

# G-WIN Slim IP65 Panel PC Series

Intel® Celeron® N6211 (up to 3.0 GHz)



**P-CAP Touch** 

Models: W10IE3S-GSH2 R10IE3S-GST2 R12IE3S-GSM2 (HB) R15IE3S-GSC3(HB)

# **User Manual**

Document Version 1.0 Document Part No. 915211171000

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### Preface

#### **Copyright Notice**

No part of this document may be reproduced, copied, translated, or transmitted in any form or by any means, electronic or mechanical, for any purpose, without the prior written permission of the original manufacturer.

#### Trademark Acknowledgement

Brand and product names are trademarks or registered trademarks of their respective owners.

#### 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 1W14Axxxxxx means October of year 2014.

#### **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.



#### Safety Precautions

For your safety carefully read all the safety instructions before using the device. Keep this user manual 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 does not work well or you cannot get it to work according to the user manual.
- 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 -20°C (-4°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.

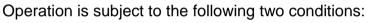
- Cover workstations with approved anti-static material. Use a wrist strap connected to a work surface and properly grounded tools and equipment.
- Use anti-static mats, heel straps, or air ionizer for added protection.
- Handle electrostatic-sensitive components, PCB's and assemblies by the case or the edge of the board.
- 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**

Countries/ Area	Symbol	This equipment complies with essential requirements of:
**** **** European Union	CE	Electromagnetic Compatibility Directive(2014/30/EU) Low Voltage Directive (2014/35/EU) Restrictions of the use of certain hazardous substances (RoHS) Directive (2011/65/EU)
USA	F©	FCC Part 15 Subpart B Regulations Class B

#### Federal Communications Commission Radio Frequency Interface Statement

This device complies with part 15 FCC rules.



- 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.

#### **European Union**



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)

- EN55024: 2010/ A1: 2015
  - o IEC61000-4-2: 2009
  - o IEC61000-4-3: 2006+A1: 2007+A2: 2010

- o IEC61000-4-4: 2012
- o IEC61000-4-5: 2014
- o IEC61000-4-6: 2014
- IEC61000-4-8: 2010
- o 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

# **ABOUT THIS USER MANUAL**

This User Manual provides information about using the Winmate® G-WIN Slim IP65 Panel PC (P-CAP) with Intel® Celeron® N6211 (up to 3.0 GHz) processor. This User Manual applies to the G-WIN Slim IP65 Panel PC (P-CAP) – W10IE3S-GSH2, R10IE3S-GST2, R12IE3S-GSM2 (HB), R15IE3S-GSC3(HB).

The documentation set for the G-WIN Slim IP65 Panel PC (P-CAP) provides information for specific user needs, and includes:

• G-WIN Slim IP65 Panel PC (P-CAP) User Manual - contains detailed description on

how to use the Panel PC, its components and features.



#### NOTE:

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

### **Document Revision History**

Version	Date	Note
1.0	3-Jul-2024	New Document Release

# **Chapter 1: General Information**

Congratulations on purchasing Winmate® G-WIN Slim IP65 with P-CAP Panel PC. The elegantly designed, yet rugged, industrial grade G-WIN S65 series is designed for usability with brilliant true-flat screens, which offer superior readability and Projected Capacitive Multi-Touch (P-CAP) technology, available in 10.1", 10.4", 12.1" and 15" options.

G-WIN Slim IP65 Panel PC operates on Intel® Celeron® N6211 (up to 3.0 GHz) processor and supports Windows operating system. The Panel PC features Projected Capacitive Multi-Touch (P-CAP). These models are full IP 65 dustproof and waterproof and have M12 connectors.

This chapter includes product overview, describes features and hardware specification.

# **1.1 Product Features**

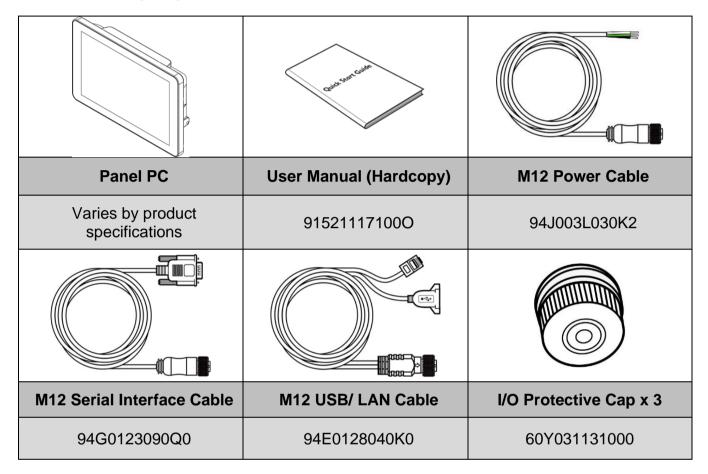
Winmate® G-WIN Slim IP65 with P-CAP Panel PC features:

- Intel® Celeron® N6211 (up to 3.0 GHz)
- Fanless cooling system and Ultra-low power consumption
- Flat design
- M12 Waterproof connectors
- Full IP65
- 1 x LAN, 1 x RS232, 1 x USB 2.0

# **1.2 Package Contents**

Carefully remove the box and unpack your Panel PC 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.

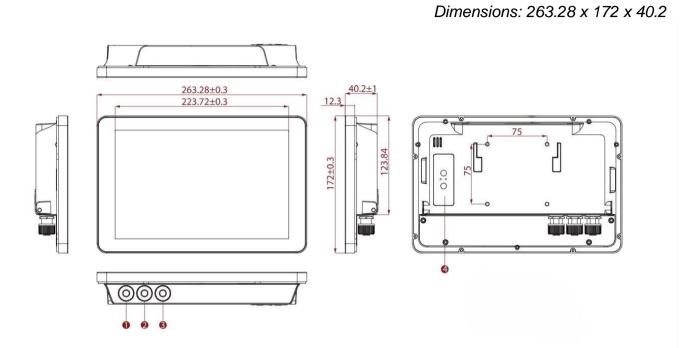
#### Standard factory shipment list:



Unit: mm

# **1.3 Product Dimensions**

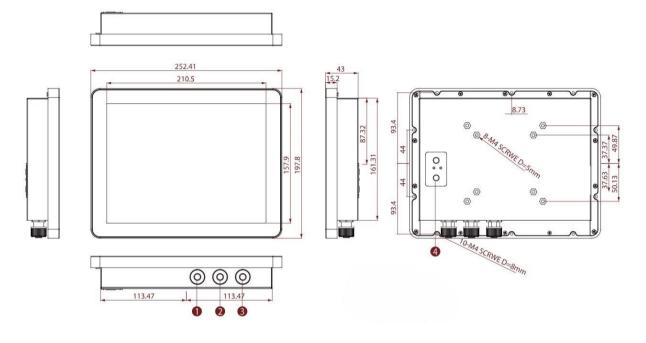
#### W10IE3S-GSH2



N⁰	Description	Nº	Description
1	Power Input (M12 Type)	3 RS232 (M12 Type)	
2	LAN / USB (M12 Type)	4 OSD Control Panel	

#### R10IE3S-GST2

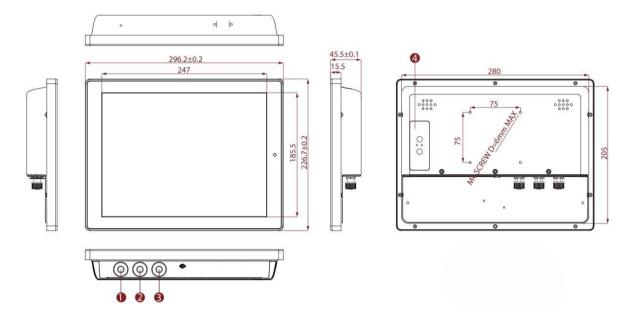
Unit: mm Dimensions: 252.41 x 197.8 x 43



N⁰	Description	<b>№</b> Description	
1	Power Input (M12 Type)	3 RS232 (M12 Type)	
2	LAN / USB (M12 Type)	4	OSD Control Panel

#### R12IE3S-GSM2(HB)

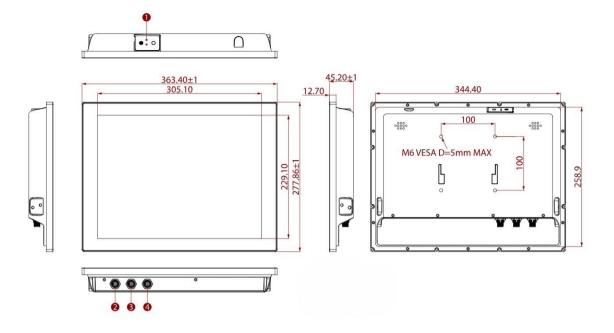
Unit: mm Dimensions: 296.2 x 226.7 x 45.5



N⁰	Description	<b>№</b> Description	
1	Power Input (M12 Type)	3 RS232 (M12 Type)	
2	LAN / USB (M12 Type)	4 OSD Control Panel	

#### R15IE3S-GSC3(HB)

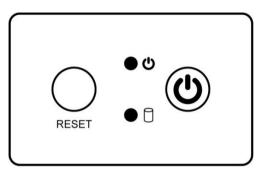
Unit: mm Dimensions: 363.4 x 277.86 x 45.2



N⁰	Description	<b>№</b> Description	
1	OSD Control Panel	3 RS232 (M12 Type)	
2	Power Input (M12 Type)	4 LAN / USB (M12 Type)	

# **1.4 Physical Buttons and LED Indicators**

Physical buttons and LED indicators (OSD Control Panel) located on the rear side of the Panel PC.



#### **Physical Buttons**

Icon	Button	Description
RESET	Reset	Press to reset the system
	Power On/ Off	Press to power on or power off the device

#### **LED Indicators**

LED Type	Status	Description
On On		Power is on
• •	Off	Power is off
	Blinking	Storage activity
		(Data is being read or written)
	Off	System is idle

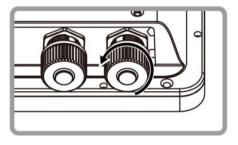
# **Chapter 2: Getting Started**

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

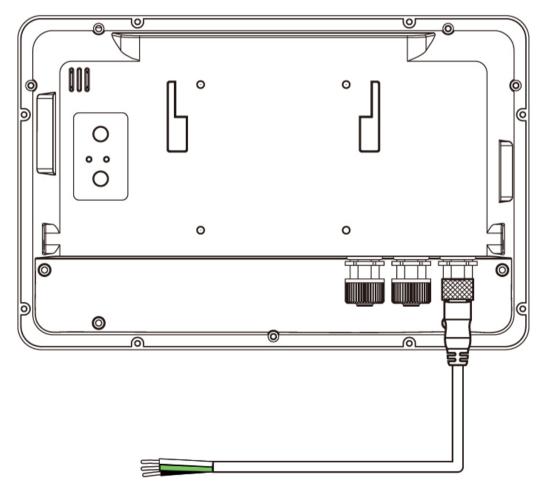
# 2.1 Turning On and Off

### 2.1.1 Turning on Your Device

1. Remove the protective cap of the power connector.



2. Connect power cable to the connector of your device. Make sure the cable fits to the connector, then tighten the O-ring (by turning clockwise) to secure the connection.



3. The device will boot automatically when powered on.

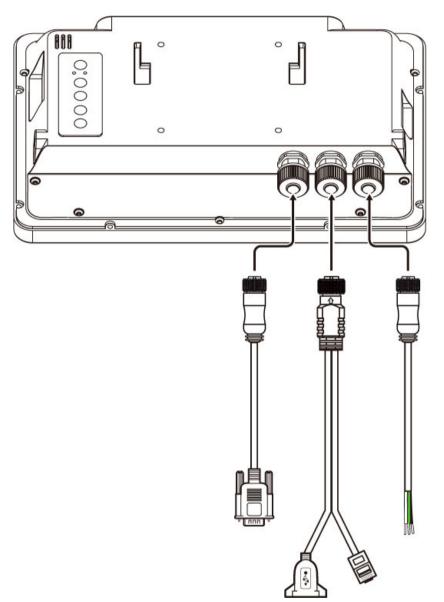
### 2.1.2 Turning off Your Device

Disconnect the power cord from the Panel PC to completely turn off the device.

# 2.2 Connecting to Other Devices

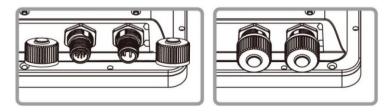
### 2.2.1 Diagram

The Panel PC features M12 type connectors with protective cap and has full IP65 rating. 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

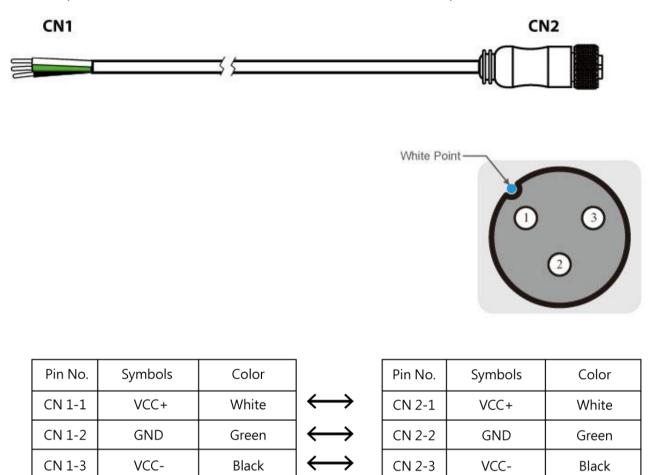
Please note that when reinstalling the protective cap, it must be fully tightened to ensure the unit is properly sealed to meet the IP65 enclosure rating.



### **2.2.2 Connector Description**

#### 2.2.2.1 Power Input Connector

Panel PC has M12 type 3 pin male power input connector which accepts 12V DC power input. Use IP65 power cable to connect the Panel PC to the source of power.



#### 2.2.2.2 Serial Interface Connector

Panel PC has M12 type 10 pin male RS-232 connector. Use IP65 serial cable to connect the Panel PC to external devices.

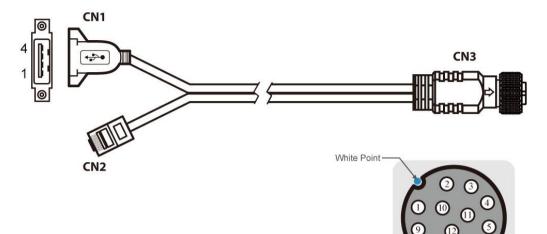


Pin No.	Symbols	Color	
CN1-1	DCD	Green	$\leftrightarrow$
CN1-6	DSR	Brown	$\leftrightarrow$
CN1-2	RXD	Red	$\longleftrightarrow$
CN1-7	RTS	Orange	$\leftrightarrow$
CN1-3	TXD	Blue	$\leftrightarrow$
CN1-8	CTS	White	$\leftrightarrow$
CN1-4	DTR	Purple	$\leftrightarrow$
CN1-9	RI	Yellow	$\leftrightarrow$
CN1-5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

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

### 2.2.2.3 Giga LAN + USB 2.0 Connector

Panel PC has M12 type 12 pin male Giga LAN and USB connector that supports two LAN and one USB 2.0.



D'a Ma	Consellerate	Calan	1	D' NI	Course la calla	Calan	1
Pin No.	Symbols	Color		Pin No.	Symbols	Color	
CN3-1	VCC	RED	$\leftrightarrow$	CN1-1	VCC	RED	
CN3-2	D-	WHITE	$\leftrightarrow$	CN1-2	D-	WHITE	Twisted
CN3-3	D+	GREEN	$\leftrightarrow$	CN1-3	D+	GREEN	pairs
CN3-4	GND	BLACK	$\leftrightarrow$	CN1-4	GND	BLACK	
CN3-5	White/0	Drange	$\leftrightarrow$	CN2-1	White/0	Drange	Twisted
CN3-6	Oran	ge	$\leftrightarrow$	CN2-2	Oran	ge	pairs
CN3-7	White/0	Green	$\leftrightarrow$	CN2-3	White/0	Green	Twisted
CN3-8	Blu	e	$\leftrightarrow$	CN2-4	Blu	e	pairs
CN3-9	White/	'Blue	$\leftrightarrow$	CN2-5	White/	Blue	Twisted
CN3-10	Gree	en	$\leftrightarrow$	CN2-6	Gree	en	pairs
CN3-11	White/E	Brown	$\leftrightarrow$	CN2-7	White/E	Brown	Twisted
CN3-12	Brov	vn	$\leftrightarrow$	CN2-8	Brov	vn	pairs

# **Chapter 3: Operating the Device**

In this chapter you will find the instructions on how to operate the Panel PC.

# 3.1 Operating System

G-WIN Slim IP65 (P-CAP) Panel PC supports:

- Windows 11 IoT Enterprise (64 bit) (Optional)
- Windows 11 Pro (64 bit) (Optional)
- Windows 10 IoT Enterprise (64 bit) (Optional)
- Linux Ubuntu 22.04 (Optional)



#### IMPORTANT:

The device is shipped with the OS System according to your order. Contact us if you have any questions regarding OS settings.

# 3.2 Multi-Touch

The touchpad supports the core gestures for Windows.

Gesture	Windows Usage	Gesture Action	Action
Tap/ Double-tap	Click / Double- click	Click or double-click	J.
Panning with Inertia	Scrolling	Drag one or two fingers up and down	
Selection/ Drag (left to right with one finger)	Mouse-drag/ Selection	Drag one finger left/right	
Zoom	Zoom (default to CTRL key + scroll wheel)	Move two fingers apart/ toward each other	لي الم
Rotate	No system default unless handled by Application (using WM_Gesture API)	Move two fingers in opposite directions <i>or</i> Use one finger to pivot around another	
Two-Finger tap	N/A - Exposed through Gesture API, used by Application discretion	Tap two fingers at the same time (where the target is the midpoint between fingers)	Ś Ś Ś
Press and Hold	Right-click	Press, wait for blue-ring animation to complete, then release	Press Of hold
Flicks	Default: Pan Up/ Down/ Back, and Forward	Make quick drag gestures in the described direction	E E E E E E E E E E E E E E E E E E E

\* Reference from Microsoft®

# Chapter 4: 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.

# 4.1 Main Menu

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

	InsydeH20 Setup Utility	Rev. 5.
Main Advanced Security	Power Boot Exit	
Product Name	IE32. V106	
Build Date	05/24/2023 13:21:56	
Processor Type	Intel(R) Celeron(R) N6211 @ 1.20GHz	
System Bus Speed	100 MHz	
System Memory Speed	2667 MHz	
Cache RAM	1536 KB	
Total Memory	8192 MB	
Channel A - SODIMM	8192 MB	
▶Platform Information		
Language	<english></english>	
System Time	[01:40:53]	
System Date	[10/03/2023]	
F1 Help	1/1 Select Item F5/F6 Change Values F9	Setup Defaults
Esc Exit		0 Save and Exit

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.

	Ins	sydeH20 Setup Utility		Rev. 5.
Advanced				
		c c	CPU Configuration Parameters	
CPU Configuration			ũ.	
Power & Performance				
System Agent (SA) Co				
PCH-10 Configuration				
PCH-FW Configuration	1			
1 Help	î/↓ Select Item	F5/F6 Change Values	F9 Setup Defaults	
sc Exit	+/→ Select Item	Enter Select 🕨 SubMenu	F10 Save and Exit	

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

# 4.2.1 CPU Configuration

Advanced		InsydeH20 Setup Ut	ility		Rev. 5.0
CPU Configuration Type ID Speed VHX SMX/TXT		Intel(R) Celeron(R) N6211 ( 0x90661 1200 HHz Supported Not Supported	9 1.20GHz	additional har	a VMM can utilize the rdware capabilities anderpool Technology.
Intel (VMX) Virtualiz Active Processor Core AES		<enabled> <all> <enabled></enabled></all></enabled>			
F1 Help Esc Exit	1/1 Select +/+ Select		nange Values elect ► SubMenu		tup Defaults /e and Exit
OS Setting	Description		Setting C	ption	Effect
tel (VMX) rtualization echnology	Enable or dis Virtualization	able Intel n Technology.	Enable/D	isable	When enabled, a VMM can utilize the additional hardware capabilities provide by Vanderpool Technology.
ctive Processor pres	Number of c each process	ore to enable in sor package	All / 1 / 2	/ 3	Select number of co to enable in each processor package
yper Threading		allows a single execute two or te threads	Enable /	Disable	Enable or disable Hyper Threading
ES	Enable or dis (Advanced E	able AES	Enable/D	isable	Enable or disable Al

Standard)

### 4.2.2 F81968 Configuration

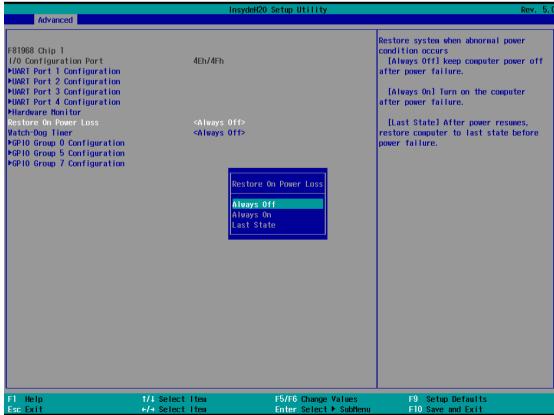
If you want to adjust the UART port type, follow below step. First, enter the UART Port1 Configuration and in Peripheral Type, you can choose between RS232/RS422/RS485.

Advanced	Ins	ydeH20 Setup Utility	Rev. 5.0
F81968 Chip 1 1/0 Configuration Port PUART Port 1 Configuration PUART Port 2 Configuration PUART Port 3 Configuration PUART Port 4 Configuration PHardware Honitor	4Eh/4Fh		UART Configuration
Restore On Power Loss Watch-Dog Timer ▶GP10 Group 0 Configuration ▶GP10 Group 5 Configuration ▶GP10 Group 7 Configuration	<always off<br=""><always off<="" td=""><td></td><td></td></always></always>		
F1 Help Esc Exit	1/1 Select Item +/→ Select Item	F5/F6 Change Values Enter Select ▶ SubMenu	F9 Setup Defaults F10 Save and Exit
Advanced		ydeH20 Setup Utility	Rev. 5.0

Advanced UART Port 1 Configuration (REAd-) Peripheral Type REAd-> Peripheral Type REAd-> Peripheral Type REAd->		Insyd	leH20 Setup Utility		Rev. 5.0
UNR1 Port 1       Cnabled>         Base 1/0 Address       -3F8h>         Interrupt       -1R04>         Peripheral Type       -485232>         Peripheral Type       -88232>         R222	Advanced				
Base 1/0 Address < 378h> Interrupt < 1804> Peripheral Type <85232> R\$452 R\$422 R\$465 r\$1 letp 1/1 Select Ites F5/F6 Change Values F9 Setup Defaults	UART Port 1 Configuration			Choose Port Mode	
F1 Help 1/4 Select Item F5/F6 Change Values F9 Setup Defaults	Base 1/0 Address Interrupt	<3F8h> <1RQ4>			
F1 Help 1/4 Select I ten F5/F6 Change Values F9 Setup Defaults		R	<b>19232</b> 19422		
F1 Help 1/4 Select Item F5/F6 Change Values F9 Setup Defaults					
F1 Help 1/4 Select Item F5/F6 Change Values F9 Setup Defaults					
	F1 Help Esc Exit	1/↓ Select Item +/+ Select Item	F5/F6 Change Values Enter Select ► SubMenu	F9 Setup Defaults F10 Save and Exit	

#### 4.2.2.1 Restore On Power Loss

In Restore On Power Loss, you can setup whether to restore the product automatically when the Power loss.



### 4.2.3 Hardware Monitor

	In	sydeH20 Setup Utility	Rev. 5.
Advanced			
Hardware Monitor			0 : Stop updating 1-15: Update sensors data per specified
Refresh Cycle	[1]		second
Voltage			
3VCC	3.280 V		
Vcore	1.616 V		
V12S	12.232 V		
V5S 3VSB	5.080 V 3.280 V		
VBAT	3.200 V 3.072 V		
5VSB	5. 160 V		
5450	5. 100 V		
Temperature			
CPU Temperature	31.0 °C/	87.8 °F	
PCH Temperature	31.0 °C/	87.8 °F	
Fan Speed			
CPU Fan Speed	N/A		
F1 Help	1/↓ Select Item	F5/F6 Change Values	F9 Setup Defaults
Esc Exit	+/+ Select Item	Enter Select ► SubMenu	F10 Save and Exit

# 4.2.4 PCH-IO Configuration

Advanced	Ins	sydeH20 Setup Utility	Rev. 5.0
PCH-10 Configuration			PCI Express Configuration settings
▶PCI Express Configuration ▶SATA Configuration ▶USB Configuration			
F1 Help Esc Exit	1/↓ Select Item +/→ Select Item	F5/F6 Change Values Enter Select ► SubMenu	F9 Setup Defaults F10 Save and Exit

BIOS Setting	Description	Setting Option	Effect
PCI Express	PCI Express clock gating enable/disable for	Enter	Opens sub-menu
Configuration	each root port.		
SATA And RST	Enable/ Disable SATA device	Enter	Opens sub-menu
Configuratuion			
USB Configuration	Selectively enable/ disable the	Enter	Opens sub-menu
	corresponding USB port from reporting a		
	Device Connection to the controller.		

### 4.2.5 PCI Express Configuration

Advanced Advanced			
PCI Express Configuration			Enable/Disable PCH PCI Express Clock Gating (Power Management) For Each Root
PCH PCI Express Clock Gating	<platform-por< td=""><td></td><td>Port.</td></platform-por<>		Port.
PPCIe RP#1 (PCIe O Single-VC) PPCIe RP#2 (PCIe O Single-VC) PPCIe RP#3 (PCIe O Single-VC) PPCIe RP#4 (PCIe O Single-VC) PPCIe RP#5 (PCIe 1 Hulti-VC)			
PCIe RP#6 (PCIe 2 Multi-VC) PCIe RP#7 (PCIe 3 Multi-VC)	Lane configur	red as USB/SATA/UFS	
PCIE clocks			
	Select Item Select Item	F5/F6 Change Values Enter Select ▶ SubMenu	F9 Setup Defaults F10 Save and Exit

### 4.2.6 SATA and RST Configuration

InsydeH20 Setup Utility Advanced				
SATA Configuration		Er	nable/Disable SATA Device.	
SATA Controller(s) SATA Mode Selection	<enabled> <ahcl></ahcl></enabled>			
Serial ATA Port O Software Preserve Port O Serial ATA Port 1 Software Preserve Port 1	<enabled> Unknown Empty <enabled> SUPPORTED TH2S3134N-064</enabled></enabled>	G (64.0GB)		
F1 Help Esc Exit	1/↓ Select Item +/→ Select Item	F5/F6 Change Values Enter Select ► SubMenu	F9 Setup Defaults F10 Save and Exit	

# 4.2.7 USB Configuration

InsydeH20 Setup Utility			Rev. 5.0
Advanced			
USB Configuration			Selectively Enable/Disable the corresponding USB port from reporting a
USB Port Disable Override	<disable></disable>		corresponding USB port from reporting a Device Connection to the controller.
F1 Help Esc Exit	1/↓ Select Item +/→ Select Item	F5/F6 Change Values Enter Select ► SubMenu	F9 Setup Defaults F10 Save and Exit

### 4.2.8 Power & Performance

Advanced	Ins	ydeH20 Setup Utility		Rev. 5.0
Power & Performance			CPU - Power Management	Control Options
►CPU - Power Management	Control			
				R
F1 Help	1/1 Select Item	F5/F6 Change Values	F9 Setup Defa	ilts
Esc Exit	+/+ Select Item	Enter Select 🕨 SubMenu	F10 Save and Ex	it

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

Advanced					
CPU - Power Management Co Boot performance mode	ontrol	<max non-turbo="" perfo<="" th=""><th></th><th>Select the performance BlOS will set starting</th><th></th></max>		Select the performance BlOS will set starting	
Intel(R) SpeedStep(tm) Intel(R) Speed Shift Tech Turbo Mode	hno logy	<enabled> <enabled> <enabled> <enabled></enabled></enabled></enabled></enabled>	1 III 01 ILE >		
			ß		
F1 Help Esc Exit	1/↓ Select +/+ Select		F5/F6 Change Values Enter Select ► SubMenu	F9 Setup Defai F10 Save and E	

BIOS Setting	Description	Setting Option	Effect
Boot Performance	Configure Boot	-Max non-turbo	Select the performance state
Mode	Performance Mode	performance	that the BIOS will set starting
	parameters	-Max battery	from reset vector
		-Turbo Performance	
Intel SpeedStep (ta)	Configure Intel	Enabled/ Disabled	Allows more than two
	SpeedStep (ta)		frequency ranges to be
	parameters		supported
Intel Speed Shift	Configure Intel Speed	Enabled/ Disabled	Enable/ Disable Intel Speed
Technology	Shift Technology		Shift Technology support.
	parameters		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
C states	Enable or disable C states	Enabled/ Disabled	Enable/ Disable CPU Power Management. Allows COU to go to C states when it is not 100% utilized
Custom P-state Table	Configure Custom P- state Table parameters	Enter	Enters sub-menu
-Number of P-states	Select the number of custom P-states.	[Number]	Set the number of custom P- states. At least 2 states must be present

# 4.2.9 System Agent (SA) Configuration

Advanced	Insyd	leH20 Setup Utility	Rev.
System Agent (SA) Configurat	ion		Graphics Configuration
VT-d	Supported		
▶Graphics Configuration VI-d	<enab led=""></enab>		
F1 Help Esc Exit	1/↓ Select Item +/→ Select Item	F5/F6 Change Values Enter Select ▶ SubMenu	F9 Setup Defaults F10 Save and Exit

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

## 4.2.10 Graphics Configuration

Advanced	Insyd	leH20 Setup Utility	Rev. 5
Graphics Configuration			raphics turbo IMON current values
Graphics Turbo IMON Current	[31]	S	upported (14-31)
Aperture Size PSHI SUPPORT DVHT Pre-Allocated DVHT Total Gfx Mem	<256MB> <d i="" led="" sab=""> &lt;60M&gt; &lt;256M&gt;</d>		
Help sc Exit	1/↓ Select Item +/+ Select Item	F5/F6 Change Values Enter Select ► SubMenu	F9 Setup Defaults F10 Save and Exit

BIOS Setting	Description	Setting Option	Effect
Internal Graphics	Internal Graphics settings	Auto Enabled Disabled	Keep IGFX enabled based on the setup options
Aperture Size	Select the aperture size	128MB 256MB 512MB 1024MB 2048 MB	Select the aperture size Note: Above 4MB MMIO BIOS assignment is automatically enabled when selecting 2048MB aperture. To use this feature please disable CSM port

BIOS Setting	Description	Setting Option	Effect
DVMT Pre-Allocated	Select DVMT Pre- Allocated	0M~60M	Select DVMT 5.0 Pre-Allocated (Fixed) Graphic Memory size used by Internal
	Anocateu		Graphic Device
<b>DVMT Total Gfx Mem</b>	Select DVMT Total	256M	Select DVMT 5.0 Total Graphic Memory
	Gfx Mem	128M	size used by the Internal Graphic
		MAX	Device
Gfx Low Power Mode	Select Gfx Low	Enabled/	This option is applicable for SFF only
	Power Mode	Disabled	

## <u>4.2.11 Boot</u>

	lns Boot	sydeH20 Setup Utility	Rev. 5
Boot Type Order USB			
BEV Hard Disk Drive Others			
Hard Disk Drive USB			
1 Help isc Exit	1/↓ Select Item +/→ Select Item	F5/F6 Change Values Enter Select ► SubMenu	F9 Setup Defaults F10 Save and Exit

BIOS Setting	Description	Setting Option	Effect
Boot Type	Boot Type	UEFI Boot Type	Select boot type to Dual type, Legacy type
	configuration		or UEFI type
Quick Boot	Quick Boot	Enabled	Allows InsydeH20 to skip certain tests
	configuration	Disabled	while booting. This will decrease the time
			needed to boot the system
Quiet Boot	Quiet Boot	Enabled	Disable or enable booting in text Mode.
	configuration	Disabled	
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 Order	Boot Type Order	Enter	Opens sub-menu

## 4.2.12 Boot Type Order

		InsydeH20 Setup Utility		Rev.
Main Advanced Security	Power Boot Exit			
			Select boot type to Dual 1	ype. Legacy
oot Type	<uef bo<="" i="" td=""><td>oot Type&gt;</td><td>type or UEF1 type</td><td></td></uef>	oot Type>	type or UEF1 type	
wick Boot	<enabled< td=""><td>Þ</td><td></td><td></td></enabled<>	Þ		
uiet Boot	<disable< td=""><td>ed&gt;</td><td></td><td></td></disable<>	ed>		
etwork Stack	<disable< td=""><td>ed&gt;</td><td></td><td></td></disable<>	ed>		
XE Boot capability	<disable< td=""><td>ed&gt;</td><td></td><td></td></disable<>	ed>		
CPI Selection	<acp 1<="" 6.="" i="" td=""><td></td><td></td><td></td></acp>			
ISB Boot	<enabled< td=""><td></td><td></td><td></td></enabled<>			
FI Device First	<enabled< td=""><td>Þ</td><td></td><td></td></enabled<>	Þ		
IEFI OS Fast Boot	<enabled< td=""><td></td><td></td><td></td></enabled<>			
USB Hot Key Support	<enabled< td=""><td>Þ</td><td></td><td></td></enabled<>	Þ		
imeout	[3]			
utomatic Failover	<enabled< td=""><td>Þ</td><td></td><td></td></enabled<>	Þ		
1 Help scExit	1/↓ Select Item +/→ Select Item	F5/F6 Change Values Enter Select ► Subhenu	F9 Setup Defaults F10 Save and Exit	

BIOS Setting	Description	Setting Option	Effect
Hard Disk Type	Hard Disk Type configuration	Enter	Opens Sub-menu
Others	Other configuration	Enter	Opens Sub-menu

### 4.2.13 Security

		) Setup Utility	Rev. 5.0
Main Advanced Security Power E	Boot Exit		
Current TPM Device TPM State TPM Active PCR Hash Algorithm TPH Hardware Supported Hash Algorith BIOS Supported Hash Algorithm TrEE Protocol Version TPM Availability TPM Operation Clear TPM Supervisor Password User Password Set Supervisor Password Set User Password Set All Hdd Password			TrEE Protocol Version: 1.0 or 1.1
Set All Master Hdd Password ▶Storage Password Setup Page			
	Select Item Select Item	F5/F6 Change Values Enter Select ► SubMenu	F9 Setup Defaults F10 Save and Exit

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

### 4.2.14 Power

Main Advanced Securi	InsydeH20 Set	up Utility Rev. 5.0
Wake on PHE Auto Wake on S5	<enabled> <disabled></disabled></enabled>	Determines the action taken when the system power is off and a PCI Power Hanagement Enable wake up event occurs.
F1 Help Esc Exit		/F6 Change Values F9 Setup Defaults ter Select ▶ SubHenu F10 Save and Exit

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

## <u>4.2.15 Exit</u>

Main Advanced Security	In Power Boot Exit	sydeH20 Setup Utility	Rev.
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 change
F1 Help Esc Exit	1/↓ Select Item +/+ Select Item	F5/F6 Change Values Enter Select ► SubMenu	F9 Setup Defaults F10 Save and Exit

# 4.3 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** on the external USB keyboard to initiate the Recovery Wizard.
- 3. The following screen shows the Recovery Wizard. Click **Recovery** button to continue.

Recovery Wizard
Click <b>" Recovery "</b> to restore your system. WARNINGI The process will clear all of your data.
If you do not want to restore your system please press " <b>Quit</b> " to reboot. Quit

- 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. During the recovery process, a command prompt will show up to indicate the percent of recovery process complete.
- 6. After the recovery process to complete, please restart your computer manually.

# **Chapter 5: Driver Installation**

This chapter contains driver installation guide. Follow the instructions below to complete the installation. You will quickly complete the installation. This chapter provides instructions on how to install drivers on the IE32 3.5" SBC.

# 5.1 Chipset Driver

Follow instructions below to install Chipset driver.

 Open the Driver (Download from Winmate Download Center) and select Chipset driver. When installation window will pop up, select Next.

Intel(R) Chipset Device Software Welcome	(intel)
You are about to install the following product: Intel(R) Chipset Device Software It is strongly recommended that you exit all programs before continu	ing.
Press Next to continue, or press Cancel to exit the setup program.	
Next	Cancel

2. Select Accept to agree with the terms of license agreement.



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



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



## **5.2 Graphic Driver**

Follow instructions below to install Graphic driver.

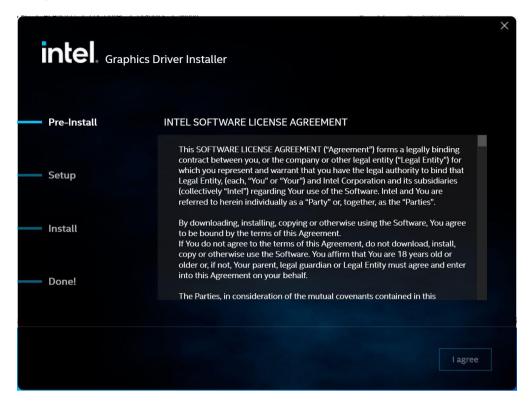
1. Open the Driver (Download from Winmate Download Center) and select **Graphic** driver.

1	This P	C > ALAN (D:) > ELK_Driver > Graphi	cs ≯ win64	ٽ ×		
🖈 Quick access	[	Name	Date modified	Туре	Size	
Desktop	*	Graphics	1/17/2023 1:52 AM	File folder		
Downloads	*	installation_readme	4/3/2022 9:43 PM	Text Document	11 KB	
		🥶 Installer	4/3/2022 9:57 PM	Application	88,620 KB	
Documents	*	license	4/3/2022 9:57 PM	Text Document	37 KB	
Pictures	A	readme	4/3/2022 9:43 PM	Text Document	569 KB	
This PC						

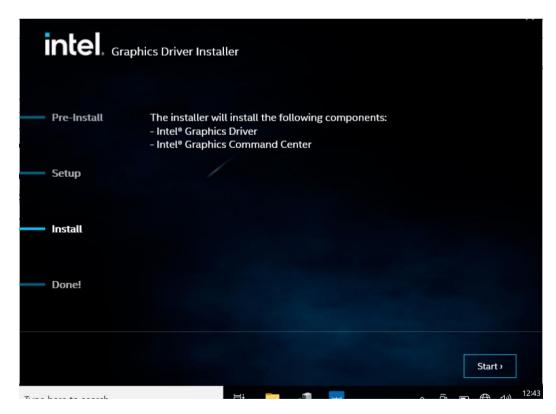
2. Installation window will pop up, select Begin installation.



3. Select I agree.



4. Select Start to install the Driver.



5. After installation is completed, click Finish.

intel. Grap	hics Driver Installer v1.0.610.0		×
Pre-Install	Installation complete!		
Setup			
Install			
Done!	<u>Show details</u>		
		Optional reboot	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 ME driver.

L I I I I I I I I I I I I I I I I I I I	Share		lication Tools Manage	ME Software In	staller			- 0	×
Pin to Quick Copy access	Paste	Cut Copy path Paste shortcut	Move to •		New folder New	Propertie	Edit Edit Open	Select all Select none Invert selection Select	on
← → • ↑ [	« In	tel Management E	ngine Driver(Ka.	> ME Softwa	re Installer	5 v	Search ME S	Software Installer	,p
📌 Quick access	*	Name	^ Ver.dll		Date modified 11/21/2017 11 11/21/2017 11	I:12 A	Type Application extent (ML Document		
Downloads	*	M SetupME			11/21/2017 11		Application	75,094 K	
Pictures IntelNic In	*		Size:	Application 73.3 MB modified: 11/21/	2017 11:31 AM				
Network 3 items 1 item set									8==

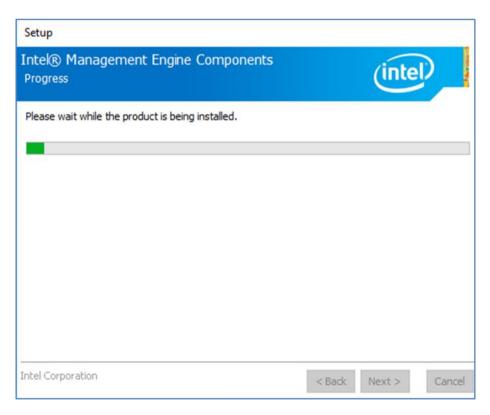
2. Select **Next** to start the installation.

Setup		×
Intel® Management Engine Components Welcome	(intel)	
You are about to install the following product:		
Intel® Management Engine Components 11.7.0.1058		
It is strongly recommended that you exit all programs before cont Click Next to continue, or click Cancel to exit the setup program.	inuing.	
Intel Corporation <	Back Next > Car	ncel

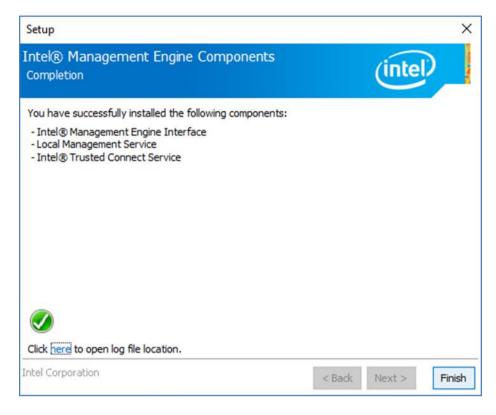
3. Select **Next** to agree with the terms of license agreement.



4. Wait for the driver to be installed.



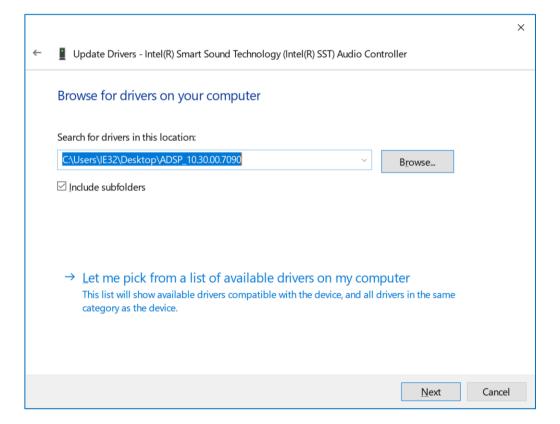
5. When installation completed, select **Finish** complete installation.



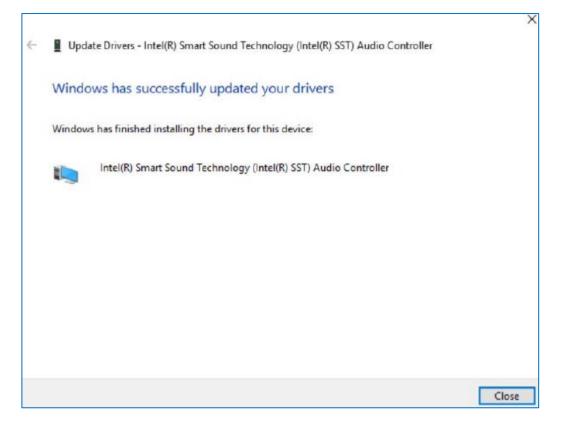
## 5.4 SST Driver

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:

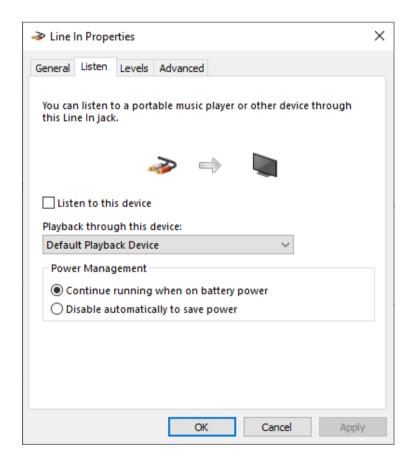
This product is equipped with SST Driver, when the line-in function of Audio is used, the product will automatically enter D3 sleep mode. To solve this problem, you must enter the line in setting and turn on the sync output. When the sync output setting is turned on, the line-out will output the sound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

Sound  $\times$ Playback Recording Sounds Communications Select a recording device below to modify its settings: Microphone 2- Realtek High Definition Audio(SST) Not plugged in Line In 2- Realtek High Definition Audio(SST) Default Device Stereo Mix 2- Realtek High Definition Audio(SST) Disabled Configure Set Default Properties

Step 2:

Step 1:



OK

Cancel

Apply

## 5.5 Audio Driver

Follow instructions below to install Audio driver.

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

L	Share		ication Tools Manage	Realtek High De	finition Driver 6	4bit V6.0.1.8036(R281)	- D ×	< ?
access	Paste	✓         Cut           Image: Copy path           Image: Paste shortcut	← Move to ▼	➤ Delete ▼ ■ Rename anize	New New folder New	Properties • Open • Open	Select all Select none Invert selection	
$\leftarrow \rightarrow \checkmark \uparrow$		ıdio → Realtek Hig					tek High Definitio P	
Quick access	*	Name	^	81_Win10_R281	Date modifier 3/26/2017 7:4	d Type	Size 212,455 KB	
Desktop	*							
Documents	*							
Pictures	*							
IntelNic								
i OneDrive								
💻 This PC								
RDVD (D:)								
Driver								
i Network 💣								
1 item 1 item sele	cted 2	07 MB						

2. Select Next to continue.



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



## **5.6 Ethernet Driver**

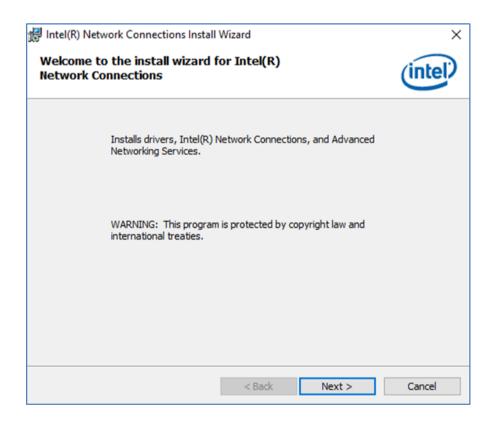
Follow instructions below to install LAN driver.

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

-> ~ 🛧 📕	This PC	C > ALAN (D:) > Driver > IAD70 Driver	> 27_2_1 > 27_2_1	ٽ ×		
Quick access		Name	Date modified	Туре	Size	
Desktop	*	APPS	4/27/2022 9:45 AM	File folder		
Downloads	*	DDP_Profiles	4/27/2022 9:45 AM	File folder		
		DOCS	4/27/2022 9:45 AM	File folder		
Documents	*	NVMUpdatePackage	4/27/2022 9:50 AM	File folder		
Pictures	A	PRO40GB	4/27/2022 9:51 AM	File folder		
Graphics sop		PRO1000	4/27/2022 9:52 AM	File folder		
This PC		PRO2500	4/27/2022 9:52 AM	File folder		
a misi c		PROAVF	4/27/2022 9:53 AM	File folder		
Network		PROCGB	4/27/2022 9:53 AM	File folder		
		PROXGB	4/27/2022 9:53 AM	File folder		
		RDMA	4/27/2022 9:54 AM	File folder		
		3rd_party_licenses	1/5/2022 3:46 AM	Text Document	18 KB	
		3rd_party_licenses_BSD	1/5/2022 3:46 AM	Text Document	8 KB	
		3rd_party_licenses_GPL	1/5/2022 3:46 AM	Text Document	30 KB	
		3rd_party_licenses_tools	1/5/2022 3:46 AM	Text Document	11 KB	
		📕 Autorun	4/4/2022 1:29 PM	Application	122 KB	
		Autorun.exe.config	4/4/2022 1:29 PM	CONFIG File	2 KB	
		Autorun	4/4/2022 1:29 PM	Configuration settings	1 KB	
		index 🦉	3/29/2022 4:28 PM	HTML Document	2 KB	
		eqaldis	1/5/2022 3:46 AM	HTML Document	1 KB	

Intel® Network Connections	63534 - 2012253823976838	×
intel Network	Connections	
	Install Drivers and Software	
	View User Guides	
	View Release Notes	
Networking at Intel.com		Version: 27.2.1.0

2. When compression is complete, select Next.



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

🛃 Intel(R) Network Connections Install	l Wizard	×
License Agreement Please read the following license agree	ement carefully.	intel.
SOFTWARE	LICENSE AGREEM	ENT
This LIMITED DISTRIBUTION LICENSI between You and Intel Corporation		
the Materials. If You are accepting t with Your work for Your employer, authority to bind your employer to using the Materials, You agree to the Materials and destroy all copies.	You represent and warran this Agreement. By downl	t that You have the oading, installing, or
with Your work for Your employer, authority to bind your employer to using the Materials, You agree to th	You represent and warran this Agreement. By downl	t that You have the oading, installing, or
with Your work for Your employer, authority to bind your employer to using the Materials, You agree to th Materials and destroy all copies.	You represent and warran this Agreement. By downl hese terms. If You do not a	t that You have the oading, installing, or gree, do not use the
with Your work for Your employer, authority to bind your employer to using the Materials, You agree to th Materials and destroy all copies. 1. DEFINITIONS.	You represent and warran this Agreement. By downl hese terms. If You do not a ling but not limited to, whe ment	t that You have the oading, installing, or gree, do not use the

4. Select the program you want to install and select Next.

Intel(R) Network Connections Install Wizard			X
Setup Options Select the program features you want installe	ed.		intel.
Install:			
Device drivers			
Feature Description			-
	< Back	Next >	Cancel

5. Confirm the installation, select **Install** to start the installation.

掃 Intel(R) Network Connections Install Wizard	×
Ready to Install the Program	
The wizard is ready to begin installation.	e
Click Install to begin the installation.	
If you want to review or change any of your installation settings, click Back. Click Cancel exit the wizard.	to
< Back Install Cano	el

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

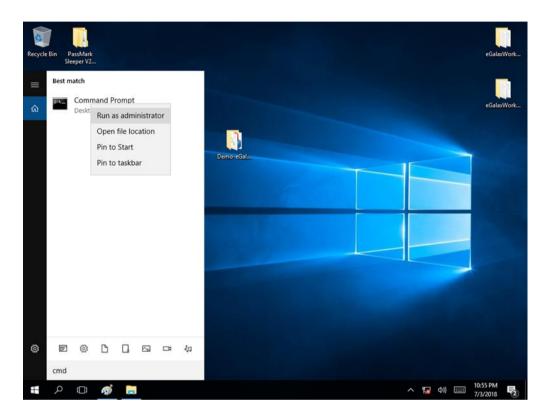
Intel(R) Network Connections Install V	Vizard	×
Install wizard Completed		intel.
A shortcut has been created in the S desired. To access new features, lau from the Start Menu.		
Additional Options:	Configuration Utility	
	< Back Finish	Cancel

## 5.7 Watchdog Driver

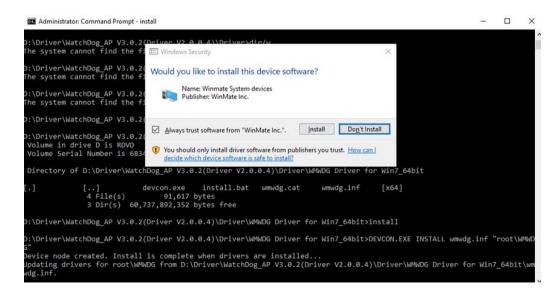
For more details about Winmate Watchdog, please download Watchdog Guide from Winmate Downloads Center:

Follow instructions below to install Watchdog driver.

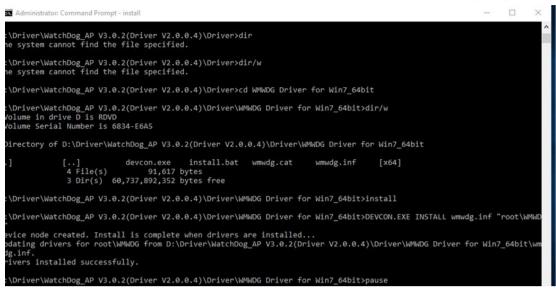
- 1. Type "cmd" in the run box then the cmd.exe will appear in programs.
- 2. Right click on the cmd.exe and click on "Run as administrator" to start Open the Driver (Download from Winmate Download Center) and select Watchdog driver.



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



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



5. Open the Driver and select Watchdog AP.

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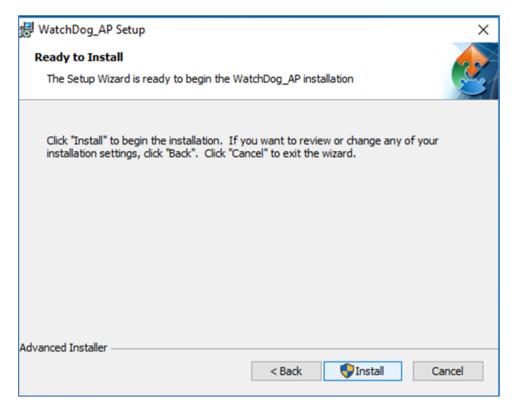
6. Select Next.



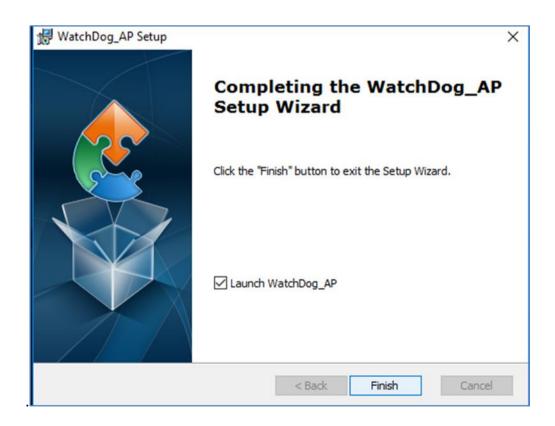
7. The installed storage location is displayed, select **Next** to continue.

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Advanced Installer			
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8. Select **Next** to start the installation.



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

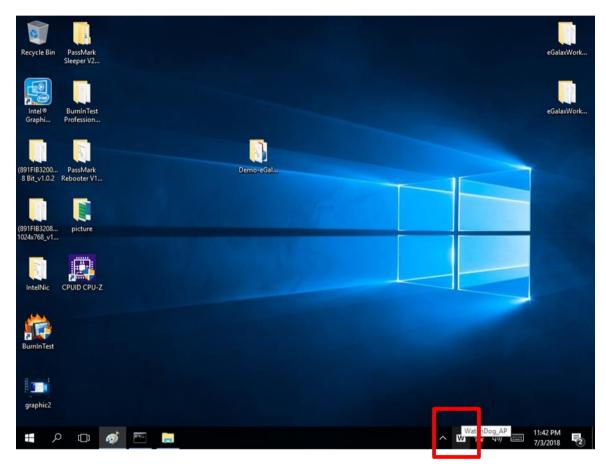


## 5.8 How to Enable Watchdog

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. Refer to the User Manual for more details.

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. lick <sup>W</sup> icon to open Watchdog utility.

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



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

### 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.

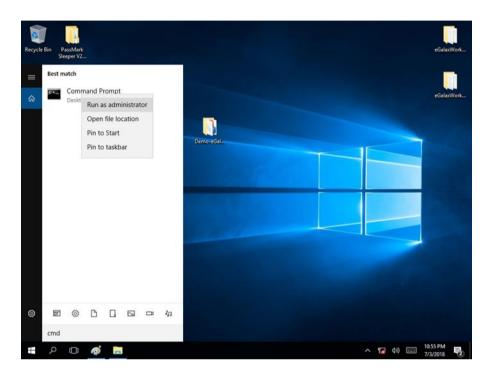
Every 9 min watchdog timer will be reset to 10

## **5.9 Digital IO Driver**

For more details about Winmate Watchdog, please download Digital IO Guide from Winmate Downloads Center:

Follow instructions below to install **Digital IO** 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 and select Digital IO 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.

Administrator: Command Prompt	-	х
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Directory of D:\Driver\WMDIO APP v1.0.0.3\Driver\5.0.6.0\WMDIO Driver for Win7_64bit		
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D:\Driver\WHDIO APP v1.0.0.3\Driver\5.0.6.0\₩HDIO Driver for Win7_64bit>pause Press any key to continue		
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### 6. Open the Driver and select **Digital IO AP**.

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# 5.10 Resistive Touch Driver for Windows 11 System

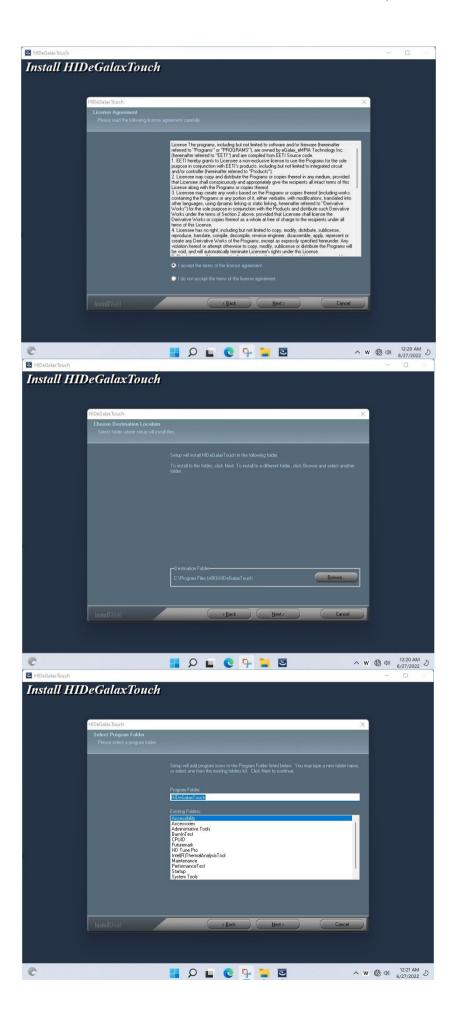
Follow the instructions below to install the touch driver.

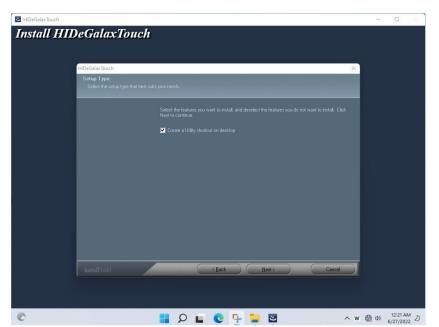
1. Click setup

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		isetup.iss	5/8/2018 4:11 AM	ISS File
> 📮 This PC		📄 setup	9/6/2018 3:39 AM	Text Document
> 🖆 Network		uninstall.iss	9/6/2018 3:06 AM	ISS File
		xHidAuto4Pts	5/25/2020 1:16 AM	Application

#### 2. Click Next to continue

HIDeGalaxTouch		- 0	×
Install HID	DeGalaxTouch		
1	HIDeGalaxTouch X		
	Welcome to the InstallShield Wizard for HIDeGalaxTouch		
	The Instal/Shield Wizard will install HIDeGalaxTouch on your computer. To continue, click Next.		
	InstallShield (Book Dents) Cancel		
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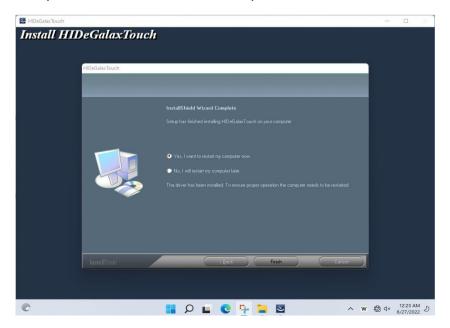




3. Click Yes to add this controller

HIDeGalaxTouch	- 0	
Install HIDeGalaxTouch HIDeGalarTouch Setup Status		
HD/BCidexTouch is configuring your new software instabilion.		
		M D

4. Restart the computer now and finish the setup.



## **Chapter 6: Mounting**

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

### WARNING! / AVERTISSEMENT!



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.

## 6.1 Cable Mounting Considerations

For a nice look and safe installation, make sure cables are neatly hidden behind the Panel PC device. Refer to Chapter 2, section 2.2 for the Cable Installation instruction.



### WARNING! / AVERTISSEMENT!

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.

### WARNING! / AVERTISSEMENT!



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.

## **6.2 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.

## 6.3 Mounting Guide

G-WIN Slim IP65 (P-CAP) devices come with different mounting options suitable for most of the industrial and commercial applications, including heavy duty and agricultural vehicles, forklifts. The main mounting approach is VESA mounting - 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.

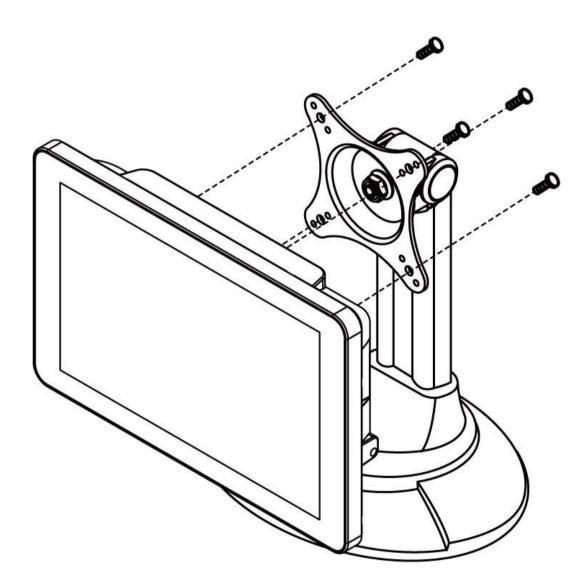
### 6.3.1 VESA Mounting

This device supports VESA Mounting and provides various types of mounting options to fit any industrial use or vehicle.

Size	VESA Plate
10.1", 10.4", 12.1"	75x75 mm
10.4", 15"	100x100 mm

### **Mounting Instruction**

Use Philips M4x5 screws to fix the desk stand to VESA holes on the back cover of the device.

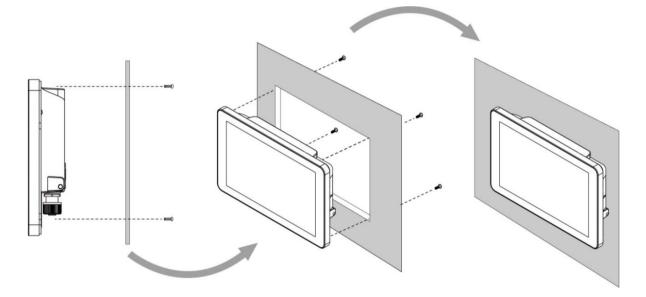


\*The picture is for demonstration purposes only. VESA Mounting accessories are not supplied by Winmate.

## 6.3.2 Panel Mounting

Panel Mount mounting solutions is suitable for many applications where Panel PC should be embedded. With this mounting solution flat surface leave no bezel in the front.

Size	Wall Cutout, mm	Screw Hole Diameter, mm
10.1"	250 x 159	M4x4
10.4"	230 x 178	M4x4
12.1"	282 x 207	M4x4
15"	346.5 x 261	M6x4



#### **Mounting Instructions:**

- 1. Prepare a fixture for the specific dimensions of the device.
- 2. Cut a hole on a sub frame or panel according to the cutout dimensions.
- 3. Install the device properly onto the cutout area of the sub frame or panel with the sides of the front bezel.
- 4. Fix the device to fixture with eight Phillips M3x4 screws.

# **Chapter 7: Technical Support**

Winmate® provides Software Development Kit (SDK). The table below lists SDK provided by Winmate for Winmate® G-WIN Slim IP65 with P-CAP Panel PC with Intel® Celeron® N6211 processor:

## 7.1 Drivers

The list of drivers available for the G-WIN IP65 Panel PC IE32 SBC:

Item	Driver
1	Chipset Driver
2	Graphic Driver
3	ME Driver
4	SST Driver
5	Audio Driver
6	Ethernet Driver
7	Watchdog Driver/AP
8	Digital IO Driver/AP
9	Windows 11 Resistive Touch Driver

To find the Drivers, please download them from the Download Center in our website or contact us.

# 7.2 Software Development Kit (SDK)

The list of SDK available for G-WIN IP65 Panel PC IE32 SBC:

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

To find the SDK, please download them from the Download Center in our website or contact us.

# **Appendix A: Product Specifications**

### Hardware Specifications

•	Model Name					
	W10IE3S-GSH2	R10IE3S-GST2	R12IE3S-GSM2(HB)	R15IE3S-GSC3(HB)		
Display						
Size/Type	10.1" TFT (Widescreen)	10.4"	12.1" TFT	15" TFT		
Resolution	1280 x 800	1024 x 768	1024 x 768	1024 x 768		
Brightness	350 nits (Optional 1000 nits)	350 nits (Optional 1000 nits)	500 nits (Optional 1000 nits)	300 nits (Optional 1000 nits)		
Contrast Ratio	800:1 (typ.)	1200:1 (typ.)	700:1 (typ.)	2000:1 (typ.)		
Viewing Angle	-75~80(H); -80~80(V)	-80~88(H); -80~88(V)	-85~89(H); -85~89(V)	-88~88(H); -88~88(V)		
Max. Colors	16.7M	16.2M	16.7M	16.2M (8-bit)		
Touch	Projected Capacitive	Projected Capacitive	Projected Capacitive	Projected Capacitive, Protection Glass (Optional)		
System						
Processor	Intel ® Celeron® Elkhart Lake N6211 (up to 3.0 HZ) Intel ® Celeron® Elkhart Lake N6210 (up to 2.6 GHZ)					
System Memory	SO-DIMM,DDR4 3200MHZ 4GB, 8GB(Optional), 16GB(Optional)					
Storage	M.2 2242 B-Key SSD 128GB M.2 2242 B-Key SSD up to 512GB(Optional) SATA III for 2.5" SSD up to 1TB(Optional)					
LAN	1 x LAN-10/ -100/ -1000 (M12 type)					
Operating SystemWindows 11 IoT Enterprise (64bit) (Optional) Windows 11 pro 64 bit (Optional) Windows 10 IoT Enterprise (64bit)(Optional) Linux Ubuntu 22.04 (Optional)						
Input/Output						
COM Port 1 x RS232/422/485 ( Default RS232) (M12 type)						
USB Port	JSB Port 1 x USB 2.0 (M12 type)					
Ethernet 2 x Intel® Ethernet ControleIr						
Speakers     2 x 2W speakers						

	Model Name						
	W10IE3S-GSH2	R10IE3S-GST2	R12IE3S-GSM2(HB)	R15IE3S-GSC3(HB)			
Power Specifications							
Power Input	9-36V DC(M12 type)	12V DC(M12 type)	9-36V DC(M12 type)	9-36V DC(M12 type)			
Mechanical Specifications							
Cooling System Fanless Design							
Mounting VESA Mount, Panel Mount							
Environment Considerations							
IP Rating	Full IP65						
Shock Operation	40g for 11 ms						
Vibration Operation	1.48/1.98/2.24g rms for XYZ/5-500 Hz	1.48/1.98/2.24g rms for XYZ/5-500 Hz	1.48/1.98/2.24g rms for XYZ/5-500 Hz	1.48/1.98/2.24g rms for XYZ/5-500 Hz			



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