Card (Optional) NVDIA® T1000 8GB Graphic Card (Optional)	
Input / Output		
Power Input	1 x 3 Pin AC Plug	
USB Ports	4x USB 3.2 Gen 2x1 (10Gbps, Type A)	
Serial Port	1 x RS232/422/485 (Default RS232)	
Video	1 x DP1.4a DP++, Max resolution up to 4096x2160@60HZ 1 x HDMI 2.0b, Max resolution up to 4096x2160@60HZ (Optional)	
Audio	Mic in	
	Line out	
Expansion Port	1 x M.2 2230 E-Key Slot (for Wi-Fi module or Hailo-8™ AI accelerator module)	
	1 x PCIe 5.0(x16) slot	
LAN	2 x 2.5 Giga LAN RJ45 Connector	

	Model Name	
	W27IAD7T-GPA1	**W32IAD7T-GPA3**
Indicator	1 x LED Indicator for power	
	1 x LED Indicator for storage	
Power Specifications		
Power Input	90 ~ 264V AC	
Environment Considerations		
Operating Temp.	0 ~ 55 °C	
Operating Humidity	10 ~ 90% (non-condensing)	
Storage Temperature	-10 ~ 60 °C	
Certification		
Certification	CE, FCC	

Note:

1. The product shown in this datasheet is a standard model. For diagrams that contain customized or optional I/O, please contact the Winmate Sales Team for more information.
2. All specifications are subject to change without prior notice.

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