15” & 21.5”

Full IP67 P-CAP Panel PC

Model No.: R15IAD3S-67C3-P(HB)
W22IAD3S-67B2-P (HB)

Quick Start Guide

Version 1.0
Document Part Number: 915211101146

Please read these instructions before operating the device and retain them for future reference.

Contents

Preface

FCC 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 his own expense.

European Union

Electromagnetic Compatibility Directive (2014/30/EU)

- EN55024: 2010/ A1: 2015
  - IEC61000-4-2: 2009
  - IEC61000-4-3: 2006+A1: 2007+A2: 2010
  - IEC61000-4-4: 2012
  - IEC61000-4-5: 2014
  - IEC61000-4-6: 2014
  - IEC61000-4-8: 2010
  - IEC61000-4-11: 2004
- EN55032: 2012/AC:2013
- EN61000-3-2:2014
- EN61000-3-3:2013

Low Voltage Directive (2014/35/EU)

- EN 60950-1:2006/A11:2009/A1:2010/A12:2011/ A2:2013

This equipment is in conformity with the requirement of the following EU legislations and harmonized standards. Product also complies with the Council directions.

Disclaimer

Winmate Inc. 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

Winmate Inc. 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 1W17Axxxxxxxx means October of year 2017.

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

Four types of advisories are used throughout the user manual 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 moderns 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.

Chapter 1: Introduction

Congratulations on purchasing Winmate® Full IP67 P-CAP Panel PC.

Winmate Full IP67 P-CAP Panel PC are designed for applications with high hygienic requirements. IP67 series is completely waterproof with IP67 level of protection allowing for easy cleaning and sterilization.

1.1 Features

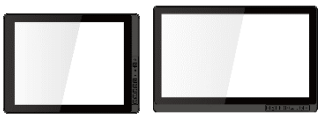
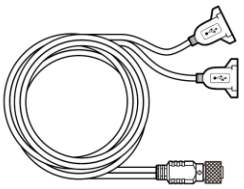
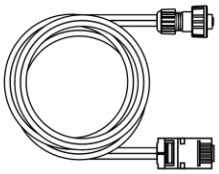
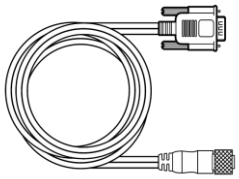
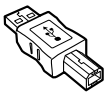
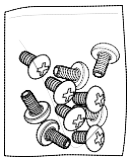
The Full IP67 P-CAP Panel PC features:

- Intel® Core™ i5-1235U Processor 12M Cache, up to 4.40 GHz
- Flat multitouch panel pc with superior readability and P-CAP technology. Supports Rain/ Glove mode
- Optical Bonding with Panel to increase the clarity and transparency
- Optional True Flat Anti-Reflective Protection Glass Optical Bonding with Panel
- Simplicity in Maintenance & Cleanliness Ensures Resistance
- Plenty of I/Os including USB 2.0, RS232 serial port and RJ45 10/100/1000 LAN ports.
- IP67 dust and water proof design (with VESA mount installation)
- Aluminum die-casting housing with anti-corrosion treatments
- Built-in ambient light sensor for auto brightness control
- Wide range 9 to 36V DC input with isolation

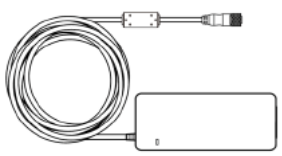
1.2 Package Content

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 shipment list:

			
15” / 22” Panel PC	Power Cable (Open Wire)	USB Cable	Ethernet Cable
Varies by order	Part No. 94J003L030K	Part No. 9480128080K0	Part No. 94I0080080KQ
			
RS-232 Cable	Quick Start Guide (Hardcopy)	Ethernet Extension Adapter	USB Adapter (USB Type-A to Type-B)
Part No. 94G0123090Q0	Part No. 915211101146	Part No. 60L0A8400000	Part No. 60A028010000
			
VESA Mounting Screws	Protective CAP for M12 Connector x3		
Quantity varies by product	Part No. 60Y031001001		

Optional shipment list:

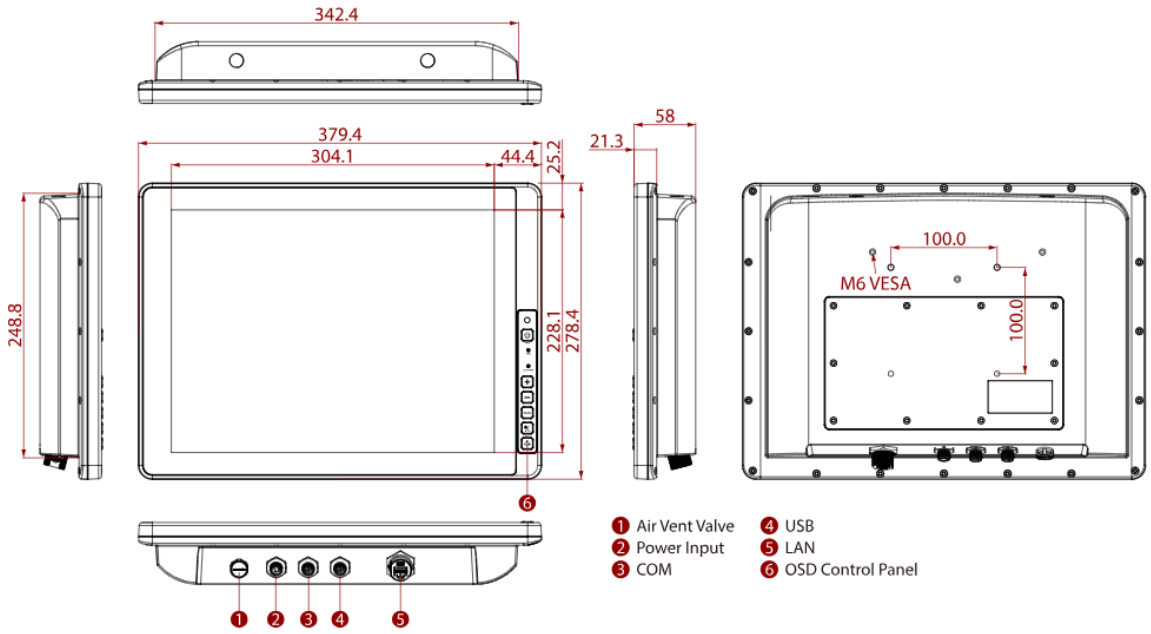
	
Power Adapter	Power Cord
Part No 90PO12120009	*Varies by country*

1.3 Product Overview

This section contains mechanical drawing of the Panel PC. Notice that this is a simplified drawing and some components are not marked in detail.

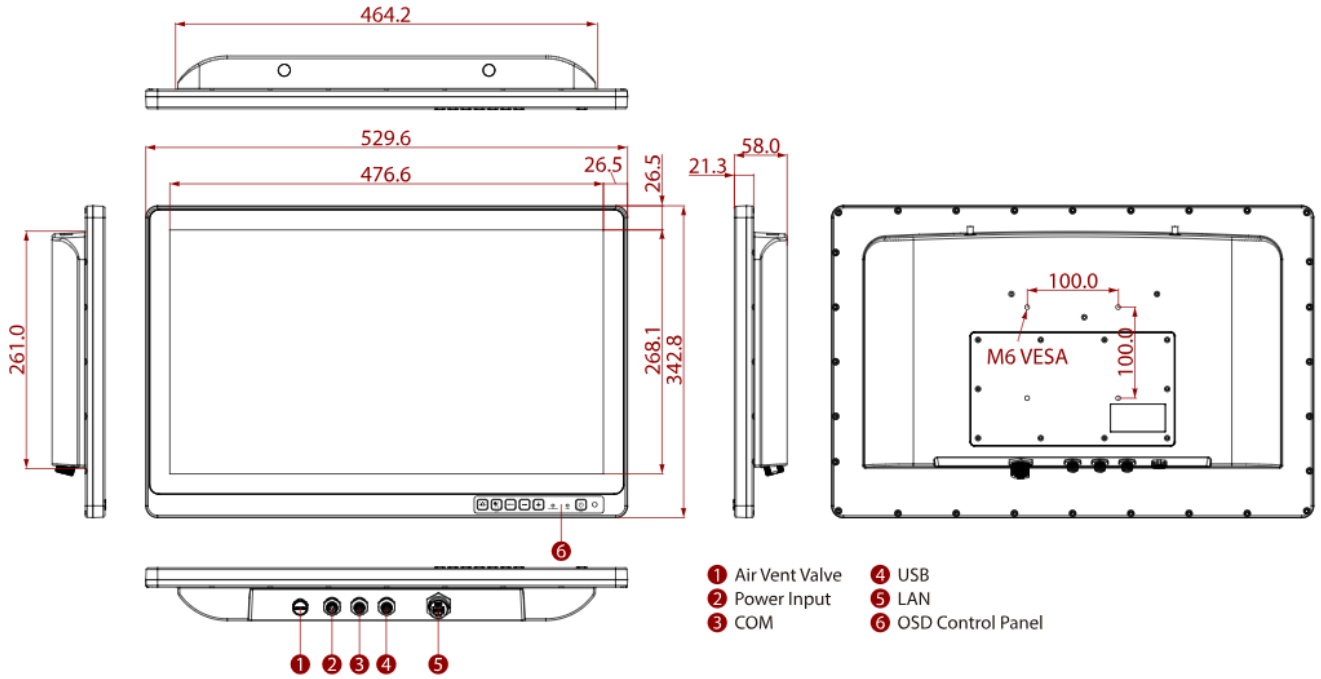
15-inch Panel PC – R15IAD3S-67C3-P (HB)

Unit: mm



21.5-inch Panel PC – W22IAD3S-67B2-P (HB)

Unit: mm



Chapter 2: INSYDE H20 BIOS Setup

This chapter describes the different settings available in the INSYDE BIOS that comes with the board. This chapter offers information on the Award BIOS installation utility

2.1 How and When to Use BIOS Setup

To enter the BIOS setup, you need to connect an external USB keyboard, external monitor and press Del key when the prompt appears on the screen during start up. The prompt screen shows only few seconds so need press Del key quickly.

IMPORTANT:

Updated BIOS version may be published after the manual released. Check the latest version of BIOS on the website.

You may need to run BIOS setup utility for reasons listed below:

1. Error message on screen indicates to check BIOS setup
2. Restoring the factory default settings.
3. Modifying the specific hardware specifications
4. Necessity to optimize specifications

BIOS Navigation Keys

The following keys are enabled during POST:

Key	Function
Del	Enters the BIOS setup menu.
F7	Display the boot menu. Lists all bootable devices that are connected to the system. With cursor ↑and cursor ↓and by pressing <ENTER>, select the device used for the boot.
Pause	Pressing the [Pause] key stops the POST. Press any other key to resume the POST.

The following Keys can be used after entering the BIOS Setup.

Key	Function
F1	Help
F5/ F6	Change Values
F9	Setup Defaults
F10	Save & Exit
Esc	Exit
Enter	Select Sub Menu
↑/ ↓	Select Item
← / →	Select Item

For items marked ► press **<Enter>** for more options.

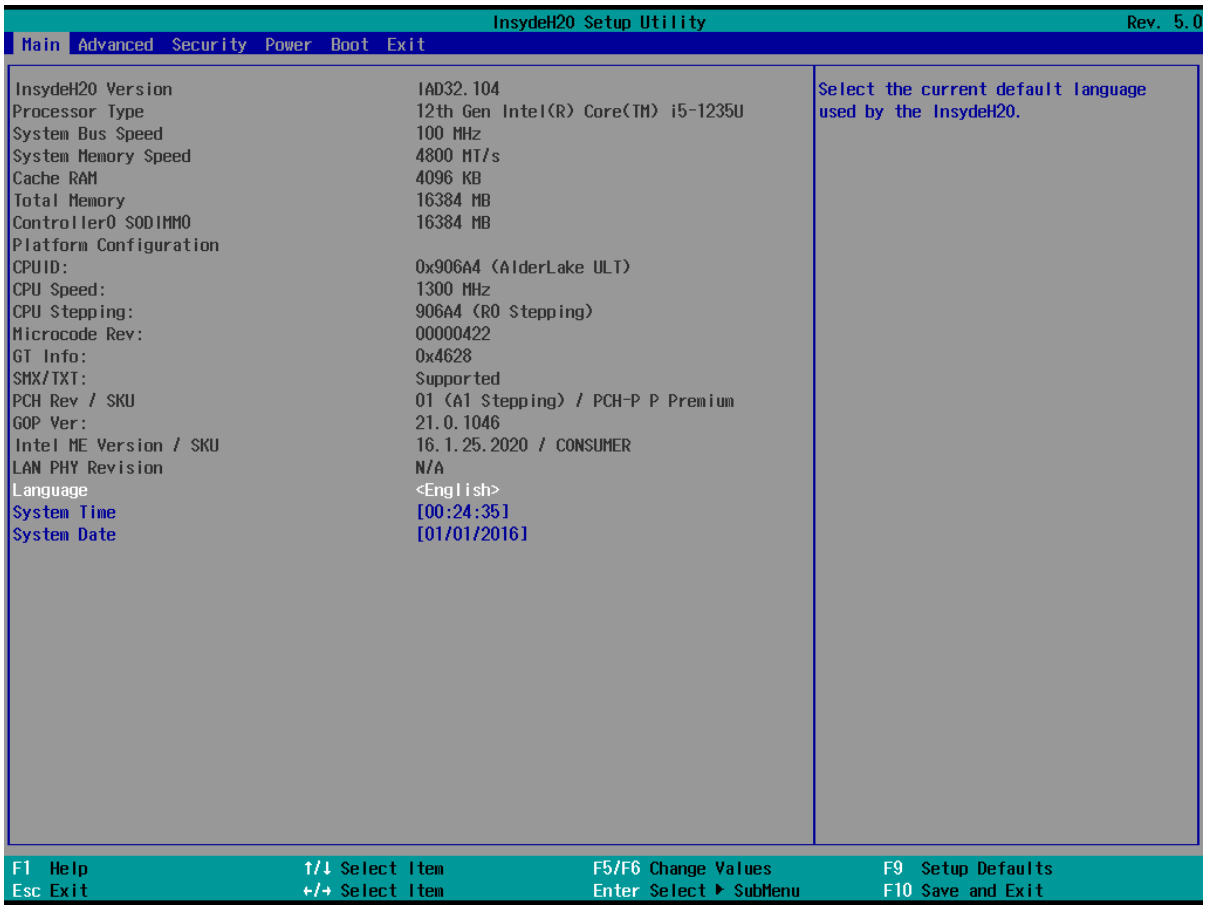
NOTE:

You can press the F1, F2, F3, F4, –/+, and Esc keys by connecting a USB keyboard to your computer.

2.2 BIOS Functions

2.2.1 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.



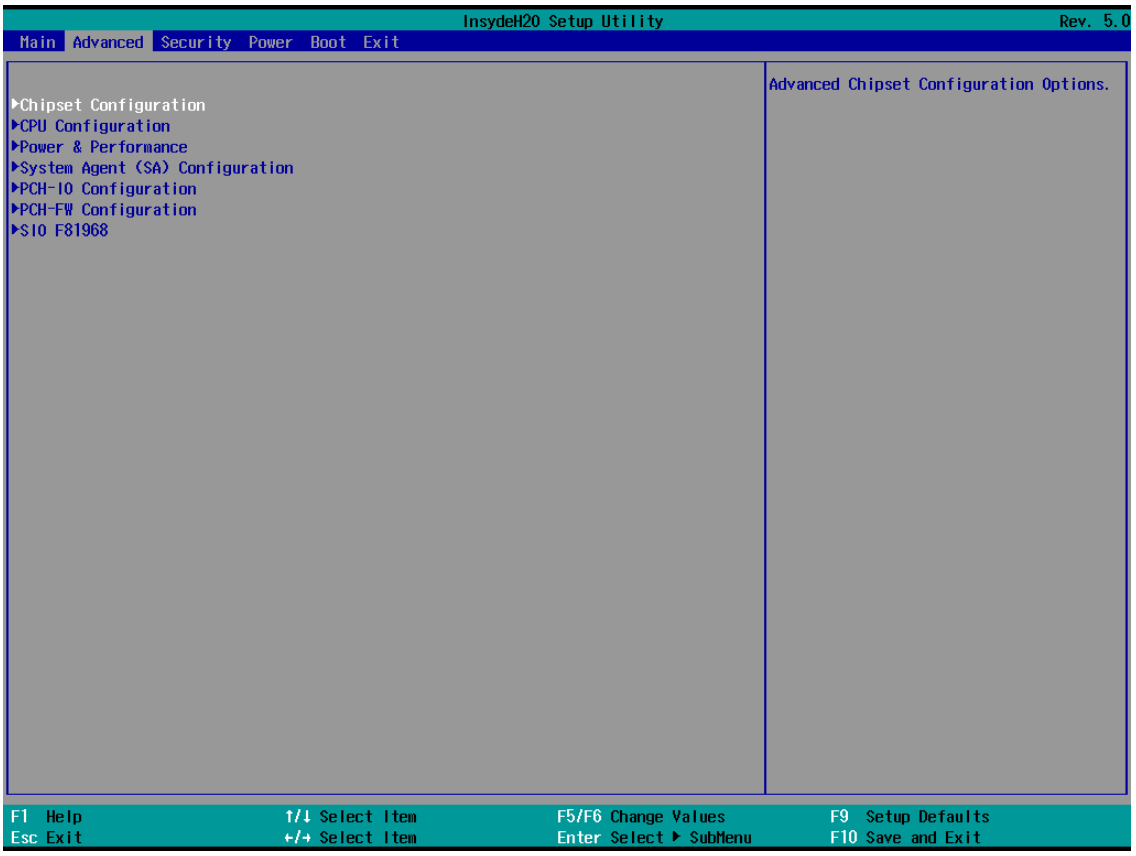
BIOS Setting	Description	Setting Option	Effect
Language	Displays the system language. [English] is set up by default.	Adjustment of the language	Set the language in other language. The language in this device is English.
System Time	This is current time setting. The time is maintained by the battery 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]

2.2.2 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.

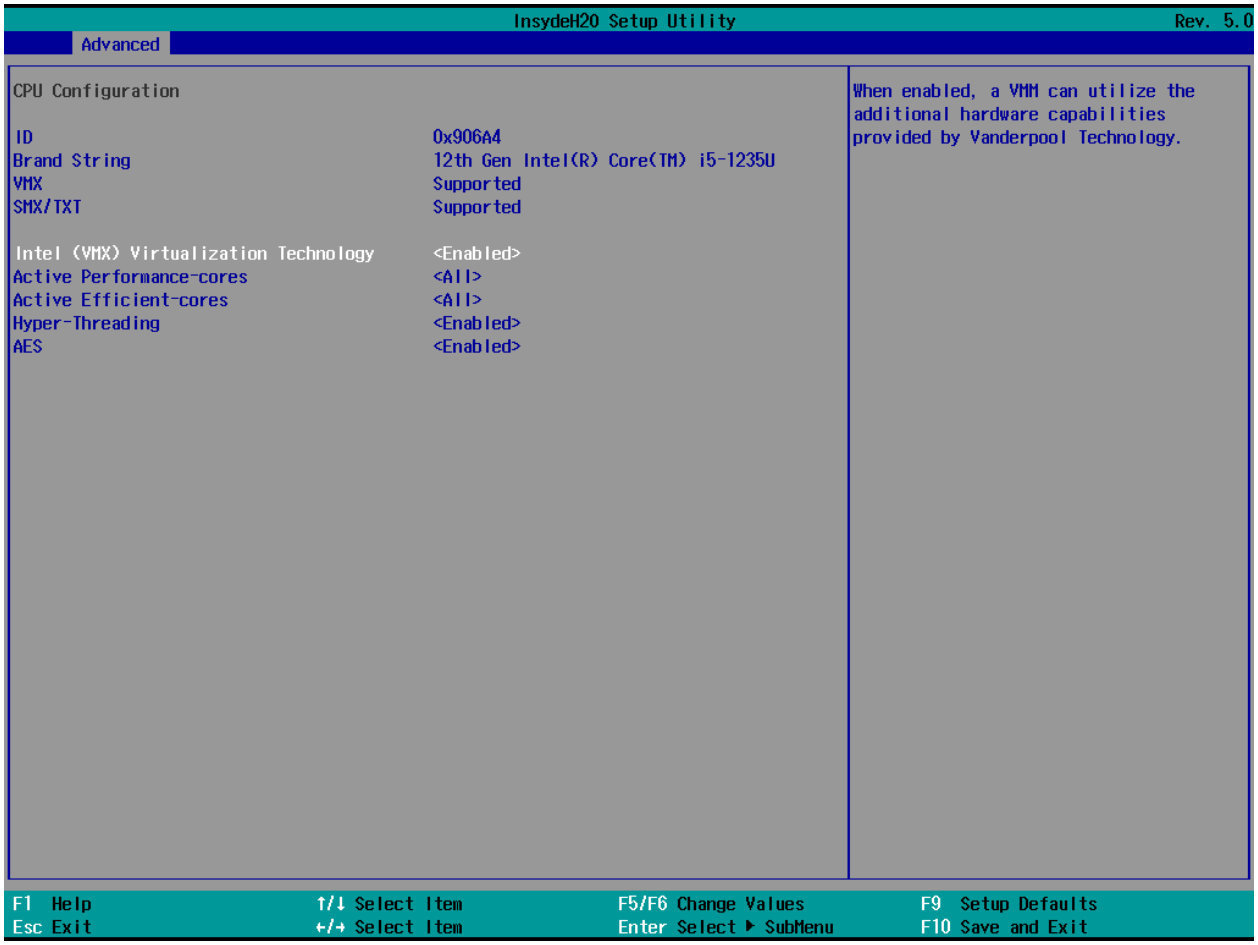
CAUTION

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



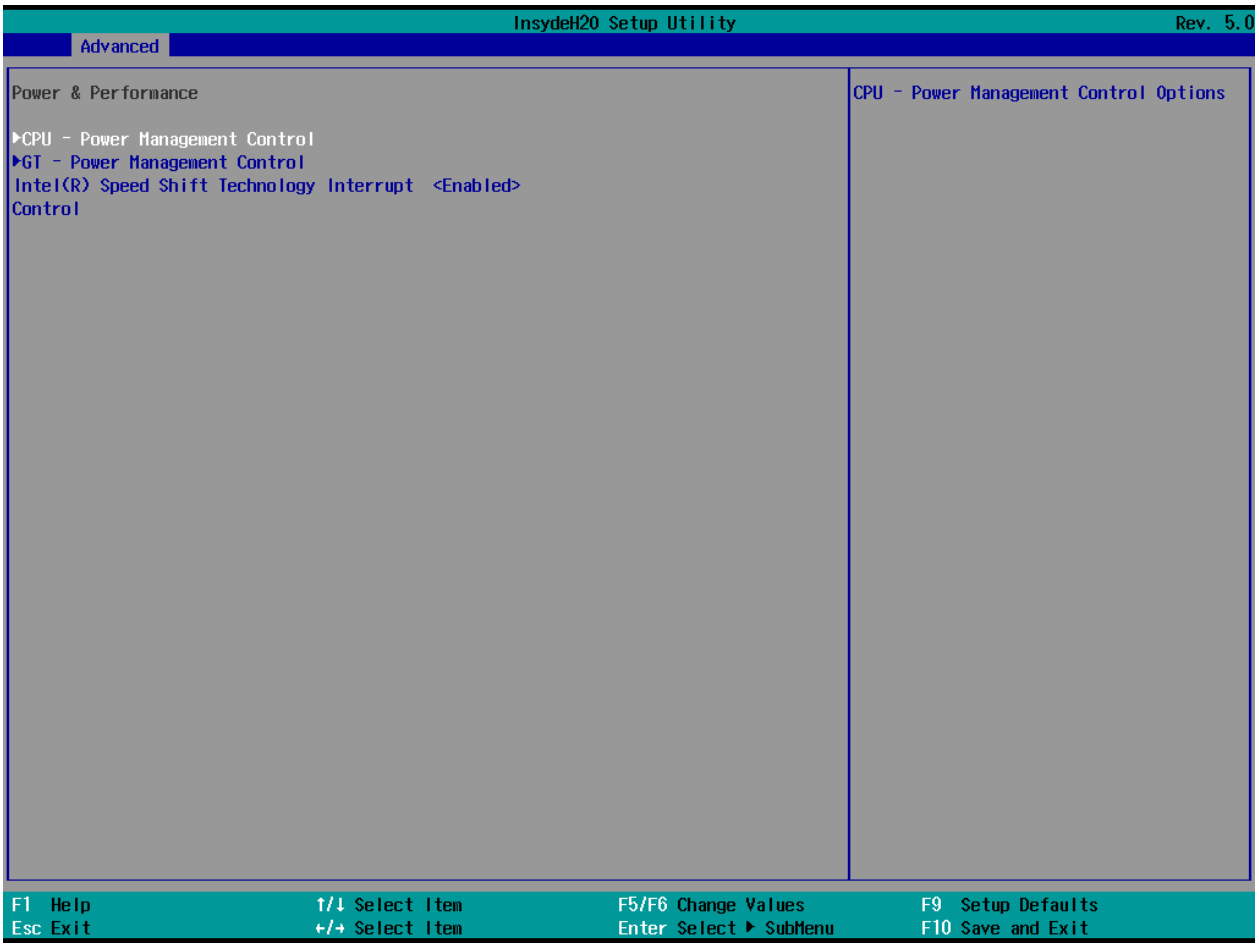
BIOS Setting	Description	Setting Option	Effect
CPU Configuration	Configures Trusted Computing parameters	Enter	Opens submenu
Power & Performance	Configures Power & Performance parameters	Enter	Opens submenu
System Agent Configuration	Configures System Agent Configuration parameters	Enter	Opens submenu
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

2.2.2.1 CPU Configuration

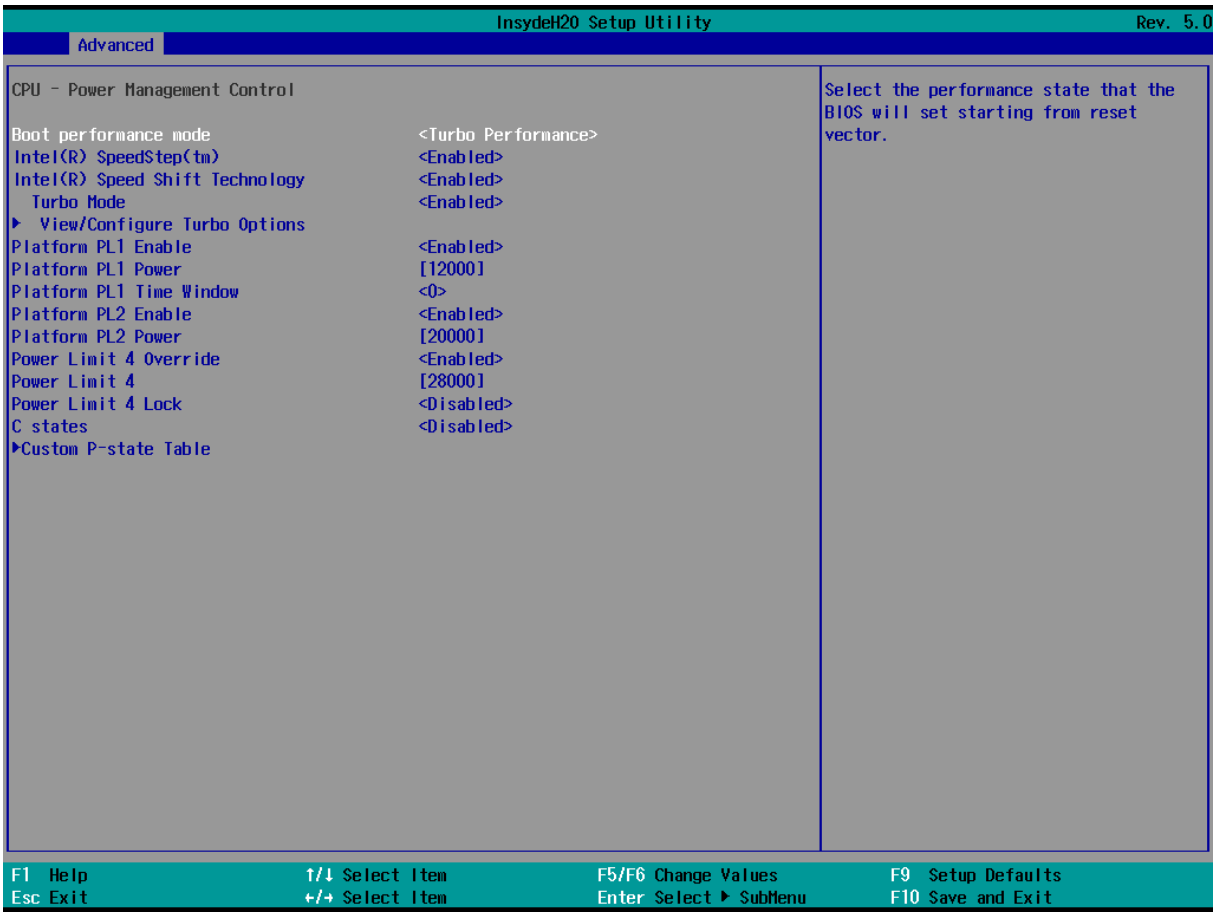


BIOS Setting	Description	Setting Option	Effect
Intel (VMM) Virtualization Technology	Enable or disable Intel Virtualization Technology.	Enable/Disable	When enabled, a VMM can utilized the additional hardware capabilities provided by Vanderpool Technology.
Active Processor Cores	Number of cores to enable in each processor package	All / 1 / 2/ 3	Select number of cores to enable in each processor package
AES	Enable or disable AES (Advanced Encyption Standard)	Enable/Disable	Enable or disable AES

2.2.2.2 Power & Performance

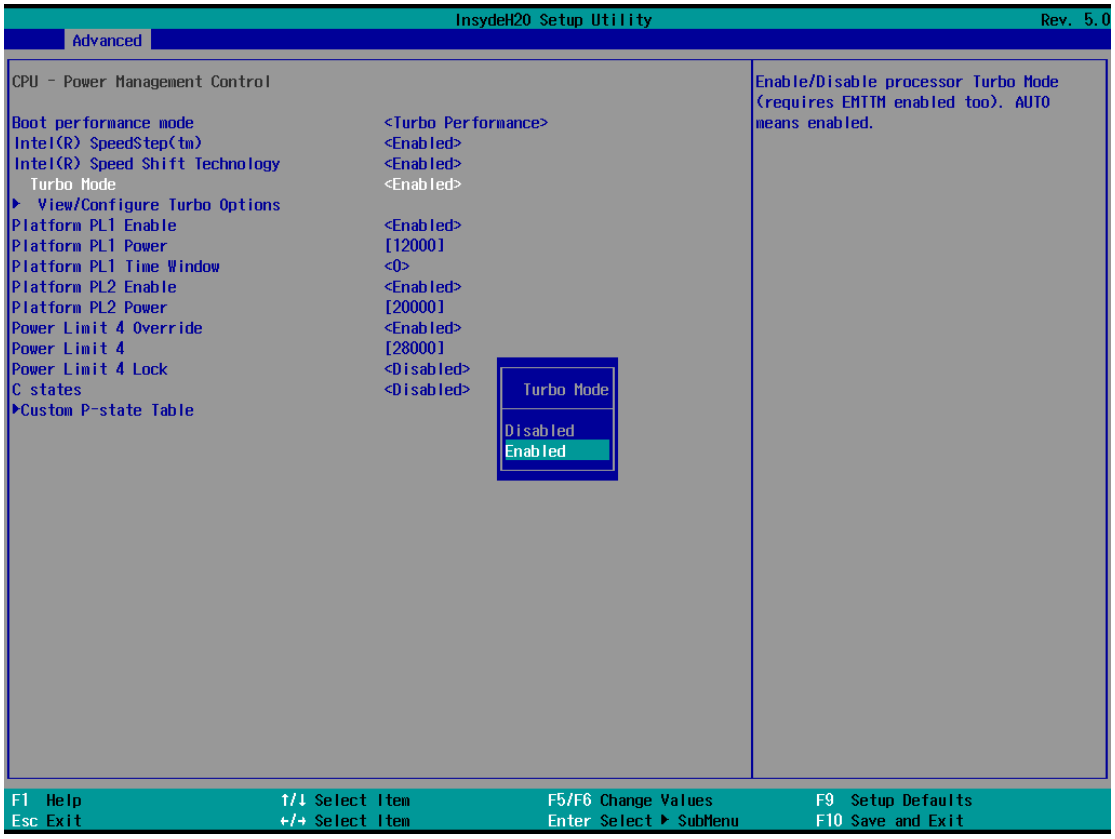


BIOS Setting	Description	Setting Option	Effect
CPU – Power Management Control	Configure CPU – Power Management Control parameters	Enter	Enters sub-menu

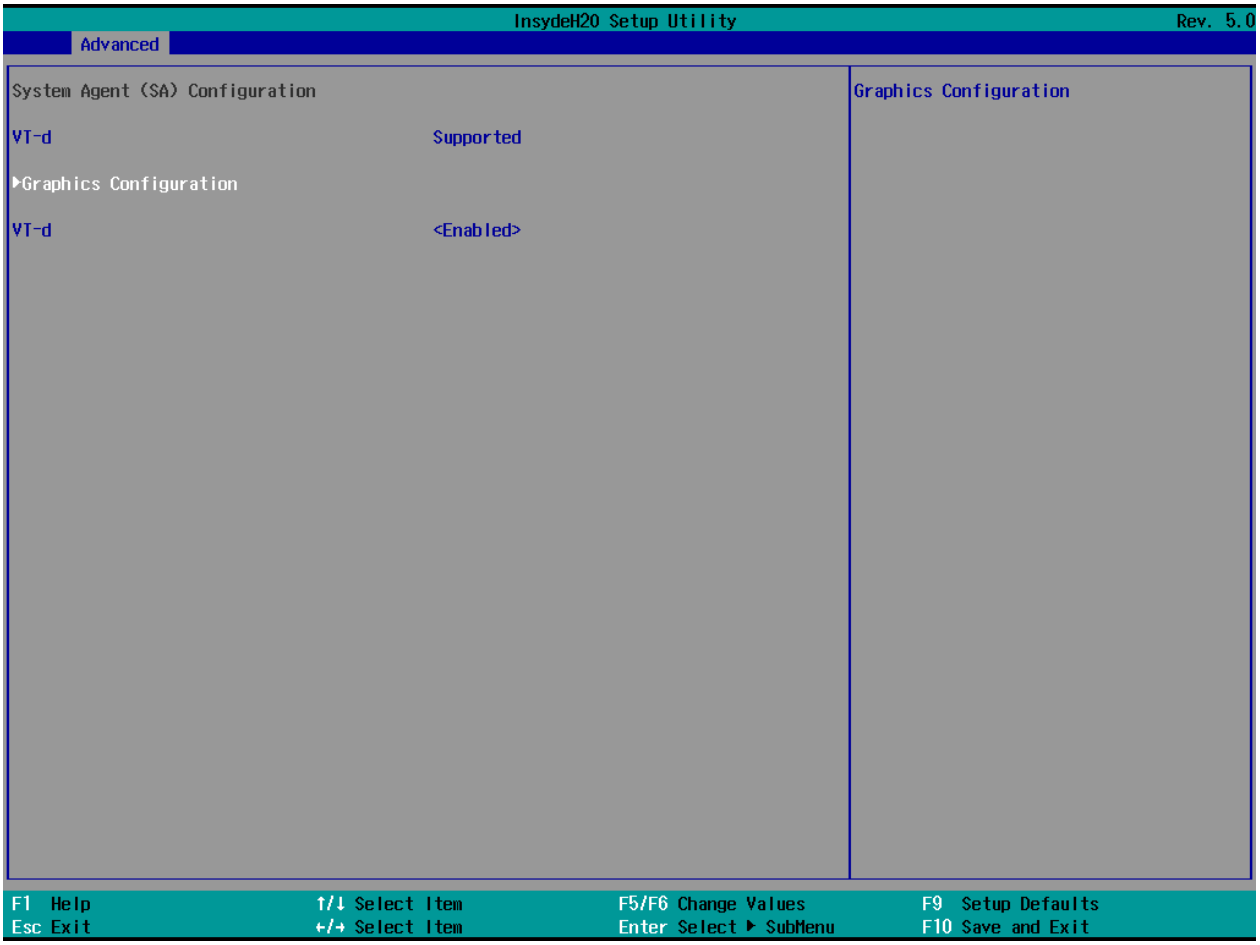


BIOS Setting	Description	Setting Option	Effect
Boot Performance Mode	Configure Boot Performance Mode parameters	Max non-turbo performance Max battery Turbo Performance	Enters sub-menu
Intel SpeedStep (ta)	Configure Intel SpeedStep (ta) parameters	Enabled/ Disabled	Allows more than two frequency ranges 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
-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

2.2.2.2.1 How to Enable/Disable Turbo Mode

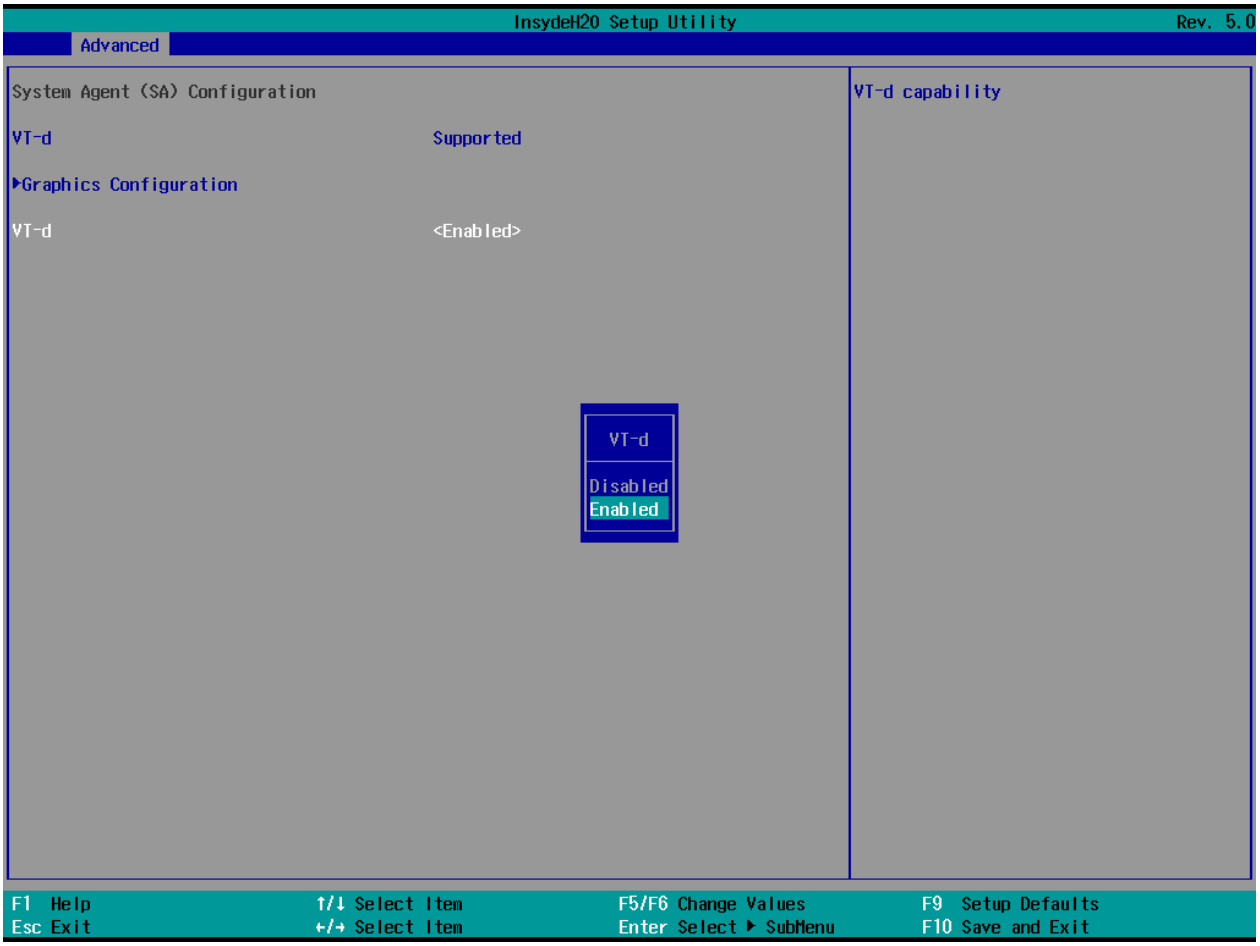


2.2.2.3 System Agent (SA) Configuration



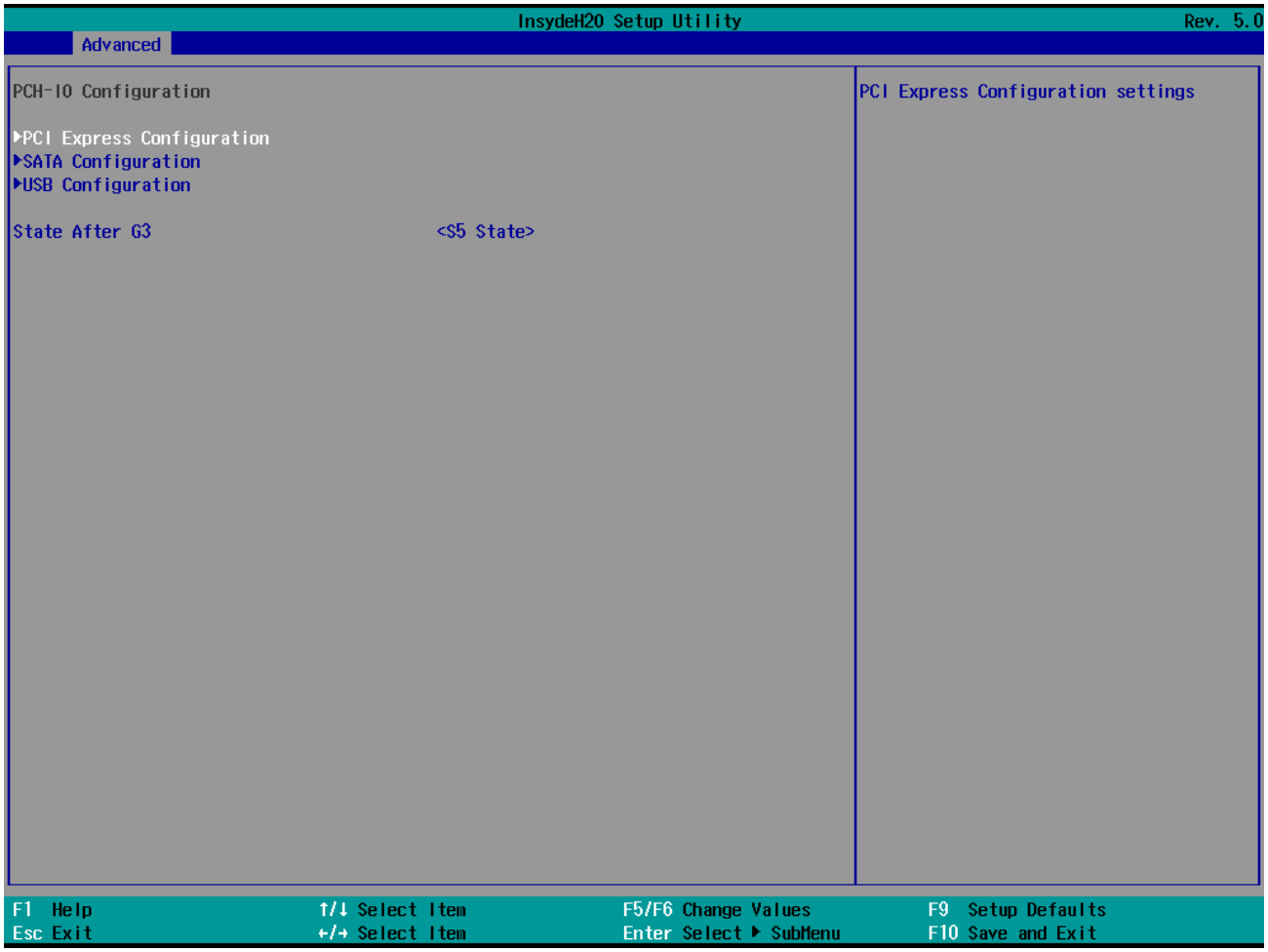
BIOS Setting	Description	Setting Option	Effect
Graphics Configuration	Configure Graphics Configuration parameters	Enter	Opens sub-menu
PEG Port Configuration	Configure PEG Port Configuration parameters	Enter	Opens sub-menu
Vt-d	Intel® Virtualization Technology for Directed I/O	Enabled Disabled	Vt-d capability

2.2.2.3.1 VT-d



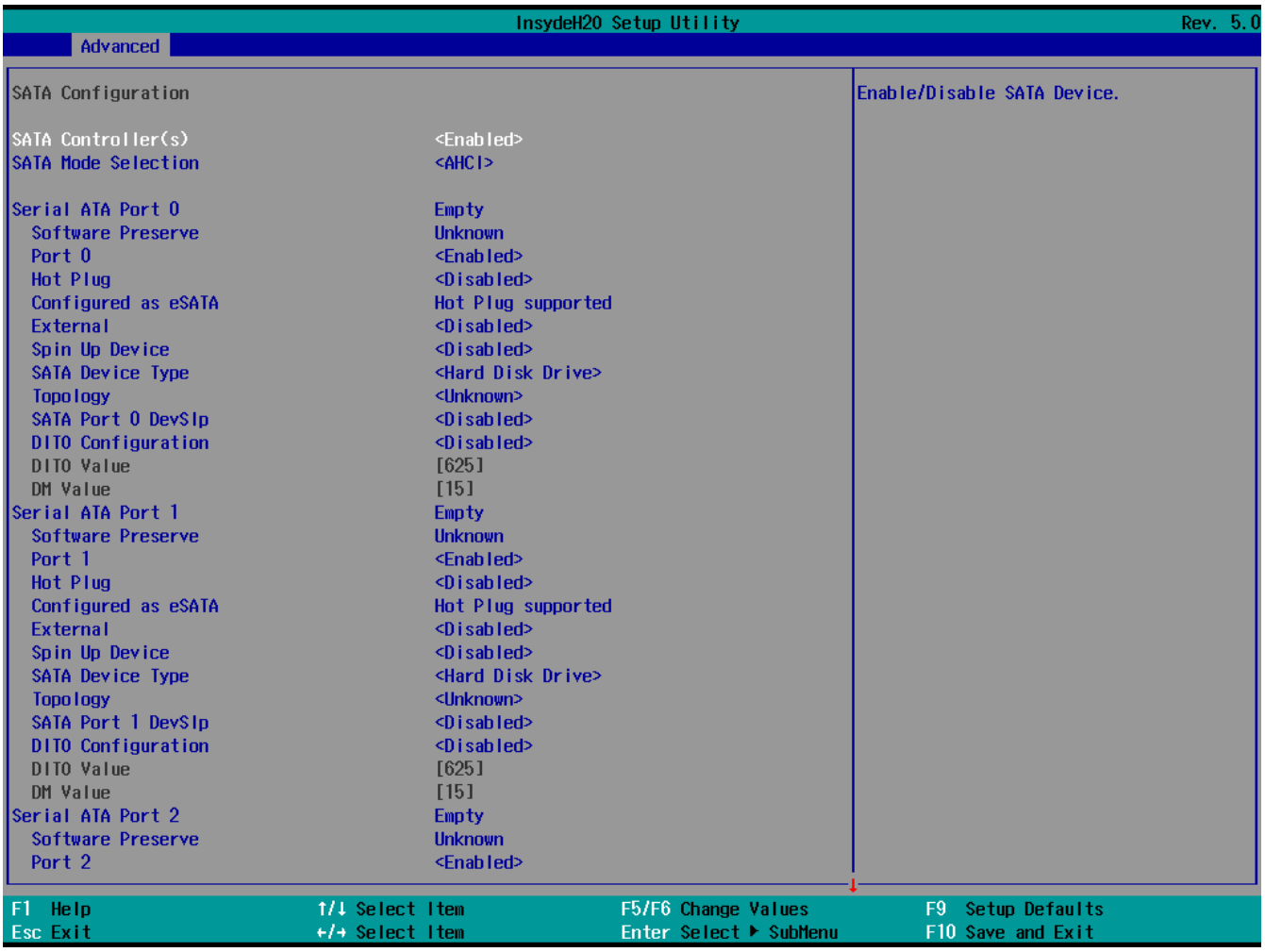
BIOS Setting	Description	Setting Option	Effect
VT-d	Intel® Virtualization Technology for Directed I/O	Enabled Disabled	Vt-d Capability

2.2.2.4 PCH-IO Configuration

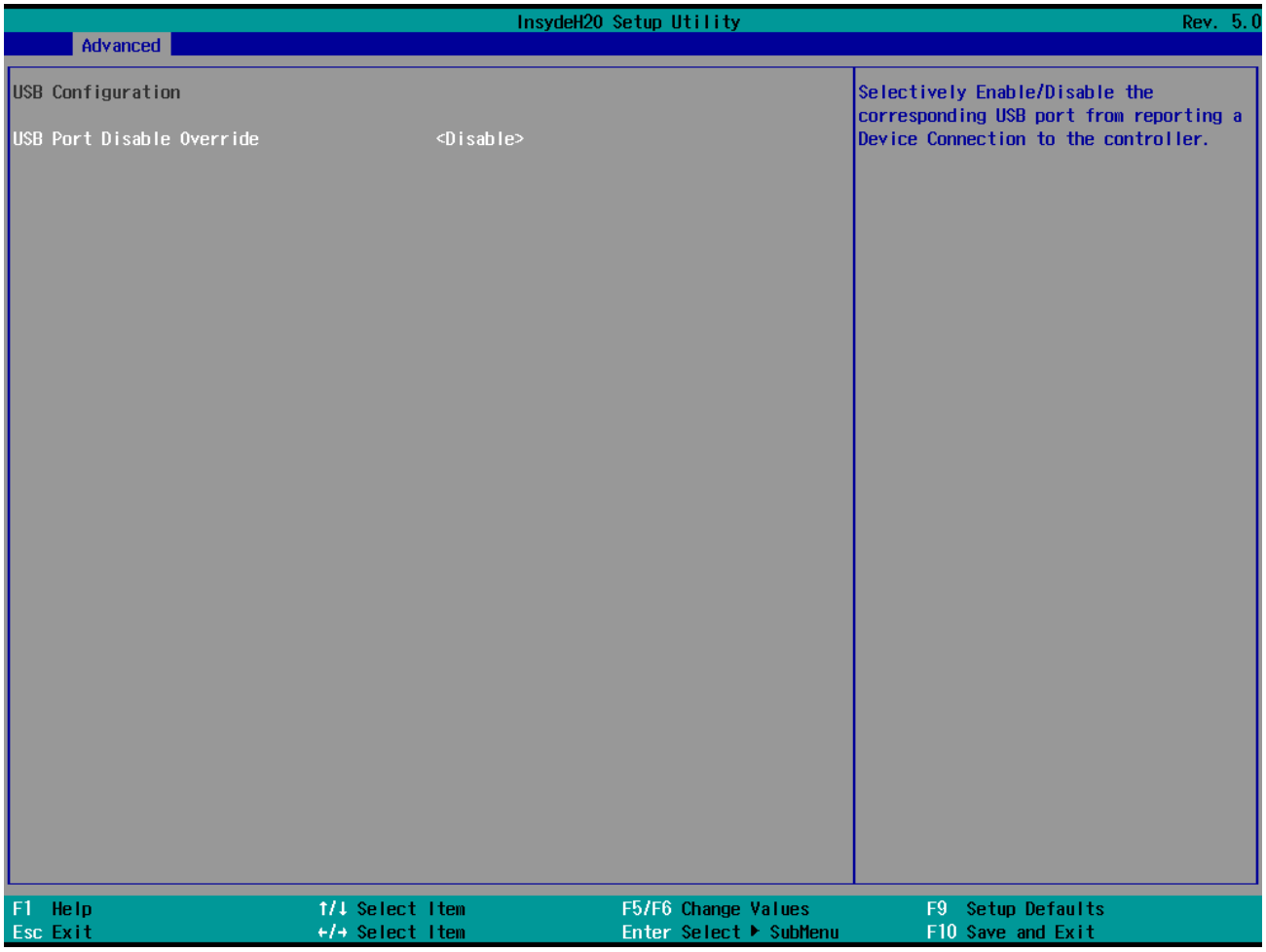


BIOS Setting	Description	Setting Option	Effect
PCI Express Configuration	Configure PCI Express settings	Enter	Opens sub-menu
SATA And RST Configuration	Configure SATA And RST settings	Enter	Opens sub-menu
USB Configuration	Configure USB settings	Enter	Opens sub-menu
State After G3			

2.2.2.4.1 SATA and RST Configuration

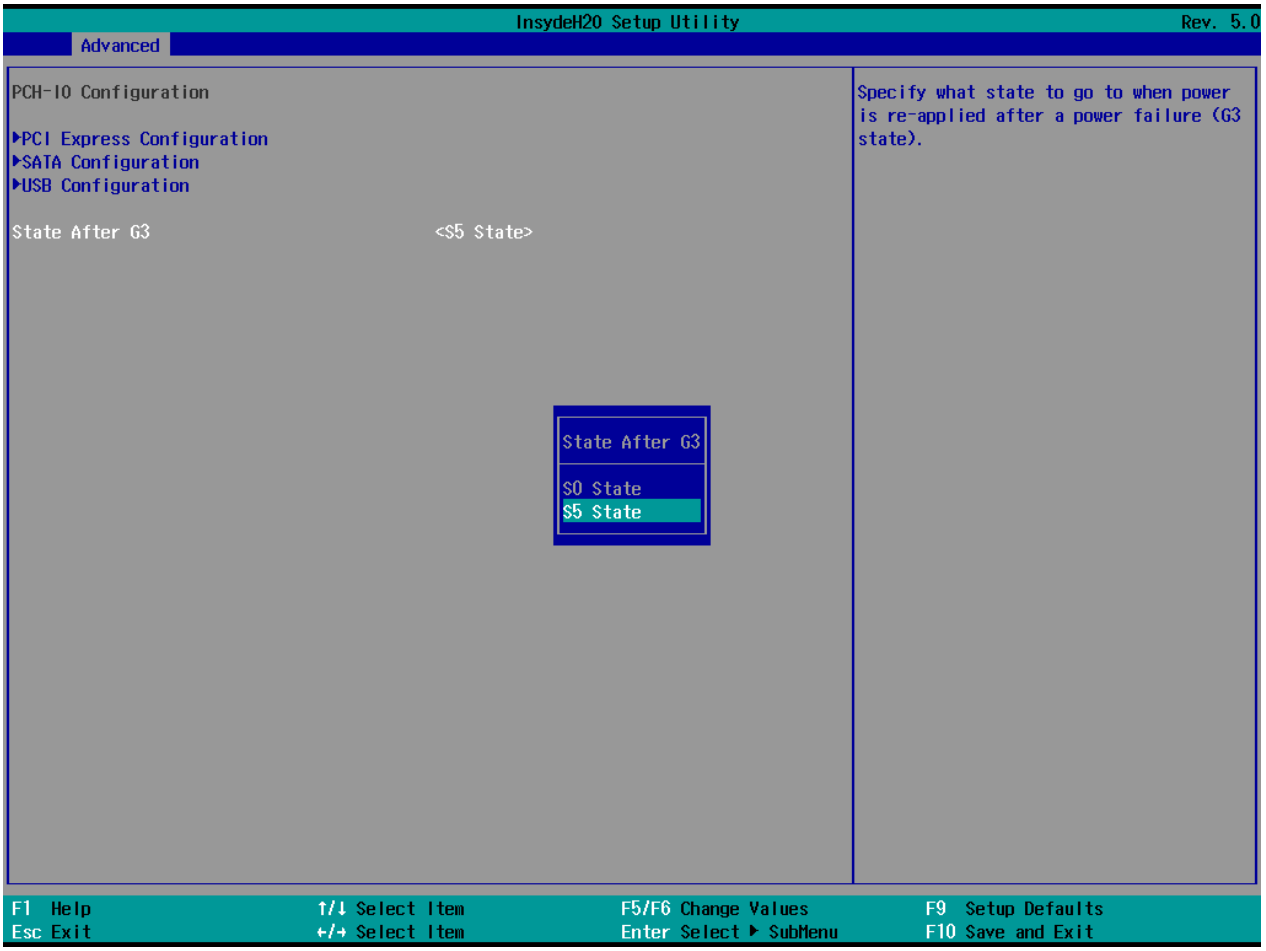


2.2.2.4.2 USB Configuration



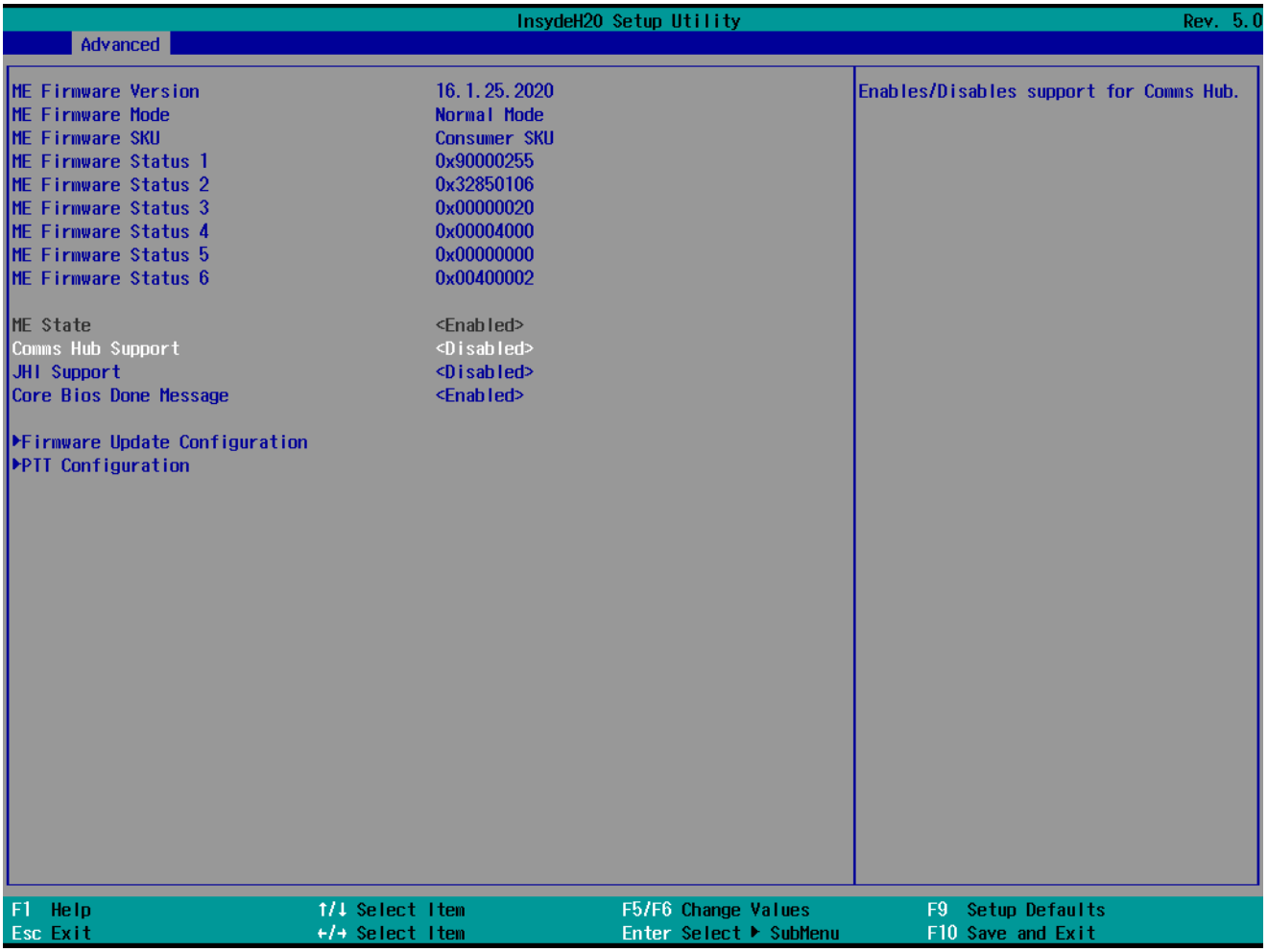
BIOS Setting	Description	Setting Option	Effect
USB Port Disable Override	USB Port Disable Override configuration	Disable Select Per-Pin	Selectively Enable/ Disable the corresponding USB port from reporting a Device Connection to the controller

2.2.2.4.3 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)

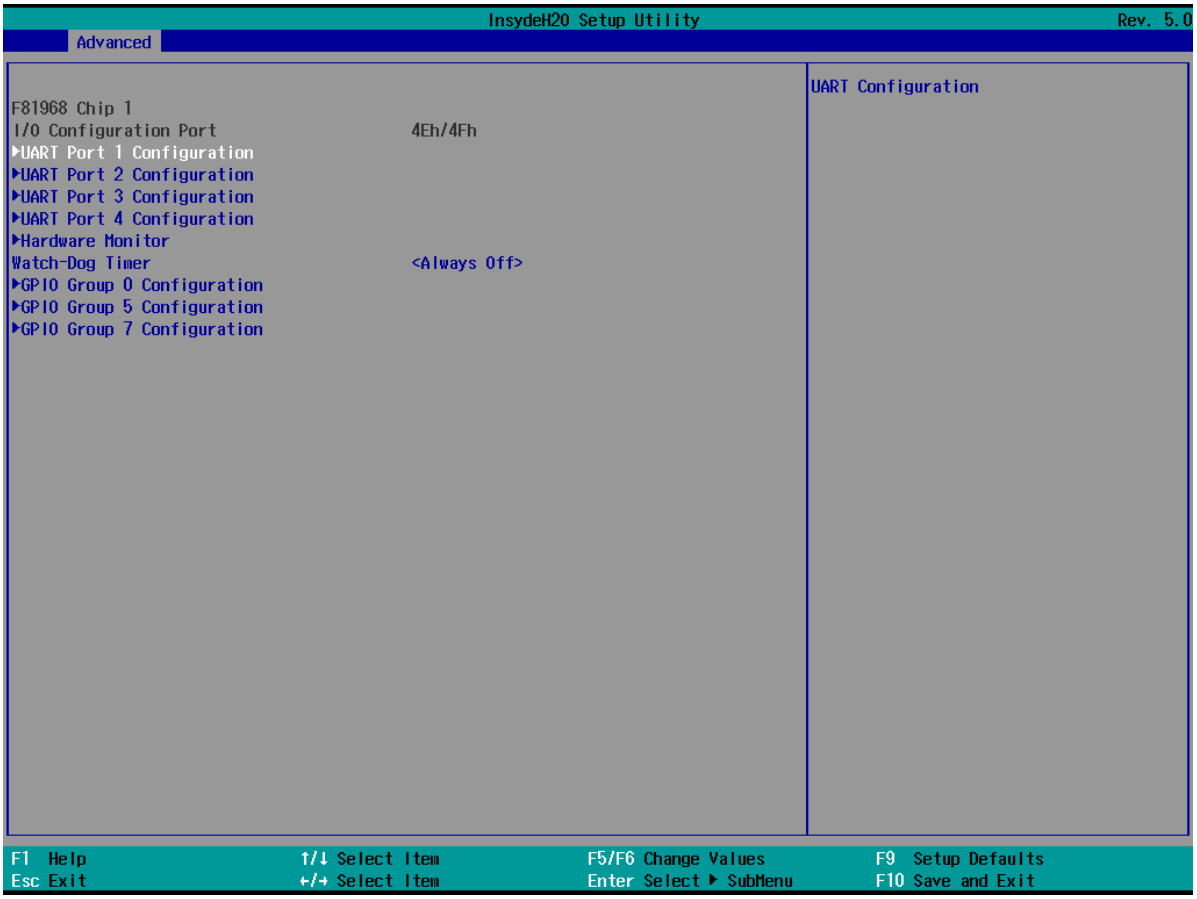
2.2.2.5 PCH-FW Configuration



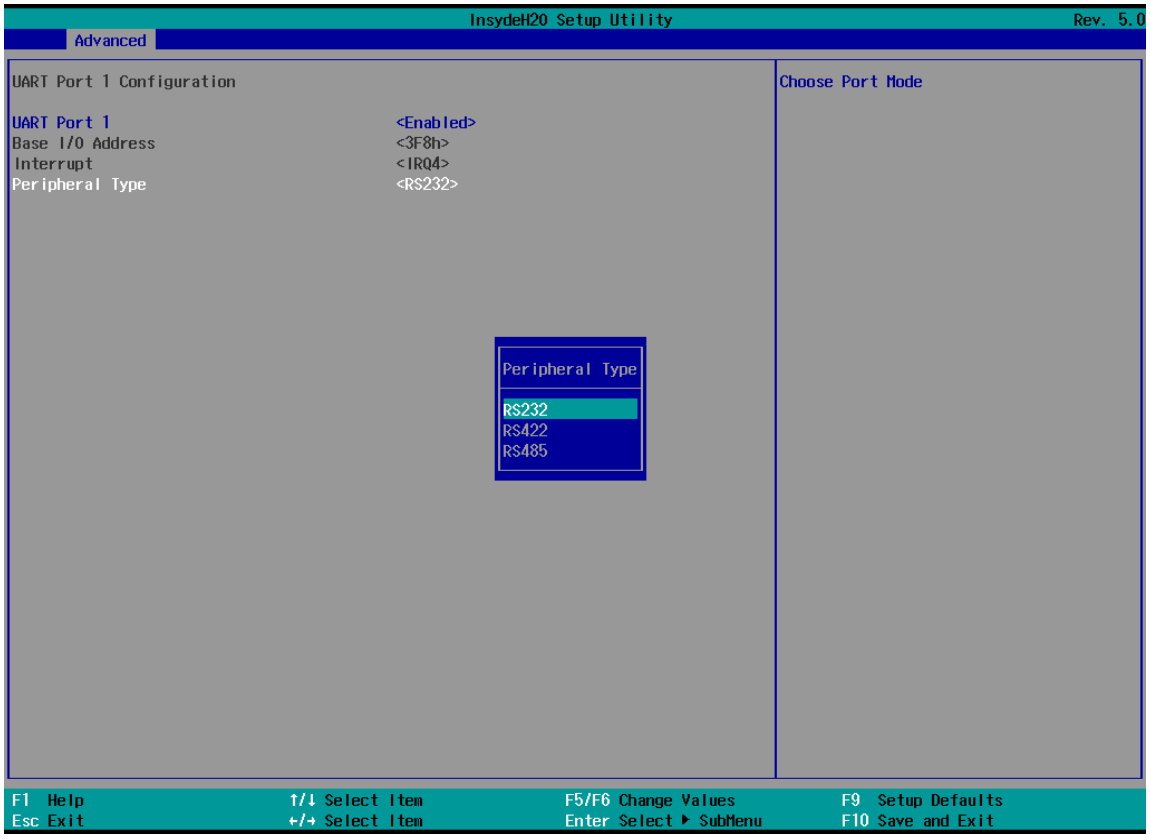
BIOS Setting	Description	Setting Option	Effect
ME State	ME State configuration	Disabled Enabled	When Disabled ME will be put into ME Temporarily Disabled Mode
Manageability Features State	Manageability Features State configuration	Disabled Enabled	Enable/ Disable Intel Manageability Features Note: this option disabled/ enables Manageability Features support in FW. To disable support platform must be in a provisioned 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

BIOS Setting	Description	Setting Option	Effect
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			

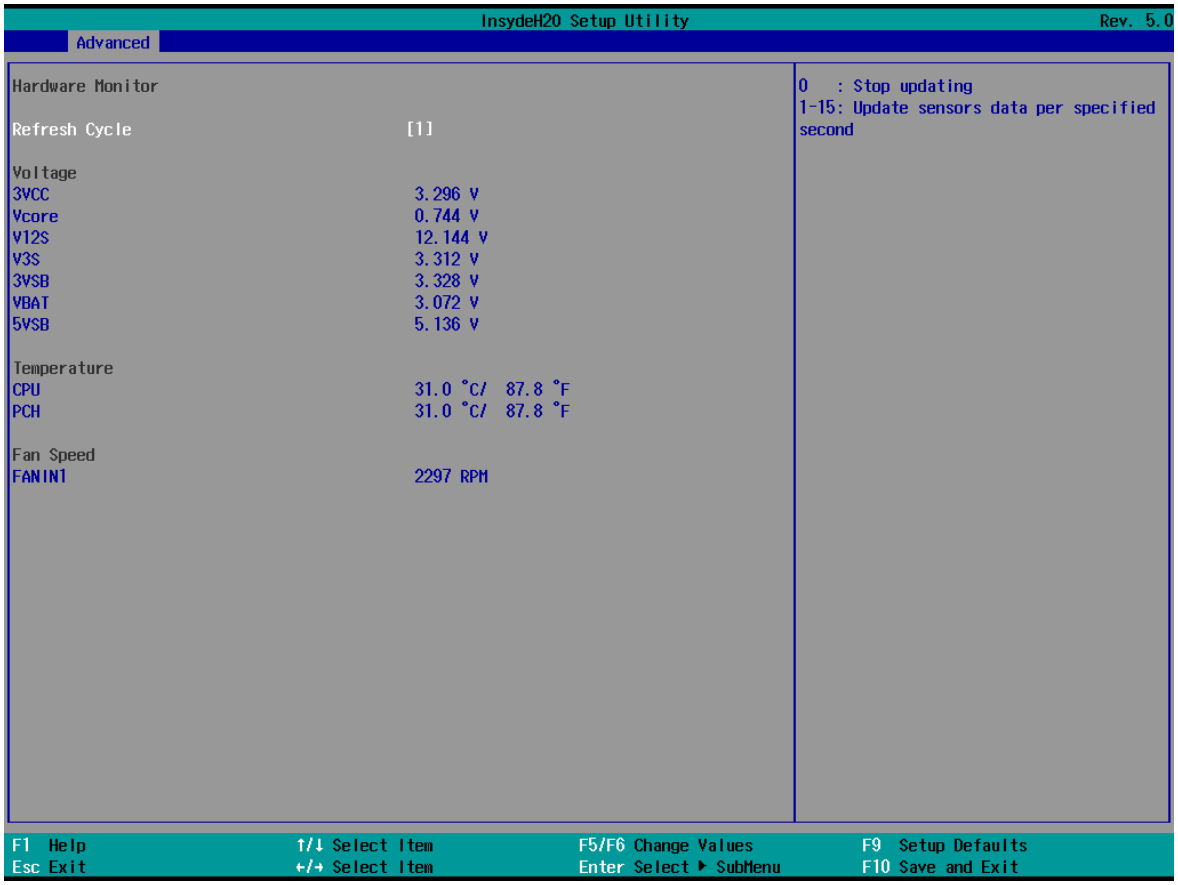
2.2.2.6 SIO F81968



BIOS Setting	Description	Setting	Effect
UART Port 1 ~ UART Port 4	Configure Serial port settings	Disable	No configuration
		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

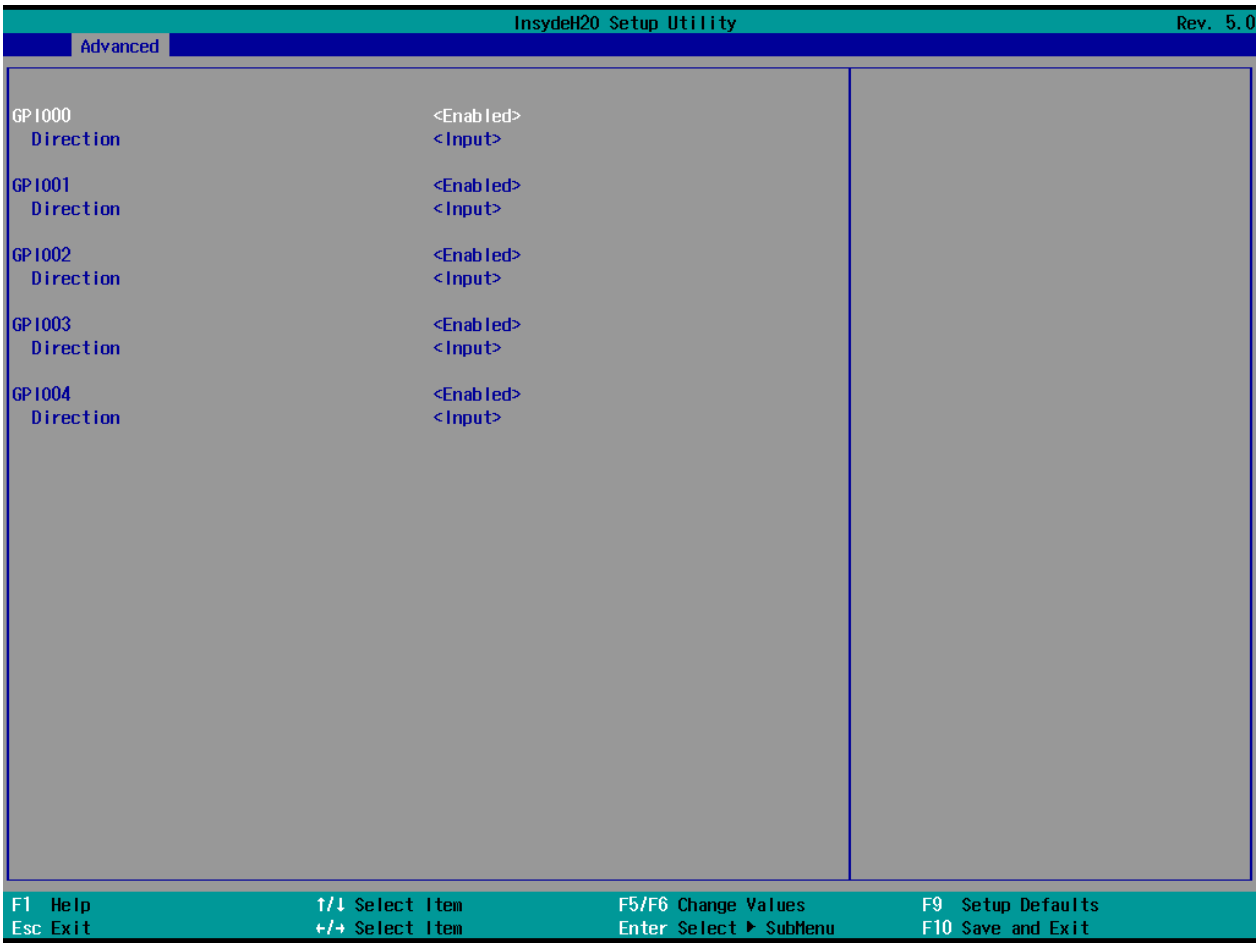


2.2.2.6.1 Hardware Monitor



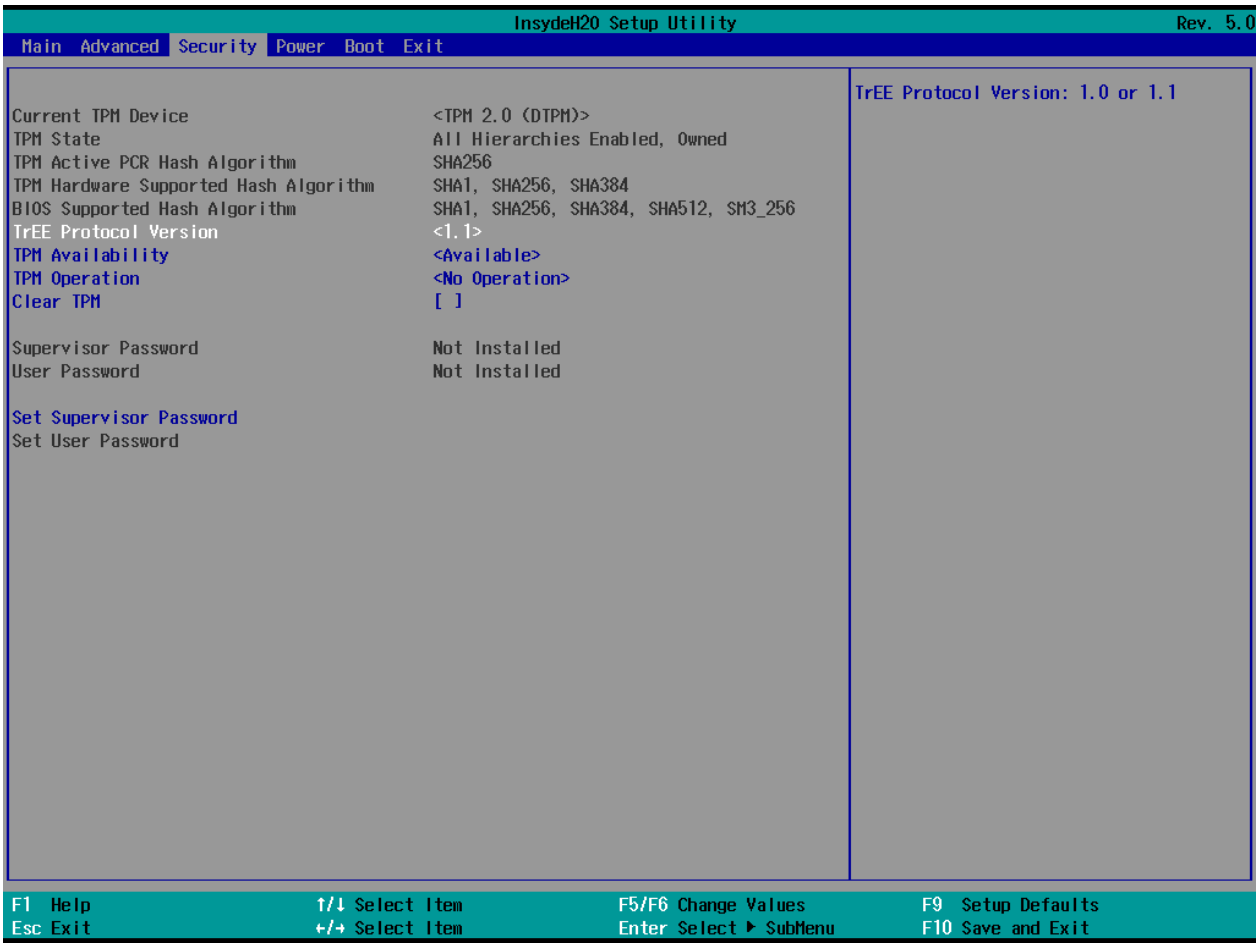
BIOS Setting	Description	Setting Option	Effect
FAN1 Mode	FAN1 Mode configuration	Manual Linear Stage	Select FAN1 Mode configuration

2.2.2.6.2 GPIO Configuration



BIOS Setting	Description	Setting Option	Effect
Internal Resistance	Internal Resistance configuration	Push Pull Open Drain	User can pull internal resistance push-pull / open-drain
Input/ Output Mode	GPIO pin configuration	Input Output	Set GPIO pin is input or output

2.2.3 Security

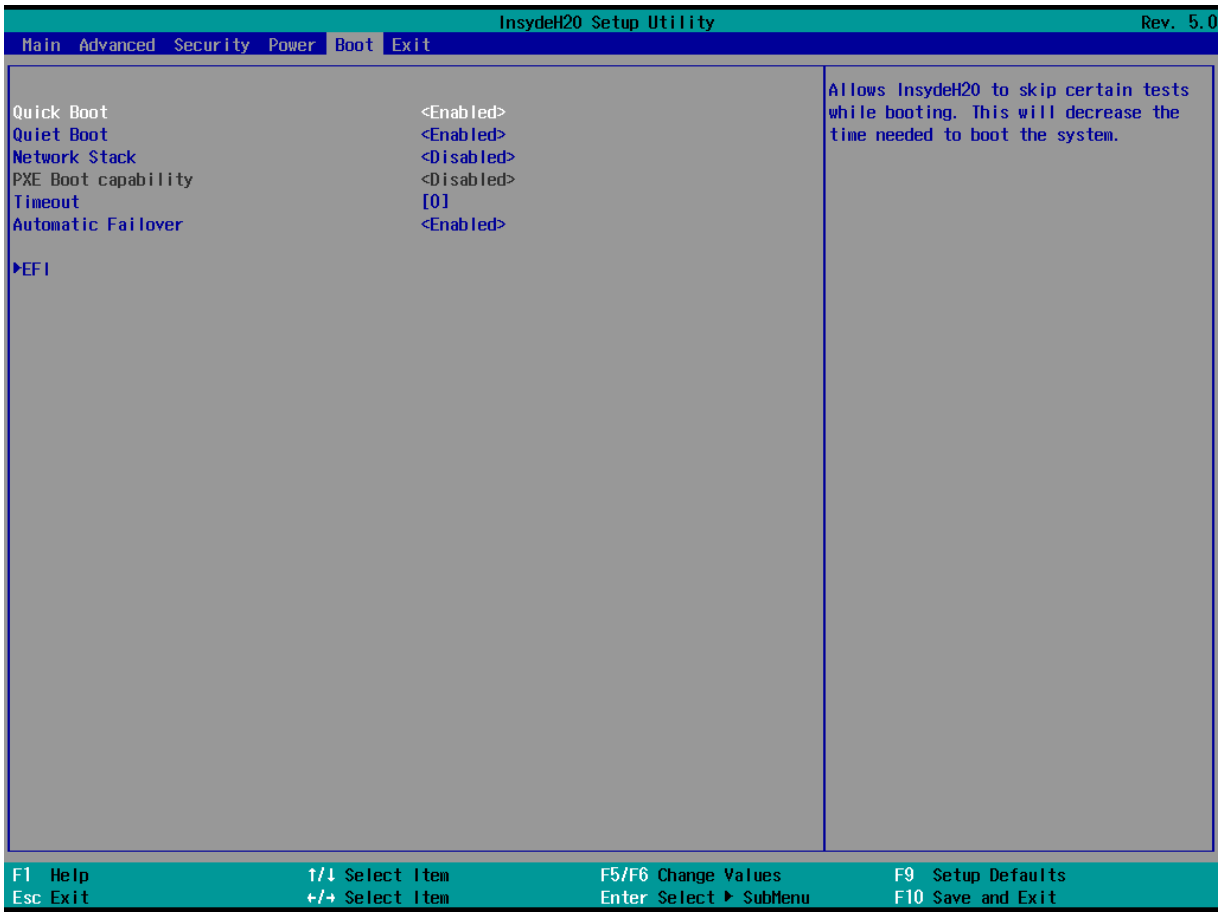


BIOS Setting	Description	Setting Option	Effect
TrEE Protocol Version	Choose TrEE Protocol Version	1.0 1.1	TrEE Protocol Version: 1.0 or 1.1
TPM Availability	TPM Availability configuration	Available Hidden	When hidden don't exposes TPM to 0
TPM Operation	TPM Operation configuration	[ ]	Select one of the supported operations to change TPM2state
Clear TPM	Clear TPM configuration	[ ]	Select to Clear TPM
Set Supervisor Password	Set Supervisor Password	Enter New password	Install or change the password and the length of password must be greater than one character

2.2.4 Power

BIOS Setting	Description	Setting Option	Effect
ACPI S3	ACPI S3 configuration	Disabled Enabled	Enable/ Disable ACPI S1/S3 Sleep state
Auto Wake on S5	Auto Wake on S5 configuration	Disabled By Every Day By Every Month	Auto Wake on S5, by Day or Month or fixed time of every day

2.2.5 Boot

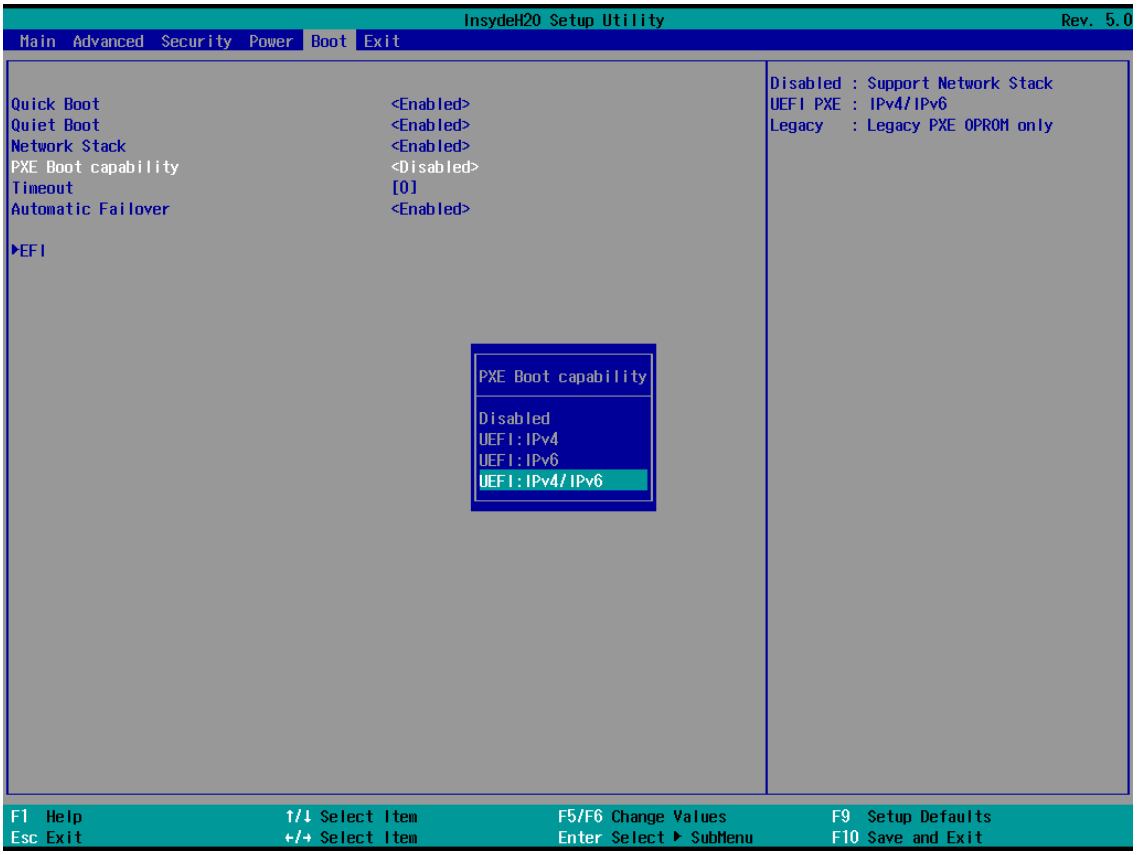


BIOS Setting	Description	Setting	Effect
Boot Type	Boot Type configuration	UEFI Boot Type	Select boot type to Dual type, Legacy type or UEFI
Quick Boot	Quick Boot configuration	Enabled Disabled	Allows InsydeH20 to skip certain tests while booting. This will decrease the time needed to boot the system
Quiet Boot	Quiet Boot configuration	Enabled Disabled	Disable or enable booting in text Mode.
Network Stack	Network Stack configuration	Disabled Enabled	Network Stack Support: Windows 8 Bitlocker Unlock UEFI IPv4/ IPv6 PXE Legacy PXE OPROM
Timeout	Timeout	[Value]	Timeout settings
Automatic Failover		Enable	If boot to default device fail, it will directly try to boot next device
		Disable	If boot to default device fail, it will pop warning message then go to firmware UI
Boot Type	Boot Type Order	Enter	Opens sub-menu

2.2.5.1 PXE Boot

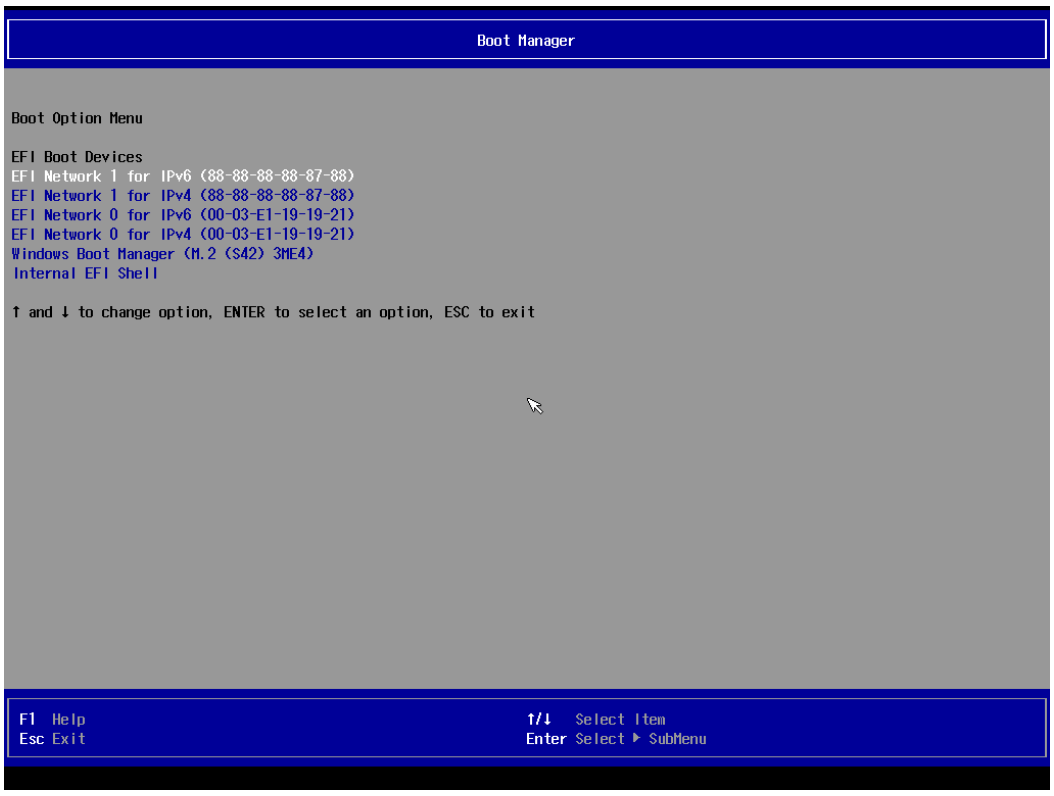
1. Press del to boot BIOS setup utility then change "Network Stack" setting to enable at Boot page.

2. Change Boot capability to UEFI:Ipv4/IPv6 that support both protocol.

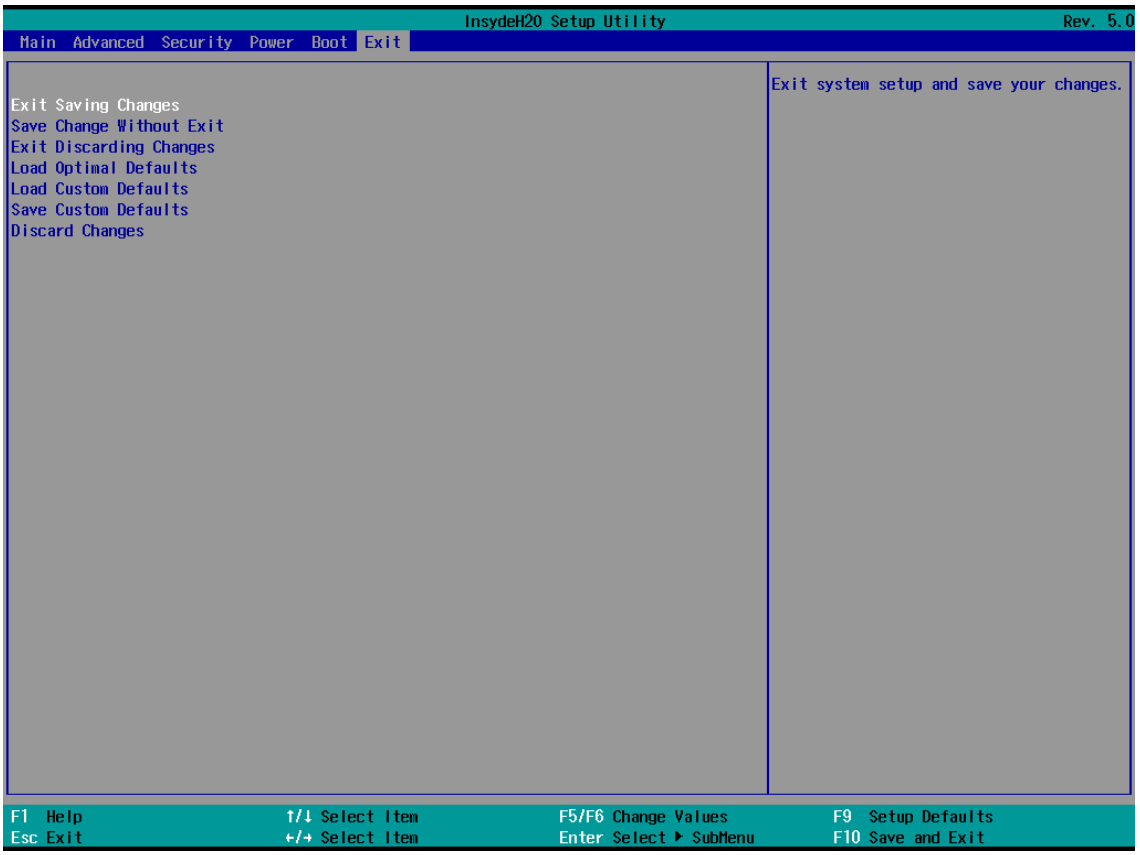


3. Type F10 to save setting and exit then reboot it will auto connects media server. If you see picture as bellow please checks your server.

4. You also can press "esc" go into boot manager to choose which one LAN you want to do PXE if you have more than one LAN.



2.2.6 Exit


InsydeH20 Setup Utility
Rev. 5.0
Main Advanced Security Power Boot Exit
Exit Saving Changes
Save Change Without Exit
Exit Discarding Changes
Load Optimal Defaults
Load Custom Defaults
Save Custom Defaults
Discard Changes
Exit system setup and save your changes.
F1 Help
Esc Exit
↑/↓ Select Item
←/→ Select Item
F5/F6 Change Values
Enter Select ▸ SubMenu
F9 Setup Defaults
F10 Save and Exit

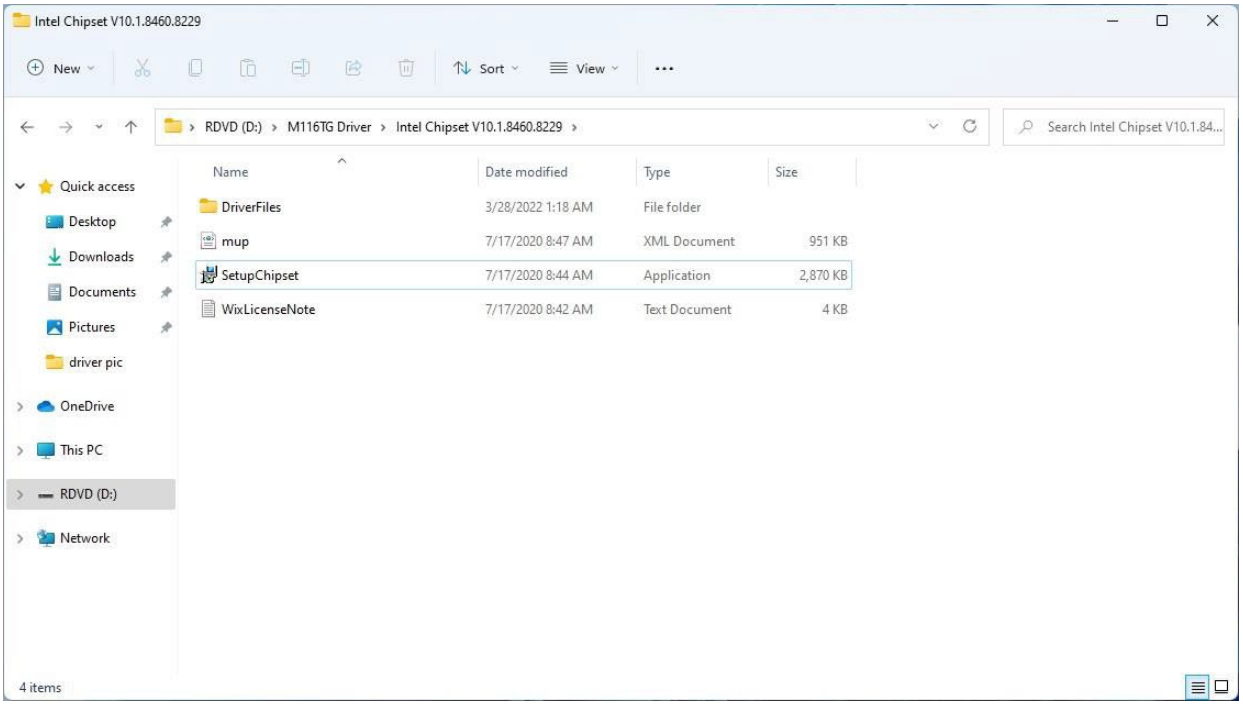
Chapter 3: Driver Installation

This chapter contains driver installation guide. Follow the instructions below to complete the installation of the drivers on the Panel PC.

3.1 Chipset Driver

Follow instructions below to install Chipset driver.

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

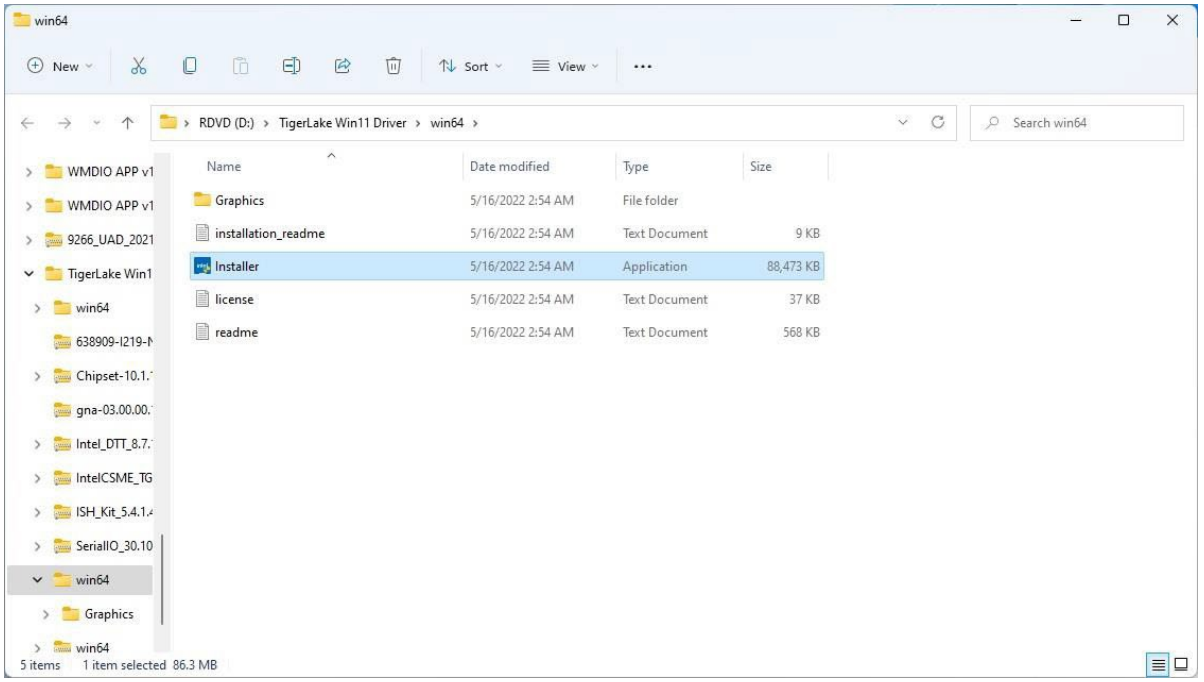
5. Wait for the driver to be installed. When installation completed, select **Restart Now** to restart your computer.


Intel(R) Chipset Device Software
Completion
intel
You have successfully installed the following product:
Intel(R) Chipset Device Software
Press Finish to complete the setup process.
View Log Files
Finish

3.2 Graphic Driver

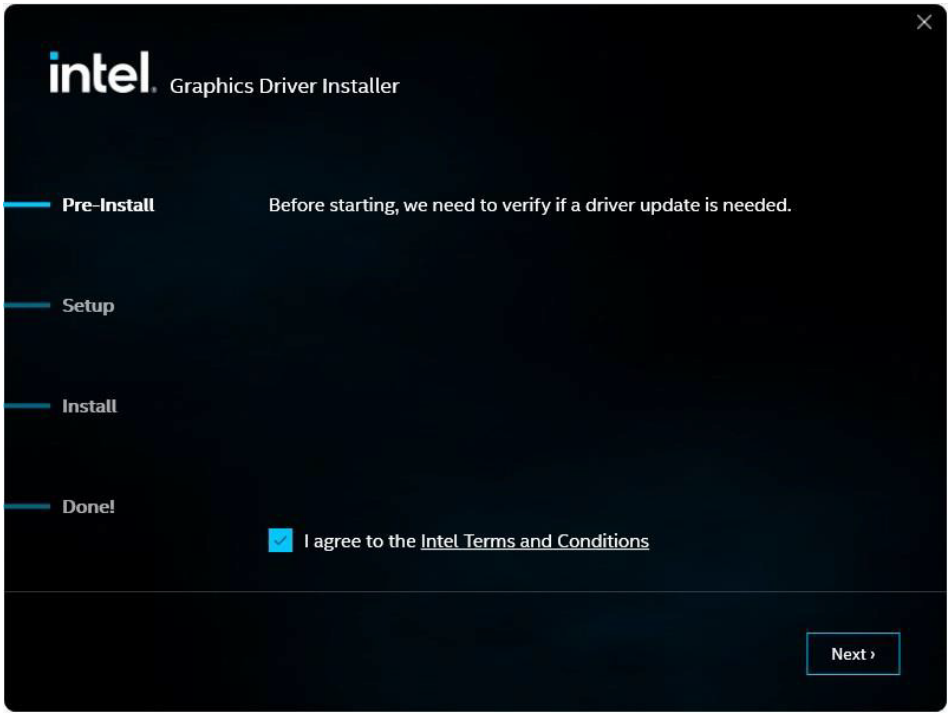
Follow instructions below to install Graphic driver.

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

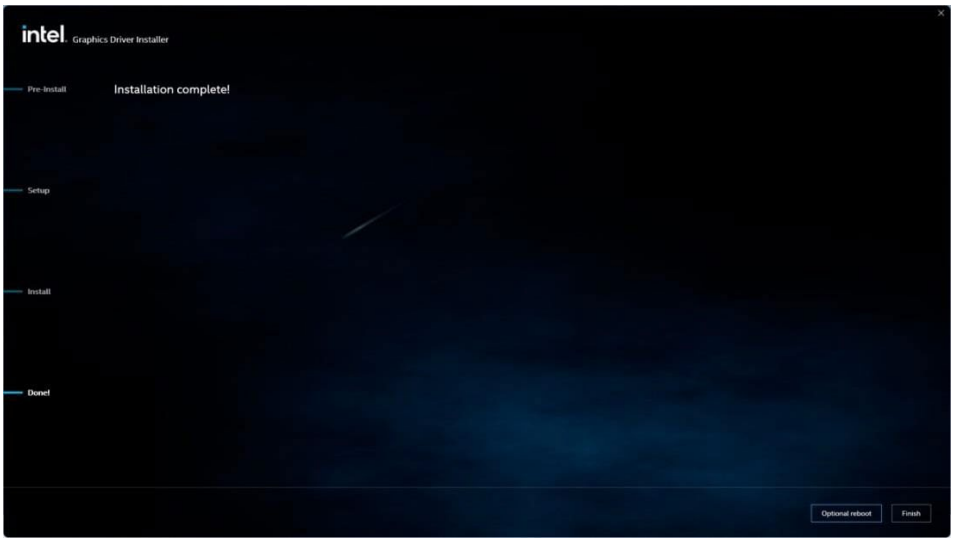


2. Installation window will pop up, click **Begin installation**

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



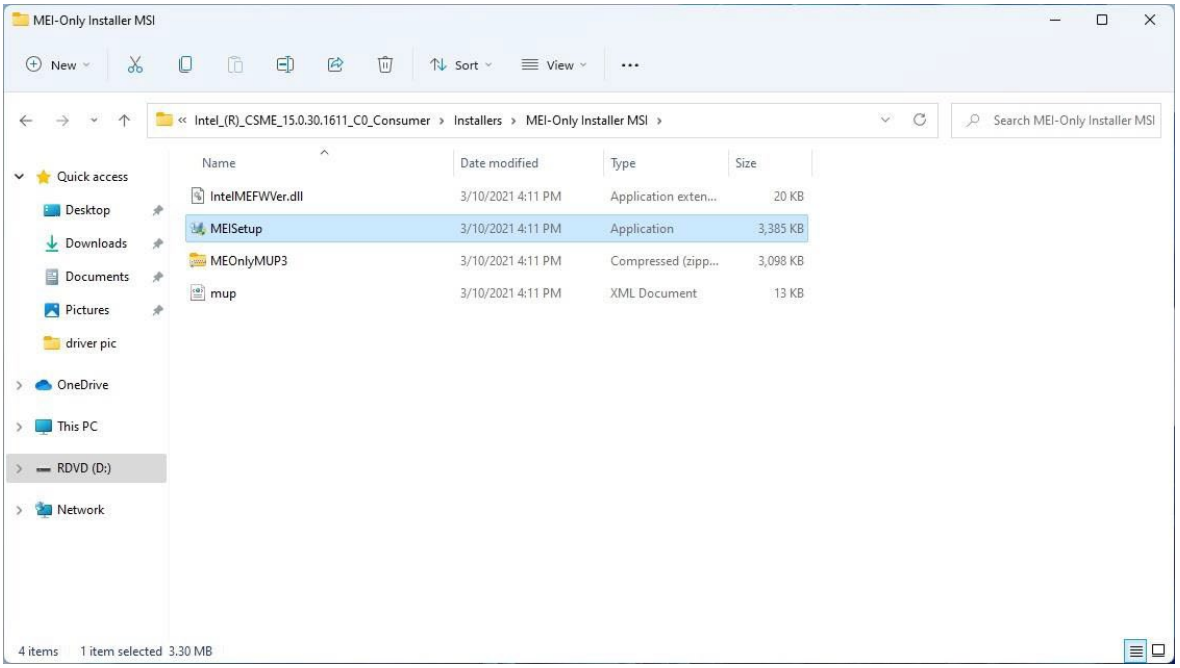
4. After installation is completed, click Finish.



3.3 Management Engine (ME)

Follow instructions below to install Management Engine (ME) .

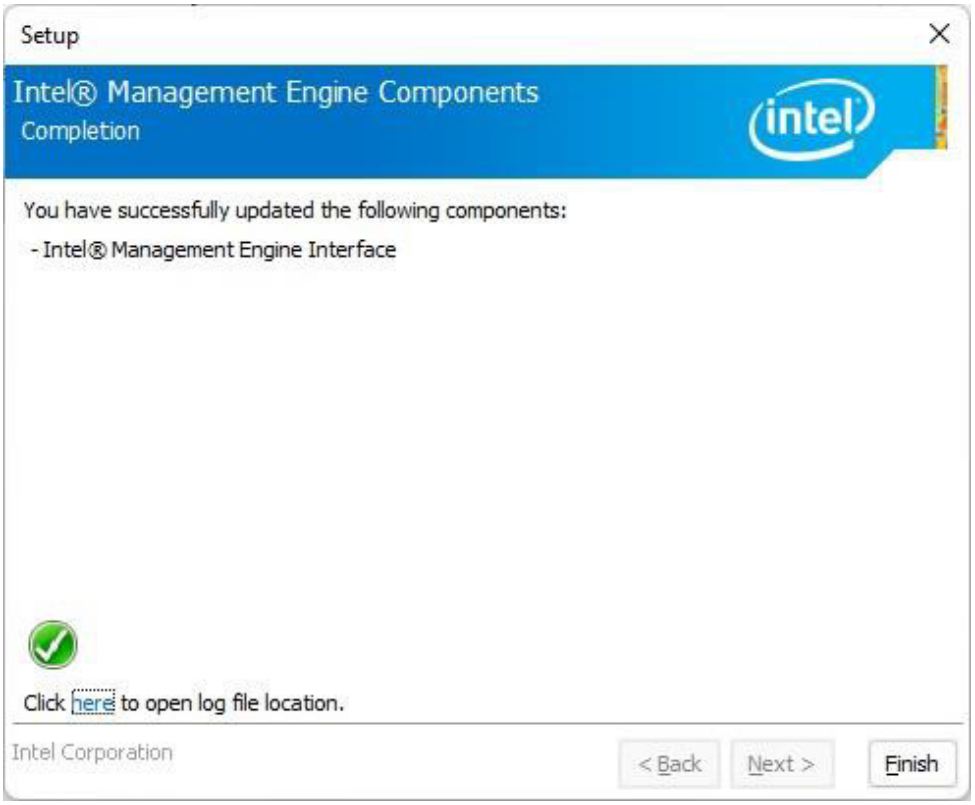
1. Open the Driver (Download from Winmate Download Center) and select **MEISetup** driver.



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

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

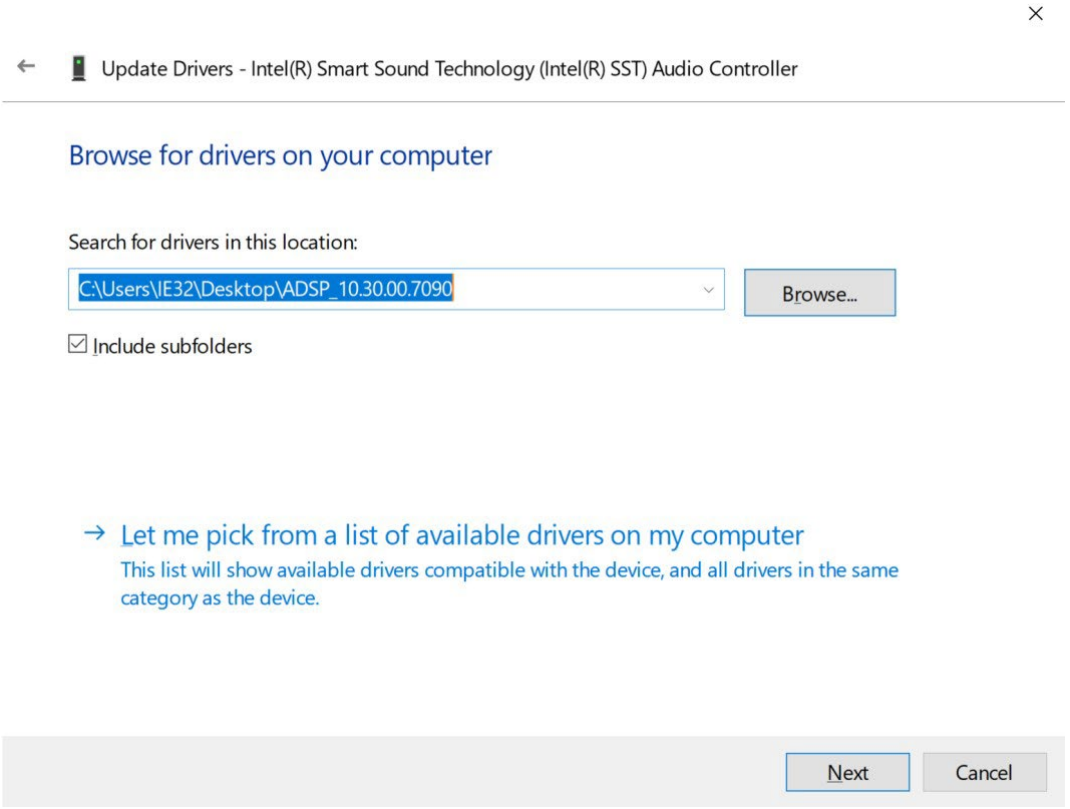
4. When installation completed, select **Finish** complete installation.



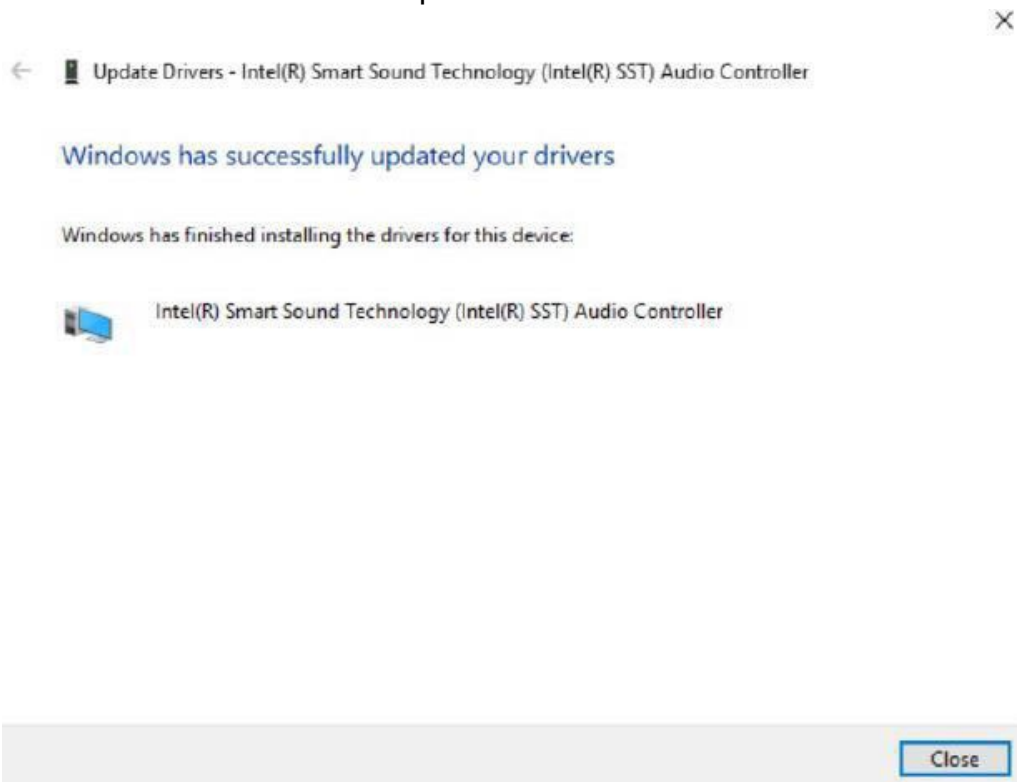
3.4 SST Driver Installation

Follow the instructions below to complete the SST Driver installation.

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



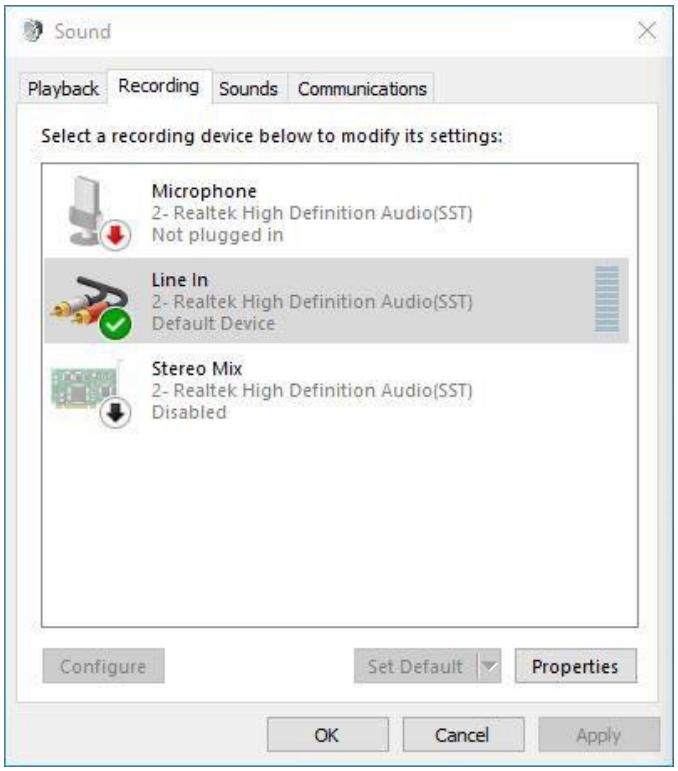
Step 2 Wait for driver installation to complete.



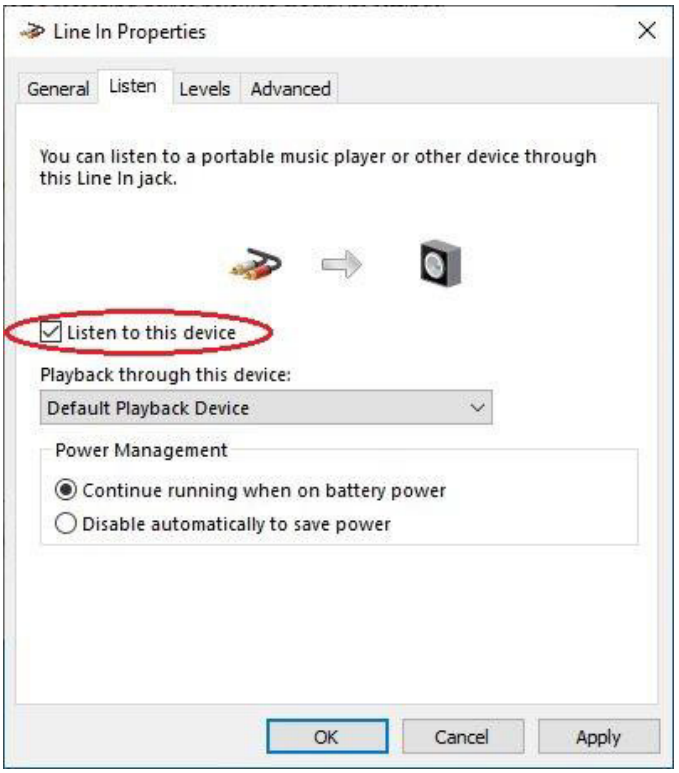
Note:

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:



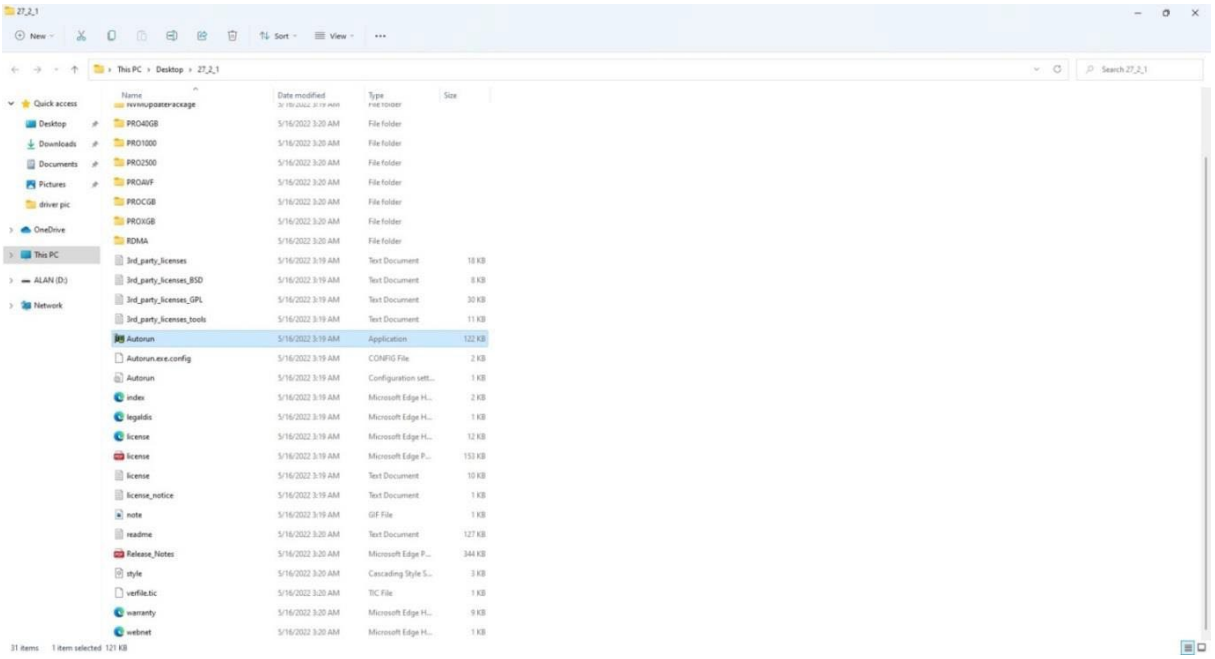
STEP 2:



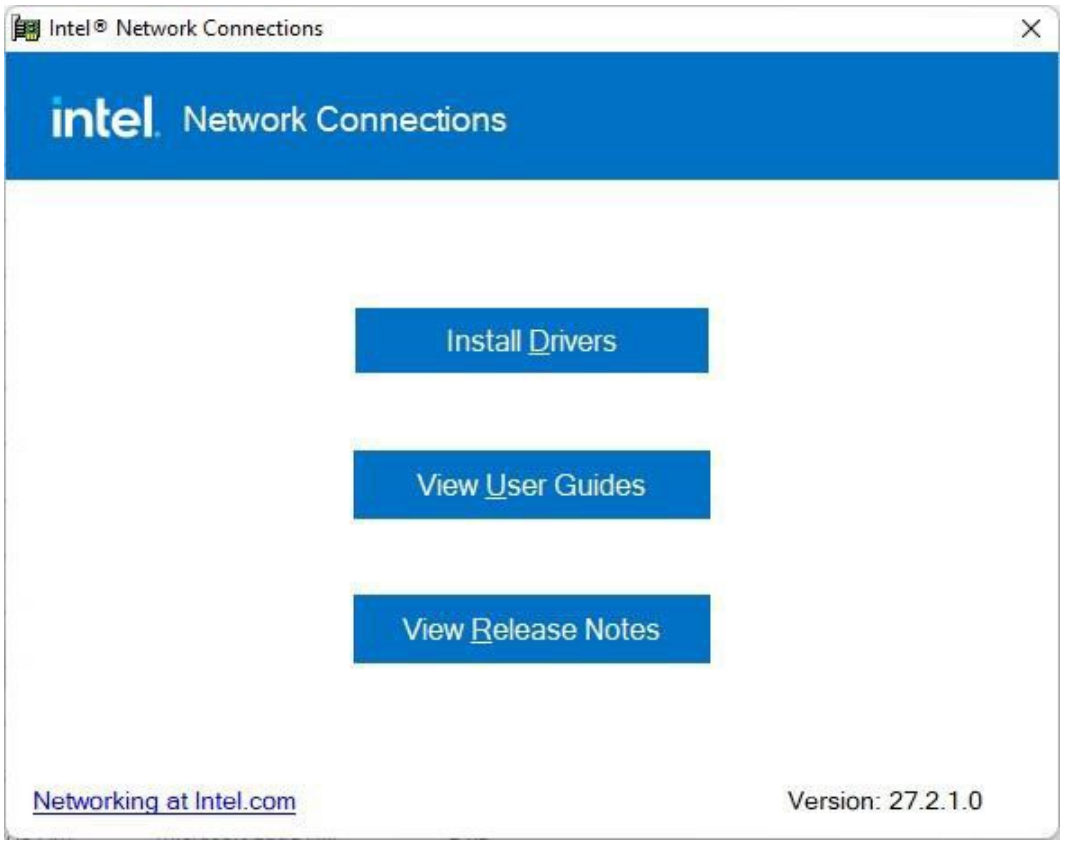
3.5 Ethernet Driver

Follow instructions below to install LAN driver.

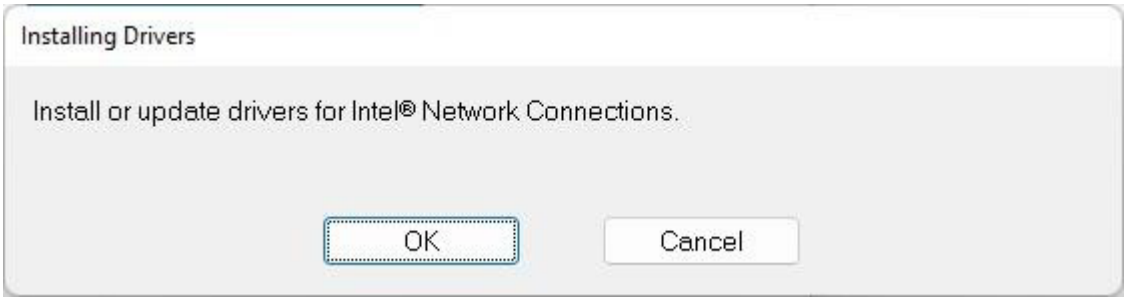
1. Open the Driver (Download from Winmate Download Center) and select **LAN** driver.



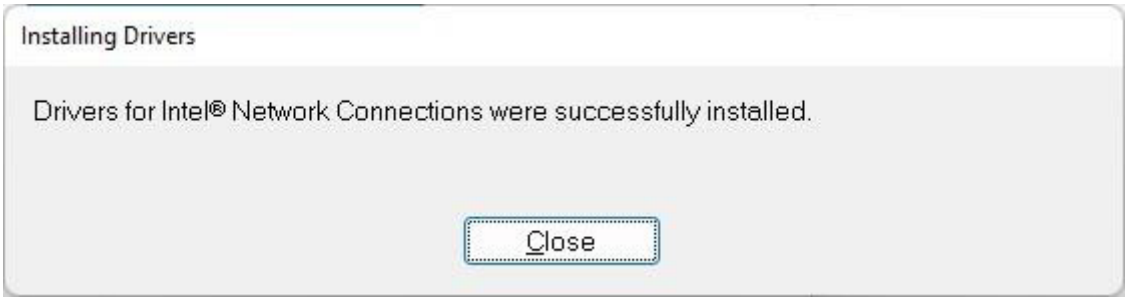
2. When compression is complete, select **Install Drivers**.



3. Select **OK**.



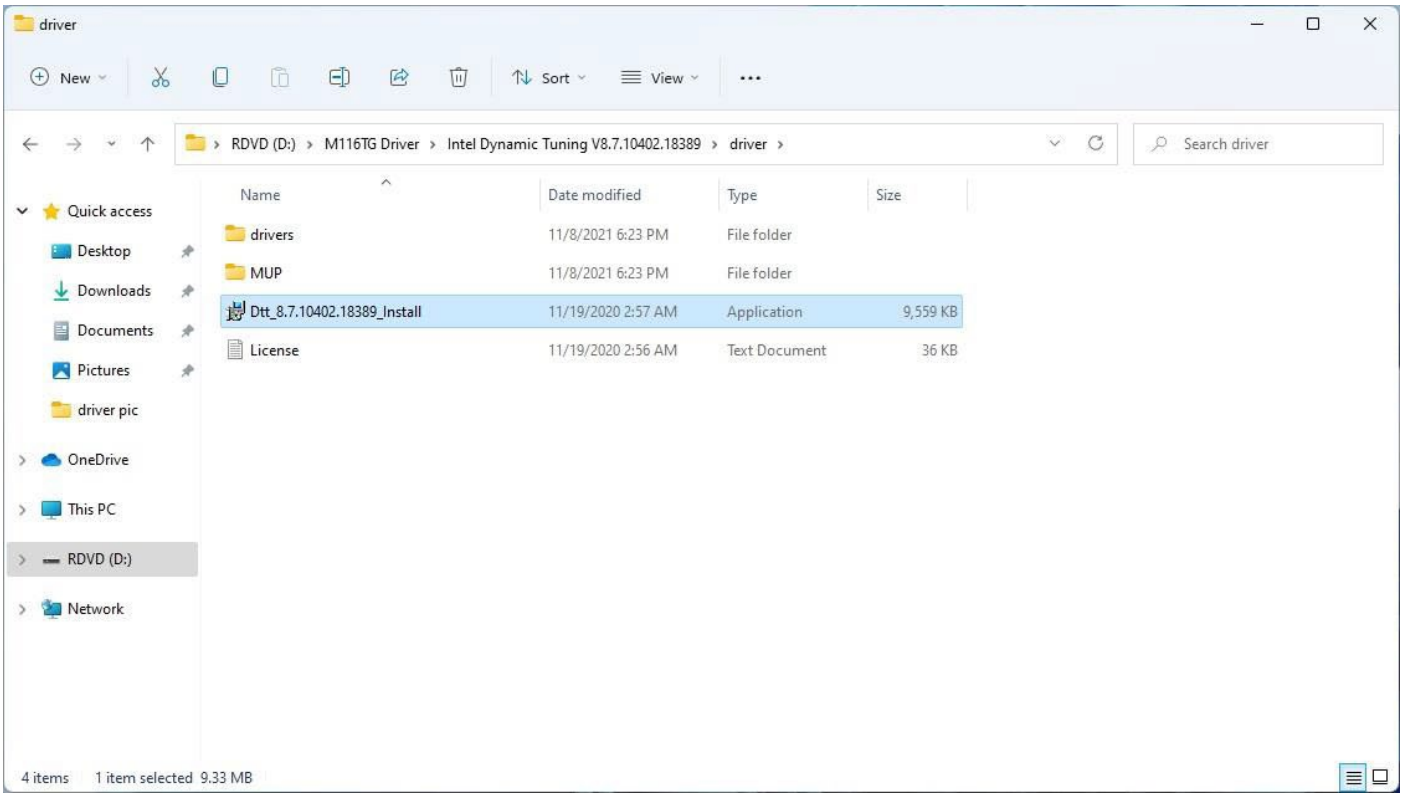
4. Select **Close** to close the window.



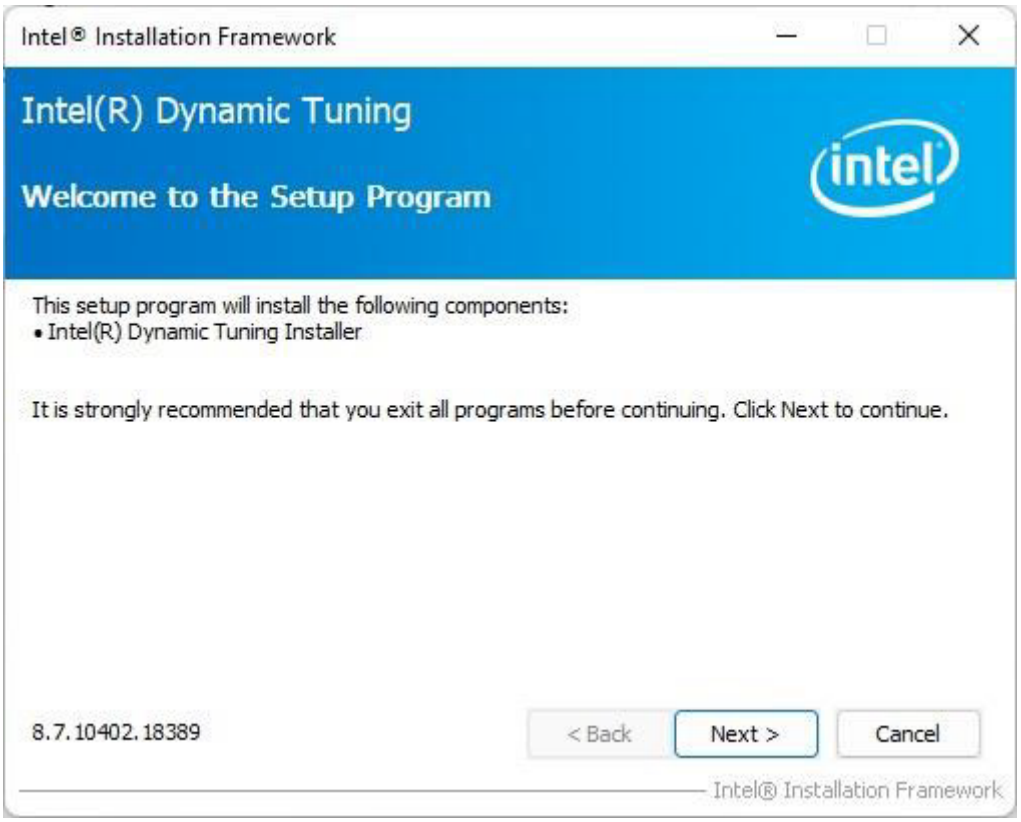
3.6 DTT Driver

Follow instructions below to install DTT driver.

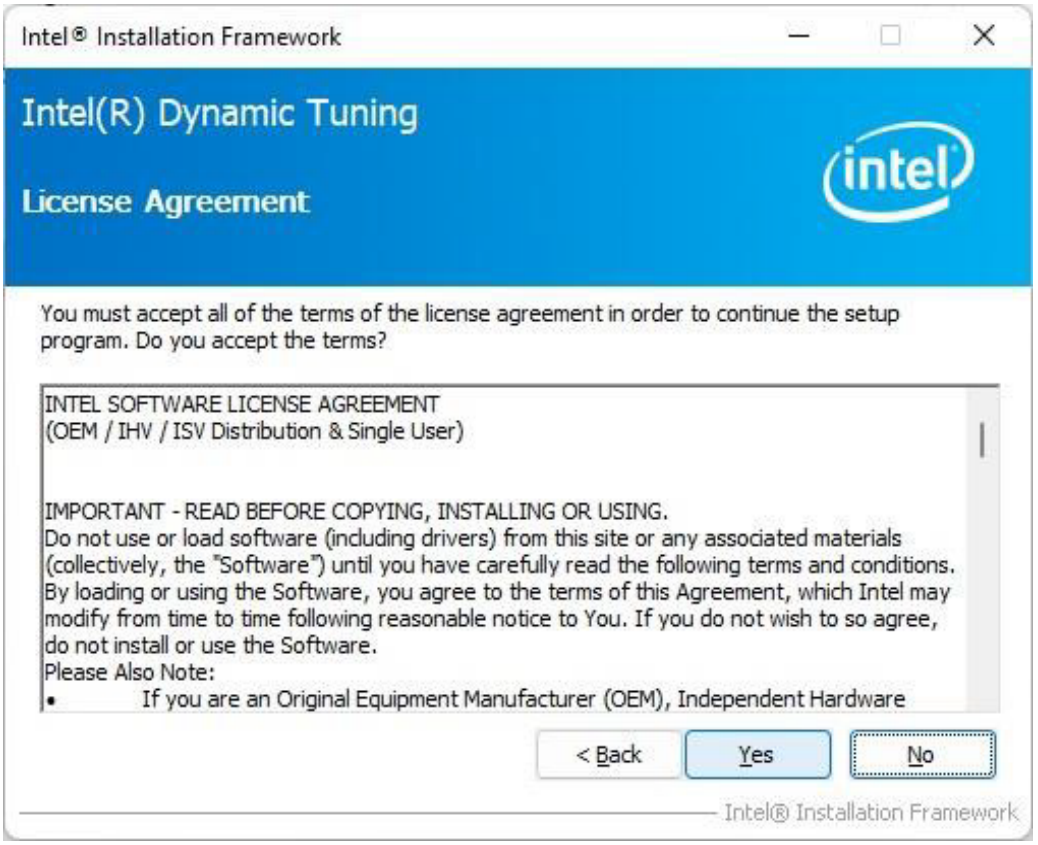
1. Open the Driver (Download from Winmate Download Center) and select **DTT** driver.



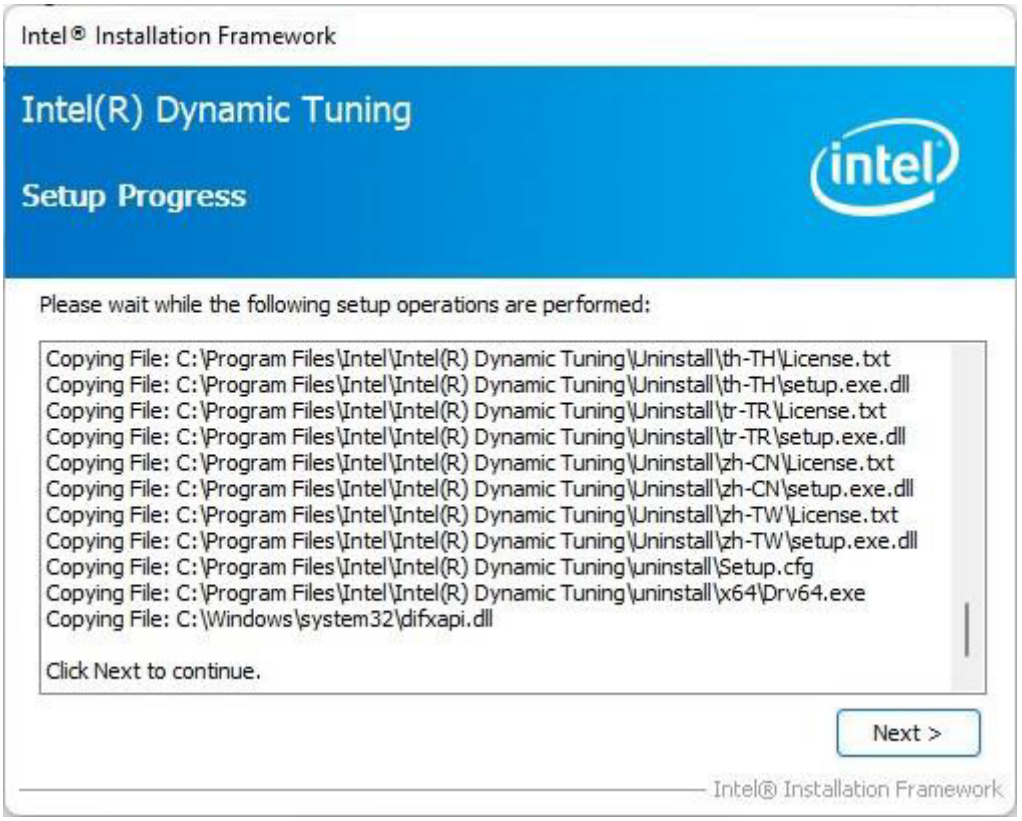
2. When compression is complete, select **Next**.



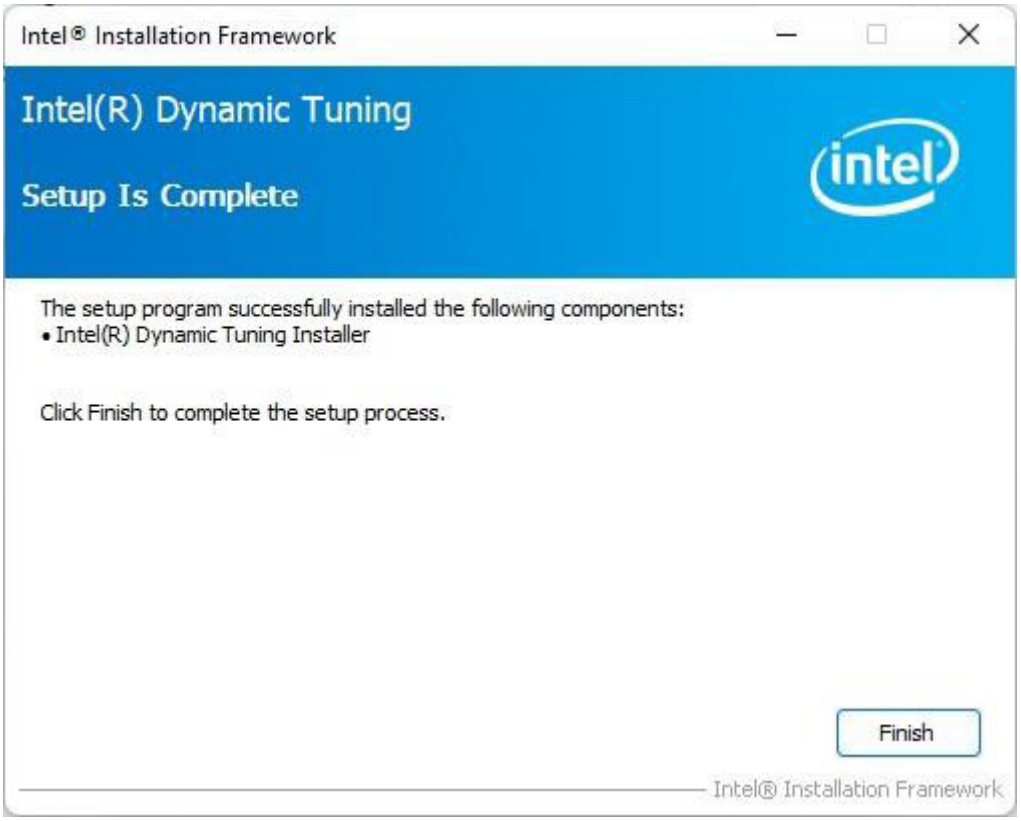
3. Read the license agreement, and then select **Yes**.



4. System displays the installed packages, select **Next.**



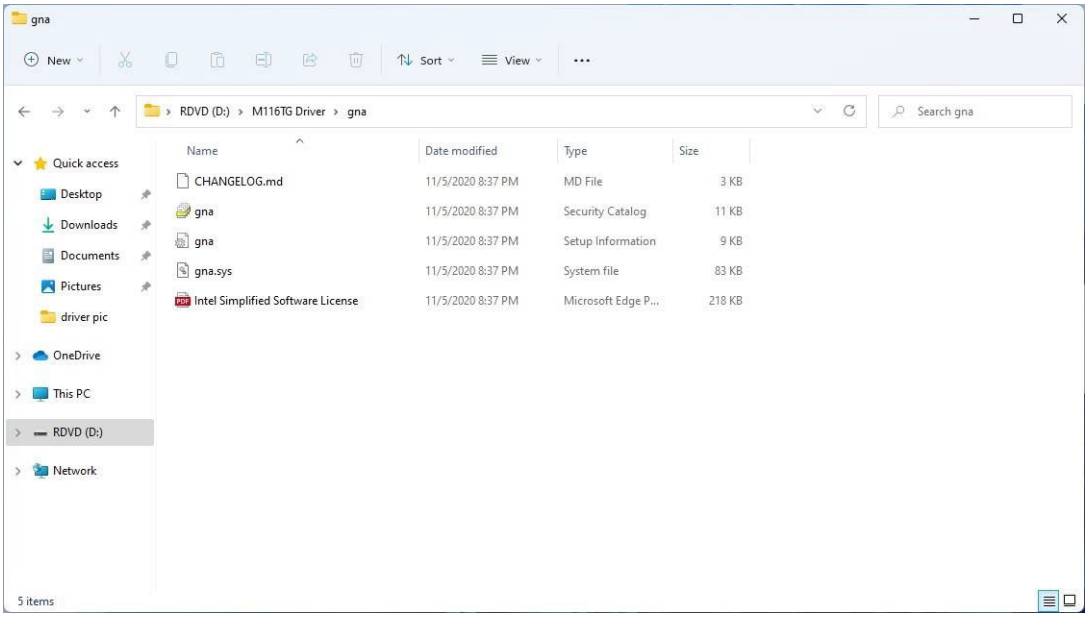
5. When installation is completed, select **Finish** to close the window.



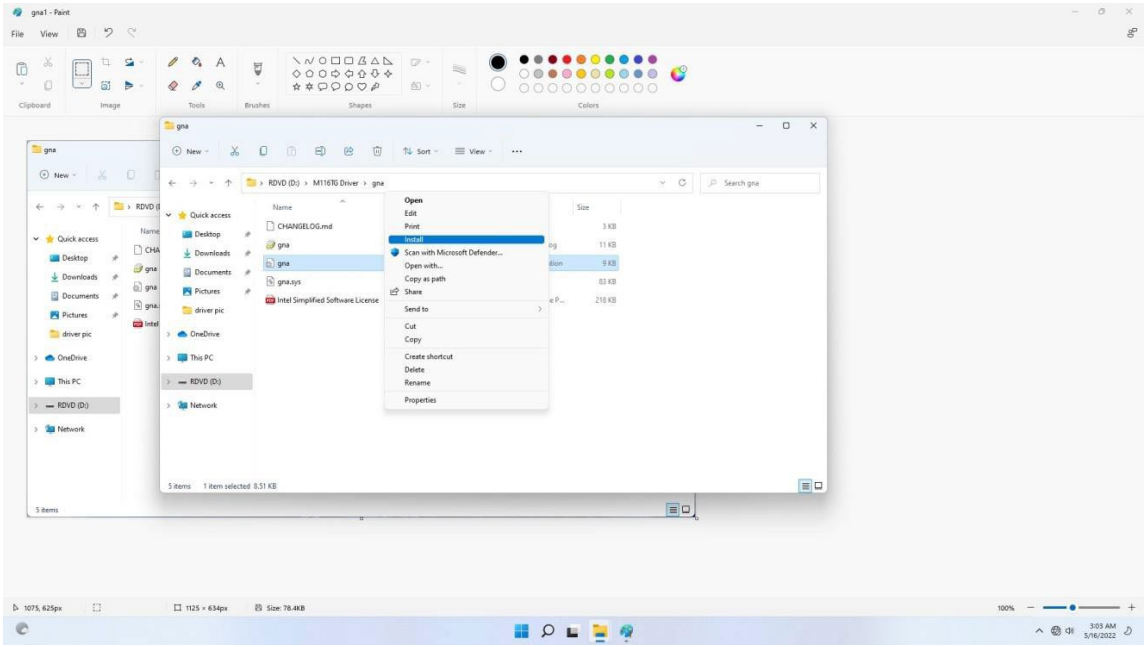
3.7 GNA Driver

Follow instructions below to install GNA driver.

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



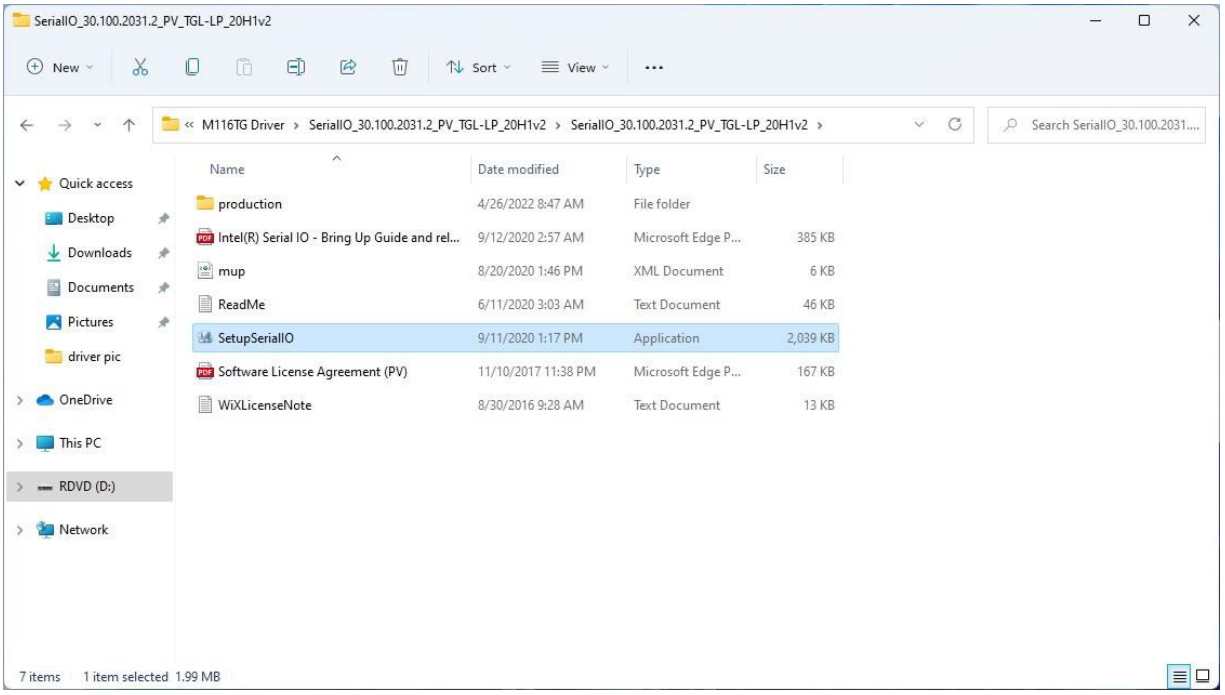
2. Right click, select **Install**.



3.8 Serial IO Driver

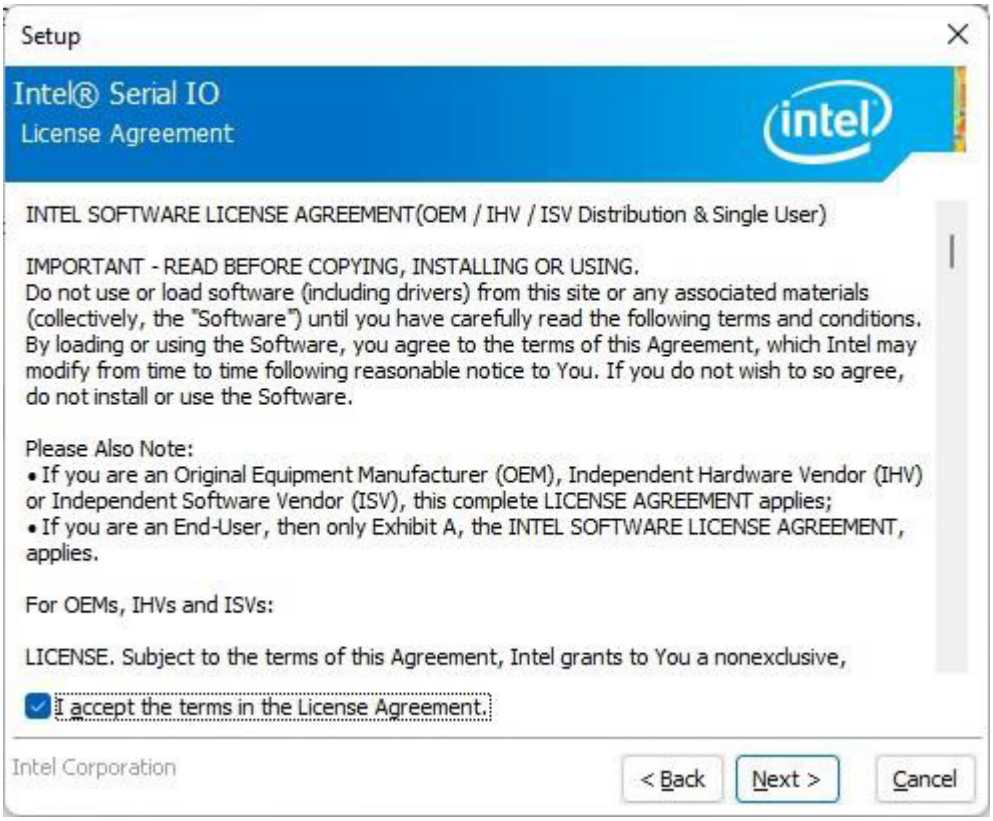
Follow instructions below to install SIO driver.

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

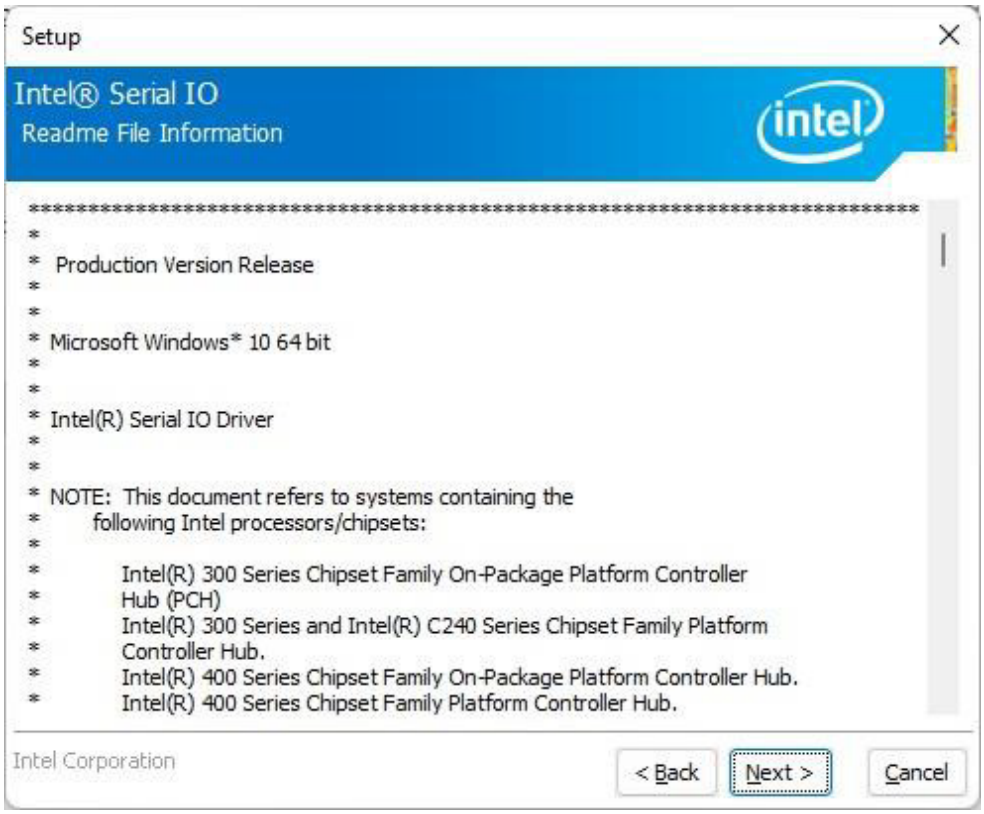


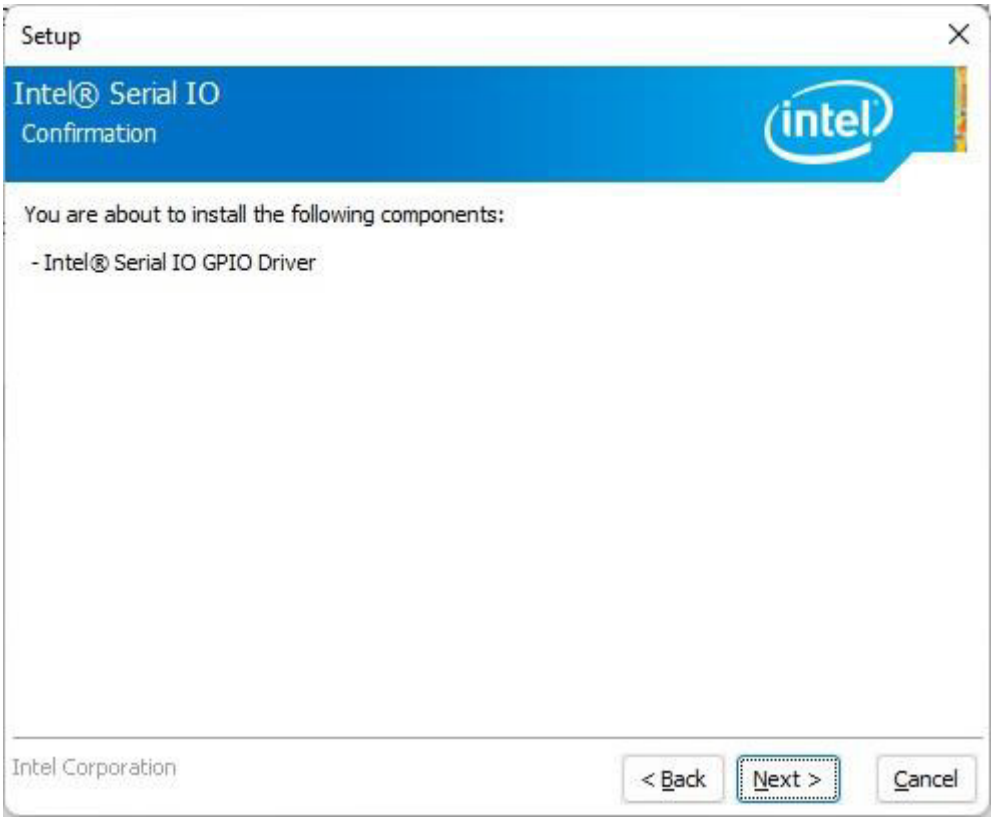
2. Select **Next** to start the installation.

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

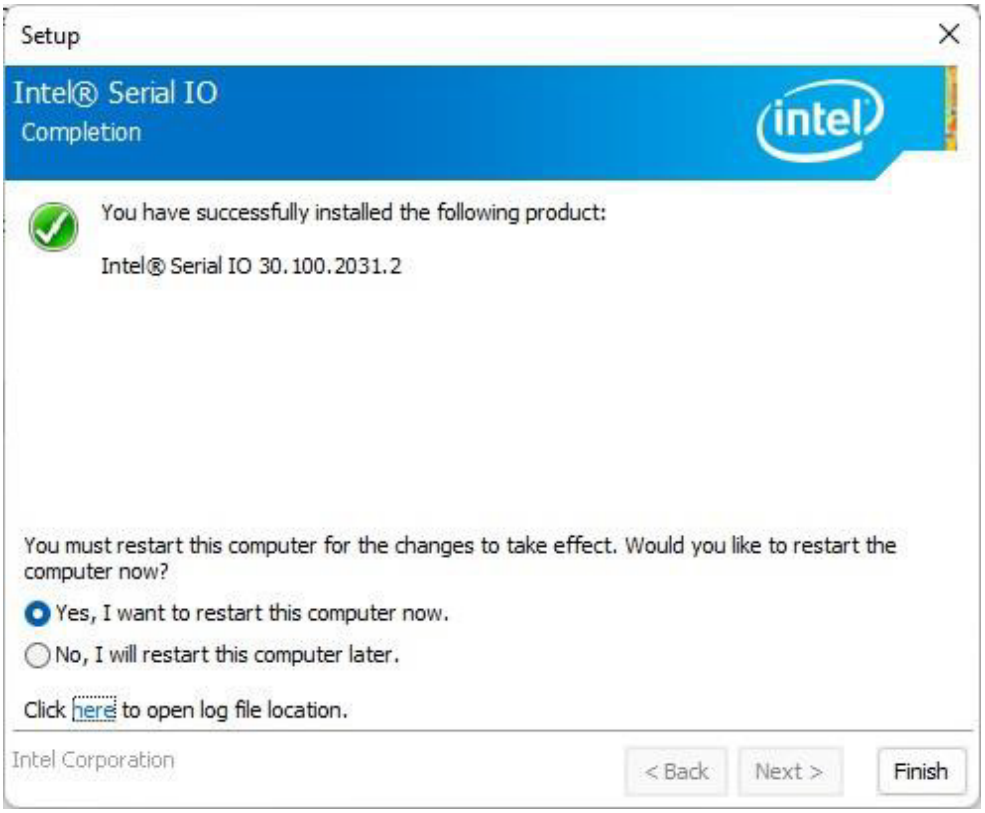


4. Click **Next**.





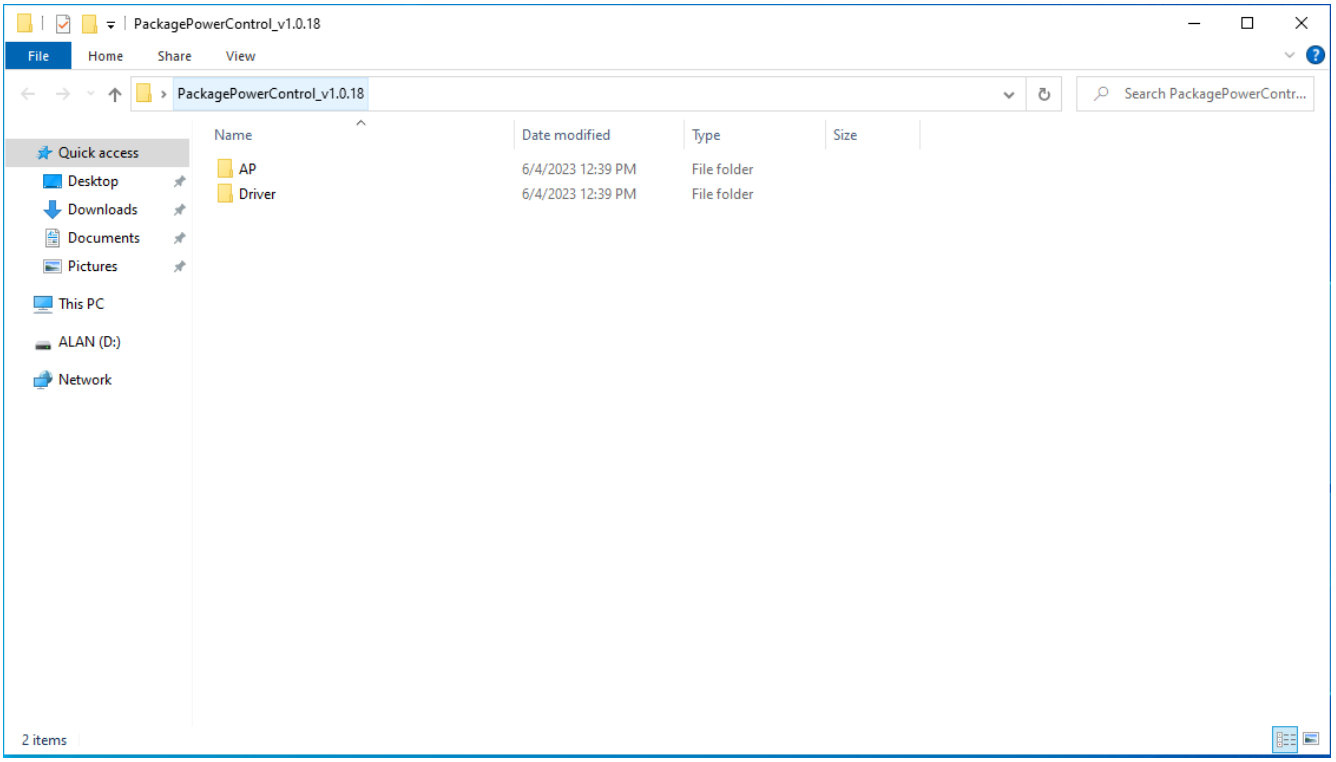
5. When installation completed, select **Yes, I want to restart my computer now**. Then click **Finish**.

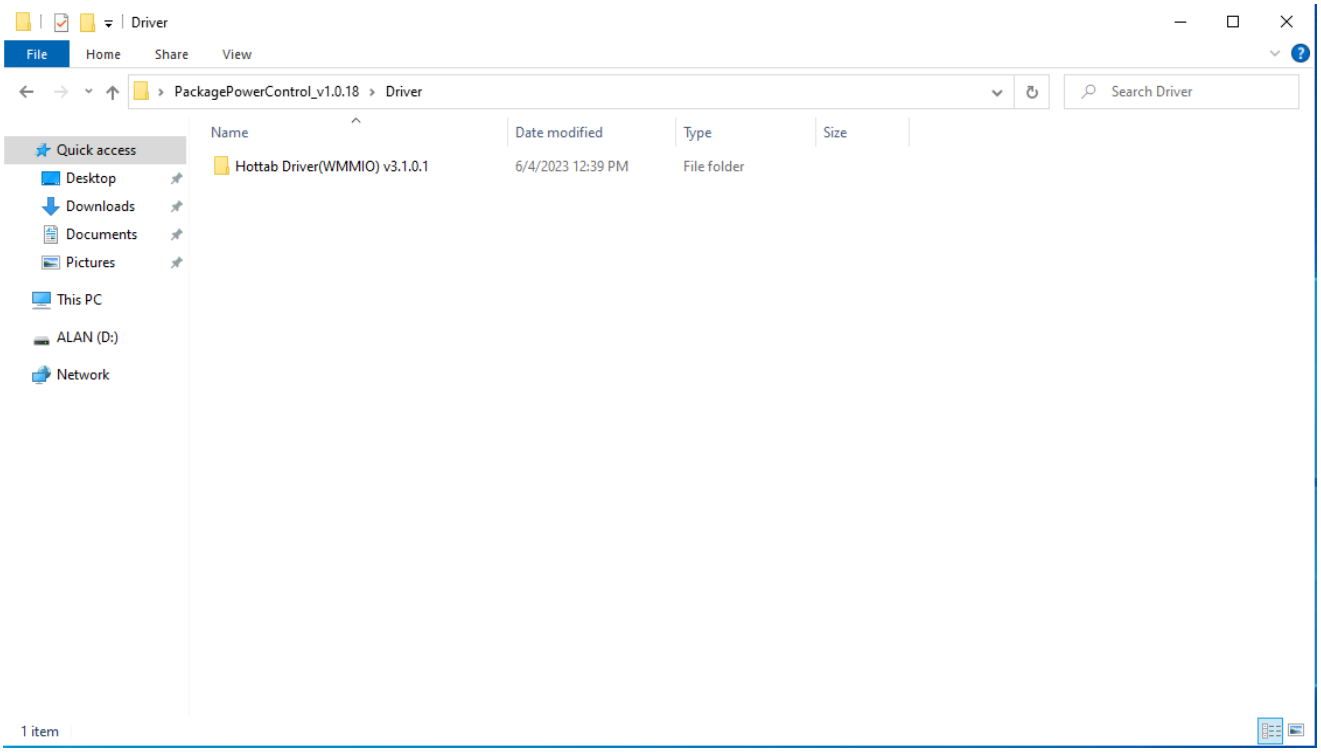


3.9 Thermal Control AP

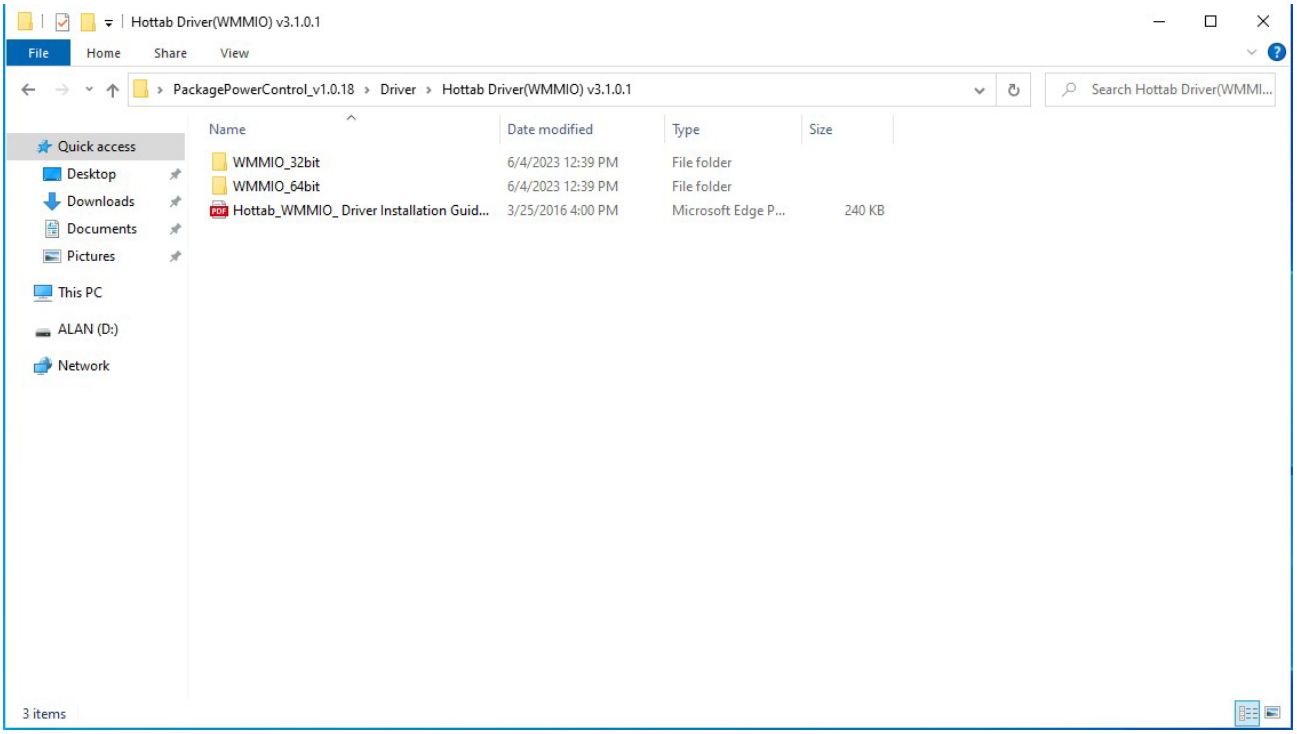
Follow instructions below to install Thermal Control AP.

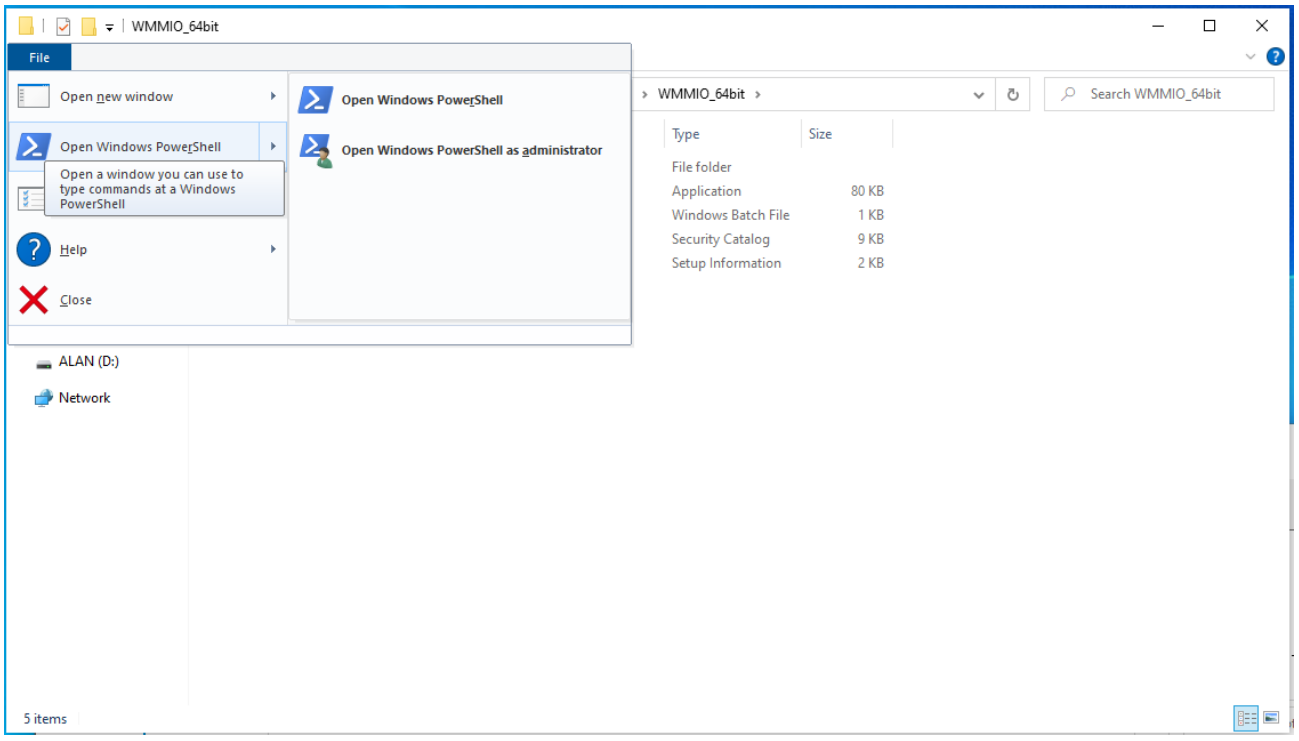
1. Click **Driver**.

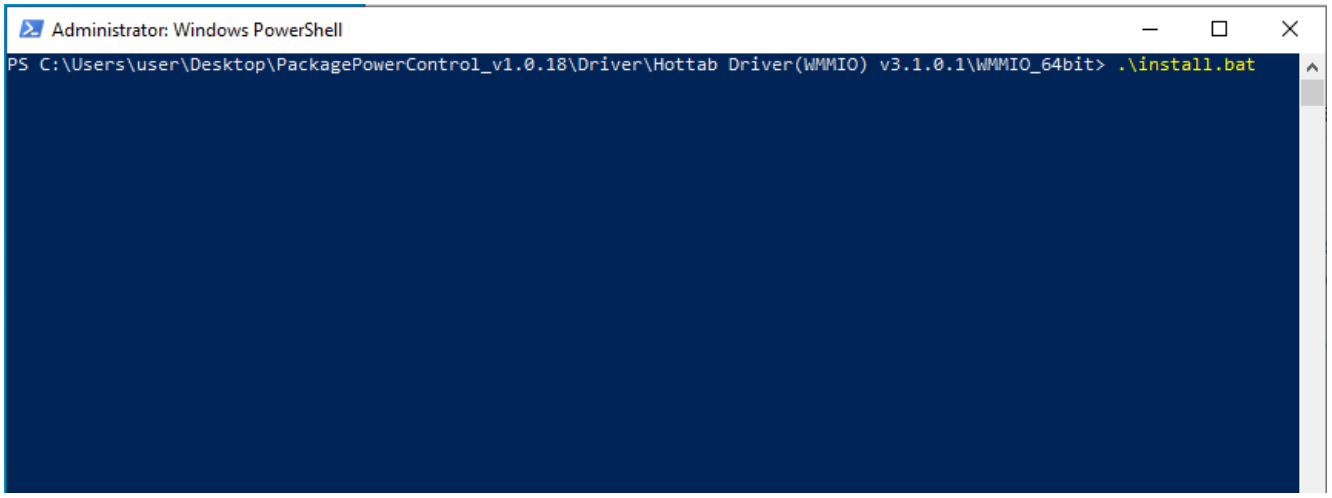


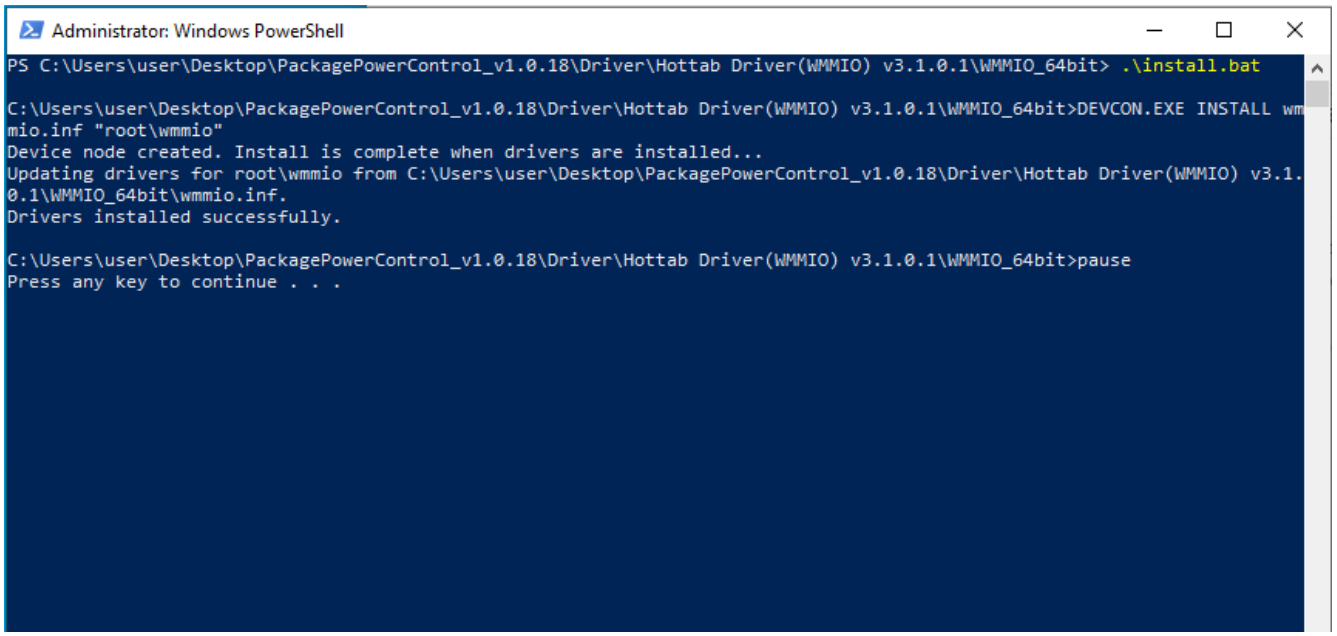


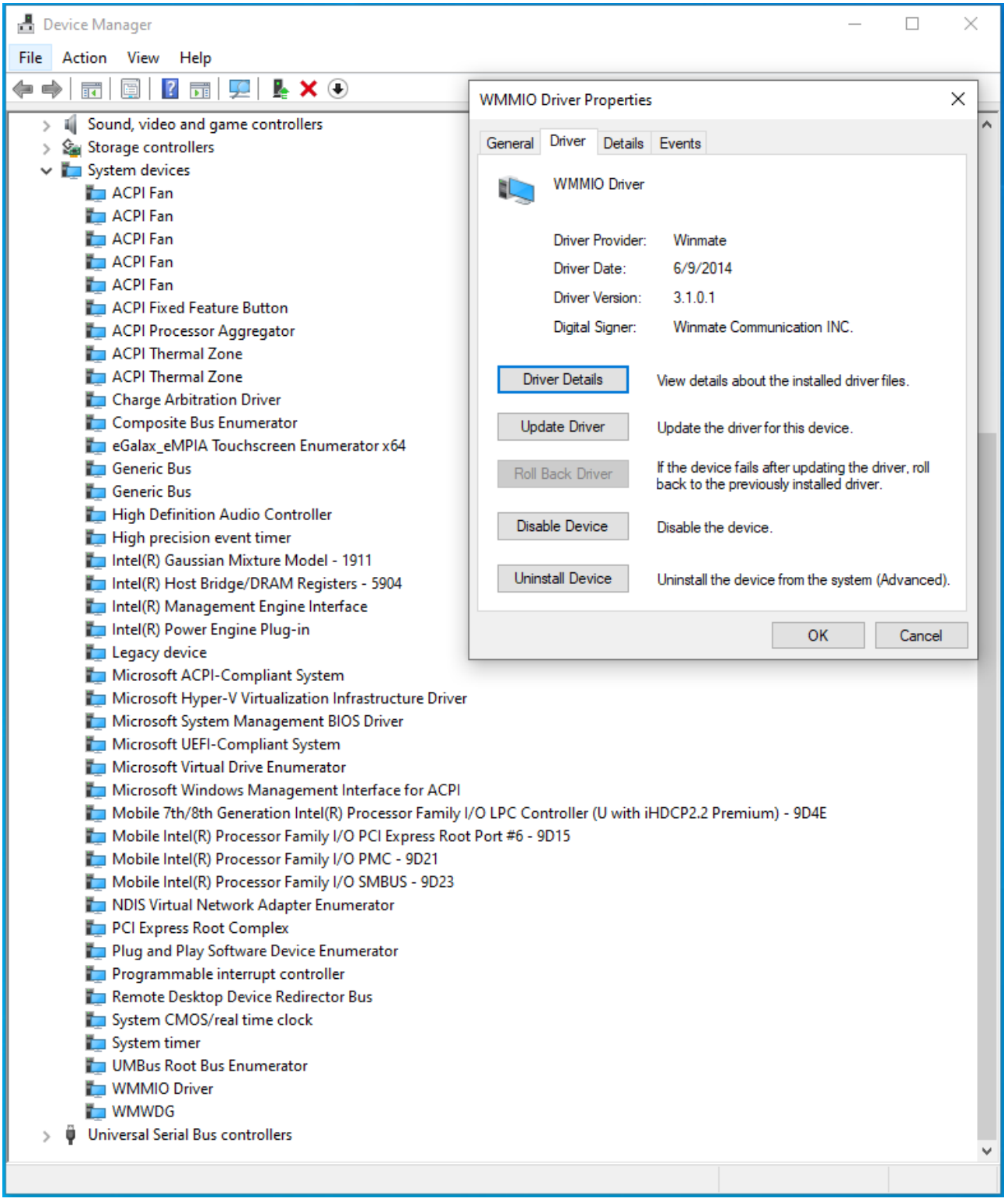
2. Click **WMMIO_64bit**.



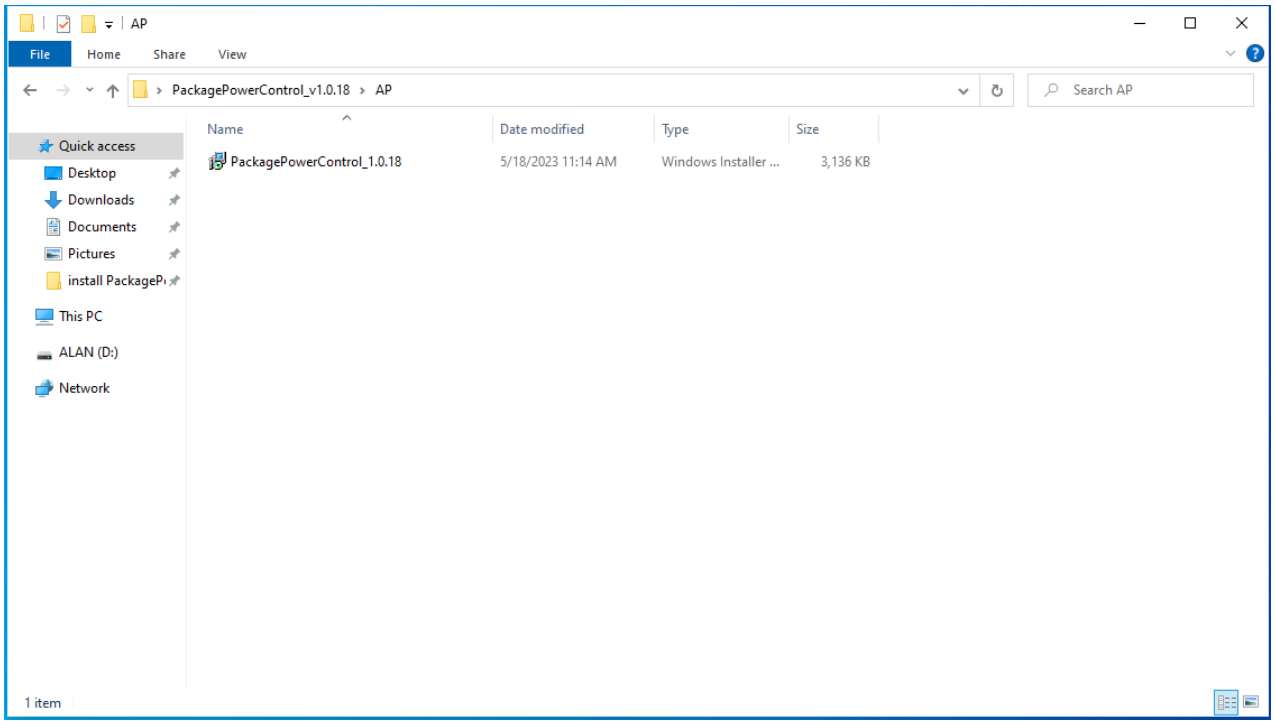



Administrator: Windows PowerShell
PS C:\Users\user\Desktop\PackagePowerControl_v1.0.18\Driver\Hottab Driver(WMMIO) v3.1.0.1\WMMIO_64bit> .\install.bat

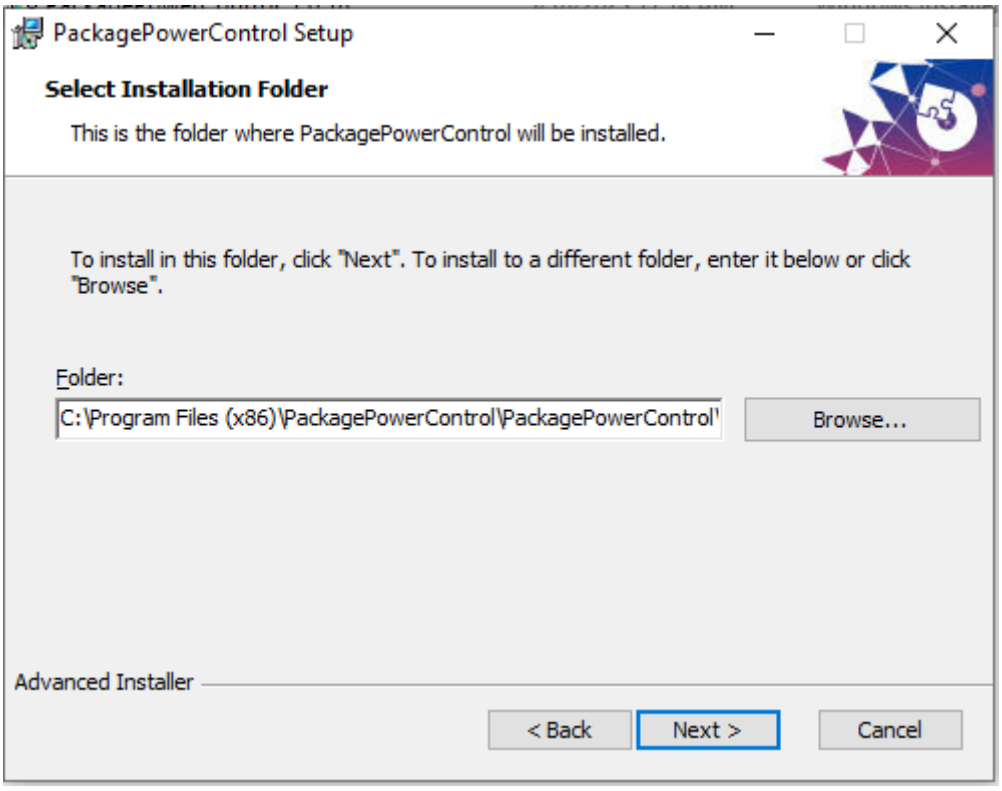

Administrator: Windows PowerShell
PS C:\Users\user\Desktop\PackagePowerControl_v1.0.18\Driver\Hottab Driver(WMMIO) v3.1.0.1\WMMIO_64bit> .\install.bat
C:\Users\user\Desktop\PackagePowerControl_v1.0.18\Driver\Hottab Driver(WMMIO) v3.1.0.1\WMMIO_64bit>DEVCON.EXE INSTALL wmmio.inf "root\wmmio"
Device node created. Install is complete when drivers are installed...
Updating drivers for root\wmmio from C:\Users\user\Desktop\PackagePowerControl_v1.0.18\Driver\Hottab Driver(WMMIO) v3.1.0.1\WMMIO_64bit\wmmio.inf.
Drivers installed successfully.
C:\Users\user\Desktop\PackagePowerControl_v1.0.18\Driver\Hottab Driver(WMMIO) v3.1.0.1\WMMIO_64bit>pause
Press any key to continue . . .

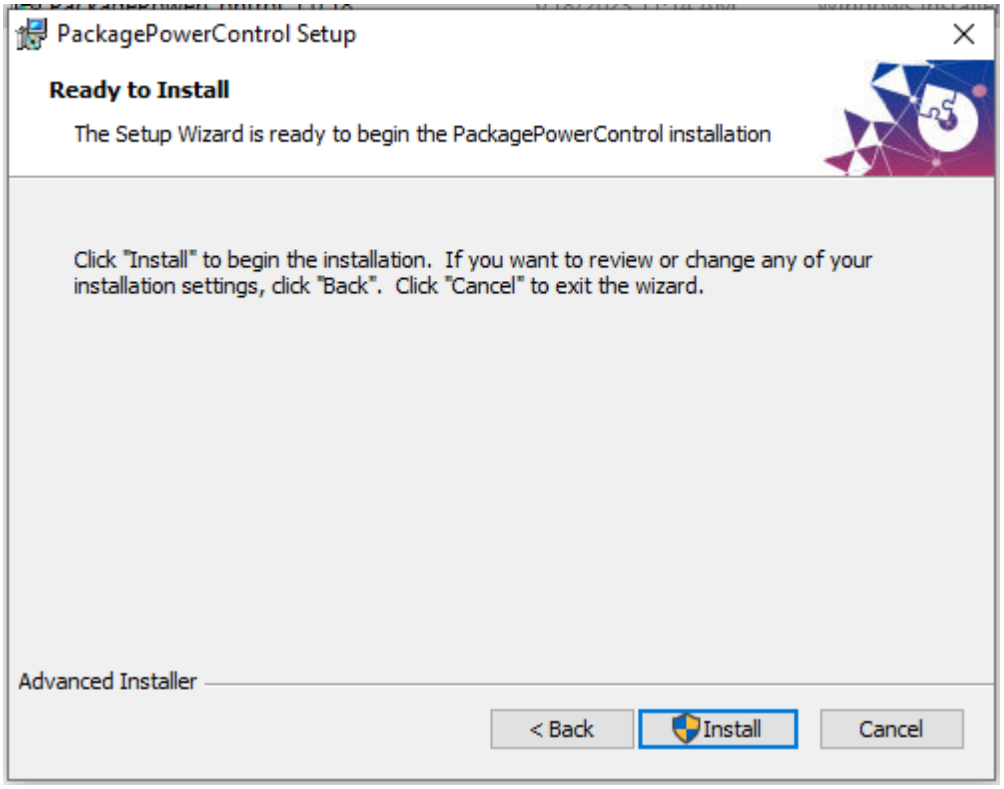

Device Manager
File Action View Help
Sound, video and game controllers
Storage controllers
System devices
ACPI Fan
ACPI Fan
ACPI Fan
ACPI Fan
ACPI Fan
ACPI Fixed Feature Button
ACPI Processor Aggregator
ACPI Thermal Zone
ACPI Thermal Zone
Charge Arbitration Driver
Composite Bus Enumerator
eGalax_eMPIA Touchscreen Enumerator x64
Generic Bus
Generic Bus
High Definition Audio Controller
High precision event timer
Intel(R) Gaussian Mixture Model - 1911
Intel(R) Host Bridge/DRAM Registers - 5904
Intel(R) Management Engine Interface
Intel(R) Power Engine Plug-in
Legacy device
Microsoft ACPI-Compliant System
Microsoft Hyper-V Virtualization Infrastructure Driver
Microsoft System Management BIOS Driver
Microsoft UEFI-Compliant System
Microsoft Virtual Drive Enumerator
Microsoft Windows Management Interface for ACPI
Mobile 7th/8th Generation Intel(R) Processor Family I/O LPC Controller (U with iHDCP2.2 Premium) - 9D4E
Mobile Intel(R) Processor Family I/O PCI Express Root Port #6 - 9D15
Mobile Intel(R) Processor Family I/O PMC - 9D21
Mobile Intel(R) Processor Family I/O SMBUS - 9D23
NDIS Virtual Network Adapter Enumerator
PCI Express Root Complex
Plug and Play Software Device Enumerator
Programmable interrupt controller
Remote Desktop Device Redirector Bus
System CMOS/real time clock
System timer
UMBus Root Bus Enumerator
WMMIO Driver
WMWDG
Universal Serial Bus controllers
WMMIO Driver Properties
General Driver Details Events
WMMIO Driver
Driver Provider: Winmate
Driver Date: 6/9/2014
Driver Version: 3.1.0.1
Digital Signer: Winmate Communication INC.
Driver Details
View details about the installed driver files.
Update Driver
Update the driver for this device.
Roll Back Driver
If the device fails after updating the driver, roll back to the previously installed driver.
Disable Device
Disable the device.
Uninstall Device
Uninstall the device from the system (Advanced).
OK
Cancel

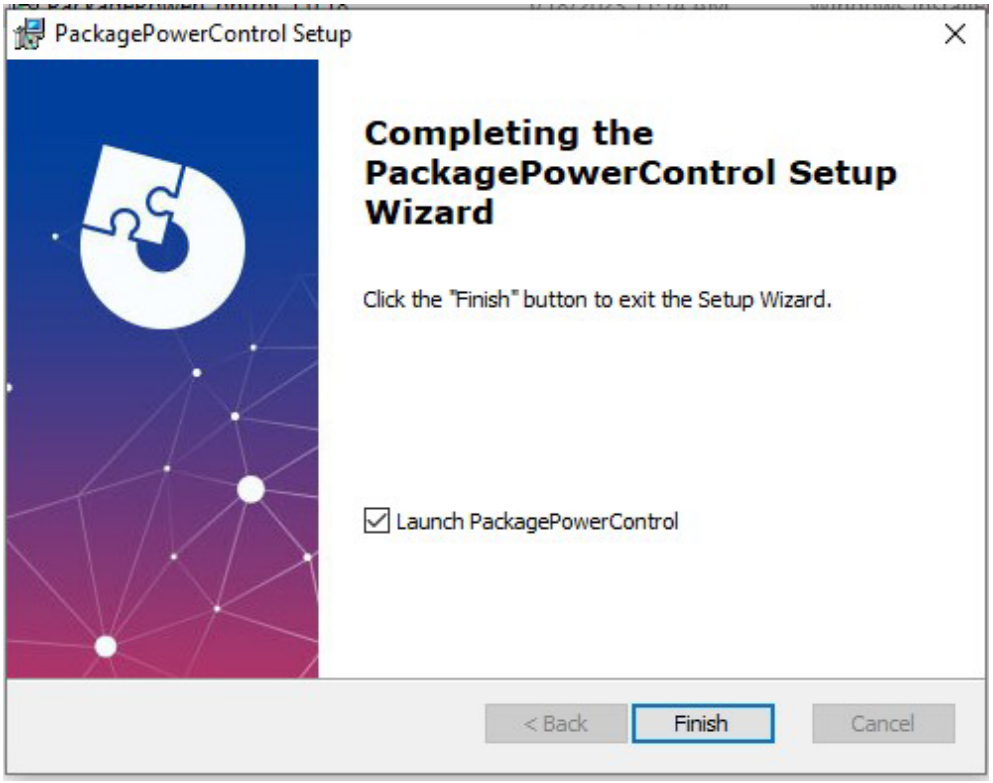
3. Click **AP**.


AP
File
Home
Share
View
PackagePowerControl_v1.0.18 › AP
Search AP
Quick access
Desktop
Downloads
Documents
Pictures
install PackageP
This PC
ALAN (D:)
Network
Name
Date modified
Type
Size
PackagePowerControl_1.0.18
5/18/2023 11:14 AM
Windows Installer ...
3,136 KB
1 item


PackagePowerControl Setup
Welcome to the PackagePowerControl Setup Wizard
The Setup Wizard will install PackagePowerControl on your computer. Click "Next" to continue or "Cancel" to exit the Setup Wizard.
< Back
Next >
Cancel


PackagePowerControl Setup
Select Installation Folder
This is the folder where PackagePowerControl will be installed.
To install in this folder, click "Next". To install to a different folder, enter it below or click "Browse".
Folder:
C:\Program Files (x86)\PackagePowerControl\PackagePowerControl\
Browse...
Advanced Installer
< Back
Next >
Cancel


PackagePowerControl Setup
Ready to Install
The Setup Wizard is ready to begin the PackagePowerControl installation
Click "Install" to begin the installation. If you want to review or change any of your installation settings, click "Back". Click "Cancel" to exit the wizard.
Advanced Installer
< Back
Install
Cancel


PackagePowerControl Setup
Completing the PackagePowerControl Setup Wizard
Click the "Finish" button to exit the Setup Wizard.
Launch PackagePowerControl
< Back
Finish
Cancel

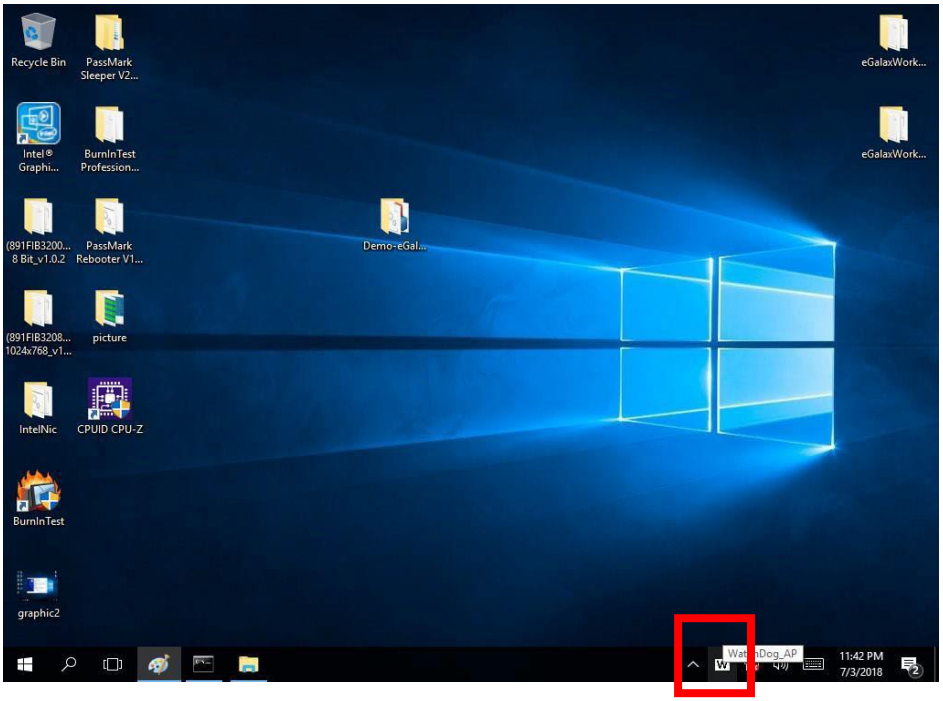

2:19 PM
6/4/2023

3.10 How to Enable Watchdog

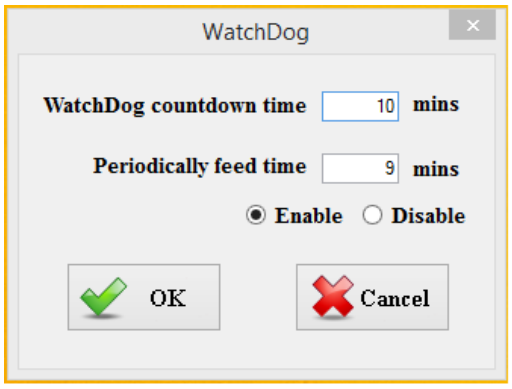
To enable Watchdog, you need to download Winmate Watchdog utility. Find more information on Watchdog in “Watchdog Guide” that you can download from Winmate Download Center or File Share.

To enable watchdog in Watchdog AP, follow the instructions below:

1. On the right bottom side of the desktop screen, click  **triangle button** to show hidden icons.
2. Click  icon to open Watchdog utility.



3. In Watchdog utility window set countdown time and periodically feed time, or disable watchdog.



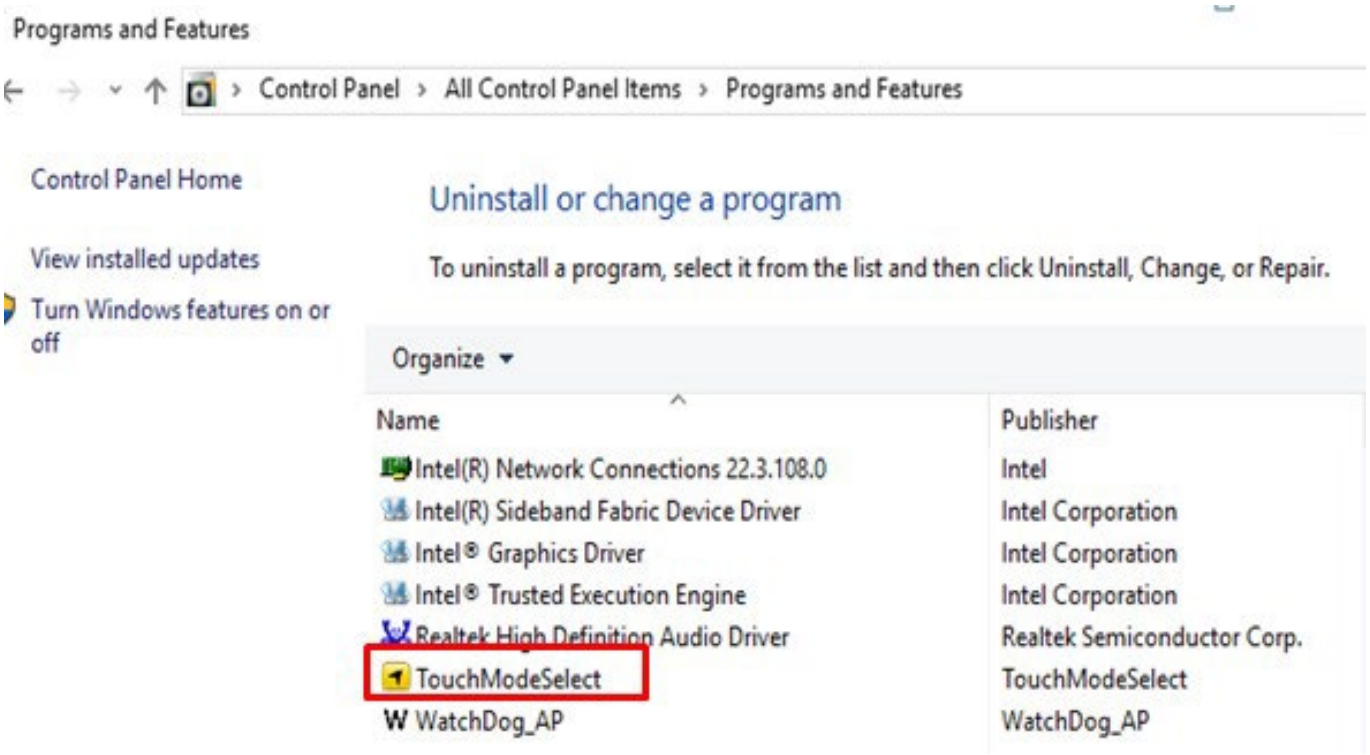
Example:
Every 10 min watchdog will monitor the system, in case any error occurs the system will restart automatically when the countdown time reaches 0.
Every 9 min watchdog timer will be reset to 10 min.

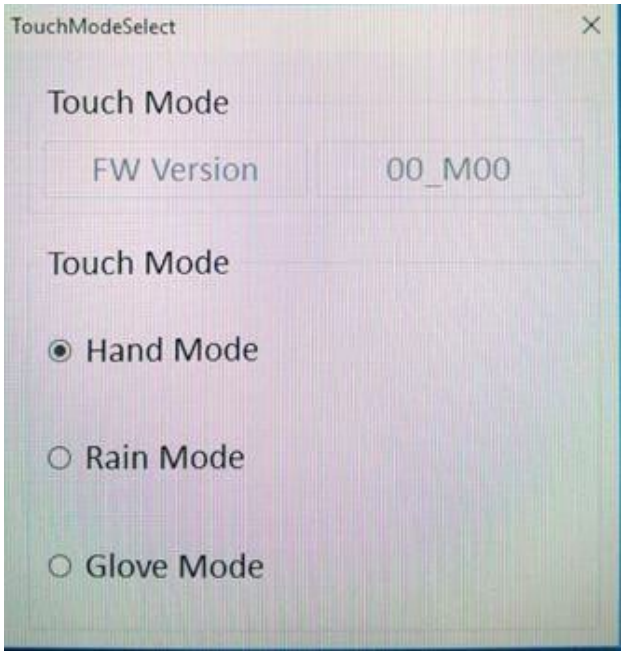
Setting	Description
Watchdog Countdown Time	The system automaticity restarts when this countdown time reaches zero. *Default: 10 min*
Periodically Feed Time	To set a cycle time to automatically reset watchdog timer. *Default: 9 min*
Enable / Disable	Enable or disable watchdog. *Default: Enable*

3.11 Touch Mode

Full IP67 P-CAP Panel PC has three types touch modes pre-installed with Windows OS.

The icon is on the bottom right corner of the toolbar.

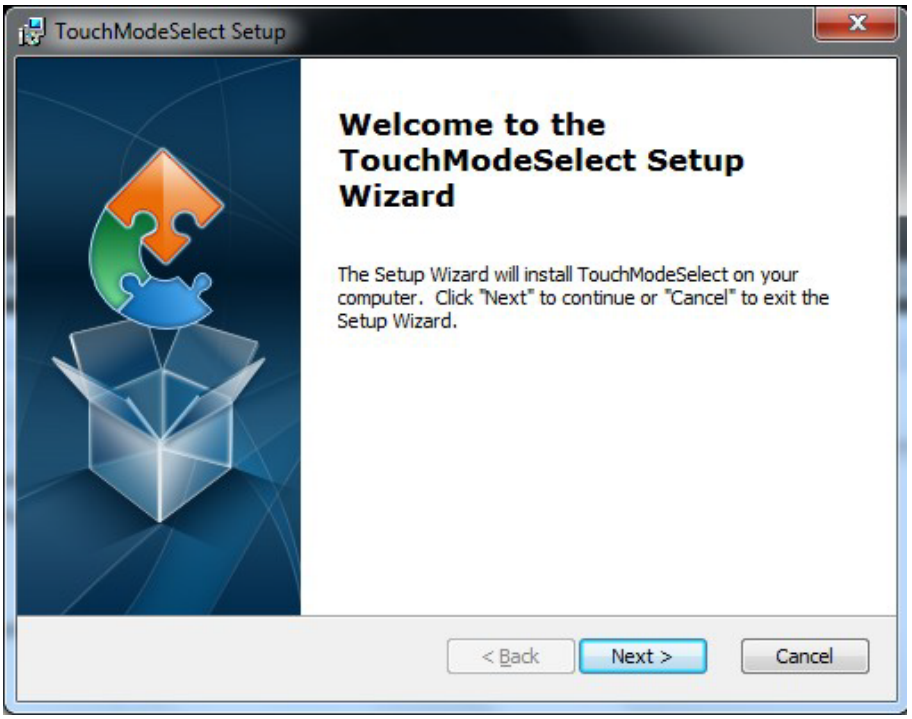




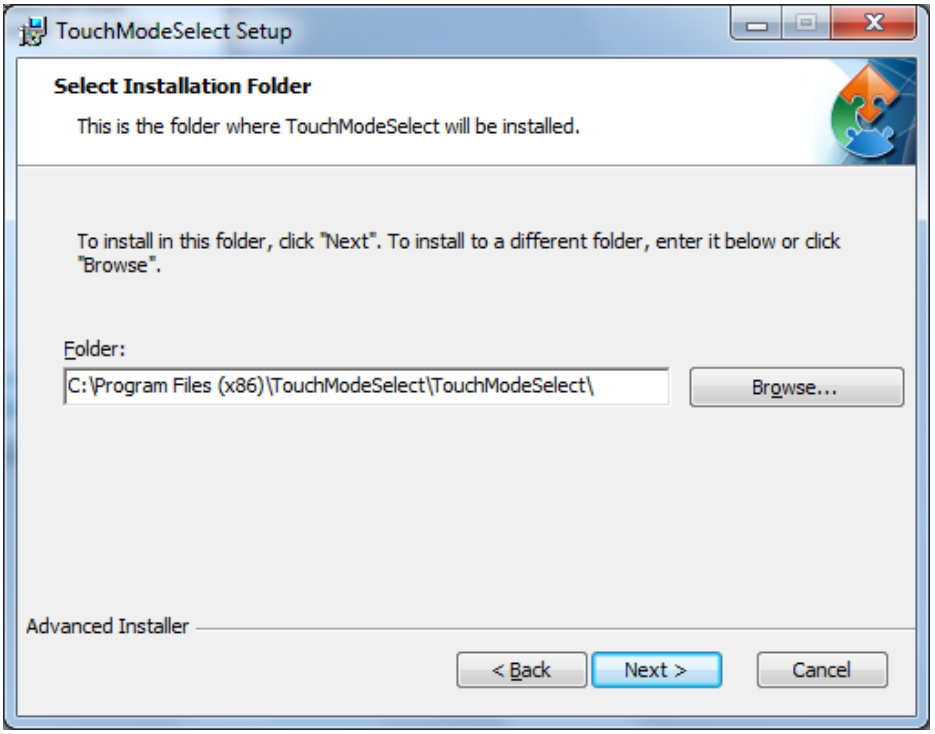
If the OS is not installed, please download the application on our website for switching the touch modes. If you cannot find it, please download it from Winmate Download Center or contact Winmate sales representative.

Follow the instructions below to install the *TouchModeSelect* Utility.

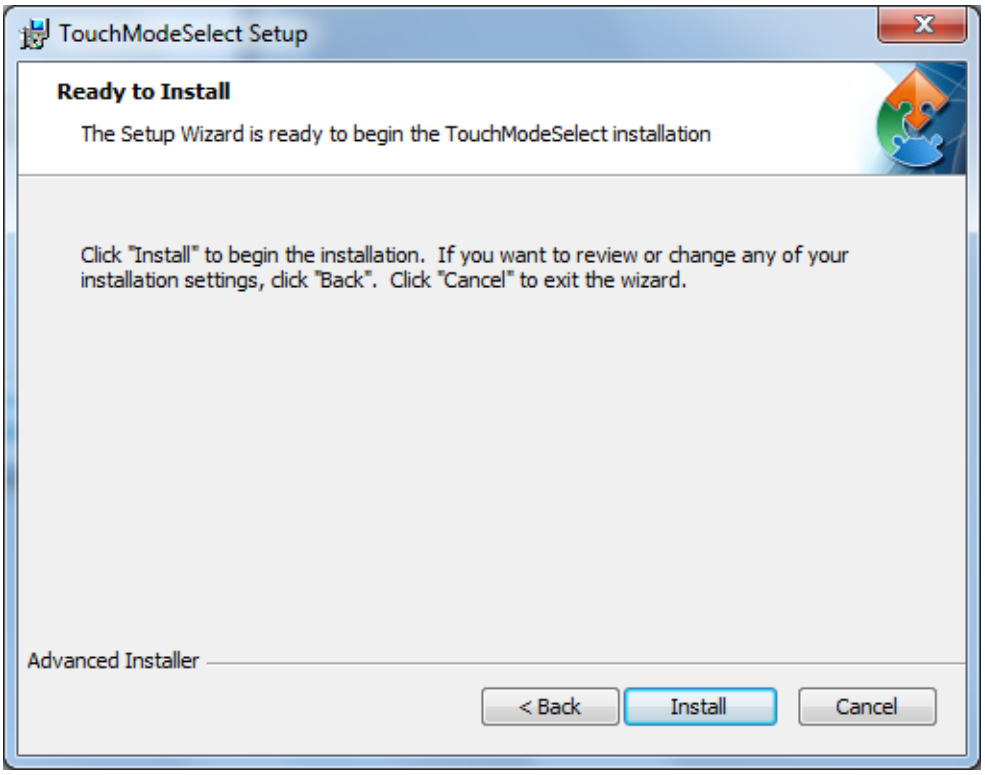
1. Download, install and execute **TouchModeSelect_1.2.3** setup wizard.
2. Click **Next** to continue.



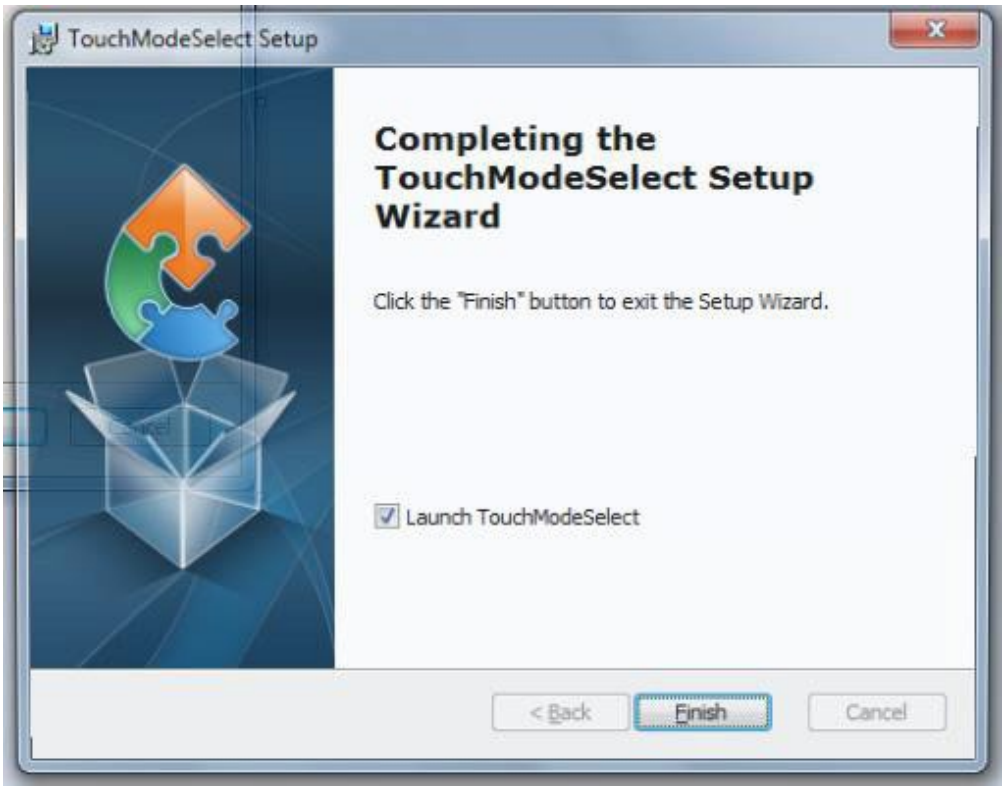
3. Select the installation folder, and click **Next** to continue.



4. The Setup Wizard is ready to begin the **TouchModeSelect** installation. Click **Install** to proceed.



5. When installation is complete, click **Finish** button to exit the Setup Wizard.



3.12 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.

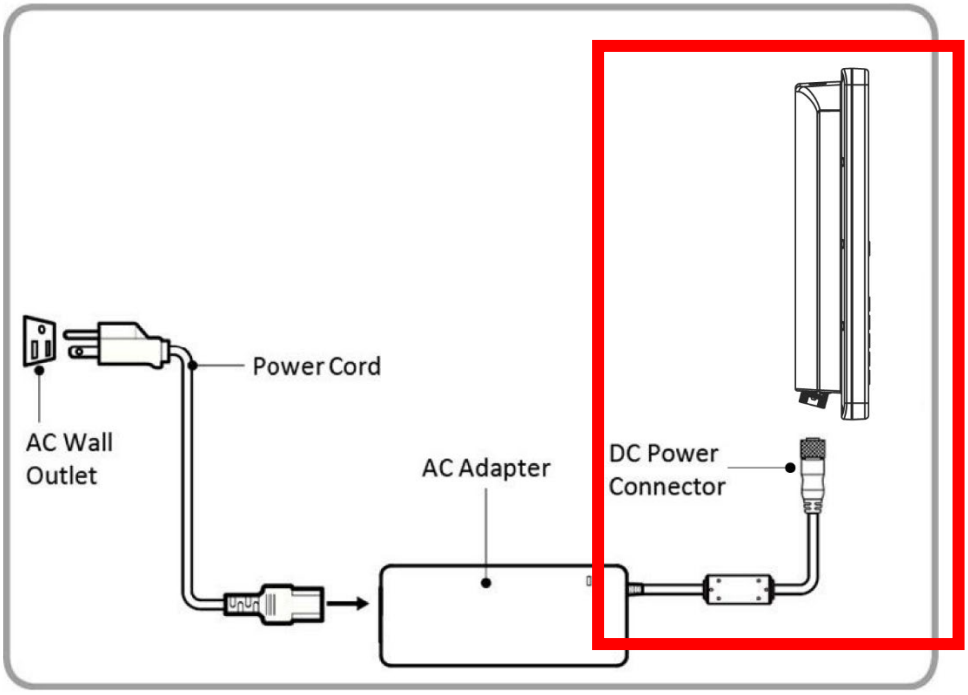
Chapter 4: Getting Started

4.1 Turning On and Off Your Device

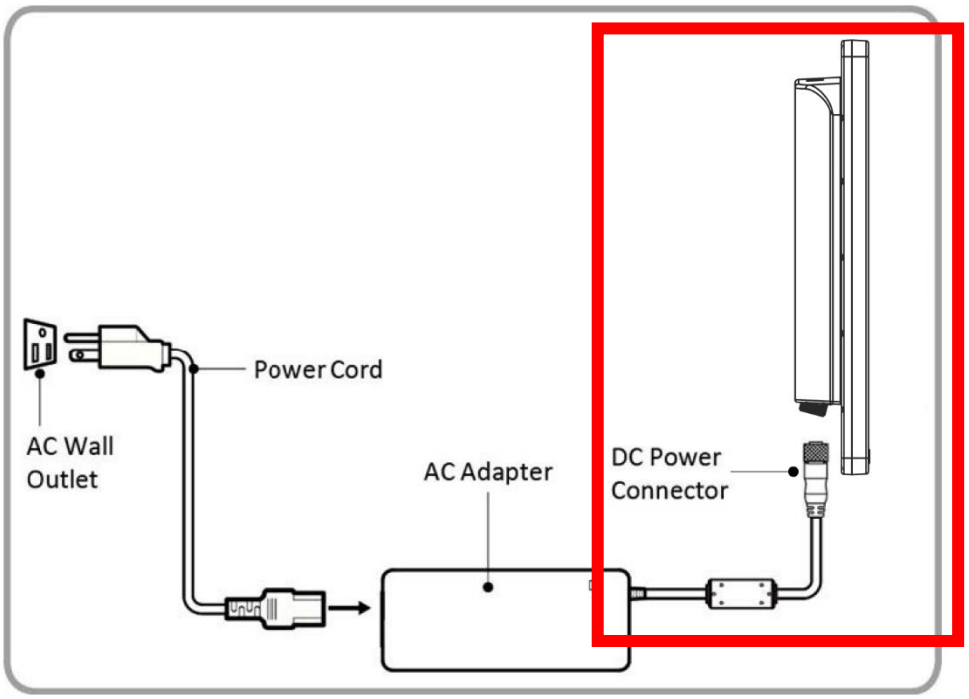
To turn on your device:

1. Connect the AC adapter to the DC-in jack connector located on the back side of the Panel PC.
2. Connect the power cord to AC adapter.
3. Plug the power cord to the AC outlet and the device will turn on automatically.

R15IAD3S-67C3-P(HB)



W22AD3S-67B2-P (HB)



AC Adapter Specifications:

AC Adapter – 12V/ 120W

**With maximum backlight and high CPU load.*

To turn off your device:

1. To shut down your device, do the following: Tap Start ( ) > Shut down.
2. Wait for your Panel PC to completely turn off before disconnecting the power cord (if necessary).

4.2 VESA Mounting

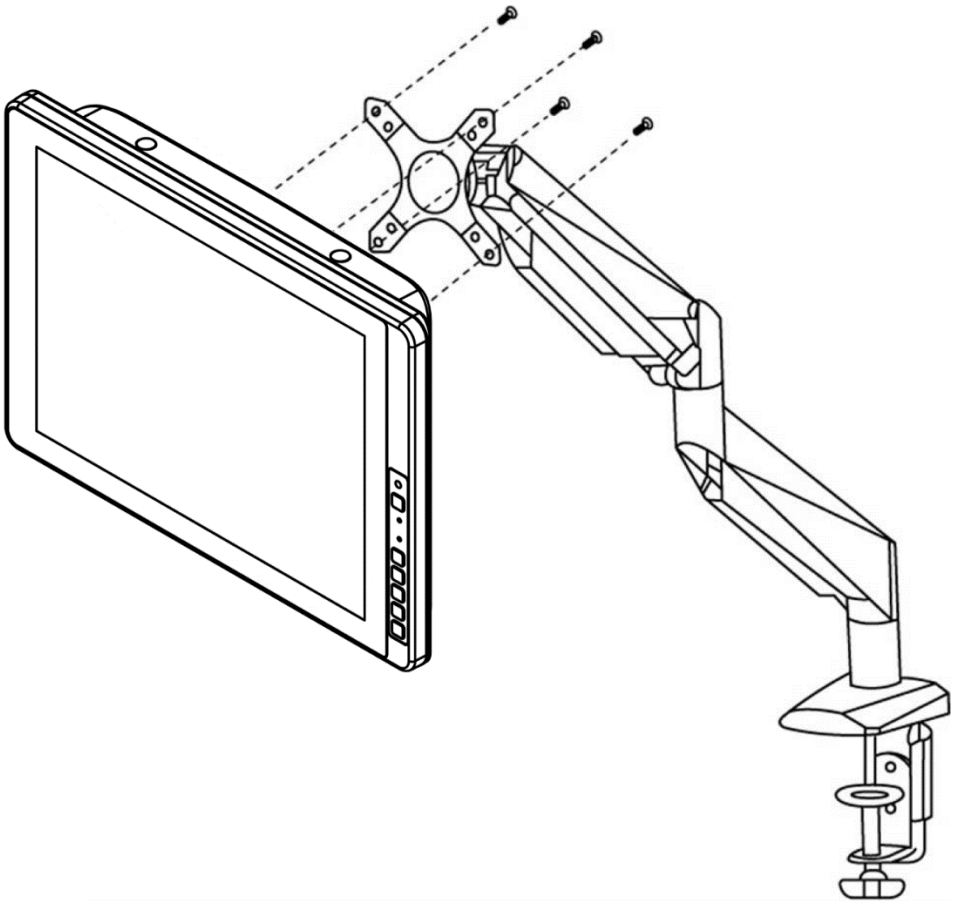
The Full IP67 P-CAP devices come with VESA mounting options suitable for most of the industrial and commercial applications.
The Panel PC has VESA mount holes on the rear side. Follow instructions below to mount the unit with VESA Mount bracket (not supplied by Winmate).

Size	VESA Plate	Screws
15”	**100 x 100 mm**	**VESA M6x8 mm**
21.5”		

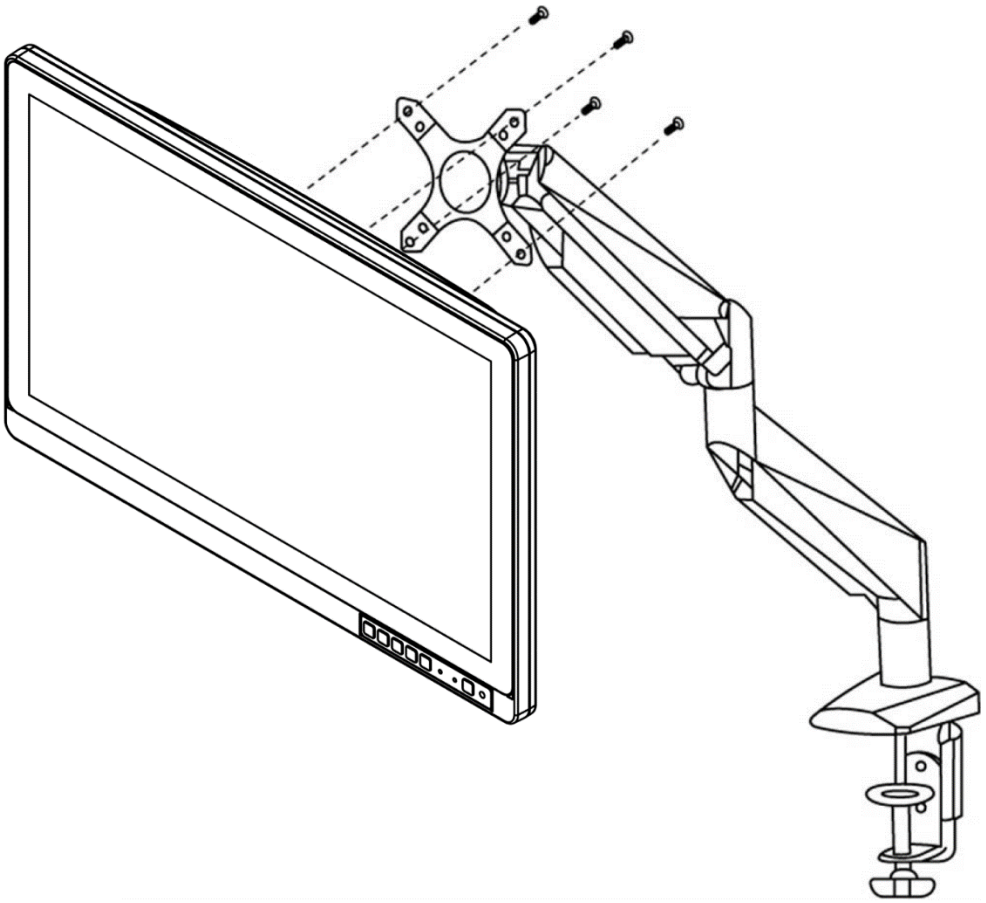
Mounting Instruction:

1. Screw VESA bracket to the fixture (ex. swing arm) with four VESA screws.
2. Place the device on VESA bracket.

R15IAD3S-67C3-P(HB)



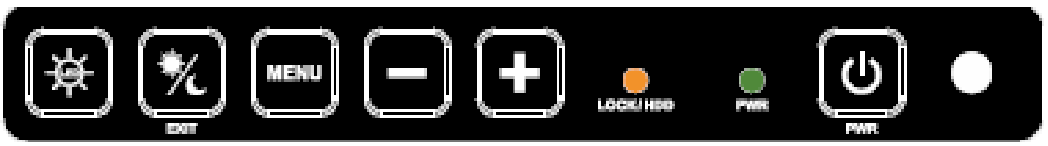
W22AD3S-67B2-P (HB)



4.3 Physical Buttons and LED Ind

R15IAD3S-67C3-P (HB)

W22IAD3S-67B2-P (HB)



4.4 Physical Buttons

Icon	Button	Function
	Power	Turn ON or turn OFF the panel PC.
	Increase	Increase the brightness of the display screen, or allows user to navigate items of a single OSD menu.
	Decrease	Decrease the brightness of the display screen, or allows user to navigate items of a single OSD menu.
	Auto Dimming/ Manually	Tap the button once to AUTOMATICALLY adjust brightness mode.
		Press the button again to MANUALLY adjust brightness mode. (Default setting)
	Day Mode/ Night Mode	Tap this button to enter Day MODE to increase visibility in low-light conditions.
		Tap this button to enter NIGHT MODE to increase visibility in low-light conditions.
	LED Adjustment	Adjust the brightness of the LED.
	Light Sensor	Detect light density.
	Power LED	Lights up green when the system turns on; signalizes that display functions normally.
		OFF Turns off when system is shut down.
	HDD LED	HDD is active.
		OFF Turns off when HDD is inactive.
	Lock LED	Lights up red when OSD button locked. OFF Turns off when OSD button lock function disabled.
	Lock/ Unlock	Tap button《+》& 《-》 at the same time around 3 secs to lock/ unlock the function of OSD panel.
		When storage is reading, the HDD LED will continue to flash; When lock key is pressed, the HDD LED will remain on. After unlocking, the HDD LED will continue to flash if the storage is still in R/W.

4.5 Wiring Requirements

The following common safety precautions should be observed before installing any electronic device:

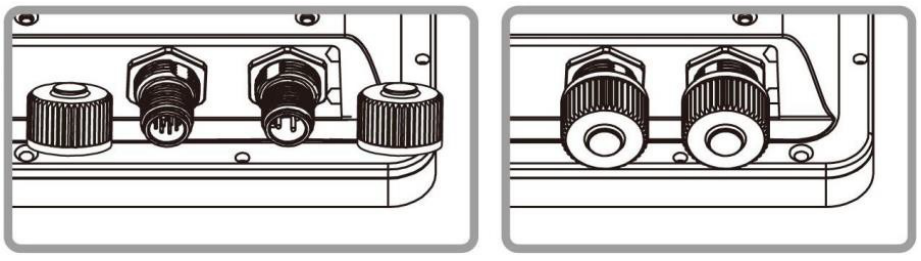
- Strive to use separate, non-intersecting paths to route power and networking wires. If power wiring and device wiring paths must cross make sure the wires are perpendicular at the intersection point.
- Keep the wires separated according to interface. The rule of thumb is that wiring that shares similar electrical characteristics may 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.
- Do not run signal or communication wiring and power wiring in the same conduit. To avoid interference, wires with different signal characteristics (i.e., different interfaces) should be routed separately.
- Be sure to disconnect the power cord before installing and/or wiring your device.
- Verify the maximum possible current for each wire gauge, especially for the power cords. Observe all electrical codes dictating the maximum current allowable for each wire gauge.
- If the current goes above the maximum ratings, the wiring could overheat, causing serious damage to your equipment.

4.6 Connecting to Other Devices

This Panel PC comes with various interfaces located on the bottom panel. All of these connectors have been shipped with protective caps. To ensure the waterproof function can work properly, make sure that the protective caps and have been securely tightened whenever the connectors are not used.

IMPORTANT

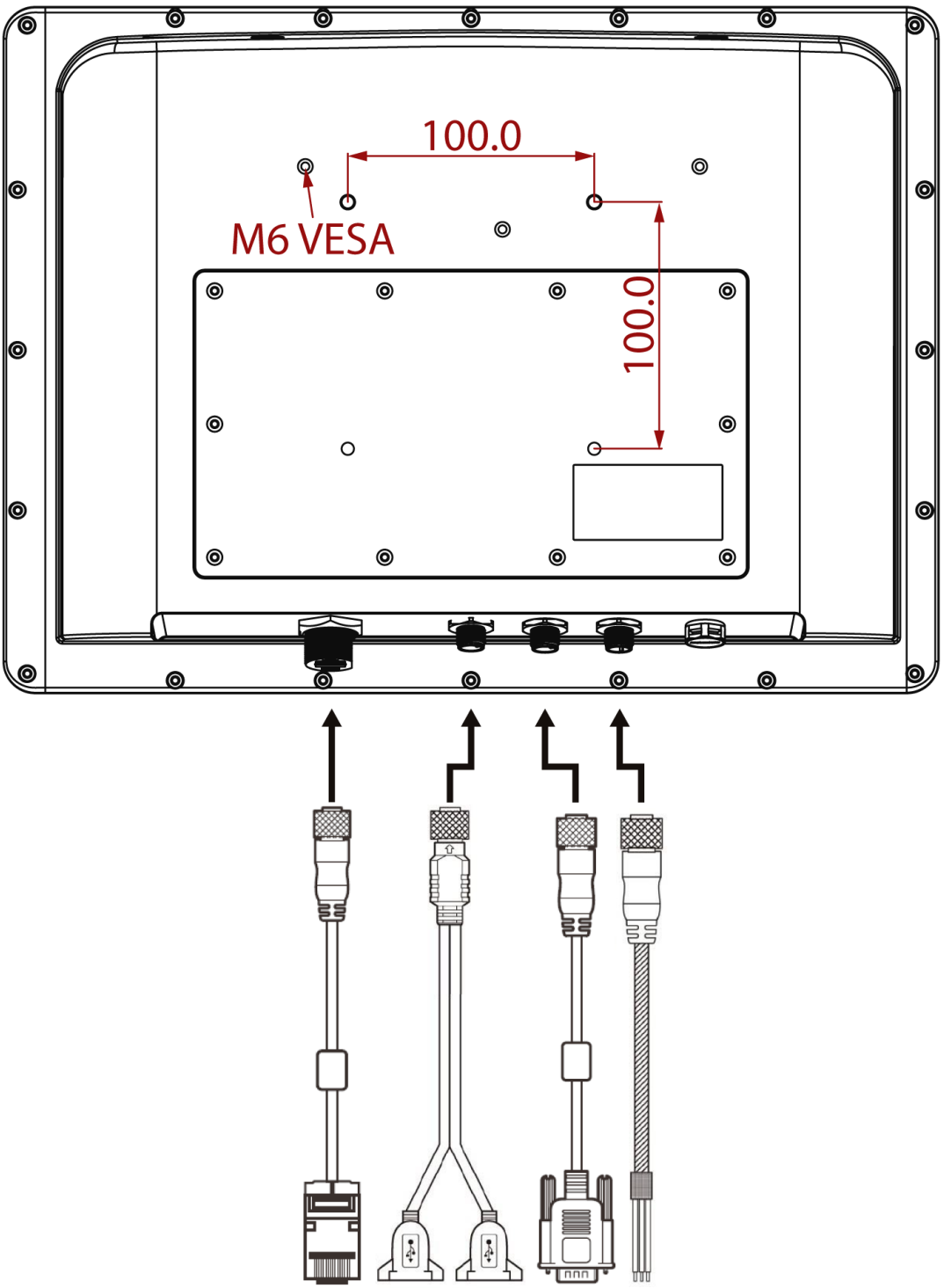
Please note that when reinstalling the protective cap, it must be fully tightened to ensure the unit is properly sealed to meet the IP67 enclosure rating.



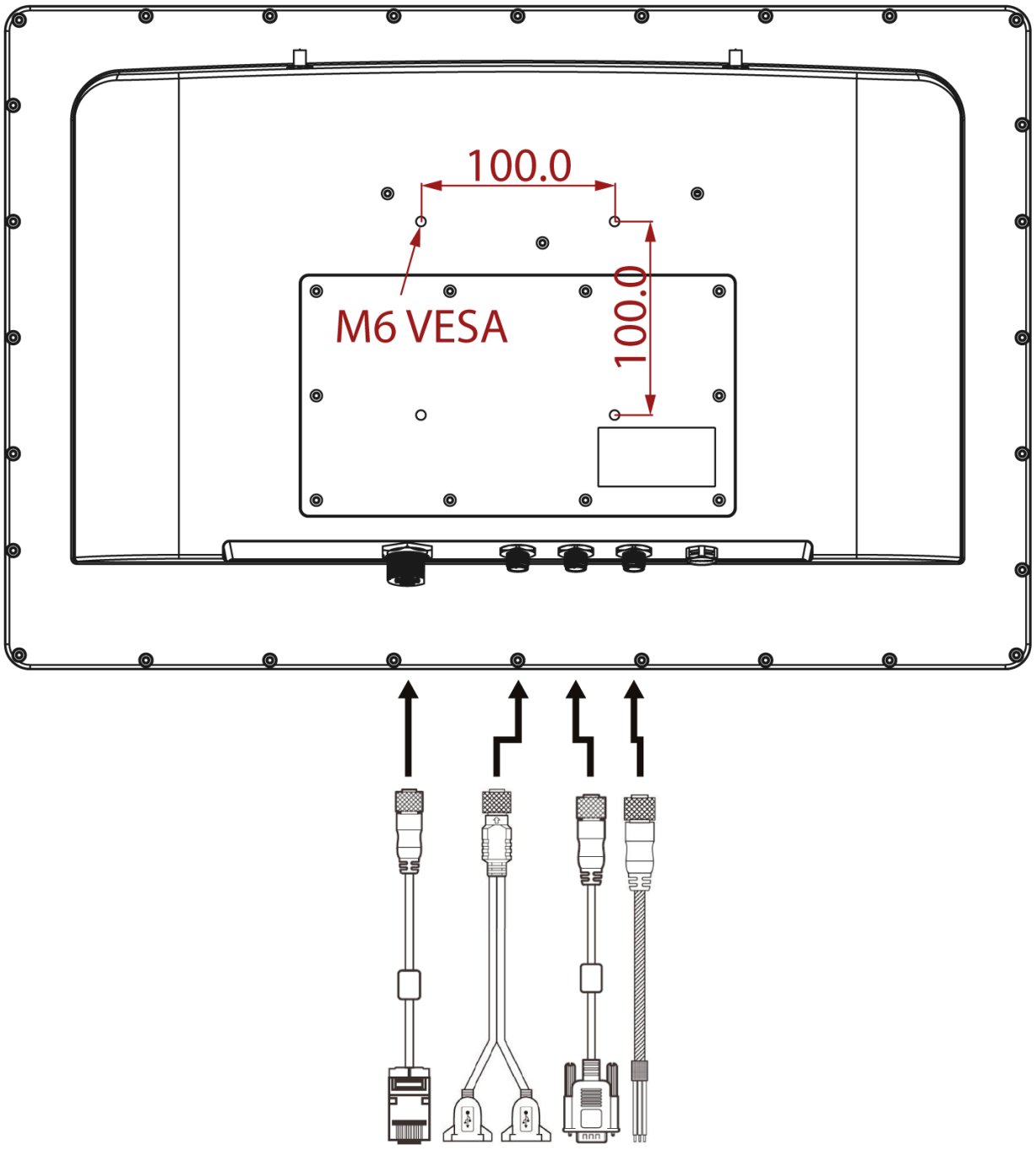
4.7 Connector Description

The Panel PC features M12 type waterproof connectors covered with protective caps.

R15IAD3S-67C3-P (HB)



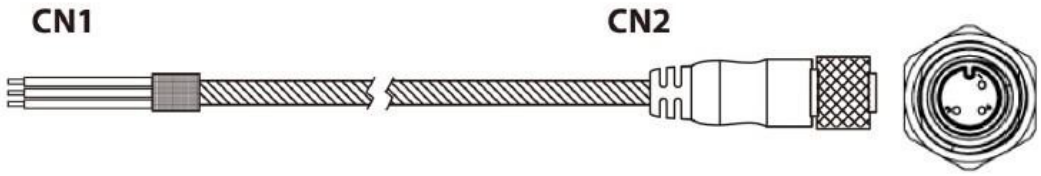
W22IAD3S-67B2-P (HB)



4.7.1 Power Input Connector

Panel PC has M12 type 3 pin male power input connector which accepts 9-36 V DC power input. Use waterproof power cable to connect the Panel PC to the source of power.

DC Power Cable



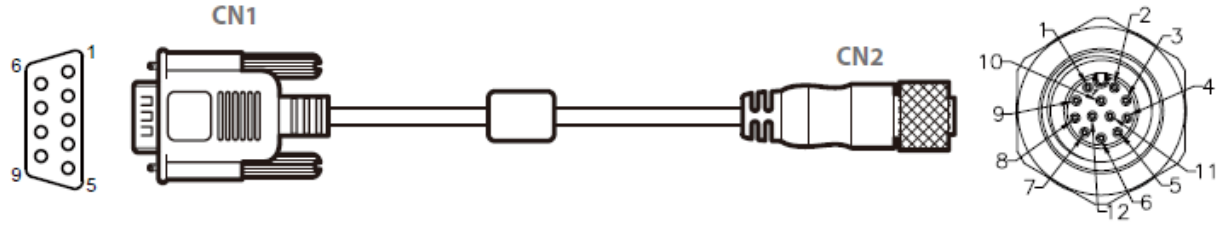
Pin No.	Symbols	Color		Pin No.	Symbols	Color
CN1-1	VCC+	White	⟷	CN2-1	VCC+	White
CN1-2	GND	Green	⟷	CN2-2	GND	Green
CN1-3	VCC-	Black	⟷	CN2-3	VCC-	Black

WARNING!/ AVERTISSEMENT!
Ensure that the external power source is OFF before connecting or disconnecting the DC IN jack.
Assurez-vous que la source d'alimentation externe est coupée avant de brancher et de débrancher la prise DC IN.

Note: Please provide 120W or above power source to the Panel PC.

4.7.2 Serial Interface Connector

Panel PC has 1 x M12 A Coded 12 Pin Female connector for serial port. Use waterproof serial cable to connect the panel PC to external devices.

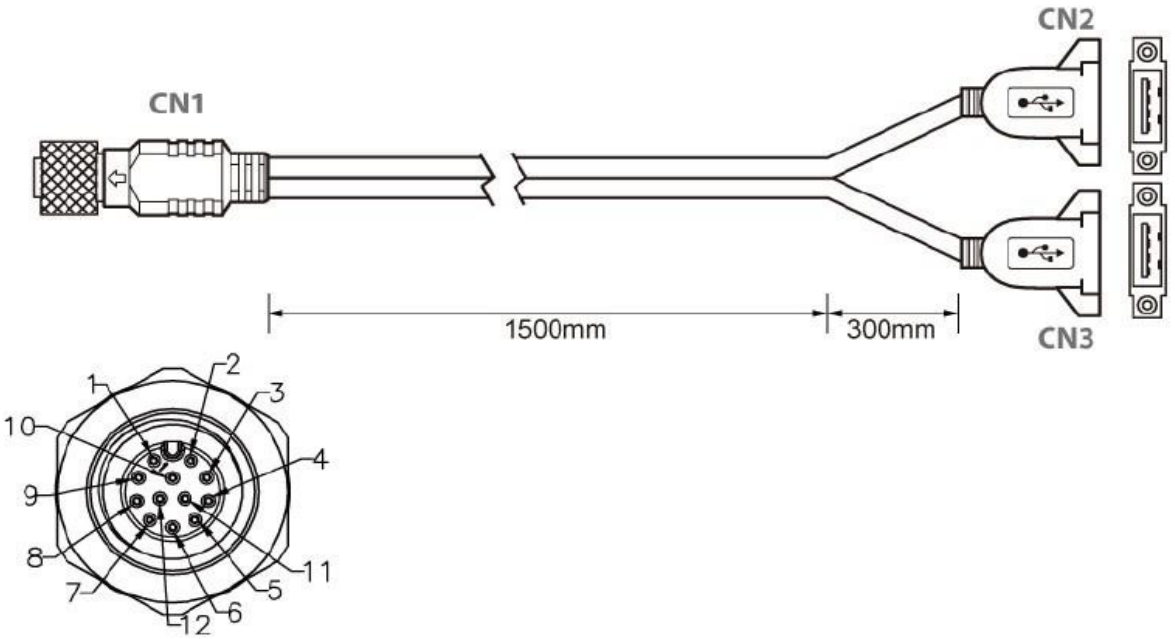


Pin No.	Symbols	Color		Pin No.	Symbols	Color
CN1-1	DCD-CON2	Green	⟷	CN2-1	DCD-CON2	Green
CN1-6	DSR-CON2	Brown	⟷	CN2-2	DSR-CON2	Brown
CN1-2	RXD-CON2	Red	⟷	CN2-3	RXD-CON2	Red
CN1-7	RTS-CON2	Orange	⟷	CN2-4	RTS-CON2	Orange
CN1-3	TXD-CON2	Blue	⟷	CN2-5	TXD-CON2	Blue
CN1-8	CTS-CON2	White	⟷	CN2-6	CTS-CON2	White
CN1-4	DTR-CON2	Purple	⟷	CN2-7	DTR-CON2	Purple
CN1-9	RI-CON2	Yellow		CN2-8	RI-CON2	Yellow
CN1-5	GND-CON2	Black		CN2-9	GND-CON2	Black

4.7.3 USB 2.0 Connector

Panel PC has M12 A Coded 12 Pin Male connector for USB 2.0 signal. Use waterproof USB 2.0 cable to connect the panel PC to external devices.

USB Cable

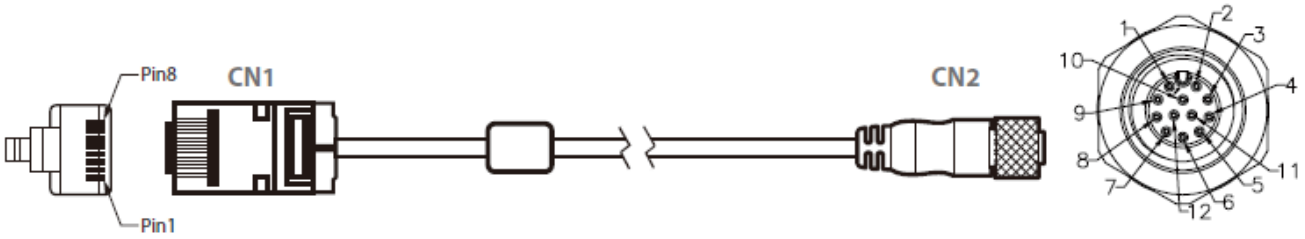


Pin No.	Symbols	Color		Pin No.	Symbols	Color	
CN1-2	VCC	RED	⟷	CN2-1	VCC	RED	
CN1-3	D-	WHITE	⟷	CN2-2	D-	WHITE	twisted pair
CN1-4	D+	GREEN	⟷	CN2-3	D+	GREEN	twisted pair
CN1-5	GND	BLACK	⟷	CN2-4	GND	BLACK	
CN1-6	VCC	RED	⟷	CN3-1	VCC	RED	
CN1-7	D-	WHITE	⟷	CN3-2	D-	WHITE	twisted pair
CN1-8	D+	GREEN	⟷	CN3-3	D+	GREEN	twisted pair
CN1-9	GND	BLACK	⟷	CN3-4	GND	BLACK	
CN1-1	GND	Braid	⟷	Braid connect to the housing			

4.7.4 Ethernet Connector

Panel PC has M12 A Code type 12 Pin connector for ethernet signal. Use waterproof LAN cable to connect the panel PC to the Ethernet.

LAN Cable



Chapter 5: Technical Support

This chapter includes the directory for technical support. 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. If any problem occurs, immediately contact us.

5.1 Drivers

The list of drivers available for Panel PC:

Item	Driver
1	Chipset Driver
2	Graphics Driver
3	ME Driver
4	SST Driver
5	LAN Driver
6	DTT Driver
7	GNA Driver
8	Serial IO Driver
9	Winset_WatchDog Driver
10	Thermal Control AP
11	Touch Mode Select AP

To find the Drivers, please refer to the Download Center in the Winmate website or contact us.

5.2 Software Development Kit (SDK)

The list of SDK available for IAD32 Motherboard

Item	File Type	Description
1	SDK	Watchdog SDK
2	SDK	Digital IO SDK

To find the SDK, please refer to the Download Center in the Winmate website or contact us.

Appendix

Appendix A: Hardware Specifications

	Model Number	
	R15AD3S-67C3-P（HB）	W22AD3S-67B2-P（HB）
Display		
Size	15”	21.5”
Resolution	1024 x 768	1920 x 1080
Brightness	1000 nits	1000 nits
Contrast Ratio	2000: 1	1000: 1
Viewing Angle	88,88,88,88	89,89,89,89
Touch	Projected Capacitive Multi Touch Screen	
System		
Processor	Intel® Core™ i5-1235U Processor 12M Cache, up to 4.40 GHz	
System Memory	1 x SODIMM, DDR5 4800 MHz, 8GB 16GB (Optional) 32GB (Optional)	
Storage	1 x M.2 2280 M Key NVMe SSD 256GB 512GB (Optional) 1TB (Optional) 2TB (Optional)	
Expansion	1 x M.2 2230 E Key Slot (for Wi-Fi module)	
Ethernet controller	Intel® Ethernet Controller	
Security	TPM 2.0	
Operating System	Windows 11 IoT Enterprise (64 bit) (Optional) Windows 10 IoT Enterprise (64 bit) (Optional) Windows 11 Pro 64-bit (Optional) Linux Ubuntu 22.04(Do not support Wake on Touch) (Optional)	
Control		
Button	1 x "Power" key to power on the device. 1 x "+" key to increase screen brightness. 1 x "" key to decrease screen brightness. 1 x "Menu" key can Automatically or manually adjust the brightness of the display screen 1 x Day / Night Mode button 1 x LED indicator brightness adjustment button 1 x Ambient Light sensor	
I/O Ports		
Ethernet LAN	1 x M12 waterproof Giga LAN RJ45 connector	
COM	1 x M12 waterproof connector RS232	
USB	1 x M12 waterproof connector for 2 x USB 2.0	
Power	1 x M12 waterproof connector for 9-36V DC IN	

Indicators	1 x LED Indicator for power 1 x LED Indicator for storage	
Mechanical Specification		
Dimension	379.4 x 278.4 x 58 mm	529.6 x 342.8 x 58 mm
Weight	3.8 Kg	8.67 Kg
Enclosure	Aluminum Housing Pre finish: Surtec 650, Type II, Class 3 Coating: Polyester powder coating	
Mounting	VESA Mount	
Cooling System	Fanless	
Accessory		
Default Accessory	External open wire Power cable with waterproof connector External USB cable with waterproof connector External COM cable with waterproof connector External LAN cable with waterproof connector Waterproof caps RJ45 female-female converter USB Type A converter VESA screws	
Optional Accessory	100~240V AC to DC 120W Adapter with power cord (Optional)	
Environmental Consideration		
Operating Temperature	-10°C to +55°C	
Operating Humidity	10% to 90% (non-condensing)	
IP Rating	IP67	
Certification		
	CE, FCC	
Ordering Information		
	R15IAD3S-67C3-R(HB) for Resistive Touch (Optional) R15IAD3S-67C3-G(HB) for Anti Reflective Protection Glass (Optional)	W22IAD3S-67B2-G(HB) for Anti Reflective Protection

Appendix B: Cleaning the Monitor

Before cleaning:

- Make sure the device is turned off.
- Disconnect the power cable from any AC outlet.

When cleaning:

- Never spray or pour any liquid directly on the screen or case.
- Wipe the screen with a clean, soft, lint-free cloth. This removes dust and other particles.
- The display area is highly prone to scratching. Do not use ketene type material (e.g. Acetone), Ethyl alcohol, toluene, ethyl acid or Methyl chloride to clear the panel. It may permanently damage the panel and void the warranty.
- If it is still not clean enough, apply a small amount of non-ammonia, non-alcohol based glass cleaner onto a clean, soft, lint-free cloth, and wipe the screen.
- Do not use water or oil directly on the display screen. If droplets are allowed to drop on the screen, permanent staining or discoloration may occur.

Appendix C: Winmate Software Development Kit

Winmate provides the following SDK and Utilities for the Full IP67 P-CAP Panel PC.

Item	File Type	Description
1	SDK	Watchdog SDK
2	Utility	Watchdog Utility

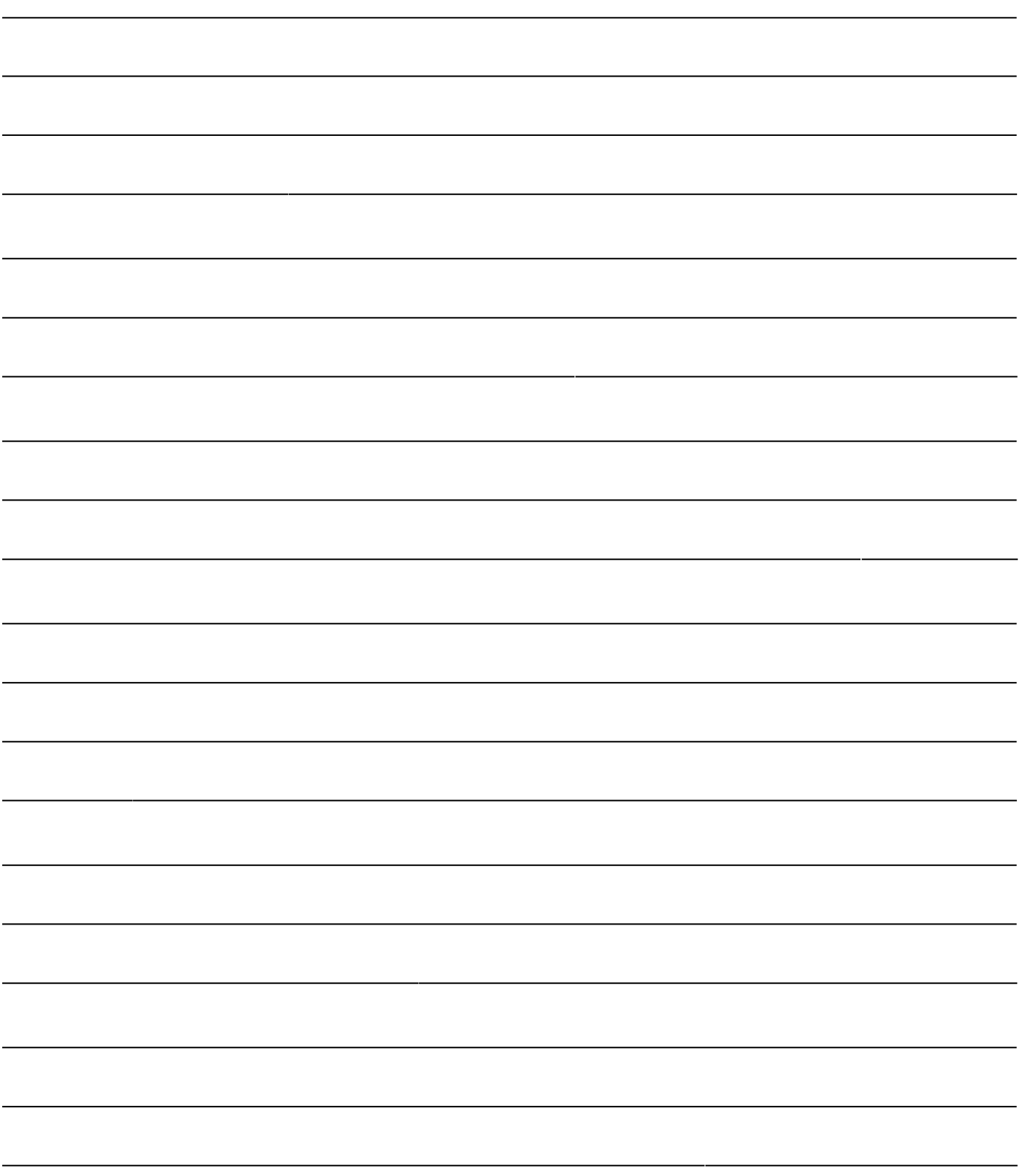
To find the Drivers and SDK, you can download drivers from Winmate Download Center.

Winmate Download Center

Go to https://dc.winmate.com/main/getModelInfo?ModelName=IAD3&like=True

Notes

Notes



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