

ATEX Panel PC

R19IHAT-66EX-T for ATEX Zone II and C1D2



User Manual

Document Version 1.3 Document Part Number: 9171190I10

Please read these instructions carefully before using this product, and save this manual for future use.

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Preface

Copyright Notice

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Warranty

Our warranty 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 its option, repair or replace the defective product at no charge to the customer, provided it is returned during the warranty period of one year, with transportation charges prepaid. The returned product must be properly packaged in the 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 1W20Axxxxxxx means October of year 2020.

Customer Service

We provide service guide for any problem as follow 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 have the following information ready before you call:

- Product serial number
- Peripheral attachments
- 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. Please do not hesitate to call or e-mail us.

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 la 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!

Â

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.

Débranchez toujours complètement le cordon d'alimentation de votre châssis chaque fois que vous travaillez avec le matériel. N'effectuez pas de connexions lorsque l'appareil est sous tension. Les composants électroniques sensibles peuvent être endommagés par des surtensions soudaines. Seul le personnel électronique expérimenté doit ouvrir le châssis du PC.

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. Mettez-vous toujours à la terre pour éliminer toute charge statique avant de toucher la carte CPU. Les appareils électroniques modernes sont très sensibles aux charges d'électricité statique. Par mesure de sécurité, utilisez toujours un bracelet antistatique avec mise à la terre. Placez tous les composants électroniques dans une surface antistatique ou un sac antistatique lorsqu'ils ne sont pas dans le châssis.

Safety Precautions

- Please read these safety instructions carefully. Veuillez lire attentivement ces consignes de sécurité.
- Please keep this user's manual for later reference. Veuillez conserver ce manuel d'utilisation pour référence ultérieure.
- Please disconnect this equipment from any AC outlet before cleaning. Do not use liquid or spray detergents for cleaning. Use a damp cloth.
 Veuillez débrancher cet équipement de toute prise secteur avant de le nettoyer. N'utilisez pas de détergents liquides ou en spray pour le nettoyage. Utilisez un chiffon humide.
- Do not touch the LCD panel surface with sharp or hard objects. Ne touchez pas la surface du panneau LCD avec des objets pointus ou durs.
- For pluggable equipment, the power outlet must be installed near the equipment and must be easily accessible.

Pour les équipements enfichables, la prise de courant doit être installée à proximité de l'équipement et doit être facilement accessible.

- Keep this equipment away from humidity. Conservez cet équipement à l'abri de l'humidité.
- Place this equipment on a reliable surface during installation. Dropping it or letting it fall could cause damage.

Placez cet équipement sur une surface fiable pendant l'installation. Le faire tomber ou le laisser tomber pourrait causer des dommages.

• The openings on the enclosure are for air convection. Protect the equipment from overheating. DO NOT COVER THE OPENINGS.

Les ouvertures sur l'enceinte sont pour la convection d'air. Protégez l'équipement contre la surchauffe. NE PAS COUVRIR LES OUVERTURES.

• Make sure the voltage of the power source is correct before connecting the equipment to the power outlet.

Assurez-vous que la tension de la source d'alimentation est correcte avant de connecter l'équipement à la prise de courant.

• Position the power cord so that people cannot step on it. Do not place anything over the power cord.

Positionnez le cordon d'alimentation de manière à ce que personne ne puisse marcher dessus. Ne placez rien sur le cordon d'alimentation.

- All cautions and warnings on the equipment should be noted. Toutes les mises en garde et avertissements sur l'équipement doivent être notés.
- If the equipment is not used for a long time, disconnect it from the power source to avoid damage by transient over-voltage.

Si l'équipement n'est pas utilisé pendant une longue période, débranchez-le de la source d'alimentation pour éviter les dommages causés par une surtension transitoire.

- Never pour any liquid into an opening. This could cause fire or electrical shock.
 Ne versez jamais de liquide dans une ouverture. Cela pourrait provoquer un incendie ou un choc électrique.
- Never open the equipment. For safety reasons, only qualified service personnel should open the equipment.

Ne jamais ouvrir l'équipement. Pour des raisons de sécurité, seul le personnel de service qualifié doit ouvrir l'équipement.

• This equipment is designed to be used in restricted access location. Only service persons or trained persons are allowed to access this equipment.

Cet équipement est conçu pour être utilisé dans un endroit à accès restreint. Seules les personnes de service ou les personnes formées sont autorisées à accéder à cet équipement.

- If any of the following situations arises, get the equipment checked by service personnel: Si l'une des situations suivantes survient, faites vérifier l'équipement par le personnel de service:
 - The power cord or plug is damaged.
 - Le cordon d'alimentation ou la prise est endommagé.
 - Liquid has penetrated into the equipment.
 Du liquide a pénétré dans l'équipement.
 - The equipment has been exposed to moisture.
 L'équipement a été exposé à l'humidité.
 - The equipment does not work well, or you cannot get it to work according to the user's manual.

L'équipement ne fonctionne pas bien, ou vous ne pouvez pas le faire fonctionner conformément au manuel d'utilisation.

The equipment has been dropped and damaged.
 L'équipement est tombé et a été endommagé.

- 7 Preface
 - The equipment has obvious signs of breakage.
 L'équipement présente des signes évidents de casse.
 - Do not leave this equipment in an uncontrolled environment where the storage temperature is below -20°C (-4°F) or above 70°C (158°F). It may damage the equipment. Ne laissez pas ce matériel dans un environnement non contrôlé où la température de stockage est inférieure à -20 ° C (-4 ° F) ou au-dessus de 70 ° C (158 ° F). Il peut endommager le matériel.
 - CAUTION Use recommended mounting apparatus to avoid risk of injury. ATTENTION - Utilisez recommandé appareil de montage pour éviter les risques de blessure.
 - **WARNING** Only use the connection cords which comes along with the product, when in doubt, please contact the manufacturer.

AVERTISSEMENT – Utilisez uniquement les cordons de connexion qui vient avec le produit , en cas de doute , s'il vous plaît contactez le fabricant.

- Provision shall be made to provide transient protection device to be set at a level not exceeding 140% of the rated voltage at the power supply terminals of the apparatus.
 Des dispositions seront prises pour fournir dispositif de protection contre les transitoires à être fixé à un niveau ne dépassant pas 140 % de la tension nominale aux bornes d'alimentation de l'appareil.
- **WARNING** Explosion Hazard Do not disconnect equipment unless power has been switched off or the area is known to be non-hazardous.

AVERTISSEMENT - Risque d'explosion - Ne débranchez pas l'équipement que l'alimentation est coupée ou que la zone est connue pour être non dangereux

- WARNING Explosion Hazard Do not apply any audio connectors in Hazardous Location.
 AVERTISSEMENT Risque d'explosion Ne pas appliquer tous les connecteurs audio dans des environnements dangereux .
- **WARNING** The equipment should be adequately protected from direct light when installed indoor or outdoor.

AVERTISSEMENT - L'équipement doit être adéquatement protégé de la lumière directe lors de l'installation intérieure ou extérieure.

- WARNING DO NOT OPEN, MAINTAIN OR SERVICE IN AN AREA WHERE AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT.
 AVERTISSEMENT - NE PAS OUVRIR, maintenir ou SERVICE DANS UN ENDROIT OÙ UNE ATMOSPHERE EXPLOSIVE PEUT ETRE PRESENTE.
- THIS EQUIPMENT IS SUITABLE FOR USE IN CLASS I, DIVISION 2, GROUPS A, B, C, D OR NON-HAZARDOUS LOCATIONS ONLY.
 Cet équipement est utilisable en Classe I, Division 2, Groupes A, B, C, D LIEUX OU non dangereux.
- WARNING EXPLOSION HAZARD SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2;
 AVERTISSEMENT - RISQUE D'EXPLOSION - substitution de composants peut nuire à la conformité Classe I, Division 2;
- WARNING EXPLOSION HAZARD DO NOT REPLACE PARTS UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NON-HAZARDOUS;

AVERTISSEMENT - RISQUE D'EXPLOSION - NE PAS remplacer les pièces que l'alimentation est coupée ou que la zone est connue pour être non dangereux;

- WARNING EXPLOSION HAZARD DO NOT DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NON-HAZARDOUS;
 AVERTISSEMENT - RISQUE D'EXPLOSION - NE PAS déconnecter l'équipement que l'alimentation est Coupée ou la région est connue pour être non dangereux;
- WARNING Do not use USB Port while the hazardous atmosphere is present.
 AVERTISSEMENT Ne pas utiliser le port USB tandis que l'atmosphère dangereuse est présente.

Specific Conditions of Use

- Contradicts IEC 60079-0:2011 clause 8.3 for EPL Gc
- **WARNING** In locations where high external humidity and internal temperature variations (e.g. frequent on-off cycles) may cause condensation inside the equipment, the interior should be periodically inspected.
- When installed, the equipment shall be subjected to an electric strength test using a test voltage of 500 Vac applied between the circuit and earth for 60 s. Alternatively, a voltage of 20% higher may be applied for 1 s. There shall be no evidence of flashover or breakdown and the maximum current flowing shall not exceed 5 mA.
- When the device is mounted in a hazardous area, connection and disconnection of the connectors while live is only permitted if the potentially explosive atmosphere is shown to be absent.
- The "9-36" Vdc rated supply shall be protected such that transients are limited to a maximum of 60Vac or 85 Vdc; no such protection is required for the signal lines.
- When the equipment is installed in a location where the ambient temperature is expected to exceed 55°C, the cable shall have a temperature rating of 85°C minimum.

General Guideline

• It is recommended to reboot the device when some functions are defect or inactive. If it still can't solve the problems, please contact your dealer or agent.

Chapter 1: Introduction

1.1 Overview

Class1 Division2 certification for equipment was created to ensure employee safety in explosive atmospheres. Today many countries have made it a requirement for organizations operating in certain industries to use equipment that meets the regulatory compliance. This includes technologies used in potentially explosive atmospheres. The Winmate 19" HazLoc PPC is the first of its kind to offer the Class1 Division2 certification, ensuring safe and reliable data collection and processing in Hazardous Locations. This Panel PC features robust processing power with the 1.5 GHz Intel Tiger Lake core i5-1145G7E. The panel PC also offers brilliant visibility with its true flat design, transflective sunlight-viewable, projected capacitive touchscreen with 1280 x 1024 pixel resolution, all in a compact form factor.

1.2 Features

- Intel® 11th Tiger Lake Core™ i3/i5/i7
- 19" SXGA High brightness panel, 800 nits (Optional 1000 nits)
- Sunlight readable, transflective, projected capacitive touch LCD panel
- Fanless, streamlined enclosure for highly efficient heat dissipation
- Front side buttons, one dedicated button to enable/disable touch screen interface
- Built to withstand extreme temperatures -40 to 70 deg. C with built in intelligent heater
- 9-36 V DC input with isolation (There is no tolerance for the DC input voltage)
- Operable in 5-95% humidity level

1.3 Package Contents

Before using this Panel PC, please make sure that all the items listed below are present in your package:

Standard Accessories:

Before using this Panel PC, please make sure that all the items listed below are present in your package:



(Optional, Non-Ex type)

Note: All cables are for testing only, **Do Not** use these cables under Hazardous area.

1.4 Product Overview

Front View



1.5 Front Buttons

Front Button & LED Indicators



Button Type	Function
	Power on/off
	Increase the brightness of the Panel
\bigcirc	Decrease the brightness of the Panel
G	Suspend the touch's function temporarily
Fn	Programmable function key configured by Hot Tab Utility

Chapter 2: Getting Started

2.1 Turning ON Your Device

1. Remove the I/O protection cover plate.



2. Connect the Power adapter to the device.

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- 3. Plug the power adapter power cord to an electrical outlet.
- 4. Touch the Power button on the front to turn on the device.



Note:

When the system hangs, press the Reset button to restart the device. Please make sure the unit is grounded to earth before operation

2.2 Adjusting the LCD Display Brightness

Use the OSD membrane buttons on the front bottom side to increase / decrease the display brightness.



2.3 Turning Off Your Device

To shut down your device, do the following: Tap Windows icon **Shut down**.



Wait for your Panel PC to completely turn off before disconnecting the power cord (if necessary).

Chapter 3: Installation

3.1 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.



Caution/ Attention

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.

Ne faites pas passer le câblage de signal ou de communication et le câblage d'alimentation dans le même conduit. Pour éviter les interférences, les fils avec des caractéristiques de signal différentes (c'est-à-dire des interfaces différentes) doivent être acheminés séparément.

- Be sure to disconnect the power cord before installing and/or wiring your device. Assurez-vous de débrancher le cordon d'alimentation avant d'installer et/ou de câbler votre appareil.
- 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.

Vérifiez le courant maximum possible pour chaque calibre de fil, en particulier pour les cordons d'alimentation. Respectez tous les codes électriques dictant le courant maximum autorisé pour chaque calibre de fil.

- If the current goes above the maximum ratings (80 W), the wiring could overheat, causing serious damage to your equipment.
 Si le courant dépasse les valeurs nominales maximales (80 W), le câblage pourrait surchauffer et endommager gravement votre équipement.
- Be careful when handling the unit. When the unit is plugged in, the internal components generate a lot of heat which may leave the outer casing too hot to touch.

Soyez prudent lorsque vous manipulez l'appareil. Lorsque l'appareil est branché, les composants internes génèrent beaucoup de chaleur, ce qui peut rendre le boîtier extérieur trop chaud au toucher.

The unit is available with different pass through glands for cable connections (required to maintain enclosure protection rating). These glands are water and gas tight and must be tightened with a torque described in the gland manufacturer's instructions provided with the unit. Cables must be passed through the glands and wired to the associated I/O connectors.



3.2 Wiring

1. Release the screws to remove the I/O protection cover and twisting the cable gland to increase gland opening for later cable go through



2. I/O cover has been removed and internal I/O ports will be seen.



3. Loosen the cable gland and let the cable go through to connect the internal terminal block connector.



4. Tighten the cable gland and screw the I/O protection cover plate back.



3.3 Pin Assignments

The pin assignments of the connectors are as follows:



VGA Port (Only used in safe area)



Pin No	Signal Name	Pin No	Signal Name
1	R_FILTER	2	G_FILTER
3	B_FILTER	4	NC
5	GND	6	GND
7	GND	8	GND
9	VGA5V	10	GND
11	NC	12	DAC_SDAT0
13	3VHSYNC0	14	3VVSYNC0
15	DAC_SCL0		

COM Port (Only used in safe area)



Pin No	Signal Name	Pin No	Signal Name
1	DCD	2	RXD
3	TXD	4	DTR
5	GND	6	DSR
7	RTS	8	CTS
9	RI		

USB Port (Only used in safe area)

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1	2 3	3 4	1

LAN1 Port (Only used in safe area)



Pin No	Signal Name	Pin	Signal Name
1	VCC	2	D-
3	D+	4	GND

Pin No	Signal Name	Pin No	Signal Name
1	MDI0_IN+	2	MDI0_IN-
3	MDI1_IN+	4	MDI2_IN+
5	MDI2_IN-	6	MDI1_IN-
7	MDI3_IN+	8	MDI3_IN-

Power terminal block



Pin No	Signal Name	Pin No	Signal Name
1	VCC+	2	VCC-
3	GND		

*Power wire for VCC should be AMW 1015 18AWG 600V or above.



To connect the Panel PC to AC power source:

- 1. Plug the DC Plug of AC adapter to the Panel PC DC IN Jack.
- 2. Connect the AC adapter to the power cord.
- 3. Plug the power cord to a working AC outlet. The device will boot automatically.



To connect the Panel PC DC power source:

- 1. Insert the exposed wires of the DC Power Cable to the appropriate connectors on the terminal block plug.
- 2. Plug the terminal block plug firmly to the DC IN Jack.
- 3. Connect the other end of the DC power cable (wires with lug terminals that are labeled "+" and "-" to the terminals of the 9~36V DC Power Source. Ensure that the power connections maintain the proper polarity.



*The wire for GND: Equipotential bonding connection facilities on the outside of electrical equipment shall provide effective connection of a conductor with a cross-sectional area of at least 4 mm², AMW 1015 10AWG 600V is recommended.

COM Port



Pin No	Signal Name	Pin No	Signal Name
1	DCD	2	RXD
3	TXD	4	DTR
5	GND	6	DSR
7	RTS	8	CTS
9	RI	10	+V5

LAN2 Port



Pin No	Signal Name	Cable Color	Pin No	Signal Name	Cable Color
1	MDIO3-	Brown	2	MDIO3+	White/ Brown
3	MDIO2-	White/ Blue	4	MDIO2+	Blue
5	MDIO1-	Green	6	MDIO1+	White/ Green
7	MDIO0-	Orange	8	MDIO0+	White/ Orange

Ethernet connection pin Assignments for T568A

RJ4-45 Pin No.	Wire Color	10BASE-T/100 BASE -T Signal	1000 BASE -T Signal
1	White/Green	Transmit+	BI_DA+
2	Green	Transmit-	BI_DA-
3	White/Orange	Receive+	BI_DB+
4	Blue	Unused	BI_DC+
5	White/Blue	Unused	BI_DC-
6	· Orange	Receive-	BI_DB-
7	White/Brown	Unused	BI_DD+
8	Brown	Unused	BI_DD-

Ethernet connection pin Assignments for T568B.

RJ4-45 Pin No.	Wire Color	10BASE-T/100 BASE -T Signal	1000 BASE -T Signal
1	White/Orange	Transmit+	BI_DA+
2	· Orange	Transmit-	BI_DA-
3	White/Green	Receive+	BI_DB+
4	Blue	Unused	BI_DC+
5	White/Blue	Unused	BI_DC-
6	Green	Receive-	BI_DB-
7	White/Brown	Unused	BI_DD+
8	Brown	Unused	BI_DD-

USB Port



Pin No	Signal Name	Pin No	Signal Name
1	VCC	2	D-
3	D+	4	GND

The external USB cable



Pin No	Signal Name	Cable Color	Pin No	Signal Name	Cable Color
CN1-1	VCC	Red	CN2-1	VCC	Red
CN1-2	D-	White	CN2-2	D-	White
CN1-3	D+	Green	CN2-3	D+	Green
CN1-4	GND	Black	CN2-4	GND	Black

Note:

This adapter was certified by UL, CUL TUV/GS CE, FCC, BSMI, EK, DOIR+C- TICK, CCC, PSE.



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 éteinte avant de connecter ou de déconnecter la prise DC IN.

Chapter 4: Mounting Solution

4.1 Clamp Mount

With the mounting clamps and screws, it provides fast and easy mounting of the 19" Panel PC onto an instrument panel or wall panel

To mount the device to a sub frame or panel, do the following:

- 1. Prepare a customized fixture for the specific dimension of the display unit
- 2. Turn off the device and disconnect the power source and other peripherals
- 3. Cut a hole on the sub frame or panel according to the cut-out dimensions



Cutout dimensions: 462 x 386 mm (W x H)

- 4. Install the device properly onto the cut-out area of the sub frame or panel
- 5. Hook the mounting clamp into the corresponding mounting pair slots of the display. Then fasten the clamp with the included mounting screw to secure its position on the sub frame or panel. Repeat the same procedure for the remaining mounting clamps



4.2 VESA Mount

Dimensions: 100 x 100mm **Screw Hole Diameter**: M4 x 5 mm **Direction:** Compatible with swimming arms mounting kits.



Chapter 5: 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

5.1 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 \uparrow and cursor \downarrow and by pressing <enter>, select the device used for the boot.</enter>
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 SubMenu
<u>↑</u> /↓	Select Item
\leftarrow / \rightarrow	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.

5.2 BIOS Functions

5.2.1 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.

InsydeH20 Setup Utility Rev. 5				
Hain Advanced Security Power Boot Exit				
InsydeH20 Version Processor Type System Bus Speed Cache RAM Total Hemory Speed Controller1 Channel0 SOD1HH0 Platforn Configuration CPUID: CPU Speed: CPU Stepping: Number Of Processors: Hicrocode Rev: GT Info: SHX/TXT: PCH Rev / SKU GOP Ver: Intel ME Version Language System Time System Date	11AT. V004 11th Gen Intr 2.40GHz 100 HHz 2400 HT/s 5120 KB 8192 HB 0x806C1 (Tig 1200 HHz 806C1 (80 Str 4 Core(s) 7 : 00000072 0x9A49 Un-Supported 20 (80 Stepp 17.0.1045 15.0.35.2039 A6 (82 Stepp 4.501 isb 16:49:541 [05/04/2022]	el(R) Core(TH) i5-113567 0 erLake ULT) epping) 8 Thread(s) ing) / TGL PCH-LP U Premium / CONSUMER ing)	Select the current default language used by the InsydeH20.	
Esc Exit	+/+ Select Item	Enter Select ► SubMenu	F10 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];

5.2.2 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.

	Ins	ydeH20 Setup Utility	Rev.
Main Advanced Secu	rity Power Boot Exit		
CDU Configuration		СР	U Configuration
Power & Performance			
System Agent (SA) Co	nfiguration		
PCH-10 Configuration			
PCH-FW Configuration			
SIN F81968			
1 Help	1/↓ 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	Configures Trusted	Enter	Opens submenu
Configuration	Computing parameters		
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 F81866A	Configures SIO F81866A parameters	Enter	Opens submenu
Console Redirection	Configures Console Redirection parameters	Enter	Opens submenu

5.2.2.1 Power & Performance

	In	sydeH20 Setup Utility	Rev. 5.0
Advanced			
Power & Performance			CPU - Power Management Control Options
▶CPU - Power Management Control			
F1 Help	1/1 Select Item	F5/F6 Change Values	F9 Setup Defaults
Esc Exit	+/→ Select Item	Enter Select ► SubMenu	F10 Save and Exit

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

Advanced	InsydeH20 Setup Uti	lity	Rev. 5.0
Advanced CPU - Power Management Control Boot performance mode Intel(R) SpeedStep(tm) Intel(R) Speed Shift Technology Turbo Hode C states	<turbo performance=""> <enabled> <enabled> <enabled> <disabled></disabled></enabled></enabled></enabled></turbo>	Select the performance BIOS will set starting vector.	state that the from reset
F1 Help 1/4 Selec	t Item F5/F6 Ch	ange Values F9 Setup Defau Lect ▶ SubMenu F10 Save and Fa	llts it

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

5.2.2.2 PCH-IO Configuration

	Insyde	20 Setup Utility	Rev. 5.0
Advanced			
Graphics Configuration		Gi	raphics turbo IMON current values unported (14-31)
Graphics Turbo IMON Current	[31]		
Primary Display Select PCIE Card	<auto> <auto></auto></auto>		
Aperture Size DVMT Pre-Allocated DVMT Total Gfx Mem	<20082 <6082 <25682		
F1 Help Esc Evit	1/4 Select Item	F5/F6 Change Values	F9 Setup Defaults F10 Save and Evit

BIOS Setting	Description	Setting Option	Effect
PCI Express	Configure PCI	Enter	Opens sub-menu
Configuration	Express settings		
SATA And RST	Configure SATA And	Enter	Opens sub-menu
Configuration	RST settings		
USB Configuration	Configure USB	Enter	Opens sub-menu
	settings		
State After G3			S0 = Auto power ON
			after power failure
			S5 = Keep power
			OFF after power
			failure

5.2.2.3 SATA and RST Configuration

	Insy	deH20 Setup Utility	Rev. 5.0
Advanced Advanced			
SATA And RST Configuration			Enable/Disable SATA Device.
SATA Controller(s)	<enabled></enabled>		
SATA Mode Selection	<ahc1></ahc1>		
Serial ATA Port O	Empty		
Software Preserve	Unknown		
Port 0	<enabled></enabled>		
Hot Plug	<d i="" led="" sab=""></d>		
Configured as eSATA	Hot Plug sup	ported	
External	<d i="" led="" sab=""></d>		
Spin Up Device	<d i="" led="" sab=""></d>		
SATA Device Type	<hard d<="" disk="" td=""><td>rive></td><td></td></hard>	rive>	
Topology	<unknown></unknown>		
SATA Port O DevSlp	<d i="" led="" sab=""></d>		
DITO Configuration	<d i="" led="" sab=""></d>		
DITO Value	[625]		
DM Value	[15]		
Serial ATA Port 1	Phison SSMP2	56 (256.0GB)	
Software Preserve	SUPPORTED		
Port 1	<enabled></enabled>		
Hot Plug	<d i="" led="" sab=""></d>		
Configured as eSATA	Hot Plug supp	ported	
External	<d i="" led="" sab=""></d>		
Spin Up Device	<d i="" led="" sab=""></d>		
SATA Device Type	<hard d<="" disk="" td=""><td>rive></td><td></td></hard>	rive>	
Topology	<unknown></unknown>		
SATA Port 1 DevSlp	<d i="" led="" sab=""></d>		
DITO Configuration	<d i="" led="" sab=""></d>		
DITO Value	[625]		
DM Value	[15]		
Fl Help	171 Select Item	F5/F6 Change Values	F9 Setup Defaults
Esc Exit	+/→ Select Item	Enter Select 🕨 SubMenu	FIU Save and Exit

5.2.2.4 USB Configuration

	Insyde	H2O Setup Utility	Rev. 5.0
Advanced			
USB Configuration		c r	Selectively Enable/Disable the corresponding USB port from reporting a levice connection to the controller
USB Port Disable Override	<disable></disable>		
F1 Help	↑/↓ Select Item	F5/F6 Change Values	F9 Setup Defaults

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

5.2.2.4.1 State After G3

	Insy	/deH20 Setup Utility	Rev. 5.0
Advanced			
PCH-10 Configuration PPCI Express Configuration PSATA And RST Configuration PUSB Configuration			Specify what state to go to when power is re-applied after a power failure (G3 state).
EFI Network State After G3	«Disabled» «S5 State»	State After G3 S0 State S5 State	
F1 Help	1/↓ Select Item	F5/F6 Change Values	F9 Setup Defaults
Esc Exit	+/→ Select Item	Enter Select ► SubMenu	F10 Save and Exit

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)

5.2.2.5 SIO F81866A

	InsydeH	20 Setup Utility	Rev. 5.
Advanced			
F81968 Chip 1 I/O Configuration Port PUART Port 1 Configuration PUART Port 2 Configuration	4Eh/4Fh	UA	NRT Configuration
PUARI Port 3 Configuration PUARI Port 4 Configuration PUART Port 5 Configuration PHardware Honitor Watch-Dog Timer PGP10 Group 0 Configuration PGP10 Group 7 Configuration	<always off=""></always>		
F1 Help	1/↓ Select Item	F5/F6 Change Values	F9 Setup Defaults

BIOS Setting	Description	Setting Option	Effect
Serial Port A ~ Serial	Configure Serial	Disable	No configuration
Port D	port settings	Enable	User configuration
		Auto	EFI/OS chooses configuration
WDT	Watchdog Timer	Disable	Enable or disable
	configuration	Enable	Watchdog Timer
Hardware Monitor	Hardware Monitor	Enter	Opens sub-section
GPIO Group 0	GPIO Group 0	Enter	Opens sub-section
Configuration	Configuration		
GPIO Group 1	GPIO Group 1	Enter	Opens sub-section
Configuration	Configuration		

5.2.2.5.1 Hardware Monitor

Advanced O : Stop updating Hardware Honitor 0 :: Stop updating Refresh Cycle [1] 1-15: Update sensors data per specified second Work 3.328 V Verve V12S 12.144 V V3S 3SB 3.344 V VBAT 3.120 V SysB 5.016 V Texperature CPU CPU 26.0 °C/ 78.8 °F PCH 26.0 °C/ 78.8 °F Fan Speed N/A FANINI N/A		Insyde	20 Setup Utility	Rev. 5.0
Hardware Honitor Refresh Cycle II Voltage SVC 3.328 V Vore 1.288 V Vi2S 12.144 V V3S 3.344 V V3S 3.344 V V3S 3.344 V V4A1 3.120 V SVSB 5.016 V Temperature CPU 26.0 °C/ 78.8 °F PCH 26.0 °C/ 78.8 °F FAN INI N/A Fi help 1/1 Select I tem F5/F6 Change Values F9 Setup Defaults F9 Setup Defaults F10 Save and Exit F10 Save and Exit F10 Save and Exit	Advanced			
Refresh Cycle [1] second Voltage 3VCC 3.328 V Vorre 3VC 3.328 V Vorre V12s 12.144 V 3VSB 3.344 V V3SB 3.344 V VBAT 3.120 V SVSB 5.016 V Temperature CPU 26.0 °C/ 78.8 °F PCH 26.0 °C/ 78.8 °F Fan Speed FANINI N/A	Hardware Monitor		l	0 : Stop updating 1-15: Update sensors data per specified
Voltage 3VC 3.328 V Vorre 1.288 V V12S 12.144 V V3S 3.344 V V8A 3.344 V V8A 3.344 V V8A 5.016 V Temperature CPU CPU 26.0 °C/ 78.8 °F POH 26.0 °C/ 78.8 °F Fan Speed FANIN1 FANIN1 N/A	Refresh Cycle	[1]		second
3VC 3.328 V Yonre 1.288 V V12S 12.144 V V3S 3.344 V V8A 3.120 V SvsB 5.016 V Tesperature CPU CPU 26.0 °C/ 78.8 °F POH 26.0 °C/ 78.8 °F Fan Speed FANIN1 FANIN1 N/A	Voltage			
Veore 1.288 V V12S 12,144 V V3S 3.344 V 3VSB 3.344 V V8A 3.120 V 5VSB 5.016 V Temperature CPU 26.0 °C/ 78.8 °F PCH 26.0 °C/ 78.8 °F Fan Speed FANINI N/A F1 Help 1/4 Select Item F5/F6 Change Values F9 Setup Defaults F2 F8 Setut 4/4 Select Item Enter Select ⊁ Sublemu F10 Save and Exit	3VCC	3.328 V		
12.144 v V3S 3.344 v V3S 3.344 v VBAT 3.120 v SVSB 5.016 v Temperature CPU CPU 26.0 °C/ 78.8 °F PCH 26.0 °C/ 78.8 °F Fan Speed N/A FANINI N/A F1 Help 1/4 Select Item F2 Setup Defaults F9 Setup Defaults F1 Sec Exit F/4 Select Item Enter Select + Subhenu F10 Save and Exit	Vcore	1.288 V		
V3S 3.344 v 3VSB 3.344 v VBAT 3.120 v 5VSB 5.016 v Temperature CPU CPU 26.0 °C/ 78.8 °F PCH 26.0 °C/ 78.8 °F Fan Speed N/A FANIN1 N/A F1 Help 1/1 Select Item F5/F6 Change Values F9 Setup Defaults F2 Esc Exit +/+ Select Item Enter Select ► Sublemu F10 Save and Exit	¥12\$	12.144 V		
3VSB 3.344 V VBAT 3.120 V 5VSB 5.016 V Temperature CPU 26.0 °C/ 78.8 °F PCH 26.0 °C/ 78.8 °F Fan Speed FANIN1 N/A	V3S	3.344 V		
VBAT 3.120 V SVSB 5.016 V Temperature 26.0 °C/ 78.8 °F CPU 26.0 °C/ 78.8 °F Fan Speed N/A Fan Speed N/A Fin Help 1/1 Select Item F3 Expt 5/F6 Change Values F1 Help 1/1 Select Item F4 Select Item F5/F6 Change Values F1 Setup Defaults F2 Se Exit 5/4 Select Item	3VSB	3.344 V		
5VSB 5.016 V Temperature CPU 26.0 °C/ 78.8 °F PCH 26.0 °C/ 78.8 °F Fan Speed FANIN1 N/A	VBAT	3. 120 V		
Temperature CPU 26.0 °C/ 78.8 °F PCH 26.0 °C/ 78.8 °F Fan Speed FANINI N/A FI Help 1/4 Select Item F5/F6 Change Values Esc Exit 4/4 Select Item Enter Select ≻ Subfenu F0 Save and Exit	5VSB	5.016 V		
CPU 26.0 °C/ 78.8 °F PCH 26.0 °C/ 78.8 °F Fan Speed FANINI N/A FI Help 1/4 Select Item F5/F6 Change Values F9 Setup Defaults Esc Exit 4/4 Select Item Enter Select ≻ Subfenu F10 Save and Exit	Temperature			
PCH 26.0 °C/ 78.8 °F Fan Speed FANIN1 N/A FI Help 1/4 Select Item F5/F6 Change Values F9 Setup Defaults Esc Exit 4/4 Select Item Enter Select ≻ Subfenu F10 Save and Exit	СРИ	26.0 °C/ 78.8	F	
Fan Speed FANIN1 N/A F1 Help 1/4 Select Item F5/F6 Change Values F9 Setup Defaults F1 Help 1/4 Select Item Enter Select ≻ Sublenu F10 Save and Exit	PCH	26.0 °C/ 78.8	°F	
FANIN1 N/A FI Help 1/4 Select Item F5/F6 Change Values F9 Setup Defaults Esc Exit 4/4 Select Item Enter Select ≻ Subfenu F10 Save and Exit	Fan Speed			
F1 Help 1/1 Select Item F5/F6 Change Values F9 Setup Defaults Esc Exit +/4 Select Item Enter Select ≻ Subflenu F10 Save and Exit	FAN IN1	N/A		
F1 Help 1/4 Select Item F5/F6 Change Values F9 Setup Defaults Esc Exit +/4 Select Item Enter Select ≻ Subflenu F10 Save and Exit				
F1 Help 1/4 Select Item F5/F6 Change Values F9 Setup Defaults Esc Exit +/4 Select Item Enter Select ≻ Subfenu F10 Save and Exit				
F1 Help 1/1 Select Item F5/F6 Change Values F9 Setup Defaults Esc Exit +/4 Select Item Enter Select ≻ Subflenu F10 Save and Exit				
F1 Help 1/4 Select Item F5/F6 Change Values F9 Setup Defaults Esc Exit +/4 Select Item Enter Select ≻ Subflenu F10 Save and Exit				
F1 Help 1/4 Select Item F5/F6 Change Values F9 Setup Defaults Esc Exit +/4 Select Item Enter Select ≻ Subhenu F10 Save and Exit				
F1 Help 1/1 Select Item F5/F6 Change Values F9 Setup Defaults Esc Exit +/4 Select Item Enter Select ≻ Subflenu F10 Save and Exit				
F1 Help 1/4 Select Item F5/F6 Change Values F9 Setup Defaults Esc Exit +/4 Select Item Enter Select ≻ Subflenu F10 Save and Exit				
F1 Help 1/4 Select Item F5/F6 Change Values F9 Setup Defaults Esc Exit +/4 Select Item Enter Select ≻ Subhenu F10 Save and Exit				
F1 Help t/L Select Item F5/F6 Change Values F9 Setup Defaults Esc Exit +/4 Select Item Enter Select ≻ Subflenu F10 Save and Exit				
F1 Help 1/4 Select Item F5/F6 Change Values F9 Setup Defaults Esc Exit +/4 Select Item Enter Select ≻ Subflenu F10 Save and Exit				
F1 Help 1/4 Select Item F5/F6 Change Values F9 Setup Defaults Esc Exit +/4 Select Item Enter Select ≻ Subhenu F10 Save and Exit				
F1 Help 1/4 Select Item F5/F6 Change Values F9 Setup Defaults Esc Exit +/+ Select Item Enter Select ≻ Subflenu F1 <u>0</u> Save and Exit				
F1 Help t/J Select Item F5/F6 Change Values F9 Setup Defaults Esc Exit +/4 Select Item Enter Select ≻ Subflenu F10 Save and Exit				
F1 Help 1/4 Select Item F5/F6 Change Values F9 Setup Defaults Esc Exit +/4 Select Item Enter Select ≻ Subflenu F10 Save and Exit				
F1 Help 1/1 Select Iten F5/F6 Change Values F9 Setup Defaults Esc Exit +/4 Select Iten Enter Select ≻ Subflenu F10 Save and Exit				
Esc Exit +/+ Select Iten Enter Select ▶ SubHenu F1 <u>0</u> Save and Exit	F1 Help	↑/↓ Select Item	F5/F6 Change Values	F9 Setup Defaults
	Esc Exit	+/→ Select Item	Enter Select ▶ SubMenu	F10 Save and Exit

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

		Insyde	H2O Setup Utility	Rev. S
Advanced				
GP LOOO		<fnahled></fnahled>		
Direction		<0utnut>		
Output Type		<push pull=""></push>		
PEI Phase Output Value		<high></high>		
DXE Phase Output Value		<high></high>		
GP 1001		<enabled></enabled>		
Direction		<0utput>		
Output Type		<push pull=""></push>		
PEI Phase Output Value		<high></high>		
DXE Phase Output Value		<high></high>		
GP1002		<enabled></enabled>		
Direction		<0utput>		
Output Type		<push pull=""></push>		
PEI Phase Output Value		<high></high>		
DXE Phase Output Value		<high></high>		
GP 1003		<enabled></enabled>		
Direction		<0utput>		
Output Type		<push pull=""></push>		
PEI Phase Output Value		<high></high>		
DXE Phase Output Value		<high></high>		
GP1004		<enabled></enabled>		
Direction		<output></output>		
Output Type		<push pull=""></push>		
PEI Phase Output Value		<high></high>		
DXE Phase Output Value		<high></high>		
Polarity		<normal></normal>		
F1 Help	1/1 Select	Item	F5/F6 Change Values	F9 Setup Defaults
Esc Exit	+/+ Select	Item	Enter Select ► SubMenu	F10 Save and Exit
	001001			

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

	Insyd	eH20 Setup Utility	Rev. 5.0
Advanced			
GP1075	<enabled></enabled>		
Direction	chutnut>		
	CPush Pulls		
DEL Phase Output Value	cHinh>		
DVE Phase Output Value	chinho		
DAL THOSE Output Turac	strights		
GP1076	<enabled></enabled>		
Direction	<output></output>		
Output Type	<push pull=""></push>		
PEI Phase Output Value	<high></high>		
DXE Phase Output Value	<high></high>		
GP1077	<enabled></enabled>		
Direction	<output></output>		
Output Type	<push pull=""></push>		
PEI Phase Output Value	<high></high>		
DXE Phase Output Value	<high></high>		
F1 Help	↑/↓ Select Item	F5/F6 Change Values	F9 Setup Defaults
Esc Exit	+/→ Select Item	Enter Select ▶ SubMenu	F10 Save and Exit

5.2.3 Security

	InsydeH2	D Setup Utility	Rev. 5.0
Main Advanced Security Powe	r Boot Exit		
Current TPM Device TPM State TPM Active PCR Hash Algorithm TPM Hardware Supported Hash Alg BloS Supported Hash Algorithm TFE Protocol Version TPM Availability TPM Operation Clear TPM Supervisor Password User Password	<pre><tpm (dtpm)="" 2.0=""> All Hierarchies SHA1, SHA256 orithm SHA1, SHA256, SH SHA1, SHA256, SH SHA1, SHA256, SH <1.1> <available> <no operation=""> [] Not Installed Not Installed</no></available></tpm></pre>	T Enablied, Owned A384 A384, SHA512, St13_256	rEE Protocol Version: 1.0 or 1.1
Set Supervisor Password Set User Password Set All Hdd Password Set All Haster Hdd Password ⊳Storage Password Setup Page			
F1 Help Esc Evit	1/↓ Select Item +/+ Select Item	F5/F6 Change Values	F9 Setup Defaults F10 Save and Evit

BIOS Setting	Description	Setting Option	Effect
TrEE Protocol	Choose TrEE	1.0	TrEE Protocol Version:
Version	Protocol Version	1.1	1.0 or 1.1
TPM Availability	TPM Availability	Available	When hidden don't
	configuration	Hidden	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	Set Supervisor	Enter New	Install or change the
Password	Password	password	password and the length of
			password must be greater
			than one character

5.2.4 Boot

	Insyde	20 Setup Utility	Rev. 5.0
Main Advanced Security F	Power Boot Exit		
Main Advanced Security (Quick Boot Quiet Boot Network Stack PXE Boot capability Timeout Automatic Failover >Boot Type Order	Power Boot Exit Source A construction of the second seco	20 Setup Utility Al wh ti	Rev. 5.0 lows InsydeH2O to skip certain tests ile booting. This will decrease the me needed to boot the system.
F1 Help Esc Exit	1/4 Select Item +/4 Select Item	F5/F6 Change Values Enter Select ► Subilenu	F9 Setup Defaults F10 Save and Exit

BIOS Setting	Description	Setting Option	Effect
Boot Type	Boot Type configuration	UEFI Boot Type	Select boot type to Dual type, Legacy type or UEFI type
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 Order	Boot Type Order	Enter	Opens sub-menu

5.2.4.1 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.

	InsydeH2	0 Setup Utility	Rev. 5.0
Main Advanced Security Power	r Boot Exit		
Main Advanced Security Power Quick Boot Quick Boot Network Stack PXE Boot capability Timeout Automatic Failover •Boot Type Order	Boot Exit <enabled> <enabled> <enabled> <uef1: ipv4="" ipv6=""> [0] <enabled> <uef1: ipv4="" ipv6=""> [0] <enabled> <tr< th=""><th>Disabled : Support Netw UEFLPXE : IPv4/IPv6 Legacy : Legacy PXE 0 ed pv4 pv6 pv4/IPv6</th><th>ork Stack PROM only</th></tr<></enabled></uef1:></enabled></uef1:></enabled></enabled></enabled>	Disabled : Support Netw UEFLPXE : IPv4/IPv6 Legacy : Legacy PXE 0 ed pv4 pv6 pv4/IPv6	ork Stack PROM only
F1 Help	1/1 Select Iten	F5/F6 Change Values F9 Setup Defaul	ts

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.

Boot Manage	r
Boot Option Menu EFI Boot Devices EFI USB Device (KingstonDataTraveler 3.0) EFI PXE 1 for IPv6 (58-88-88-88-87-88) EFI PXE 0 for IPv6 (50-62-55-10-00-01) EFI PXE 0 for IPv4 (50-62-55-10-00-01) Windows Boot Manager (Phison SSMP256GTB4C0-S11) 1 and 4 to change option, ENTER to select an option, ESC to exit	
F1 Help t/1 Esc Exit Enter	Select Item Select ⊨ SubHenu

5.2.5 Exit

	Ir	nsydeH20 Setup Utility	Rev. 5.0
Main Advanced Security	Power Boot Exit		
Main Advanced Security Exit Saving Changes Save Change Without Exit Exit Discarding Changes Load Optimal Defaults Load Custon Defaults Save Custom Defaults Discard Changes	Power Boot Exit	Ex	Rev. 5.0
F1 Help Fsc Exit	1/1 Select Iten	F5/F6 Change Values Enter Select ► Sublemu	F9 Setup Defaults F10 Save and Evit

Chapter 6: Driver Installation

6.1 Chipset Driver Installation

The Intel Chipset Drivers should be installed first before the software drivers to enable Plug & Play INF support for Intel chipset components.

Step 1. Insert the DVD that comes with the motherboard. Open the "Intel Chipset subfolder" and click on the Setup file to install driver.

Ch > Intel Chipset V10.1.8460 >	~	ō		م
Name		Da	te modified	Туре
DriverFiles		5/1	0/2022 8:48 PM	File folder
🚔 mup		7/1	7/2020 8:47 AM	XML Document
😸 SetupChipset		7/1	7/2020 8:44 AM	Application
WixLicenseNote		7/1	7/2020 8:42 AM	Text Document

Step 2. Click on Next to install driver.



Step 3. Click Accept and Install to install driver.





Step 4. After the installation completed, click Finish.

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

6.2 Graphic Driver Installation

ITAT Motherboard is with Intel mobile Core i5-1145G7E(Optional i3-1115G4E/i7-1185G7E) dual core CPU and with an integrated graphics controller. You need to install the Graphic driver to enable the function.

Step 1. Insert the DVD that comes with the motherboard. Open the "Intel Graphics subfolder" and click on the Setup file to install driver.



Step 2. Click Next to install Driver.



	_/into	1
cense Agreement	(IIII)	-
You must accept all of the terms of the l program. Do you accept the terms?	license agreement in order to continue the setup	
and for which intel makes no assurance production version.	s that it will ever develop or make generally available a	^
 LICENSE GRANT TO PRE-RELEASE SO Agreement, Intel grants You a non-exc and license under Intel's copyrights to r binary form for Your internal evaluation use only with the Intel-based Product for 	OFTWARE. Subject to the terms and conditions of this dusive, non-assignable, non-sublicensable, limited right reproduce the Software only in its unmodified and and testing use only, and not for commercial use, for for which the Software has been provided.	

Step.4. Click on Next to install Driver.

ntel® Installation Framework		-		×
Intel® Graphics Drive	er			
Readme File Information			(in	tel
Refer to the Readme file below to view the syste	em requirements	and installation	n informatio	on.
Driver Version: 27.20.100.8935				^
Release Version: Production Version				
Operating System(s): Microsoft Windows* 10-64 (RS3) Microsoft Windows* 10-64 (RS4) Microsoft Windows* 10-64 (RS5) Microsoft Windows* 10-64 (19H1) Microsoft Windows* 10-64 (19H2) Microsoft Windows* 10-64 (20H1)				~
	< Back	Next >	Car	n <mark>cel</mark>
		Intel® Ir	stallation F	rameworl

Intel® Installation Framework	
Intel [®] Graphics Driver	
Setup Progress	(intel)
Please wait while the following setup operations are p	erformed:
Deleting Registry Key: HKLM\SOFTWARE\Microsoft\V Deleting Registry Key: HKLM\SOFTWARE\Microsoft\V Installing Driver: Intel(R) Iris(R) Xe Graphics Version: 27.20.100.8935 •	/indows\CurrentVersion\Uninstall\{F0E3AD4C /indows\CurrentVersion\Uninstall\{F0E3AD4C
<	>
	Next >

Step.5. Choose "Yes, I want to restart this computer now" then click Finish.



6.3 Audio Driver Installation

The High-Definition Audio Codecs providing ten DAC channels, plus 2 channels of independent stereo sound output (multiple streaming) through the front panel stereo outputs. The series integrates two stereo ADCs that can support a stereo microphone, and feature Acoustic Echo Cancellation (AEC), Beam Forming (BF), and Noise Suppression (NS) technology.

Please make sure which operating system you are using in the ITAT Motherboard before installing the Audio drivers.

STEP 1. Insert the DVD that comes with the motherboard. Open the "Audio-related subfolder" and click on the Setup file to install driver.

↑ <mark>→</mark> > 20	22 → 3_8688_FF → ✓	٩ ٥
ccess	Name	Date modified
)D #	ChCfg	2/8/2011 11:56 PM
ondr at	📑 data1	4/15/2019 5:00 AM
oaus 🛪	🗋 data1.hdr	4/15/2019 5:00 AM
nents 🖈	📑 data2	4/15/2019 5:00 AM
es 🖈	Setup.dll	4/15/2019 5:13 AM
oset_V1 ≠	📄 layout.bin	4/15/2019 5:00 AM
phics Vi 🖈	RtlExUpd.dll	4/15/2019 5:13 AM
FF00_PG4	🛎 Setup	4/15/2019 5:13 AM
10000000000000000000000000000000000000	🔊 setup	4/15/2019 5:04 AM
	setup.inx	4/15/2019 5:00 AM
ver (E:)	📄 setup.isn	5/12/2014 8:07 PM
	setup.iss	5/31/2005 12:01 AM
all (D:)	USetup.iss	11/13/2007 11:18 PM

STEP 2. Click Next to install driver.





STEP 3. Choose "Yes, I want to restart this computer now" then click Finish.



6.4 Dynamic Tuning Installation

Please make sure which operating system you are using in the ITAT Motherboard before installing the dynamic tuning drivers.

STEP 1. Insert the DVD that comes with the motherboard. Open the "driver subfolder" and click on the Setup file to install the driver.



STEP 2. Click Next to start the installation.

Intel® Installation Framework			
Intel(R) Dynamic Tuning Welcome to the Setup Pro) ogram	(intel
This setup program will install the follow • Intel(R) Dynamic Tuning Installer It is strongly recommended that you e	wing components: xit all programs before conti	nuing. Click Next	to continue.
8.7.10402.18389	< Back	Next > — Intel® Insta	Cancel allation Framework

STEP 3. Click on Yes to agree License.

ntel® Installation Framework				×
Intel(R) Dynamic Tuning			into	Э
License Agreement			inte	
You must accept all of the terms of the lice program. Do you accept the terms?	nse agreement in order	to continue the	e setup	
APPLICABLE LAWS. Claims arising under the Delaware, excluding its principles of conflic Contracts for the Sale of Goods. You may export laws and regulations. Intel is not of are in writing and signed by an authorized GOVERNMENT RESTRICTED RIGHTS. The Use, duplication, or disclosure by the Gow FAR52.227-14 and DFAR252.227-7013 et Government constitutes acknowledgment Manufacturer is Intel Corporation, 2200 M	his Agreement will be go ct of laws and the Unite not export the Softwar bligated under any othe representative of Intel Software is provided wi software is subject to re t seq. or its subject to re t seq. or its successor. I of Intel's proprietary rig lission College Blvd., Sa	overned by the d Nations Conv re in violation of a greements u th "RESTRICTEI strictions as set Use of the Softw ghts therein. Co nta Clara, CA 9	laws of ention on applicable inless they D RIGHTS." D RIGHTS." D RIGHTS." Torth in vare by the ntractor or 5052.	^
	< Back	Yes	No	~
		— Intel® Inst	allation Fra	mewor

STEP 4. Click on Next to install driver.

	(intel)
etup Progress	
Please wait while the following setup operations are performed:	
Copying File: C:\Program Files\Intel\Intel(R) Dynamic Tuning\Uni Copying File: C:\Windows\system32\difxapi.dll	nstall\th-TH\License.txt nstall\th-TH\setup.exe.dll nstall\tr-TR\setup.exe.dll install\tr-TR\setup.exe.dll install\zh-CN\setup.exe.dll install\zh-CN\setup.exe.dll install\zh-TW\License.txt install\zh-TW\setup.exe.dll install\zh-TW\setup.exe.dll nstall\zh-TW\setup.exe.dll nstall\x64\Drv64.exe

STEP 5. After the installation completed, click Finish.



6.5 Management Engine Software Installation

This installation program installs the Intel® ME software components required for the platform on which you are installing, and installs only those components that match your platform's capabilities.

STEP 1. Insert the DVD that comes with the motherboard. Open the "ME_SW_DCH subfolder" and click on the Setup file to install driver.

ME	_SW_D	сн				
	Share	View				~ 🕜
	« 5-lr	ntel ME 2141.15.0.2511 > ME_SW_DCH	~	Ū	Search ME_SW_DCH	م
		Name	Date modified		Туре	Size
5		IntelMEFWVer.dll	10/4/2021 11:51	PM	Application exten	21 KB
	~	💼 mup	10/4/2021 11:57	PM	XML Document	52 KB
5	R	3 Setup ME	10/4/2021 11:56	PM	Application	317,724 KB
s	*					
	*					
V10	.1. *					

STEP 2. Click Next.

Welcome	(inte	
You are about to install the following product:		
Intel® Management Engine Components 2141.15.0.2511		
It is strongly recommended that you exit all programs before co Click Next to continue, or click Cancel to exit the setup program	ontinuing. n.	

STEP 3. Check the "I accept the terms in the License Agreement" then click Next.



STEP 4. Choose the destination folder, then click Next.

Setup	>
Intel® Management Engine Components Destination Folder	(intel)
Click Next to install to the default folder, or dick Change to choo	se another destination folder.
C:\Program Files (x86)\Intel\Intel(R) Management Engine Comp	oonents
	Change
	L
Intel Corporation	< Back Next > Cancel

STEP 5. After the installation completed, click Finish.



6.6 Serial IO Host Controller Installation

This installation program installs the driver for Intel Serial I/O. Intel serial I/O driver enables the communication and the transfer of data between connected devices and the system.

STEP 1. Insert the DVD that comes with the motherboard. Open the "Serial IO subfolder" and click on the Setup file to install driver.



STEP 2. Click next to install the driver.



STEP 3. Check the "I accept the terms in the License Agreement" then click Next.



STEP 4. Click Next.



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STEP 5. After the installation completed, click Finish.



6.7 GNA Scoring Accelerator Driver Installation

This installation program installs the driver for Intel GNA Scoring Accelerator. The purpose of Intel GNA is to offload the CPU during some computations. The primary intended usage (but not limited to) is the Automated Speech Recognition domain.

STEP 1. Use Windows Search box on the taskbar and input Device Manager. **STEP 2.** Use a mouse or touch gesture, right-click **Base System Device**, choose **Update driver**.



STEP 3. Choose Browse my computer for drivers.

\rightarrow	Search automatically for drivers	
1	Windows will search your computer for the best available driver and install it on your device.	
→ I	Browse my computer for drivers	
I	Locate and install a driver manually.	

STEP 4. Click Browse...

		×
←	Update Drivers - Base System Device	
	Browse for drivers on your computer	
	Search for drivers in this location:	
	ITAT Win10 driver\7_GNA_Win10_3.0.0.1400\GNA_Win10_3.0.0.1400 V Browse	
	Include subfolders	
	→ Let me pick from a list of available drivers on my computer This list will show available drivers compatible with the device, and all drivers in the same category as the device.	
	some category as the active.	

Next

Cancel

STEP 5. Choose the drivers, click OK.



STEP 6. Check the Include subfolders, click Next.



×

STEP 7. Click Close.

Update Drivers - Intel(R) GNA Scoring Accelerator module
 Windows has successfully updated your drivers
 Windows has finished installing the drivers for this device:
 Intel(R) GNA Scoring Accelerator module



6.8 Ethernet Driver Installation

The Users must make sure which operating system you are using in the ITAT Motherboard before installing the Ethernet drivers. Follow the steps below to complete the installation of the Intel® LAN drivers. You will quickly complete the installation.

STEP 1. Insert the DVD that comes with the motherboard. Open the file LAN and click on the Setup file to install driver.



STEP 2. Click OK.

nstalling Drivers			
Install or update d	rivers for Intel® Network C	onnections.	

STEP 3. After the installation is completed, click Close.

Installing Drivers		
Drivers for Intel® Network (onnections were successfully installed.	

6.9 Win-Set_WatchDog Driver Installation

Before install this Win-Set Driver, Please install C++ first. To install this Win-Set Driver and AP to make the buttons on the front of unit work.

Driver Installation:

1) Installation Files

Please select the driver for the corresponding operating system.

hot	tab(WMMIO) Driver 32bit
🔒 Hot	tab(WMMIO) Driver 64bit
🔁 Hot	tab(WMMIO) Driver Installation Guide v103
WMMIO_32bit	Windows 7/8/8.1/10 x86 Edition
WMMIO_64bit	Windows 7/8/8.1/10 x64 Edition

In each directory, it includes following files.

 Jase Isse Install Wmmio Wmmio Wmmio 	 ▶ x64 ▶ devcon ▶ install ▶ wmmio ₩ wmmio ₩ wmmio
Devcon.exe	Driver application
Install.bat	Driver Installation file
Wmmio.cat	Digital signature file
Wmmio.inf	Driver information file
Wmmio.sys	Win-Set Driver

2) Installation Procedure

A. Uninstall the old Version.

Before you start to install the new signature Hottab driver, please remove the old Hottab PortIO driver in Windows's Device Manager.



Select "**PortIO Driver**" under System devices and right-click it. Use **Uninstall** selection to remove the driver.

PortIO -	<u> </u>
Progra	Update Driver Software
Remo	Disable
	Uninstall
<u>I</u> ≣ UMBu	Scan for hardware changes
	Properties
I UMBu	Toperaes



- B. Install the driver
 - 1. Type "cmd" in the run box.
 - 2. The cmd.exe will appear in Programs
 - 3. Right click on the cmd.exe and click on "Run as administrator" to start command prompt.

Pr	ograms (1)					
	and and					
	Open					
9	Run as administrator					
	Pin to Taskbar					
	Pin to Start Menu					
	Restore previous versions					
	Send to	•				
	Cut					
	Сору					
	Delete					
	Open file location					
	Properties					
P	See more results					
	cmd	×	Shu	ıt dowr	1 >	

4. Change directory to driver's location, and type install to install the driver



5. When Windows Security dialog appear, select **install** to continue the installation.



When the driver is successfully installed, you can see "Drivers Updated successfully" message in the dos prompt. "WMMIO" device also added in the Device Manger under "System devices"

System devices
ACPI Fixed Feature Button
Direct memory access controller
- 📲 Microsoft ACPI-Compliant Embedded Controller
- 👰 Microsoft System Management BIOS Driver
- 📲 Numeric data processor
🖳 Plug and Play Software Device Enumerator
📲 UMBus Root Bus Enumerator
1 WMMIO

Win-Set Installation



Important:

Please make sure the Win-set driver (WMMIO) has been installed before you start to install the Win-set application

- 1. Uninstall the old version Win-set software before start to install the new version Win-set
- 2. Open the folder of Win-Set you want to install, find "Winset.exe" and double click it

	Application Tools	HOLIAD_A30.1.08 for I	
File Home Shar	e View Manage		~
-) -> + 🚺 > H	HotTab_A30.1.08 for IHAT (修 → HotT	ab_A30.1.08 for IHAT 🛛 🗸 🖒	Search HotTab_A30.1.08 for I
🔆 Favorites	Name	Date modified Ty	ype Size
📃 Desktop	🗒 Hottab	11/30/2015 12:13 W	/indows Installer 5,658 KB
🗼 Downloads	HottabCfg	11/30/2015 12:12 Co	onfiguration sett 4 KB
🔛 Recent places	🔂 setup	11/30/2015 12:13 A	pplication 387 KB

2. Click "Next" go to install the Win-set

劇	HotTab		- 🗆 ×
Welcome to the Hot1	ab Setup Wizard	i	
The installer will guide you through	the steps required to install H	HotTab on your comp	uter.
WARNING: This computer program Unauthorized duplication or distribu or criminal penalities, and will be pro	is protected by copyright la tion of this program, or any p secuted to the maximum ext	w and international tr ortion of it, may resul ent possible under th	eaties. t in severe civil e law.
	Cancel	< Back	Next >

3. Click "Next"

谩	HotTab	- 🗆 🗙
Select Installa	tion Folder	5
The installer will install H To install in this folder, cl Ender:	otTab to the following folder. ick "Next". To install to a different folder, enter	it below or click "Browse".
C:\Program Files (x86	i)\HotTab\HotTab\	Browse
		Disk Cost
Install HotTab for your Everyone Just me	self, or for anyone who uses this computer:	
	Cancel < E	Back Next >

4. Click "Next", the installation will be started



5. Installation Complete, click "Close" to close the window

國	HotTab		- • ×
Installation Comple	ete		
HotTab has been successfully Click "Close" to exit.	nstalled.		
Please use Windows Update to	check for any critical updates	to the .NET Framewo	rk.
	Cancel	< Back	Close

6. Yan can find this shortcut on the desktop, double click it to open the Win-Set application



6.10 Win-set Utility

Win-set ® is a program made by Winmate to control the main functions of the R19IHAT-66EX-T. In Win-set ®, users can check system information, control function button settings, configure blanking function and settings.

Long-press Fn function key to open Win-set. Users also can open this utility by double-clicking on the Win-set icon on the desktop.



6.10.1 System information menu



6.10.2 Win-set Shortcut Setting

In Function Behavior, submenu users can set up functions.

5 2	Inform	ation	Behavior				
	Function	F1 Sho	ert Empty	NEW	DEL		
	Lock	Open F1 LOR	ng Empty	NEW	DEL	×	
		e - + = = Organize • New1	Program > internet explore > cider A tione	v Ö Search interne	d explorer IEI •	0 0	
	Bright	New folder	en-US images	4/12/2018 4/11/2018	216 AM	File folder File folder	
	25	This PC	E EtEpot	4/11/2018 4/11/2018 4/11/2018	433 PM 433 PM	Application Application	
	\sim	Documents Downloads	ininital informatii	4/11/2018 4/11/2018 4/11/2018	433 PM 433 PM	Application Application	
		Music R: Pictures Videos	File description Internet Expl	4/15/2018 4/15/2018	1208 AM	Application Application	
		🔔 System (C)	 File version 11.0.17134.1 Date created 4/12/2018.2.16 Size 804.KB 	AM			
		Fi	le name: usplove	-	-		
				Uper			^ 호 ✿ 40
✓ Type here to search				Uper			^ 호 ♣ 40 때 ²³⁴ X
	System	'n	Function Behavior	Exi	it		^ 호 ♣ 40 때 234 A 57472
	System Information Function	n F1 Short	Function Behavior Empty	Exi	it	and	^ © € 44 cm 234A 52423
	System Information Function Buttion	n F1 Short F1 Long	Function Behavior Empty Empty	Exi	it DEL DEL		^ ♀ € 40 □□ 238.4 52823
	System Information Function Buttion Lock	n F1 Short F1 Long Touch Loc	Function Behavior Empty Empty	Exi NEW NEW Dis	it DEL able		^ ⊕ ⊕ €0 □ 234 A 57842
	System Information Function Buttion Lock	n F1 Short F1 Long Touch Loc Key Lock	Function Behavior Empty Empty	Ext NEW NEW Dis	it DEL DEL able		
	System Information Function Buttion Lock Brightness	n F1 Short F1 Long Touch Loc Key Lock	Function Behavior Empty Empty	Exi NEW NEW Dis	it DEL DEL able		

6.11 Watchdog Driver Installation

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

Follow instructions below to install Watchdog driver.

1. Type "cmd" in the run box then the cmd.exe will appear in programs.



- 2. Right click on the cmd.exe and click on "Run as administrator" to start.
- 3. Open the Driver CD (included in the package) and select Watchdog driver.



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



6

7

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



The Setup Wizard will install WatchDog_AP on your computer. Click "Next" to continue or "Cancel" to exit the Setup Wizard.

Next >

Cancel

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

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

< Back

- 9 Select **Next** to start the installation.
- 10 When installation is completed, select **Finish** to close the window.



Appendix A: Hardware Specifications

Item	Specifications	
Computer		
CPU	Intel® Core ™ i5-1135G7(8M Cache, up to 4.20 GHz) Intel® Core ™ i7-1165G7(12M Cache, up to 4.70 GHz, optional) Intel® Core ™ i3-1115G4E (6M Cache, up to 3.90 GHz, optional) Intel® Core ™ i5-1145G7E(8M Cache, up to 4.10 GHz, optional) Intel® Core ™ i7-1185G7E(12M Cache, up to 4.40 GHz, optional)	
OS	Windows 11 (Optional) Windows 10 IoT Enterprise (Optional) Linux Ubuntu 22.04 (Optional)	
System Chipset	Intel® Iris® Xe Graphics	
BIOS	Insyde system BIOS	
System Memory	2 x DDR4 3200 SO-DIMM, up to 128 GB	
USB	1 x USB 3.2 Gen 1 / 2 x USB 2.0 Type A (only used in safe area), 1 x 4pins terminal block USB 2.0	
Storage		
Main Storage	1 x M.2 M-Key 2242 SATA SSD, up to 512GB 1 x M.2 M-Key 2280 NVMe SSD, up to 4TB (Optional) 1 x SATA III, up to 2TB (Optional)	
Display		
Panel Size	19-inch 1280 x 1024, 800nit (Optional 1000nits)	
Contrast Ratio	1000:1	
View Angles	85,85,80,80	
Touch	Projected capacitive touch (PCAP)	
Ethernet Interface		
Hardware Interface	1 x RJ45 (only used in safe area); 1 x 8pins terminal block	
Serial Interface		
Serial Standard	1 x DB9 RS232 (only used in safe area); 1 x 10pins terminal block	
Video Interface		
VGA	1 x DB15 VGA (only used in safe area)	
Power Requirements		
Input Voltage	Typical 9~36V DC with isolation (There is no tolerance for the DC input voltage)	
Physical Characteristics		
Housing	Aluminum housing	
Dimensions	474 x 410 x 111 mm	
Cutout	462 x 386 mm	
Mounting	Mounting hole for VESA 100 x 100 mm	
Environment Limits		
Operating Temperature	-40°C to 70°C	
Storage Temperature		
Ambient Relative Humidity	5 to 95% (non-condensing)	
Standard and Certification		
Hazardous Locations Safety	Class I, Div.2, Groups A,B,C,D T4 -40 <= Tamb <= 70 Meet Standards ANSI/ISA-12.12.01-2013 CSA Std. C22.2 No. 213-M1987 -40 <= Tamb <= 70	
Item	Specifications	
--------------------------	--	
	Meet Standards	
	ATEX II 3 G Ex ec ic IIC T4 Gc	
	EN IEC 60079-0:2018, EN 60079-11:2012,	
	EN 60079-7:2015 + AMD1 :2018	
	-40 <= Tamb <= 70	
	Meet Standards	
	IECEx II 3 G Ex ec ic IIC T4 Gc	
	IEC 60079-0:2017 Edition 7, IEC 60079-11:2011 Edition 6,	
	IEC 60079-7:2017 Edition 5.1	
Ordinary Location Safety	CSA C22.2 No. 62368-1:19	
	ANSI/UL 62368-1-2019	
	EN 62368-1	

NOTE:

- 1. Accessories and Integrated Options may vary depending on your configuration. The product shown in this datasheet is a standard model. For diagrams that contain customized or optional I/O, please contact the Winmate Sales Team for more information.
- 2. All specifications are subject to change without prior notice.



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 (ex. 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 uses 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: Statement of Regulatory Approval

Refer the following descriptions for various approvals and certifications

Explosive Atmospheres Directive



Certification with ATEX Directive 2014/34/EU; Independent 3rd party assessment (Notified Body: DEMKO)

Low Voltage Directive European Safety for Industrial Control Equipment



Self-Declaration in accordance with European LVD Directive 2014/35/EU; Independent 3rd party assessment (Accredited by IEC 17025)

Electromagnetic Compatibility Directive European EMC for Industrial Control Equipment

CE

Self-Declaration in accordance with EMC Directive 2014/30/EU; Independent 3rd party assessment (Accredited by IEC 17025)



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