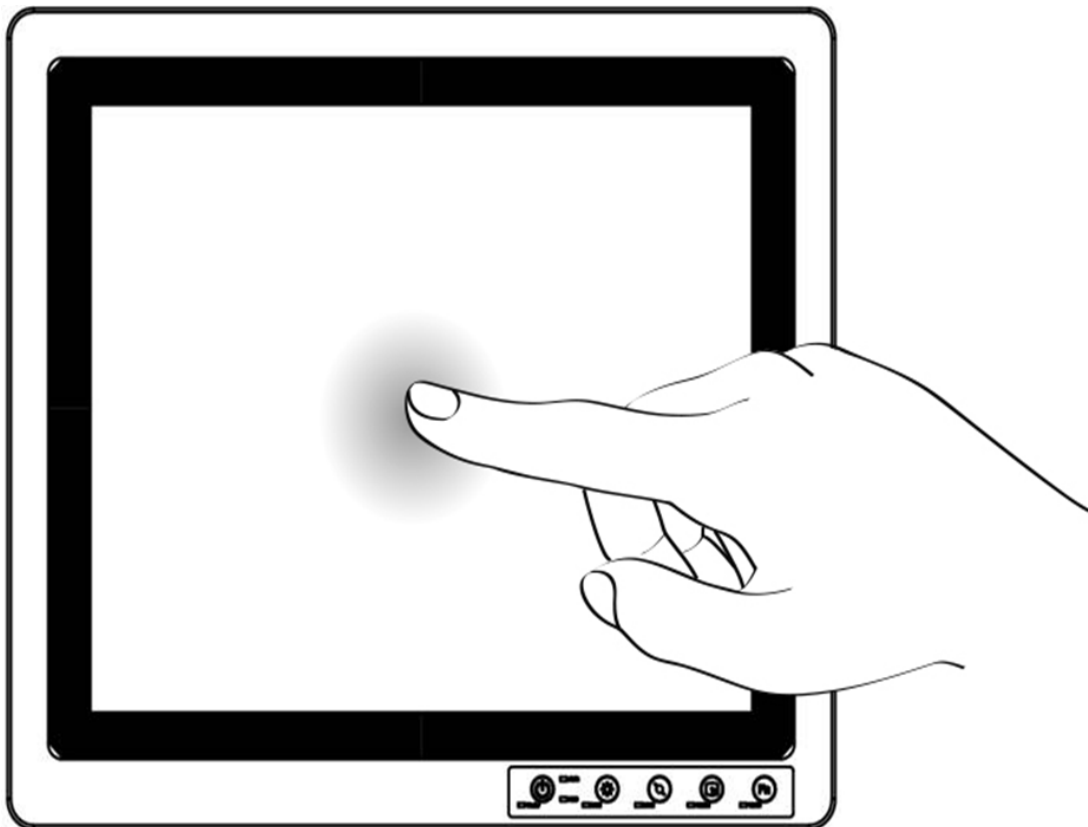


Full IP66 Aluminum

Flat Touch Panel PC Series

R19IHAT-66EX for ATEX Zone II and C1D2



User Manual

Contents

Preface	2
Chapter 1: Introduction	8
1.1 Overview	8
1.2 Features	8
1.3 Package Contents	9
1.4 Product Overview	10
1.5 Front Buttons	11
Chapter 2: Getting Started	12
2.1 Turning On Your Device	12
2.2 Adjusting the LCD Display Brightness	13
2.3 Turning Off Your Device	13
Chapter 3: Installation	14
3.1 Wiring Requirements	14
3.2 Wiring	15
3.3 Pin Assignments	17
Chapter 3: Mounting Solution	22
3.1 Clamp Mount	22
3.2 VESA Mount	23
Chapter 4: Windows 7 Driver Installation	24
4.1 Chipset Driver Installation	24
4.2 Graphic Driver Installation	26
4.3 USB 3.0 Driver Installation	28
4.4 Ethernet Driver Installation	31
4.5 Audio Driver Installation	32
4.6 Fintek COM Port Driver Installation	33
4.7 Intel Management Engine Software Installation	35
4.8 HotTab Driver and AP Installation	37
4.9 Hottab Utility	43
4.9.1 System information menu	43
4.9.2 Hottab Shortcut Setting	44
4.10 Touch Lock Setting	45
4.11 Brightness Adjustment	46
Appendix A: Hardware Specifications	47
Appendix B: Cleaning the Monitor	49
Appendix C: Statement of Regulatory Approval	49

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 reserves 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 makes 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 warranty that such application will be suitable for the specified use without further testing or modification.

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 1W08Axxxxxxx means October of year 2008.

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 potentiel 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.

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.
- 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 2.9GHz Intel Haswell Core i5-4300U. The panel PC also offers brilliant visibility with its true flat design, transfective sunlight-viewable, projected capacitive touchscreen with 1280 x 1024 pixel resolution, all in a compact form factor

1.2 Features

- Intel® Haswell Core i5-4300U, turbo max 2.9GHz (Optional i7-4650U)
- 19" SXGA High brightness panel, 800 nits (Optional 1000 nits)
- Sunlight readable, transfective, 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 in to withstand extreme temperatures -40 to 70 deg. C with built in intelligent heater and wide range temperature memory parts
- 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

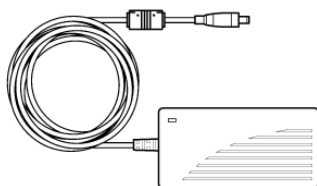
Before using this Panel PC, please make sure that all the items listed below are present in your package:

Standard Accessories:

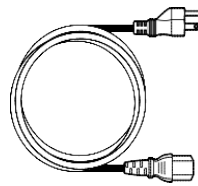
Before using this Panel PC, please make sure that all the items listed below are present in your package:



Panel PC



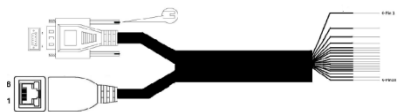
24V 150W AC to DC
Power adapter
(for Testing only)



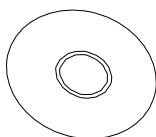
Power cord



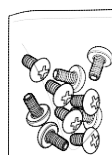
Open wire power cable



LAN + COM combo cable



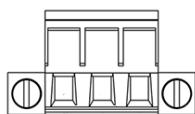
Manual & Driver DVD



VESA Mounting
Screws



Mounting Clips &
Screws



3 Pins Terminal Block For
Power



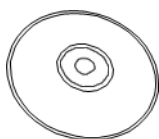
8 Pins Terminal Block
For LAN



4 Pins Terminal
Block For USB

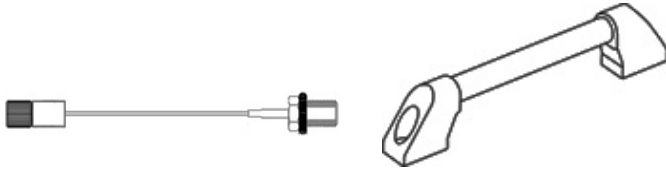


10 Pins Terminal Block
For COM



Touch Driver CD
(C1D2 Version)

Optional Accessories:



Wi-Fi Antenna
extension cable
(Optional, Non-Ex type)

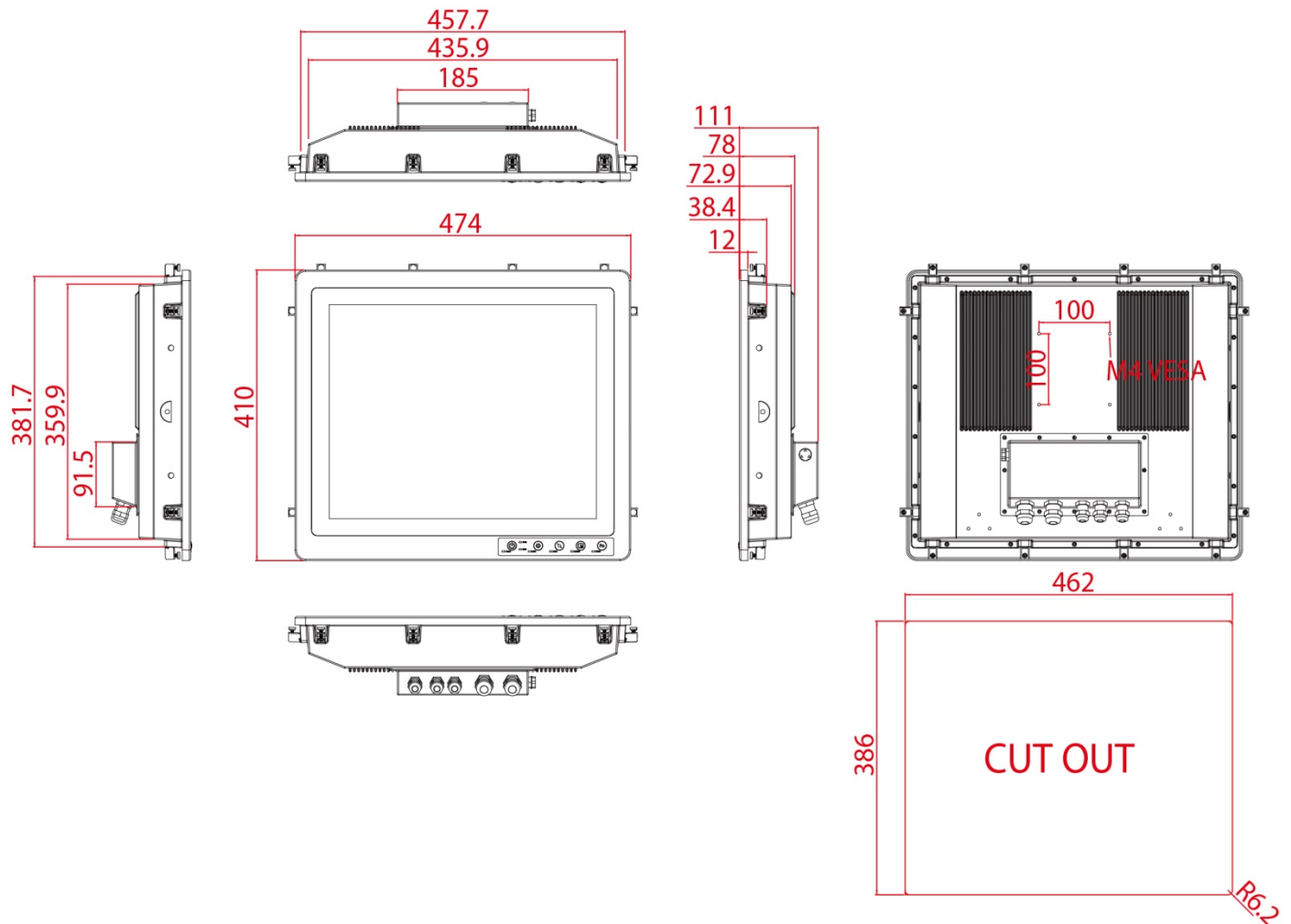
Side Handle
(Optional)

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

1.4 Product Overview

Unit: mm






Front View



1.5 Front Buttons

Front Button & LED Indicators

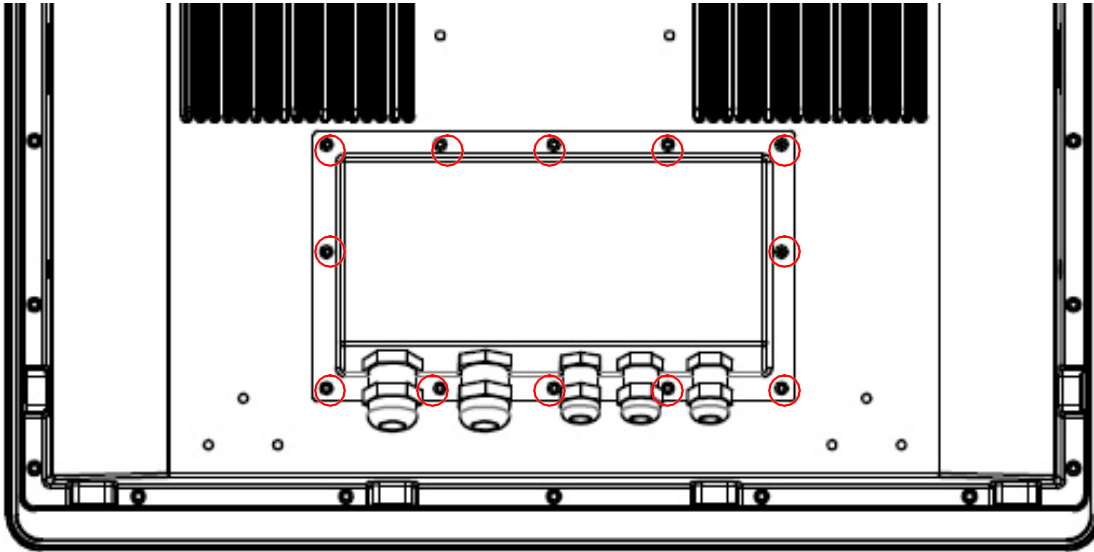


Button Type	Function
	Power on/off
	Increase the brightness of the Panel
	Decrease the brightness of the Panel
	Suspend the touch's function temporarily
	Programmable function key configured by Hot Tab Utility

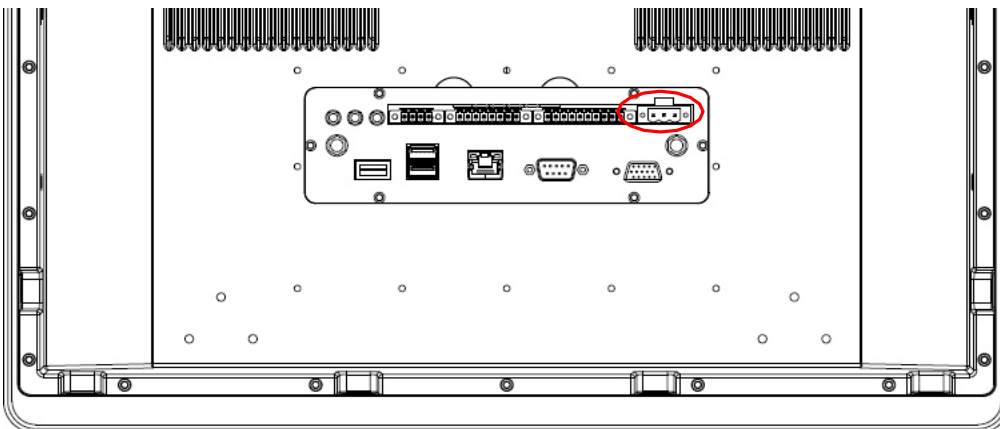
Chapter 2: Getting Started

2.1 Turning On Your Device

1. Remove the I/O protection cover plate.



2. Connect the Power adapter to the device.



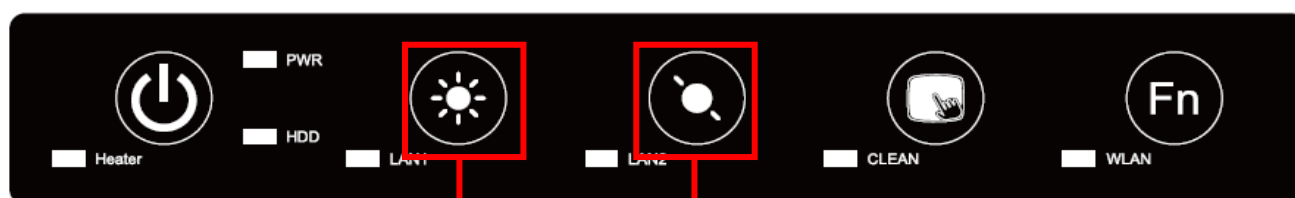
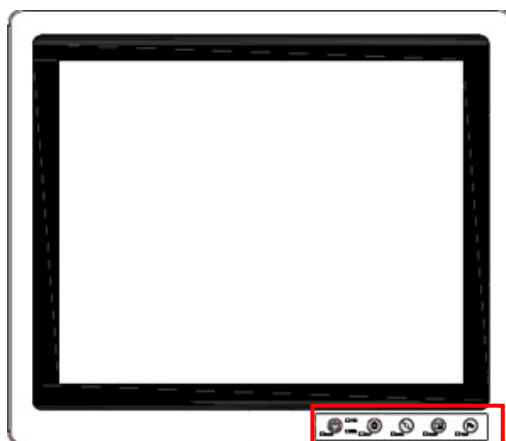
3. Plug the power adapter power cord to an electrical outlet.
4. Touch the Power button on the front to turn on the device.

**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

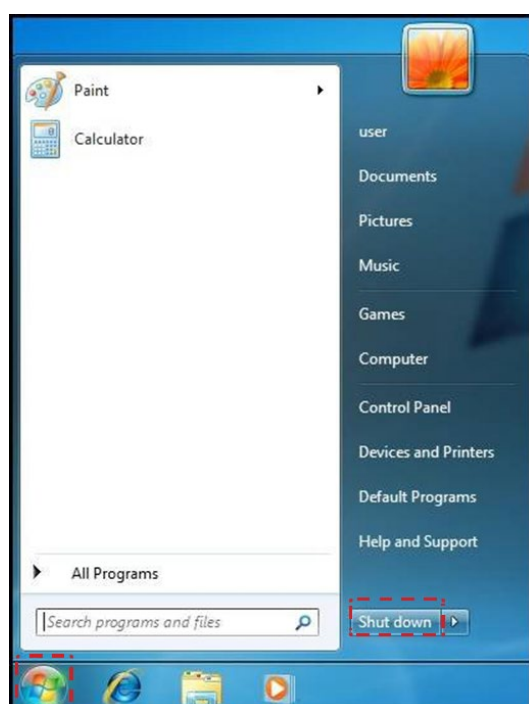
Use the OSD membrane buttons on the front bottom side to increase / decrease the display brightness.



Brightness
Up

Brightness
Down

2.3 Turning Off Your Device



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:

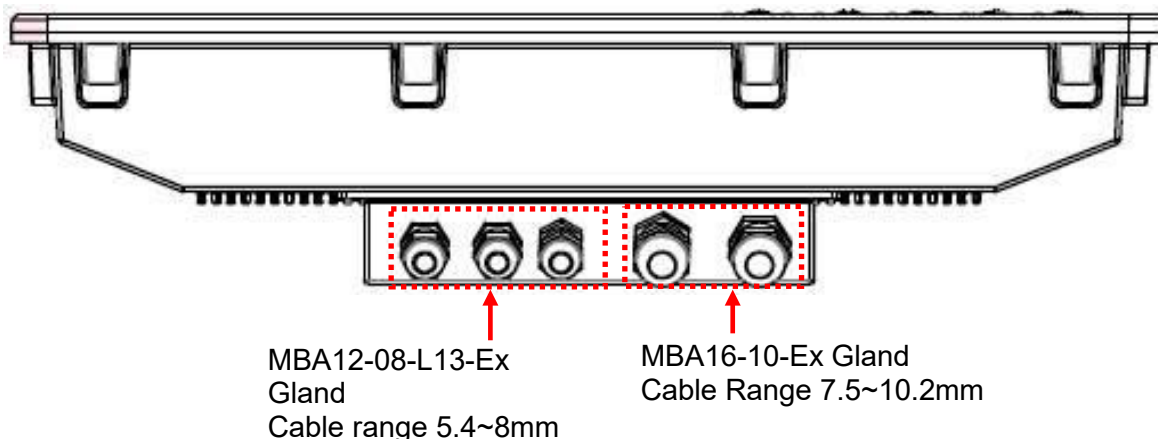
- Strive to use separate, non-intersecting paths to route power and networking wires. If power wiring and device wiring paths must cross make sure the wires are perpendicular at the intersection point.
- Keep the wires separated according to interface. The rule of thumb is that wiring that shares similar 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

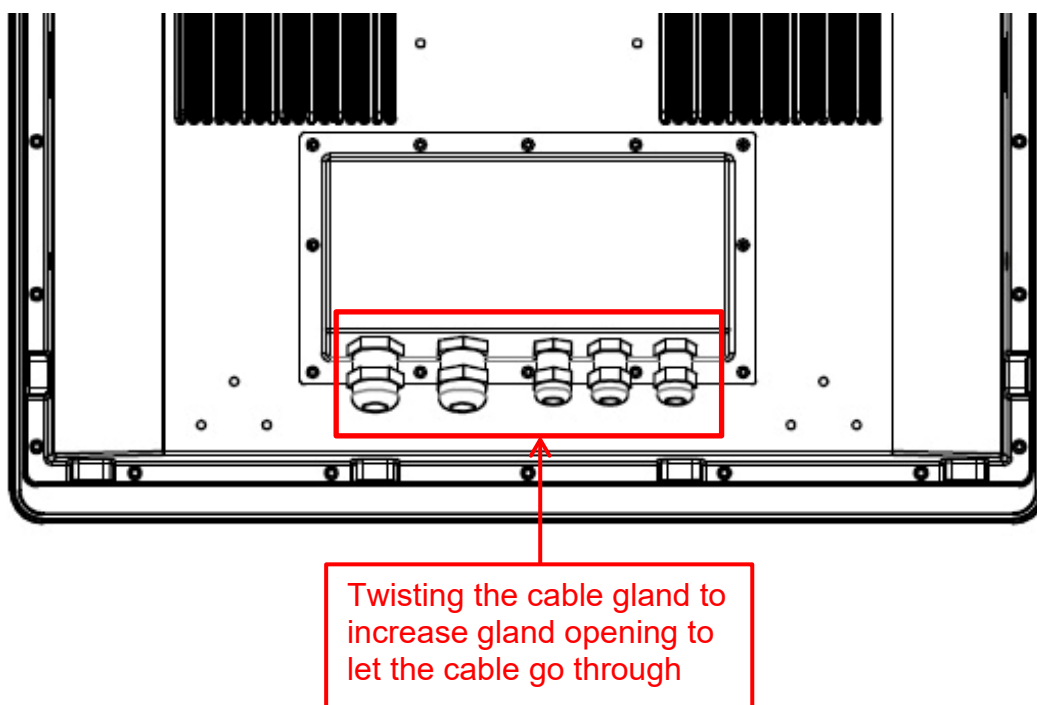
- Do not run signal or communication wiring and power wiring in the same conduit. To avoid interference, wires with different signal characteristics (i.e., different interfaces) should be routed separately.
Ne faites pas passer le câblage de signal ou de communication et le câblage d'alimentation dans 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.

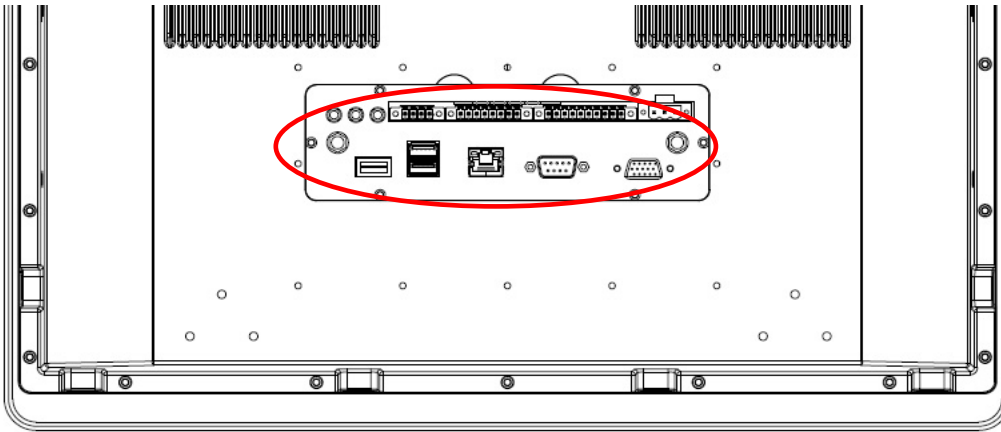


3.2 Wiring

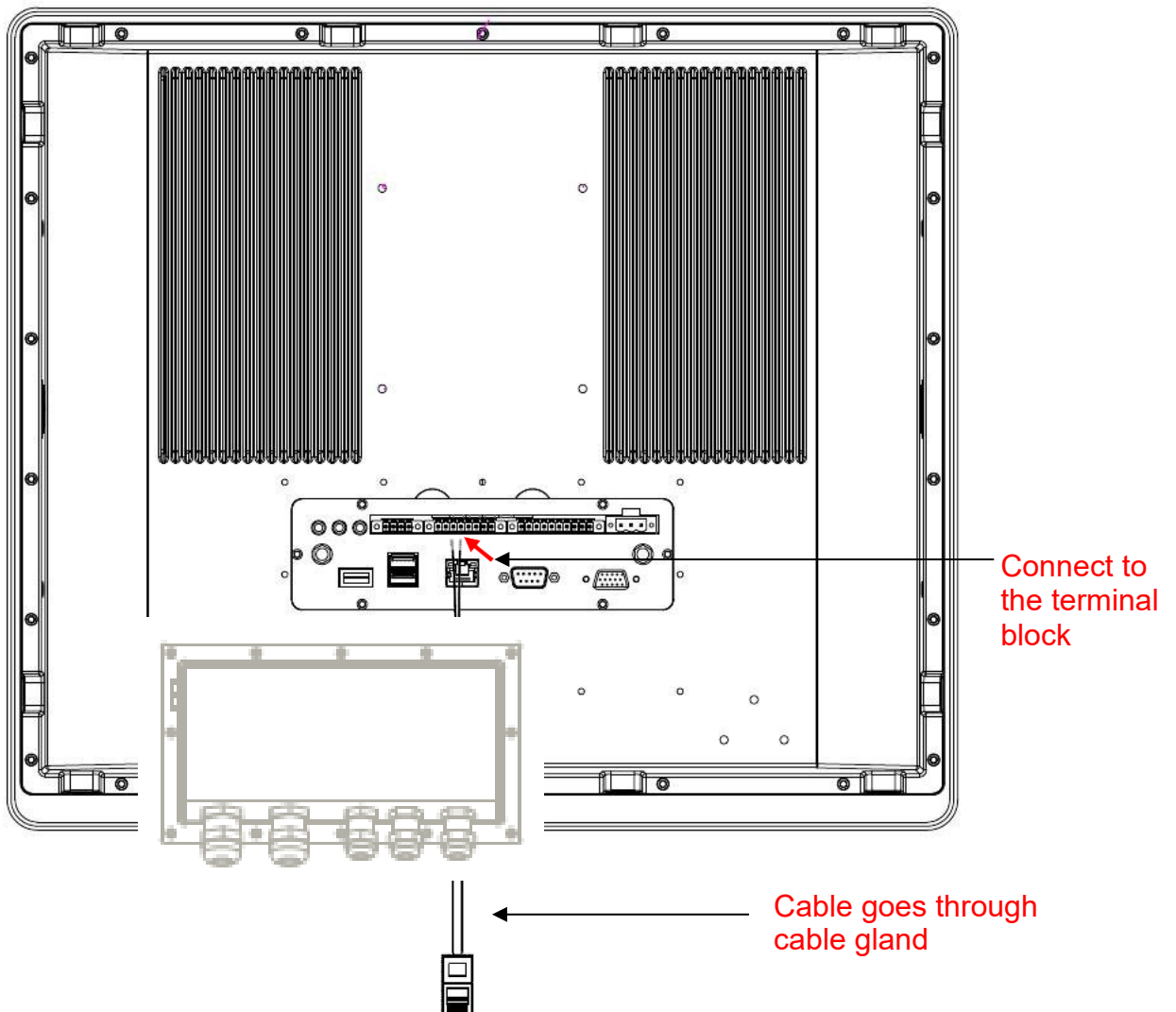
1. Release the screws to remove the I/O protection cover and twisting the cable gland to increase gland opening for later cable go through



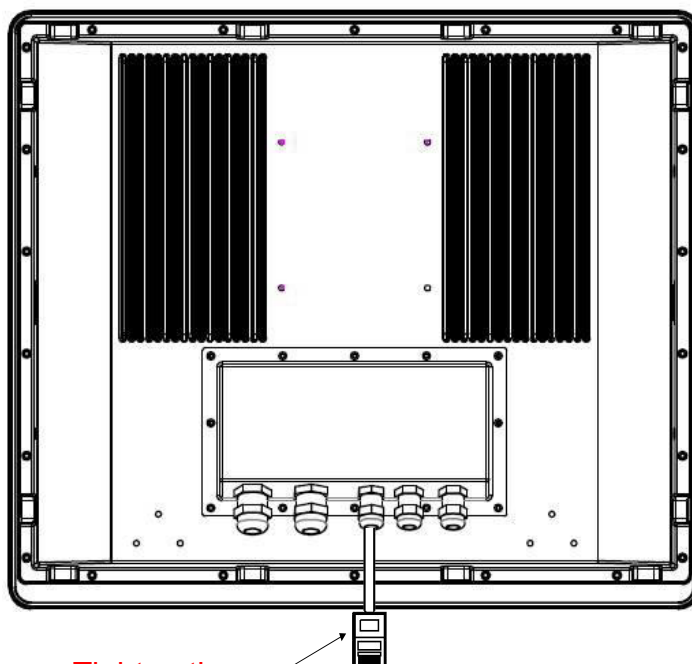
2. I/O cover has been removed and internal I/O ports will be seen.



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



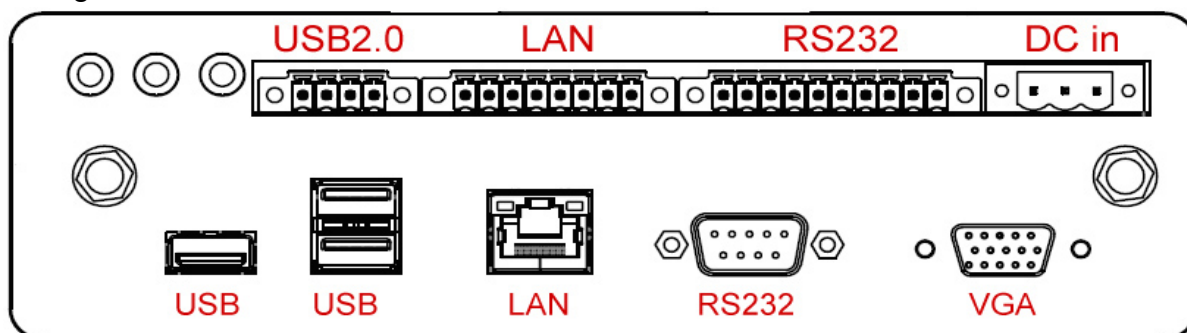
4. Tighten the cable gland and screw the I/O protection cover plate back.



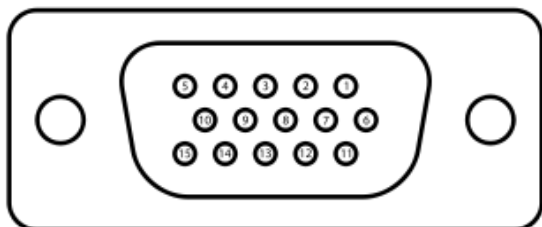
Tighten the
gland
to hold the

3.3 Pin Assignments

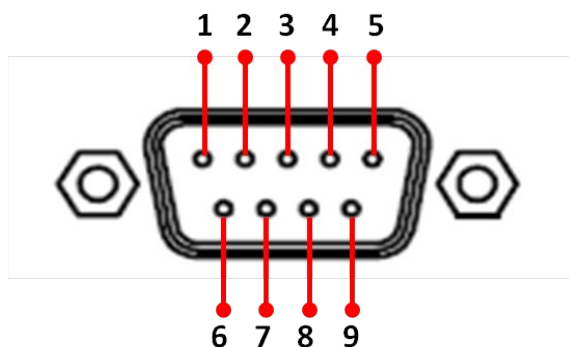
The pin assignments of the connectors are as follows:



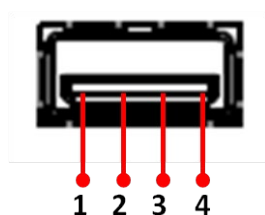
VGA Port (Only used in safe area)



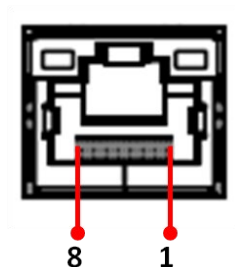
Pin	Signal Name	Pin	Signal Name
1	R_FILTER	2	G_FILTER
3	B_FILTER	4	NC
5	GND	6	GND
7	GND	8	GND
9	VGA5V	10	GND
11	NC	12	DAC_SDAT0
13	3VHSYNC0	14	3VVSNC0
15	DAC_SCL0		

COM Port (Only used in safe area)

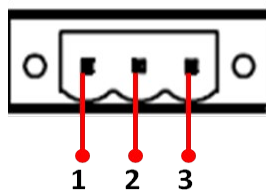
Pin	Signal Name	Pin	Signal Name
1	DCD	2	RXD
3	TXD	4	DTR
5	GND	6	DSR
7	RTS	8	CTS
9	RI		

USB Port (Only used in safe area)

Pin	Signal Name	Pin	Signal Name
1	VCC	2	D-
3	D+	4	GND

LAN1 Port (Only used in safe area)

Pin	Signal Name	Pin	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

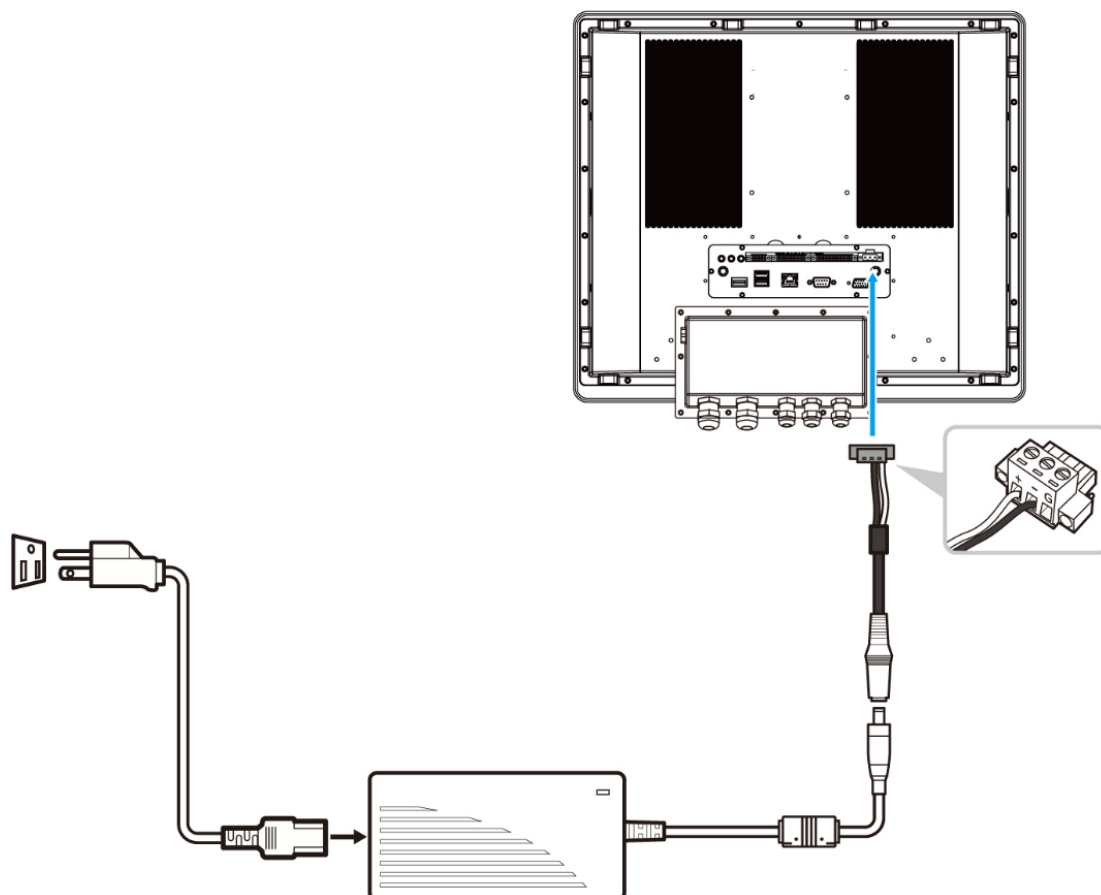
Pin	Signal Name	Pin	Signal Name
1	VCC+	2	VCC-
3	GND		

*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.

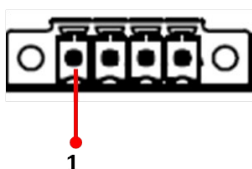
Ethernet connection pin Assignments for T568A

RJ45 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.

RJ45 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	Signal Name	Pin	Signal Name
1	VCC	2	D-
3	D+	4	GND

**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.

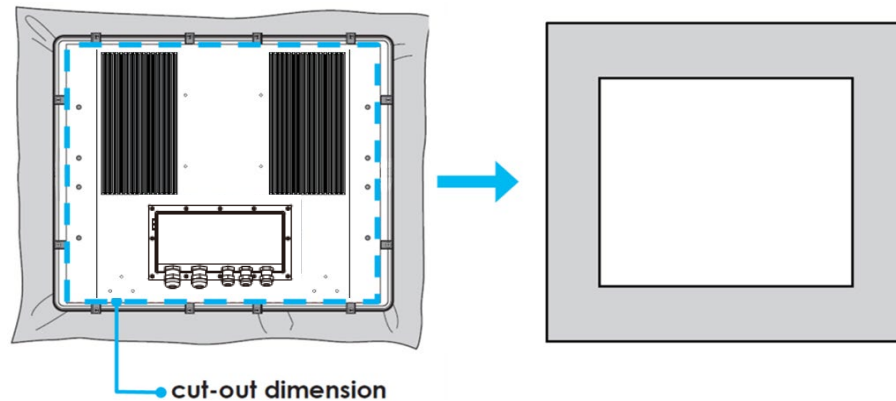
Chapter 3: Mounting Solution

3.1 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

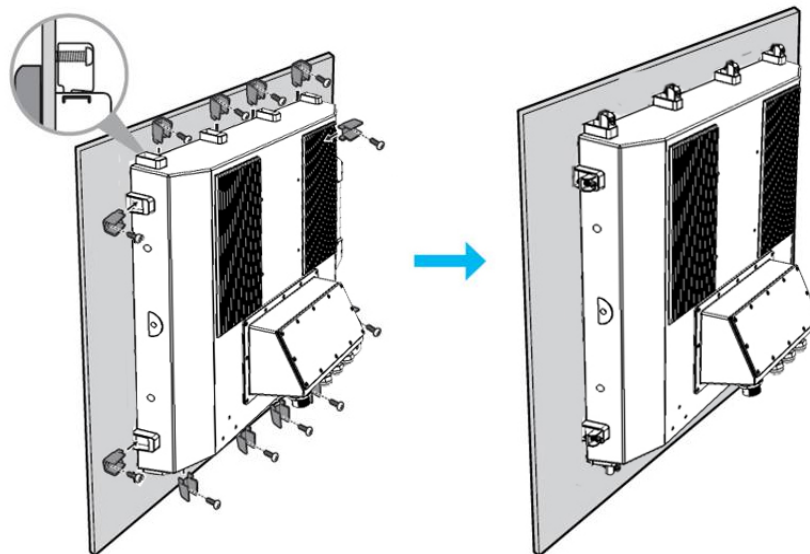
To mount the device to a sub frame or panel, do the following:

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

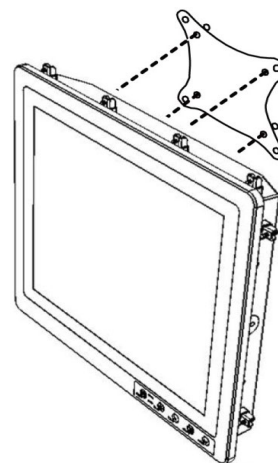


3.2 VESA Mount

Dimensions: 100 x 100mm

Screw Hole Diameter: M4 x 5 mm

Direction: Compatible with swimming arms mounting kits.

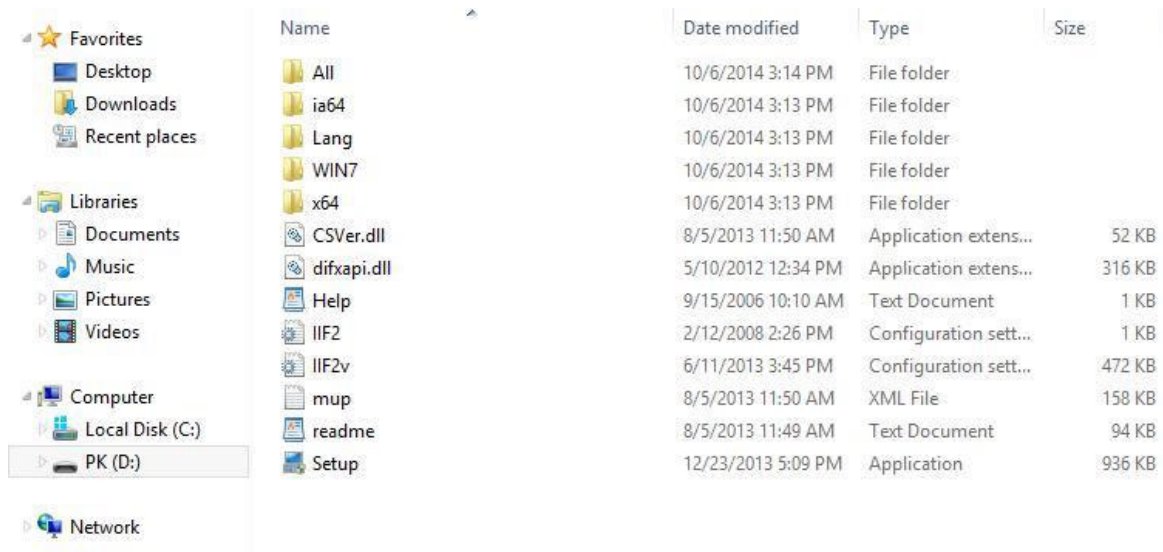


Chapter 4: Windows 7 Driver Installation

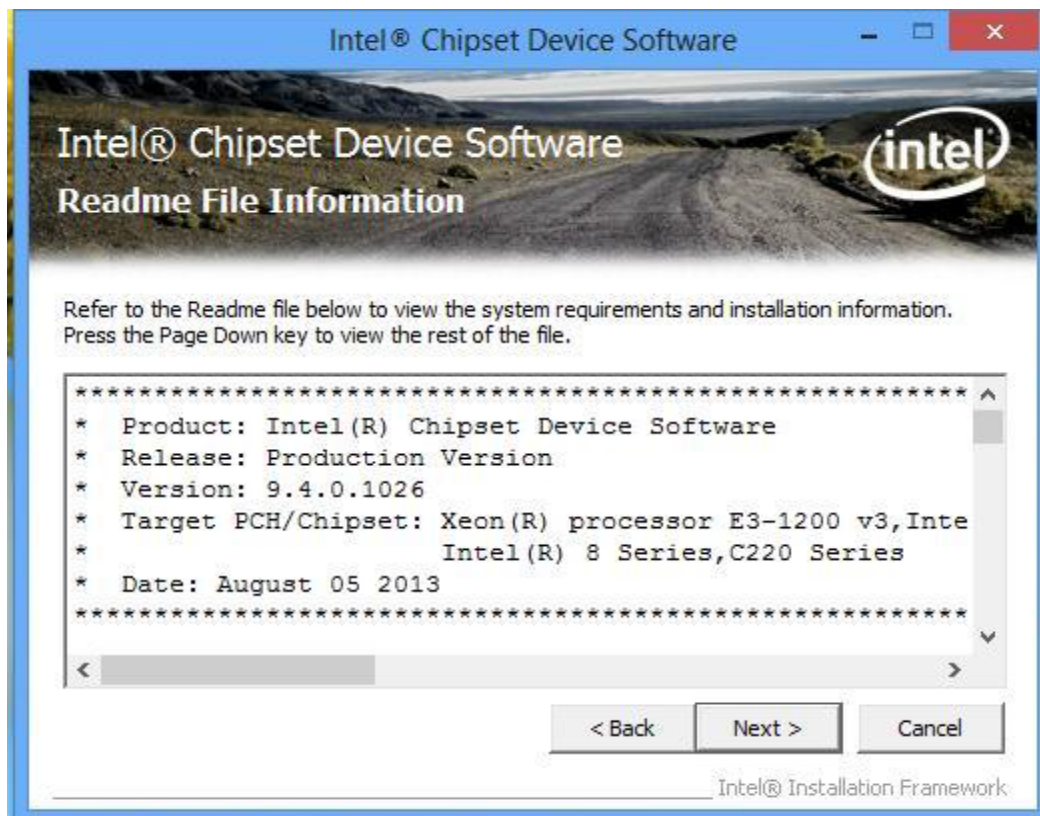
4.1 Chipset Driver Installation

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

Step 1. Insert the DVD that comes with the motherboard. Open the file document “Chipset Driver” and click on “Setup.exe” to install driver.



Step 2. Click on “Next” to install driver.



Step 3. Click on “Next” to install driver.



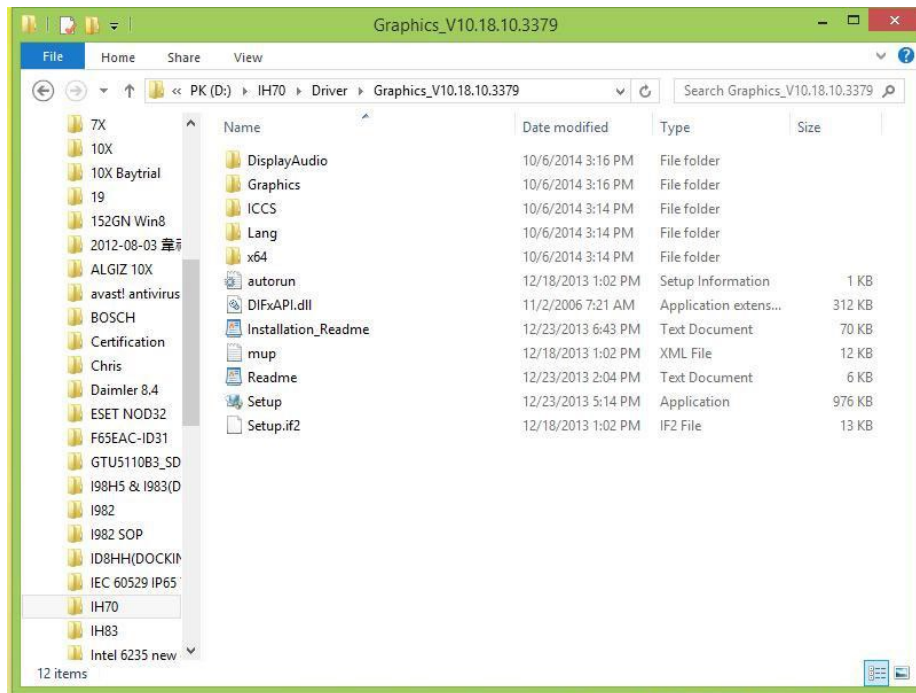
Step 4. Click on “Yes, I want to restart this computer now” to go on.



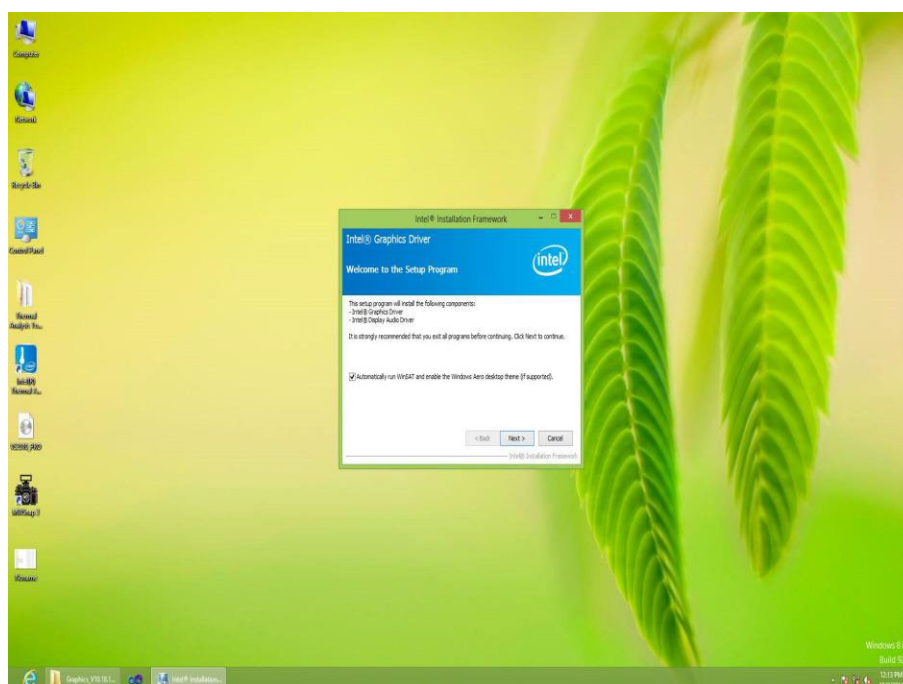
4.2 Graphic Driver Installation

IHAT Motherboard is with Intel mobile Core i5-4300U(Optional i7-4650U) dual core CPU and with an integrated graphics controller. You need to install the Graphic driver to enable the function. Intel Graphic supports versatile display options and 32-bit 3D graphics engine. Triple independent display, enhanced display modes for widescreen flat panels for extend, twin, and clone display mode.

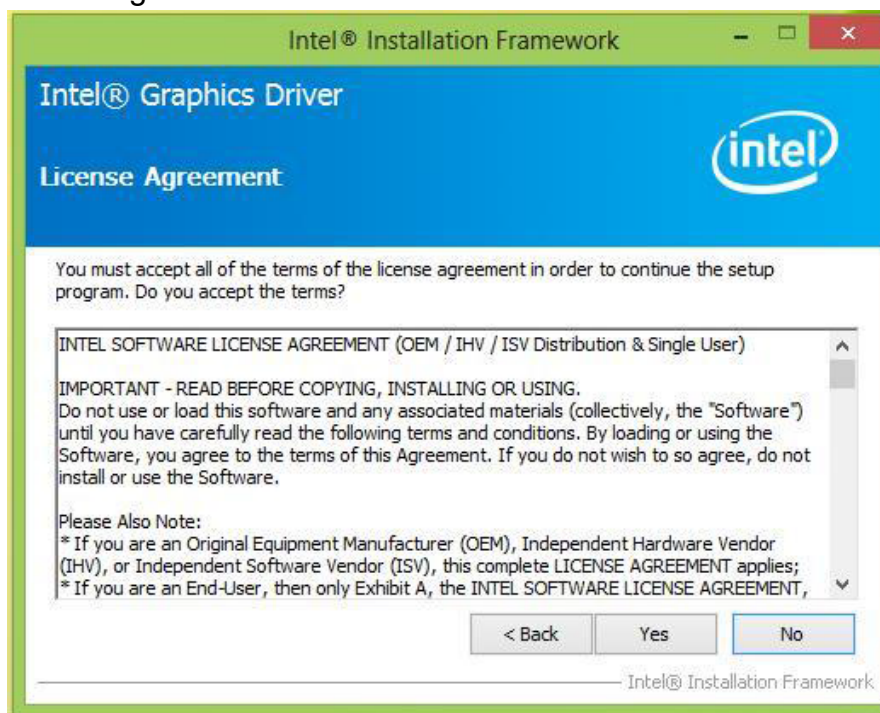
Step 1. Insert the driver DVD into your system's DVD-ROM drive. You can see the driver folders items. Navigate to the “Graphic Driver” folder and click "setup.exe" to complete the installation.



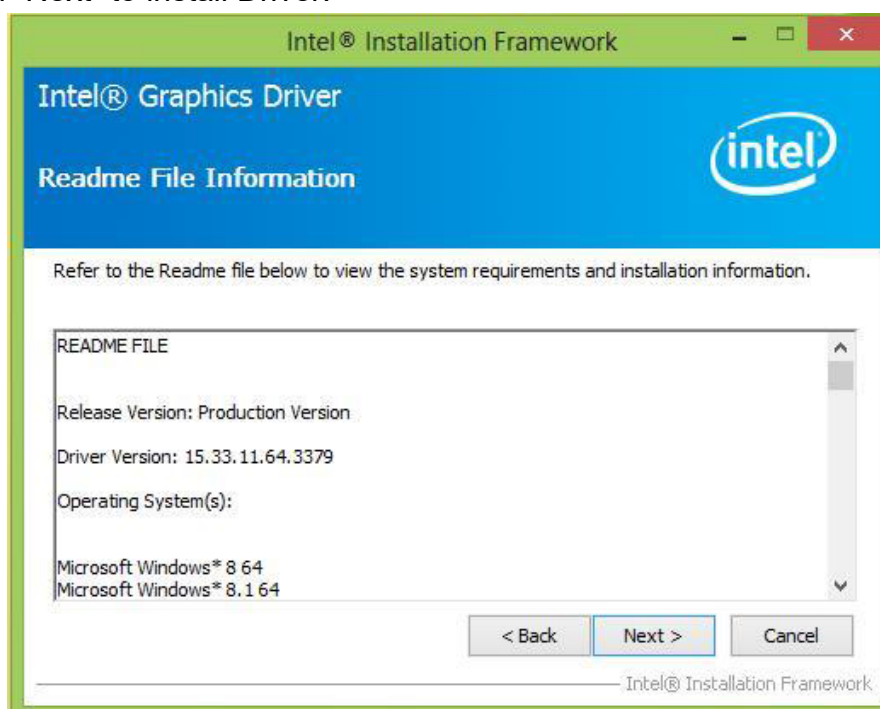
Step 2. Click on “Next” to install Driver.



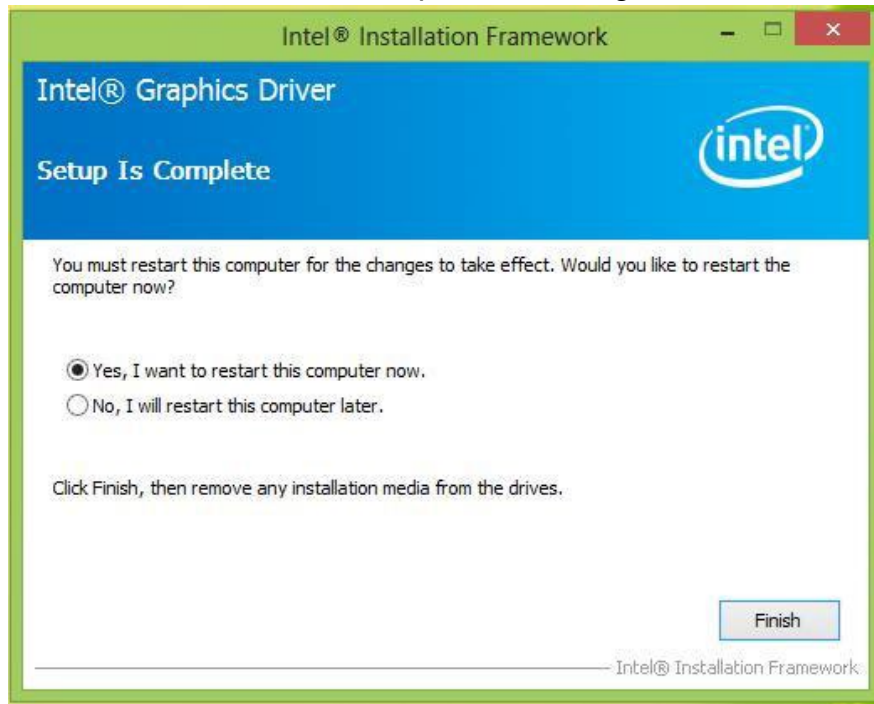
Step.3. Click on “Yes” to agree License.



Step.4. Click on “Next” to install Driver.



Step.5. Click on “Yes, I want to restart this computer now” to go on.

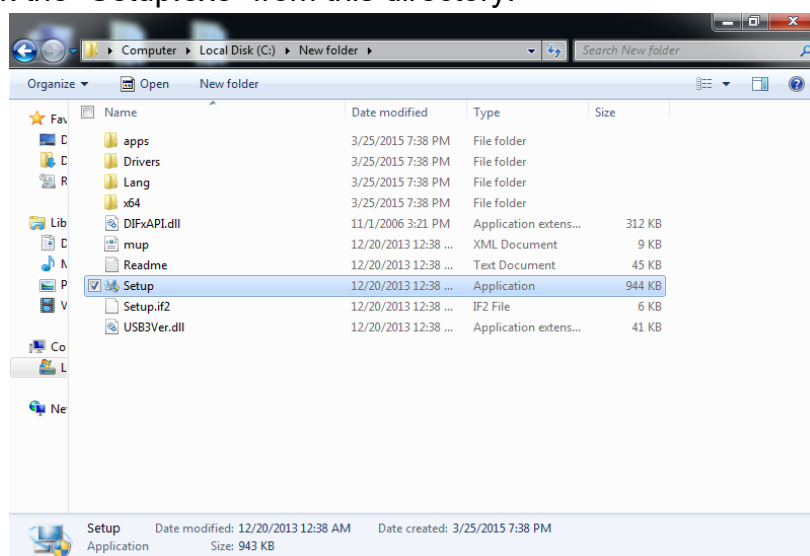


4.3 USB 3.0 Driver Installation

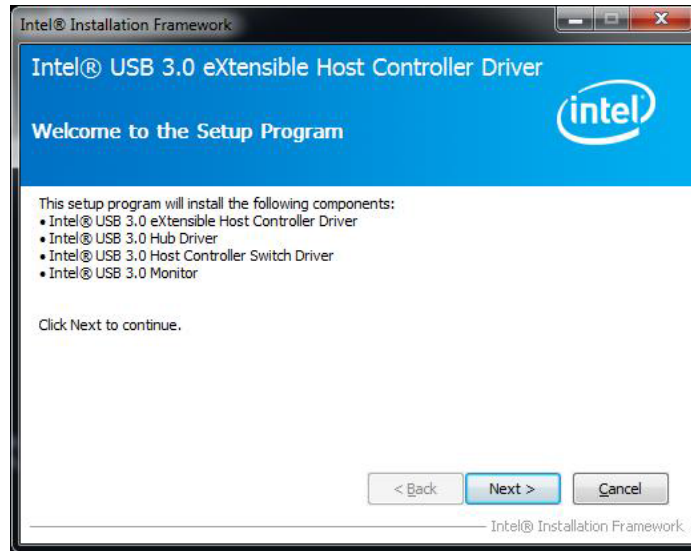
IHAT Motherboard is designed with Intel mobile Core i7, Core i5 dual core CPU with the Intel® USB 3.0 eXtensible Host Controller. You need to install the Intel® USB 3.0 eXtensible Host Controller driver to enable the function.

STEP 1. Locate the hard drive directory where the driver files are stored with the browser or the explore feature of Windows*.

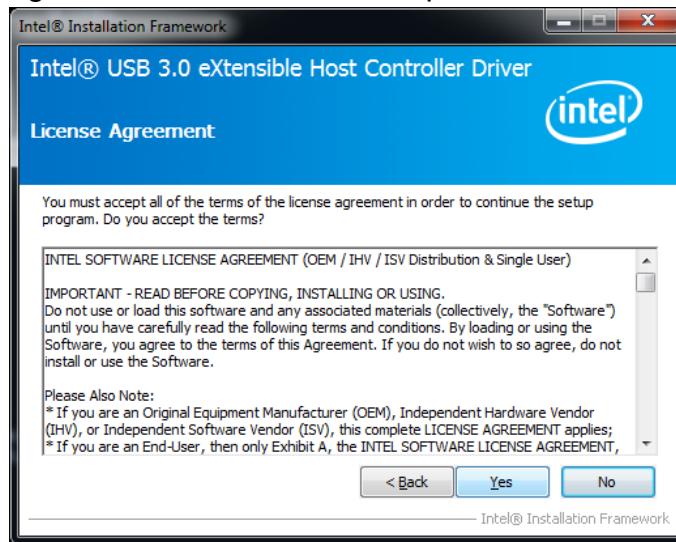
STEP 2. Double click the “Setup.exe” from this directory.



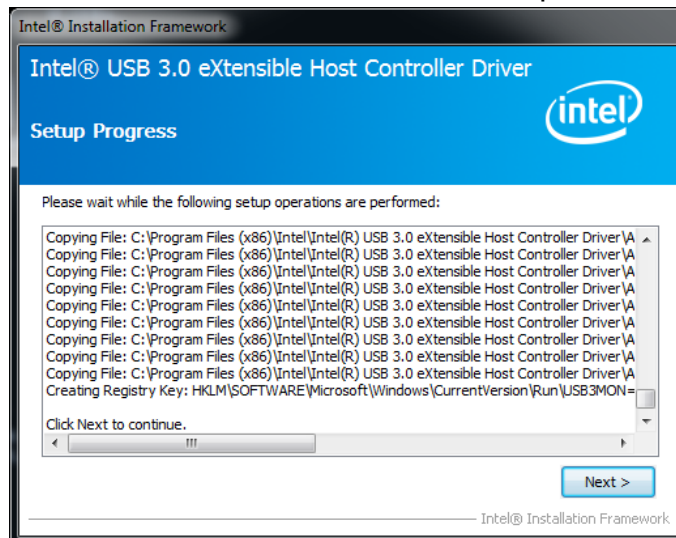
STEP 3. Click “Next” to continue.



STEP 4. Read License Agreement and click “Yes” to proceed



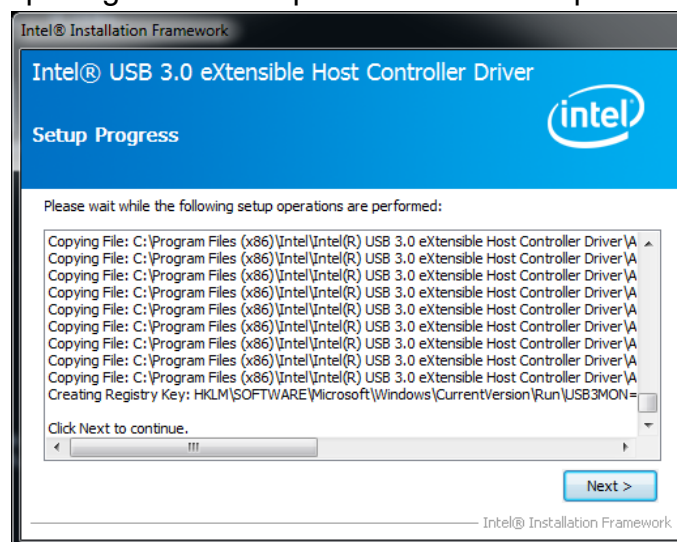
STEP 5. Review Readme File Information and click “Next” to proceed.



Step.6. When the “Setup Progress” is complete click “Next” to proceed.



STEP 7. When the “Setup Progress” is complete click “Next” to proceed.



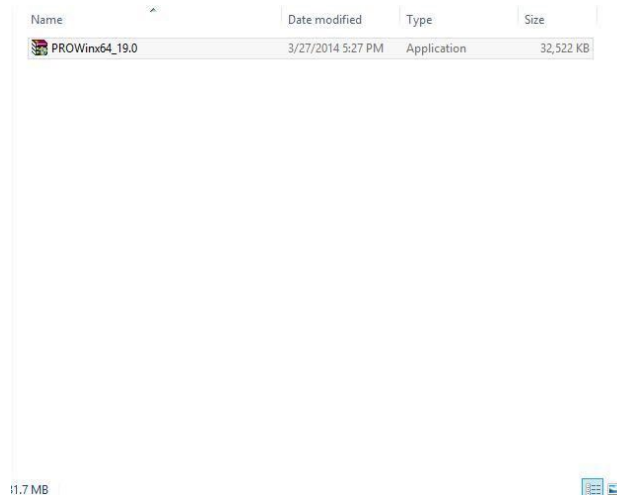
STEP 8. Lastly, the “Setup Complete” screen appears so click “Finish” to restart your computer.



4.4 Ethernet Driver Installation

The Users must make sure which operating system you are using in the IHAT Motherboard before installing the Ethernet drivers. Follow the steps below to complete the installation of the Intel® I210IT Gigabit-LAN Controller + I218LM Gigabit-LAN drivers. You will quickly complete the installation.

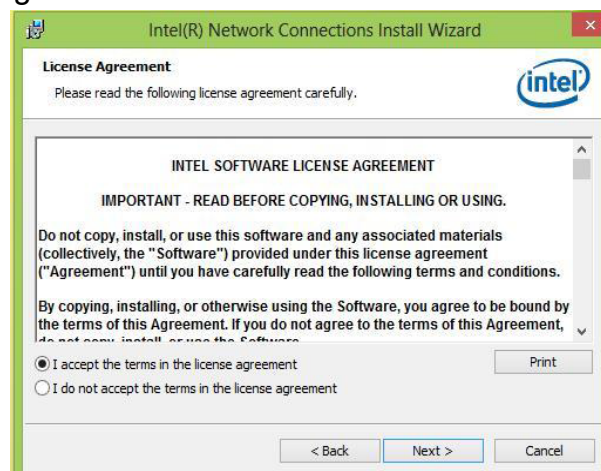
STEP 1. Insert the driver DVD and select the “LAN Driver” folder.



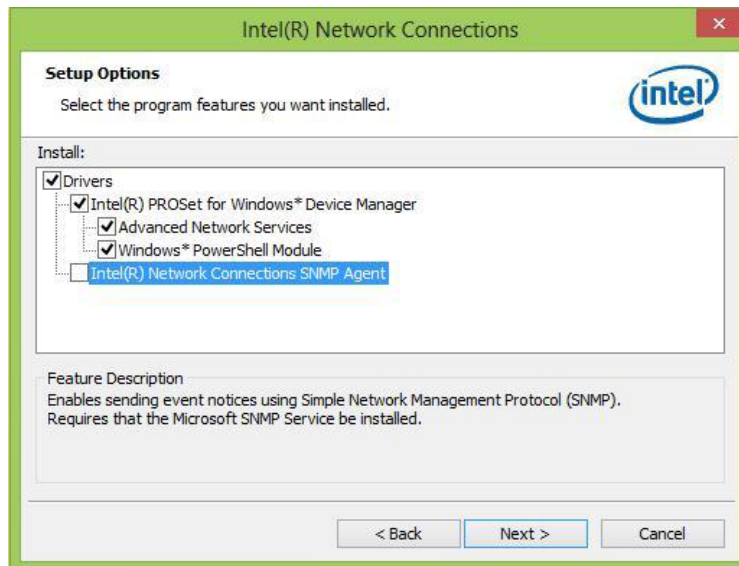
STEP 2. Extract the “PROWinX64_19.0 ” file and click on next to install the driver.



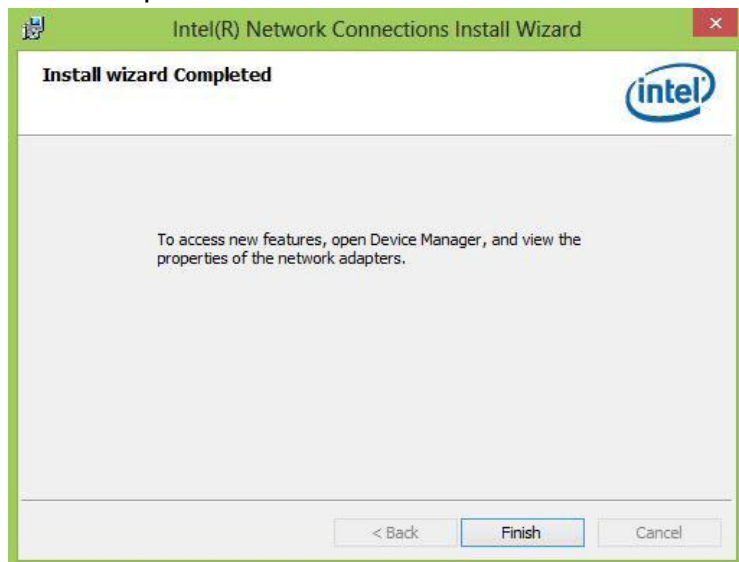
STEP 3. Click on “Next” to agree License.



STEP 4. Click on “Next” to install driver.



STEP 5. Click on “Finish” to complete the driver installation.



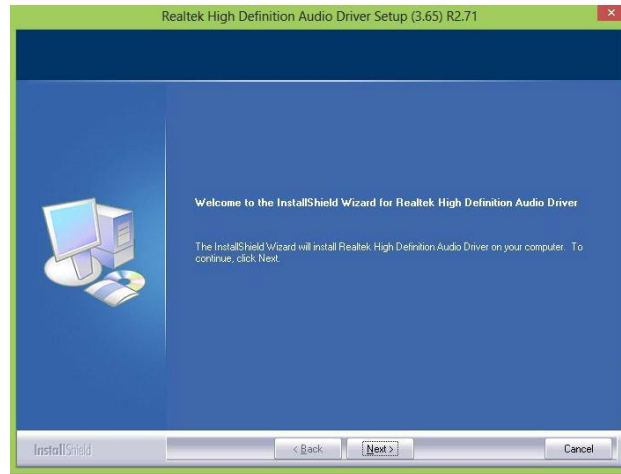
4.5 Audio Driver Installation

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.

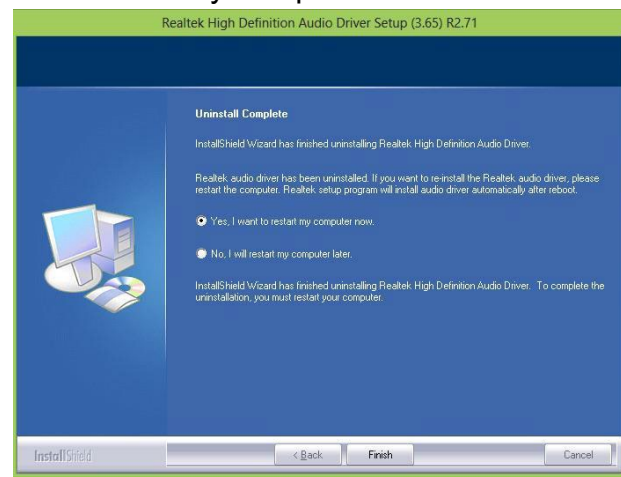
The users must make sure which operating system you are using in the IHAT Motherboard before installing the Audio drivers. Follow the steps below to complete the installation of the Realtek Audio drivers. You will quickly complete the installation.

STEP 1. Insert the DVD that comes with the motherboard. Open the folder “Audio Driver” and click on “Audio(0008-64bit_Win7_Win8_Win81_Win10_R281)” to execute the setup.

STEP 2. Click on “Next” to install driver.



STEP 3. Click on “Yes, I want to restart my computer now” to finish installation.



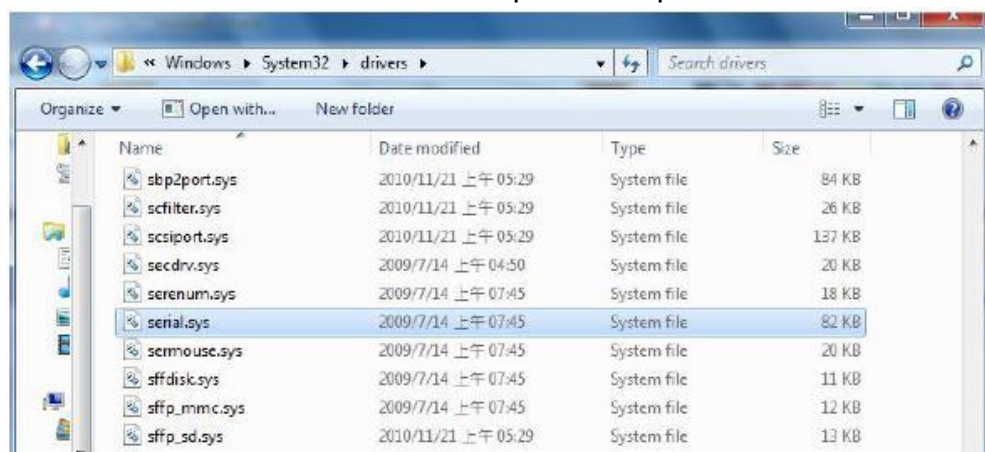
4.6 Fintek COM Port Driver Installation

STEP 1. If the system is WIN7 please first close UAC. (Refer following “Disabling User Account Control (UAC) in Windows 7”)

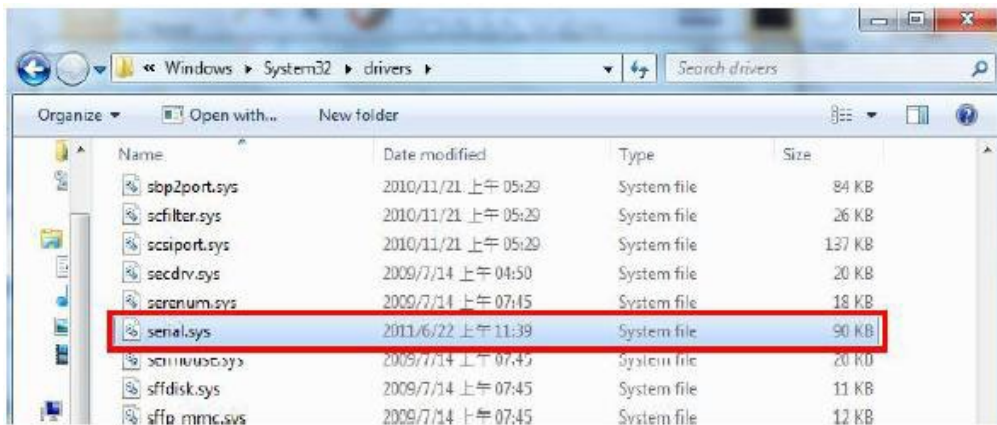
STEP 2. Extract the Patch_0408.zip to a folder.

STEP 3. Double-click batch file(patch.bat) will install driver.

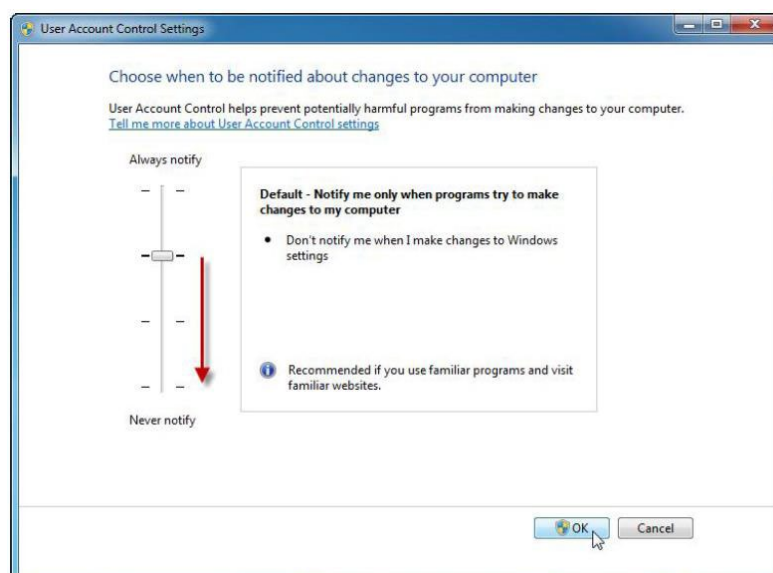
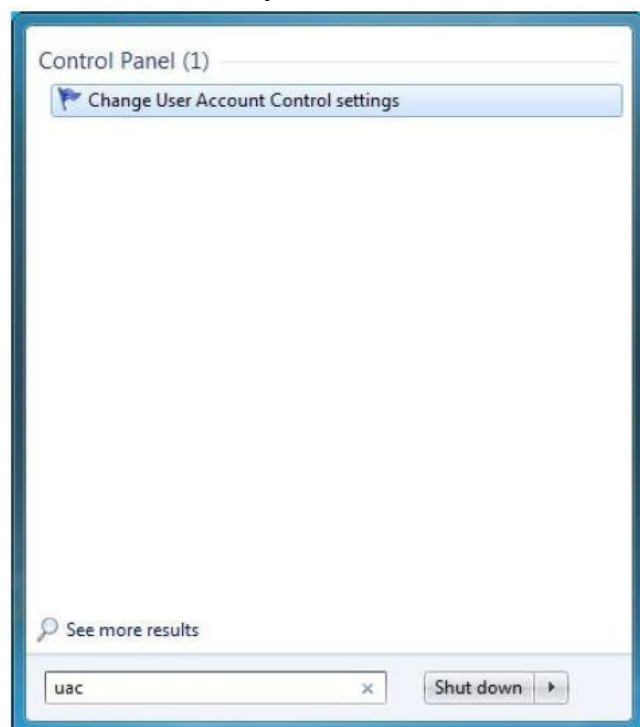
STEP 4. Check driver install success. Before the update or update fail.



After the update and update success.



STEP 5. You will need to restart your computer for driver install success. Type in this command from the Run menu: C:\Windows\System32\UserAccountControlSettings.exe or uac



To turn UAC back on, move the slider to choose when you want to be notified, and then click OK. If you're prompted for an administrator password or confirmation, type the password or provide confirmation.

You will need to restart your computer for UAC to be turned off.

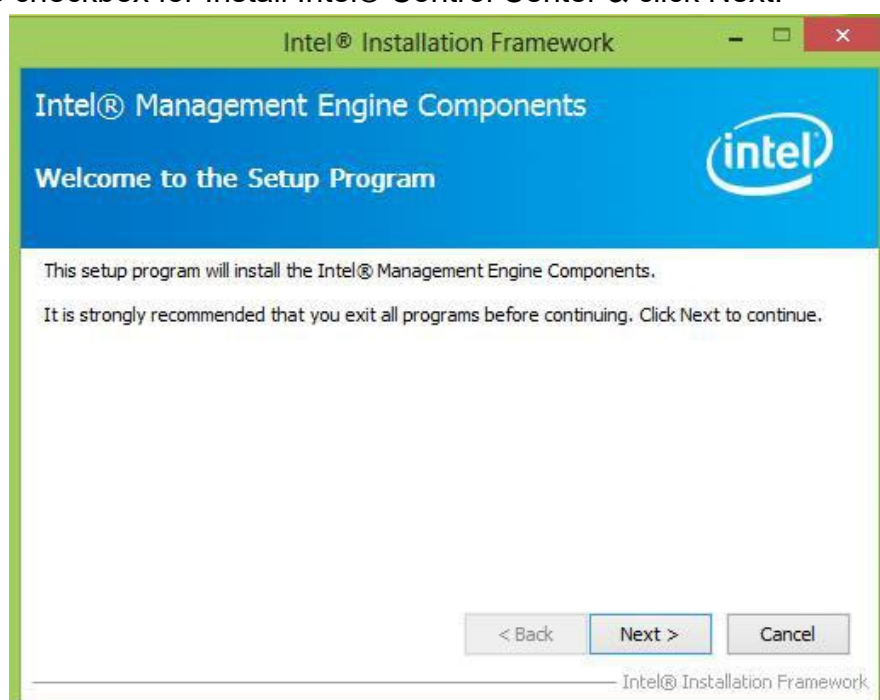
4.7 Intel Management Engine Software Installation

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.

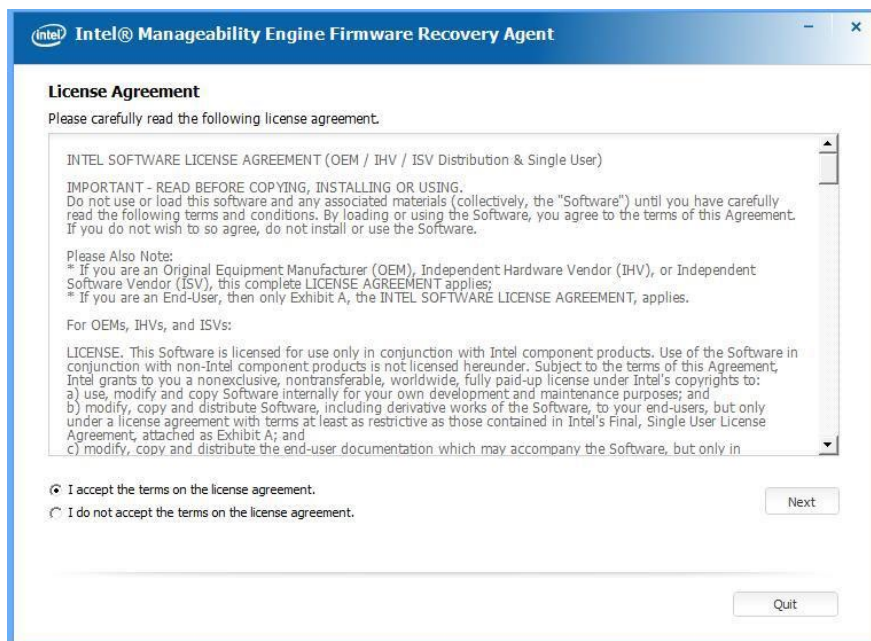
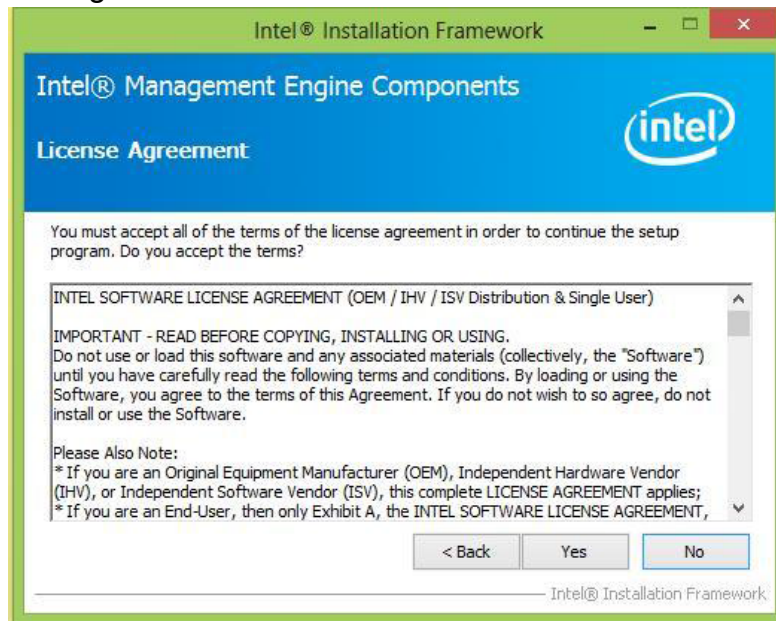
STEP 1. Insert the driver DVD and select the “Intel ME 9.0” folder and click “Setup.exe”

Name	Date modified	Type	Size
DAL	10/6/2014 3:17 PM	File folder	
Drivers	10/6/2014 3:17 PM	File folder	
Firmware Recovery Agent	10/6/2014 3:16 PM	File folder	
IFR	10/6/2014 3:16 PM	File folder	
Intel Control Center	10/6/2014 3:16 PM	File folder	
IntelMEFWVER	10/6/2014 3:16 PM	File folder	
IUS	10/6/2014 3:16 PM	File folder	
Lang	10/6/2014 3:16 PM	File folder	
LMS	10/6/2014 3:16 PM	File folder	
NAC_PP	10/6/2014 3:16 PM	File folder	
x64	10/6/2014 3:16 PM	File folder	
autorun	8/8/2013 1:25 PM	Setup Information	1 KB
DIFxAPI.dll	8/8/2013 1:25 PM	Application extens...	312 KB
mup	8/8/2013 1:25 PM	XML File	9 KB
Setup	8/8/2013 1:25 PM	Application	966 KB
Setup.if2	8/8/2013 1:25 PM	IF2 File	24 KB
version	8/8/2013 1:25 PM	Configuration sett...	1 KB

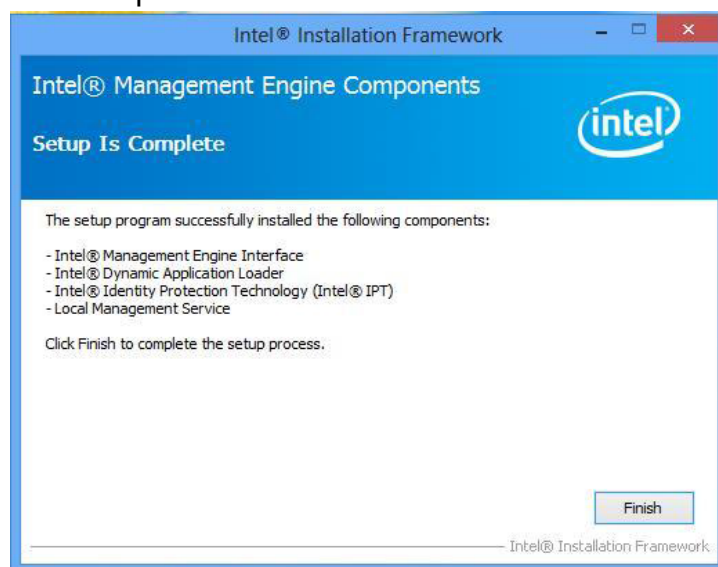
STEP 2. Click the checkbox for Install Intel® Control Center & click Next.



STEP 3. Click on “Yes” to agree License.



STEP 4. Click on “Finish” to complete the software installation.



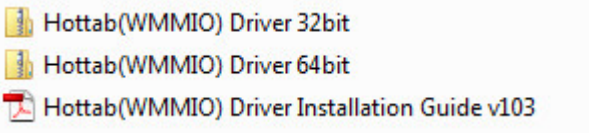
4.8 HotTab Driver and AP Installation

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

Driver Installation:

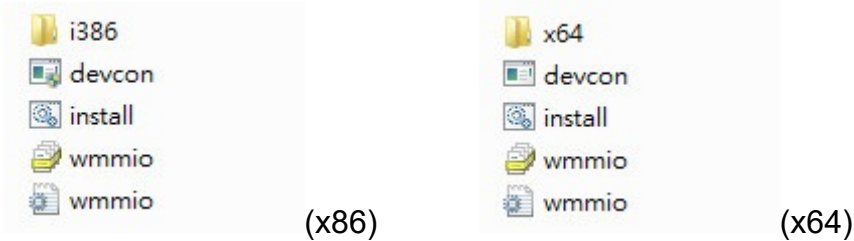
1) Installation Files

Please select the driver for the corresponding operating system.



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.

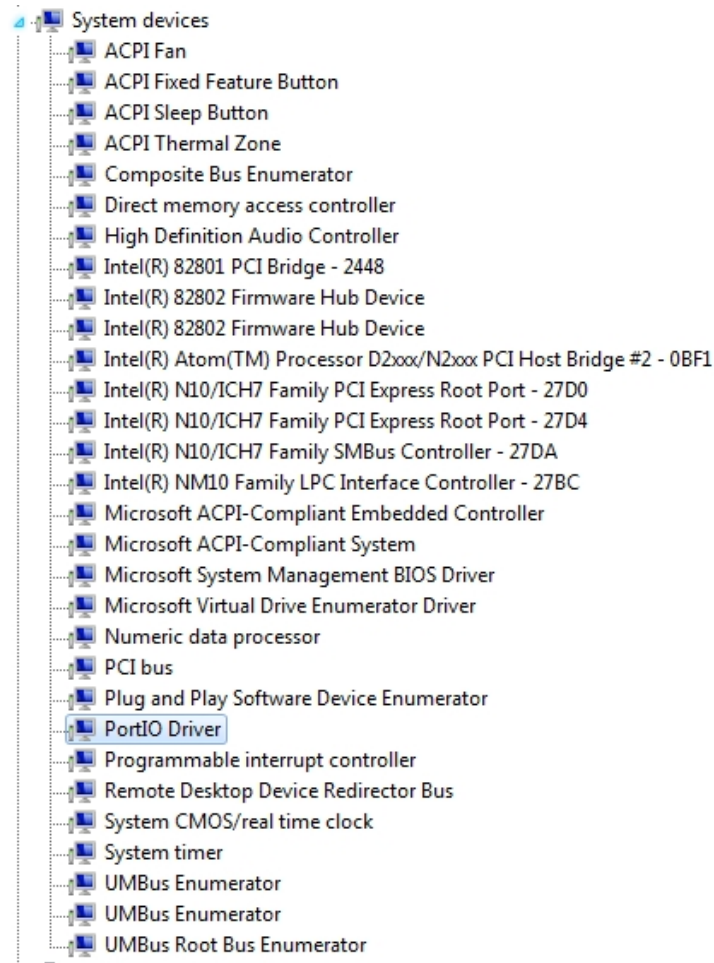


Devcon.exe	Driver application
Install.bat	Driver Installation file
Wmmio.cat	Digital signature file
Wmmio.inf	Driver information file
Wmmio.sys	Hottab Driver

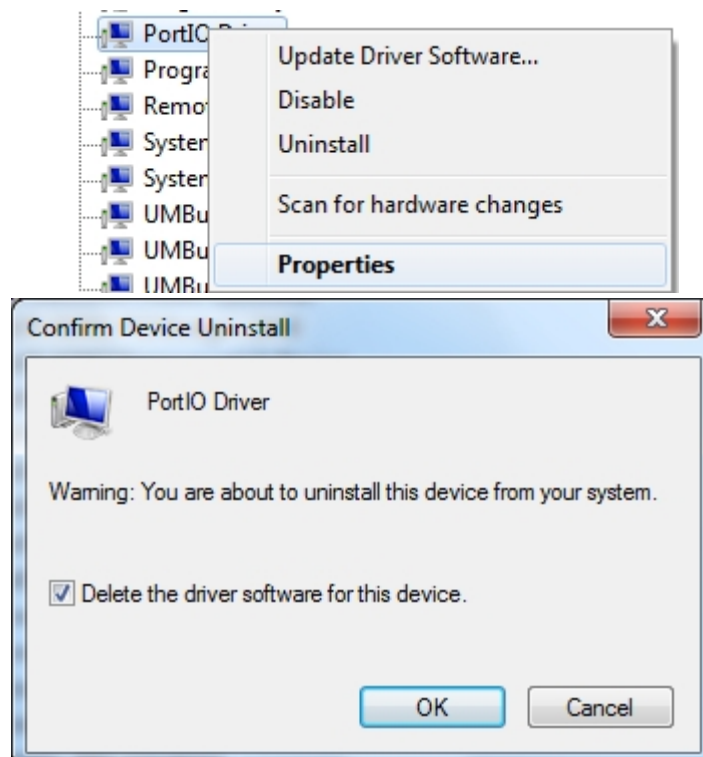
2) Installation Procedure

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.

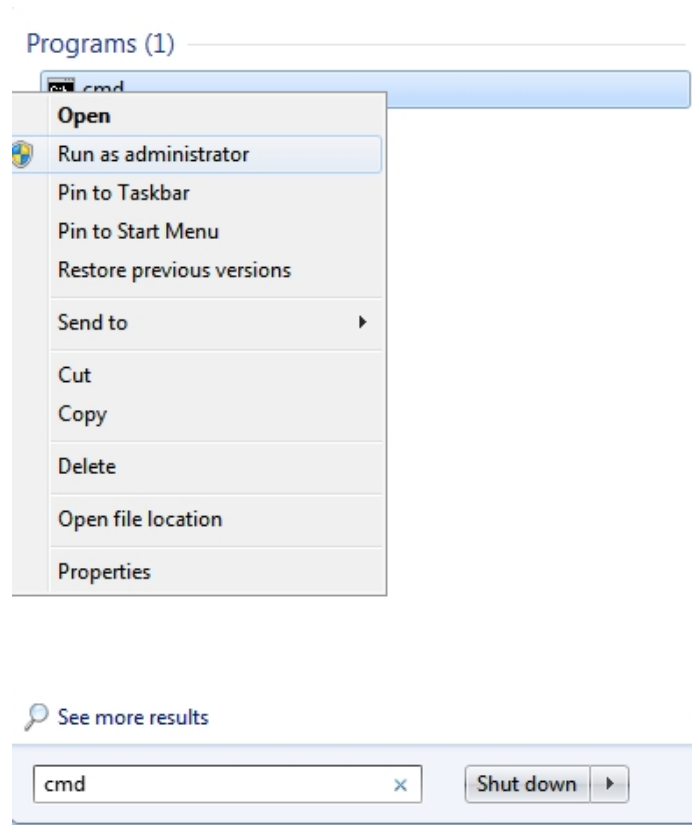


Select "**PortIO Driver**" under System devices and right-click it. Use **Uninstall** selection to remove the driver.

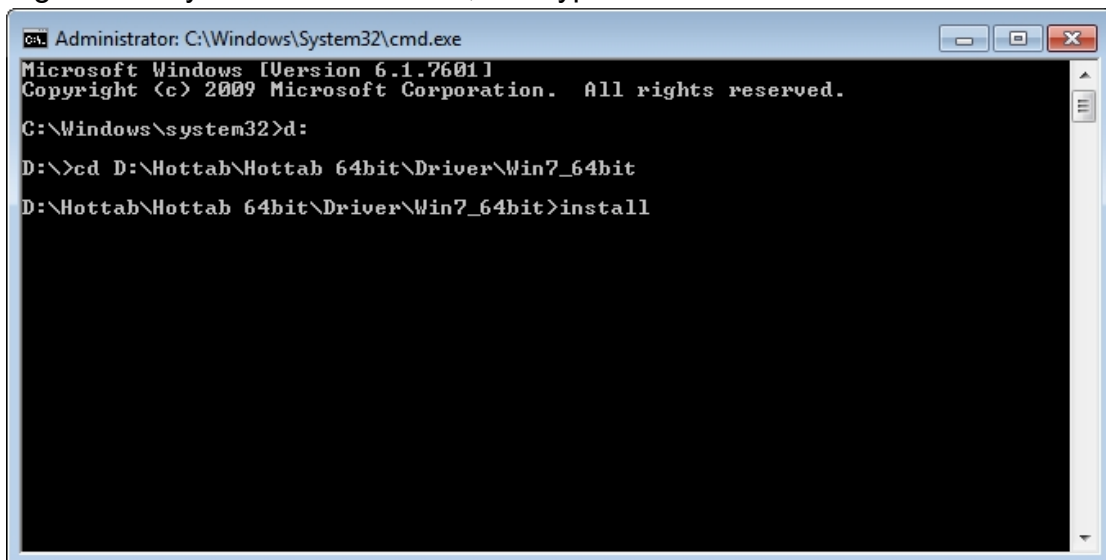


B. Install the driver

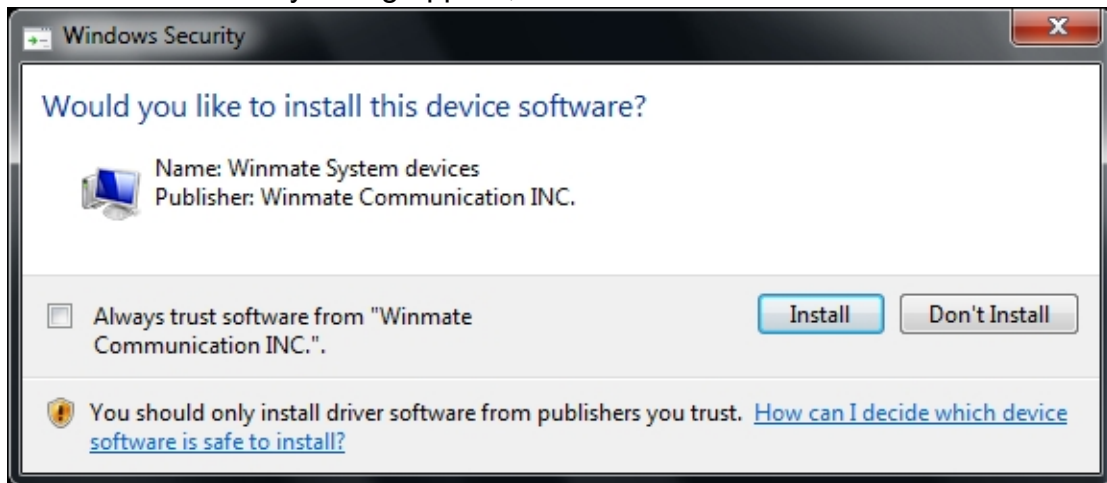
1. Type "cmd" in the run box.
2. The cmd.exe will appear in Programs
3. Right click on the cmd.exe and click on "Run as administrator" to start command prompt.



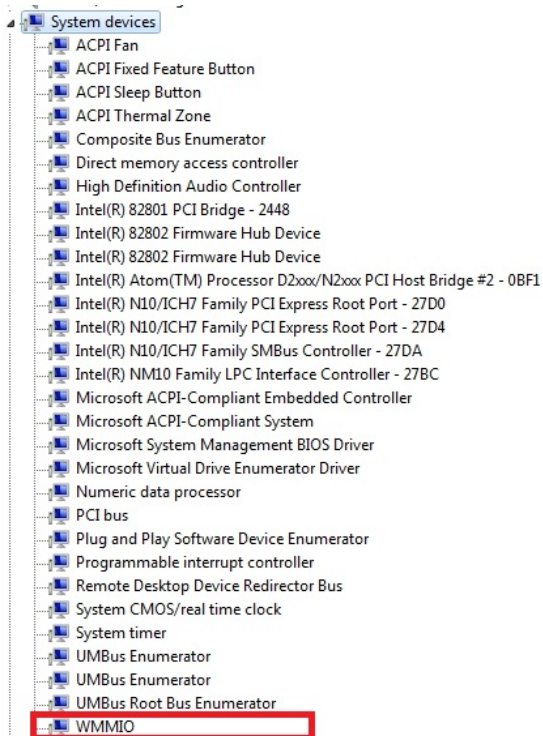
4. Change directory to driver's location, and type **install** to install the driver



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”



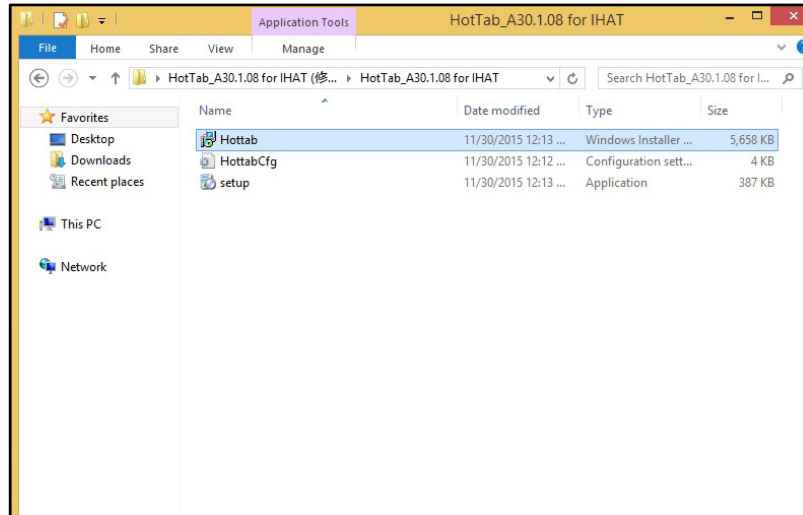
Hottab AP Installation



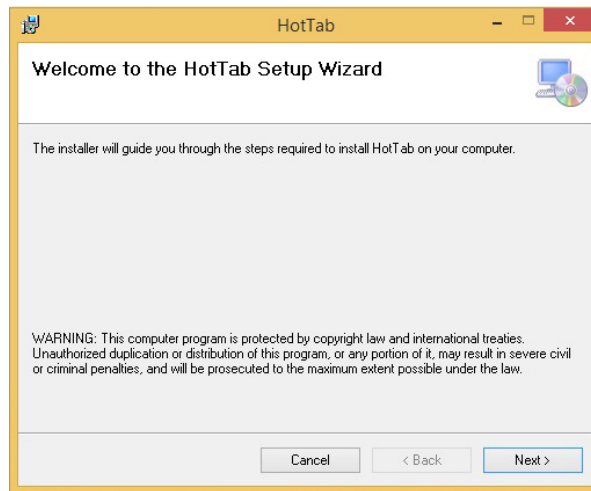
Important:

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

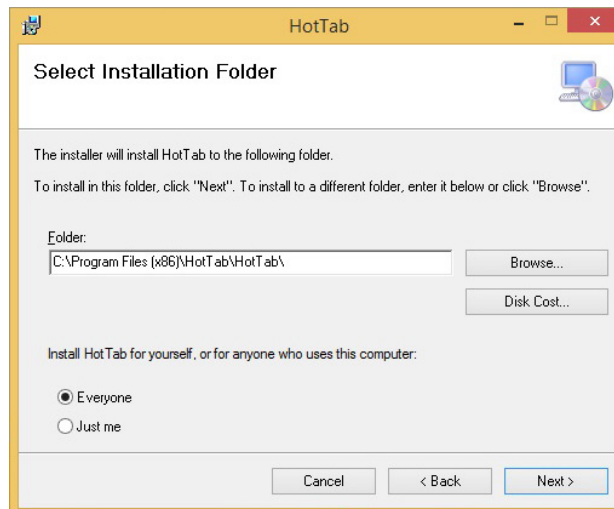
1. Uninstall the old version Hottab software before start to install the new version Hottab
2. Open the folder of Hottab you want to install, find "Hottab.exe" and double click it



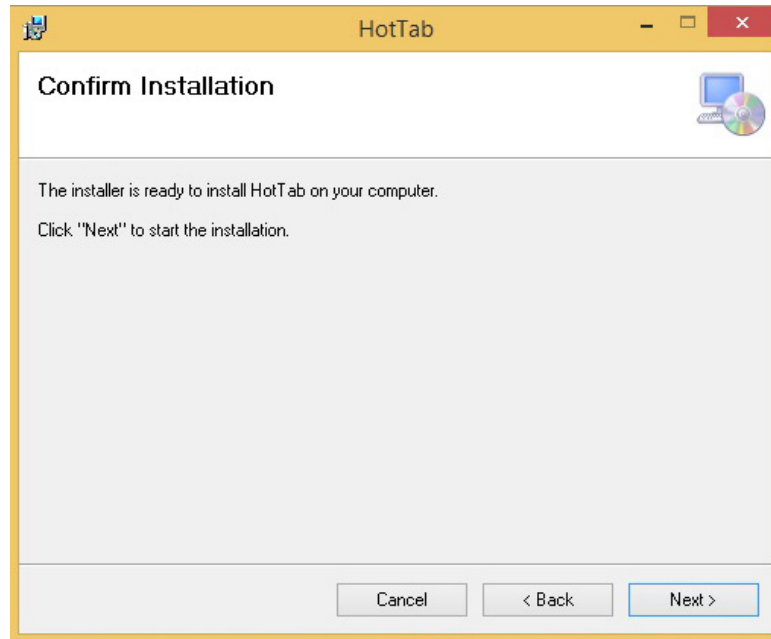
2. Click "Next" go to install the Hottab



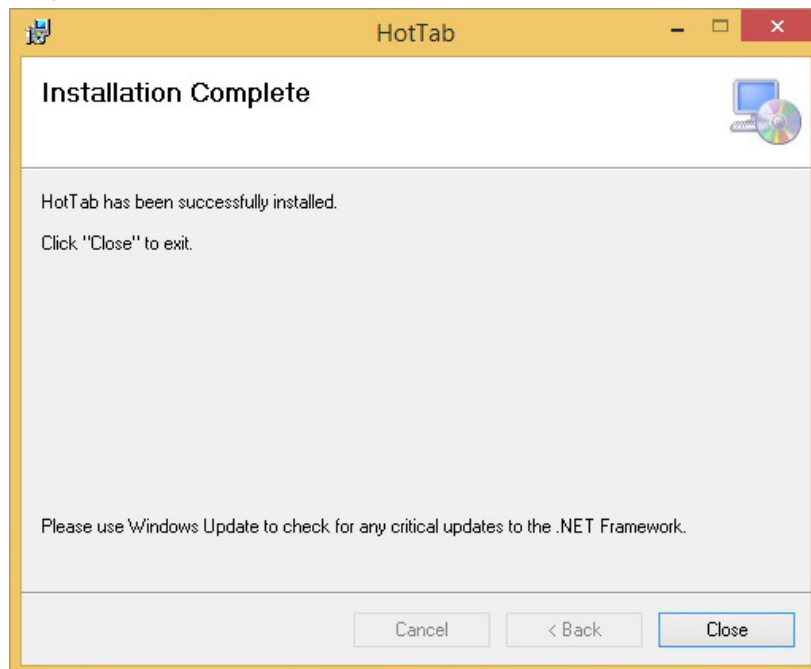
3. Click "Next"



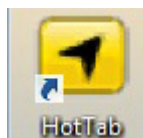
4. Click "Next", the installation will be started



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




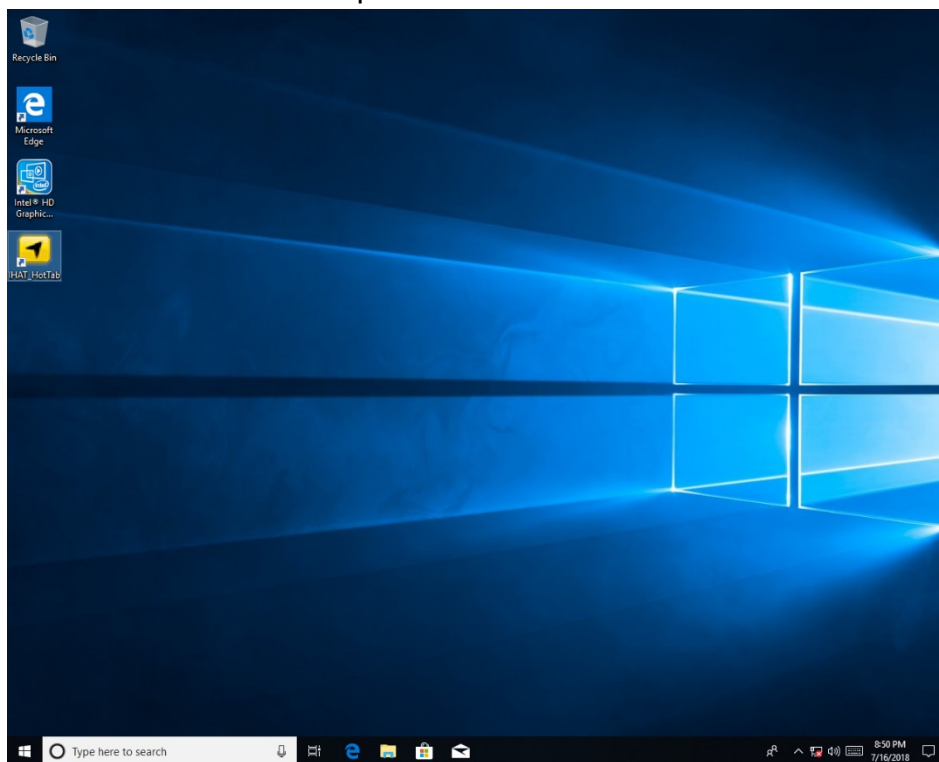
6. Yan can find this shortcut on the desktop, double click it to open the Hottab application



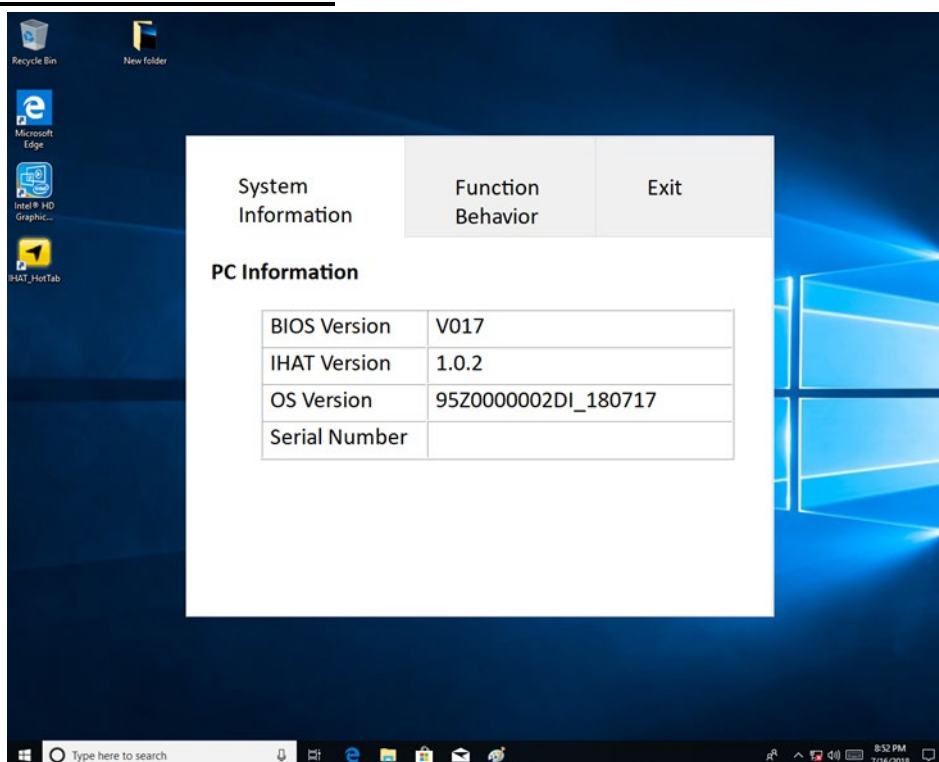
4.9 Hottab Utility

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

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

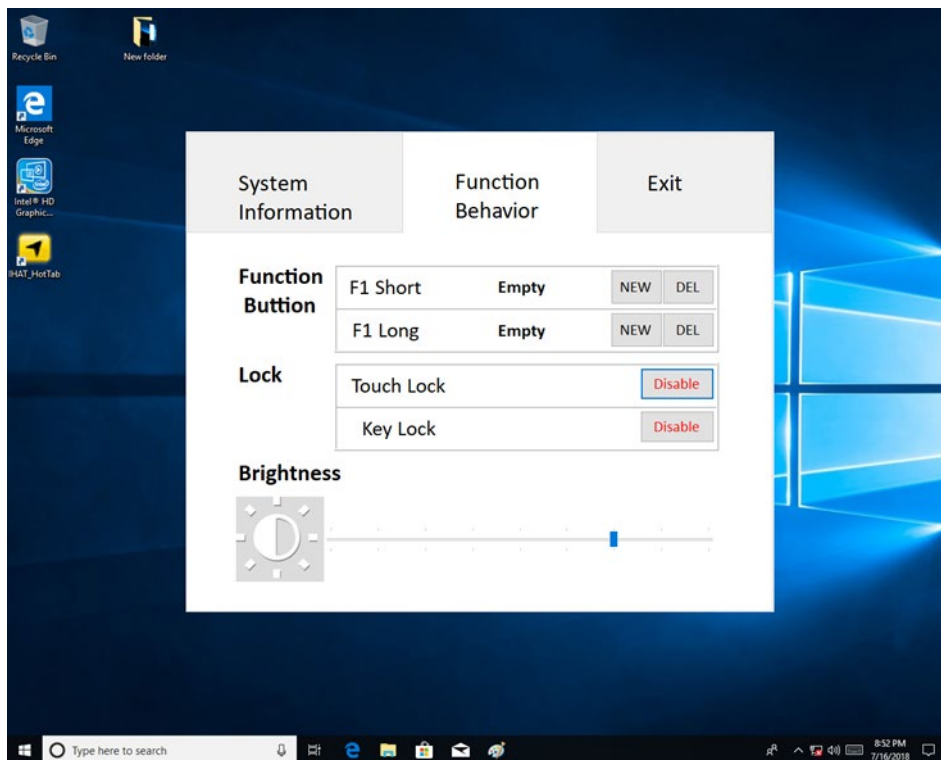
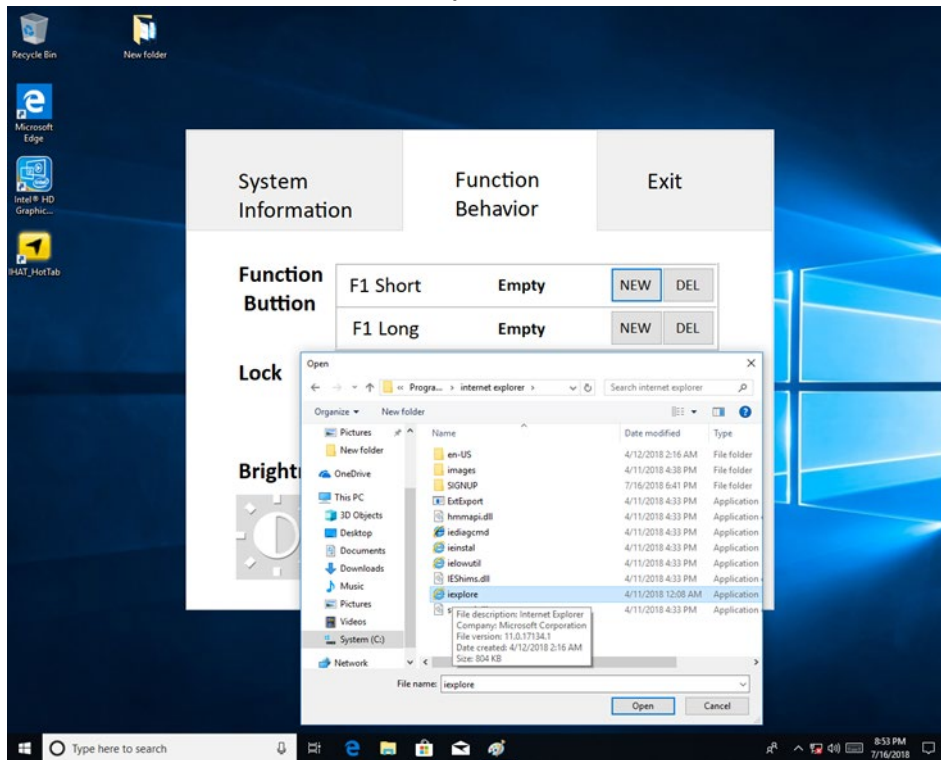


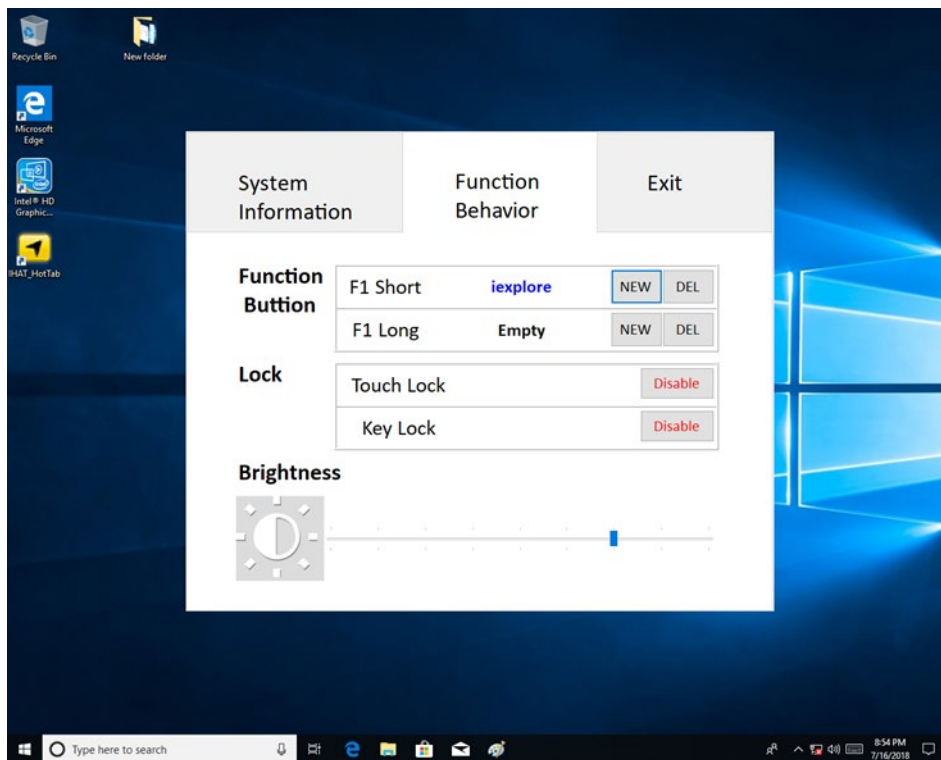
4.9.1 System information menu



4.9.2 Hottab Shortcut Setting

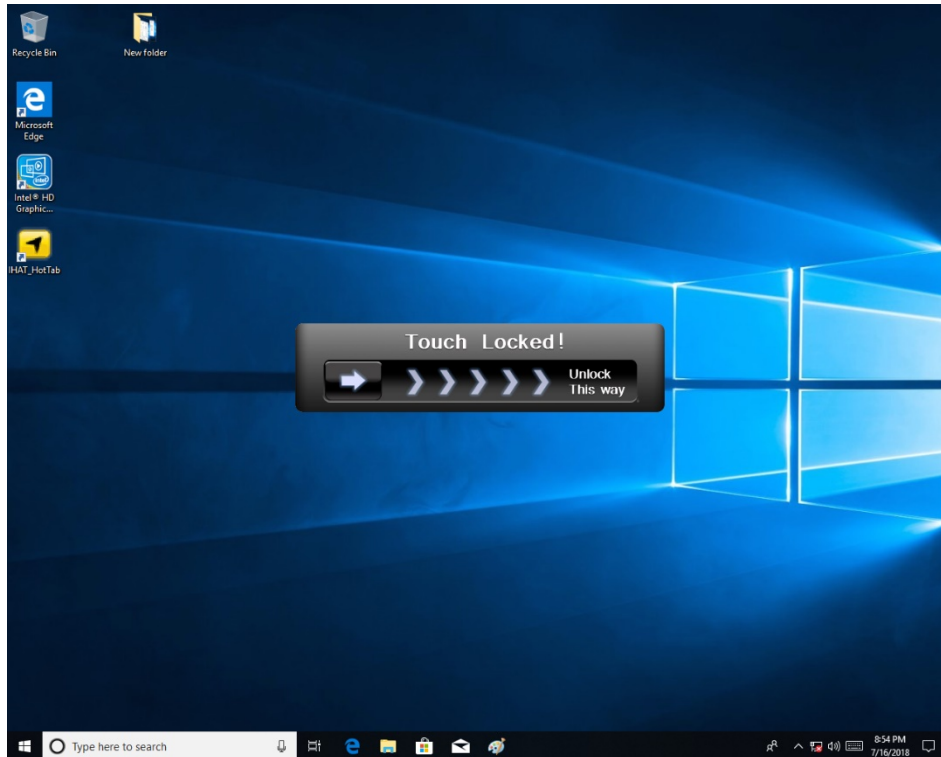
In Function Behavior, submenu users can set up functions.



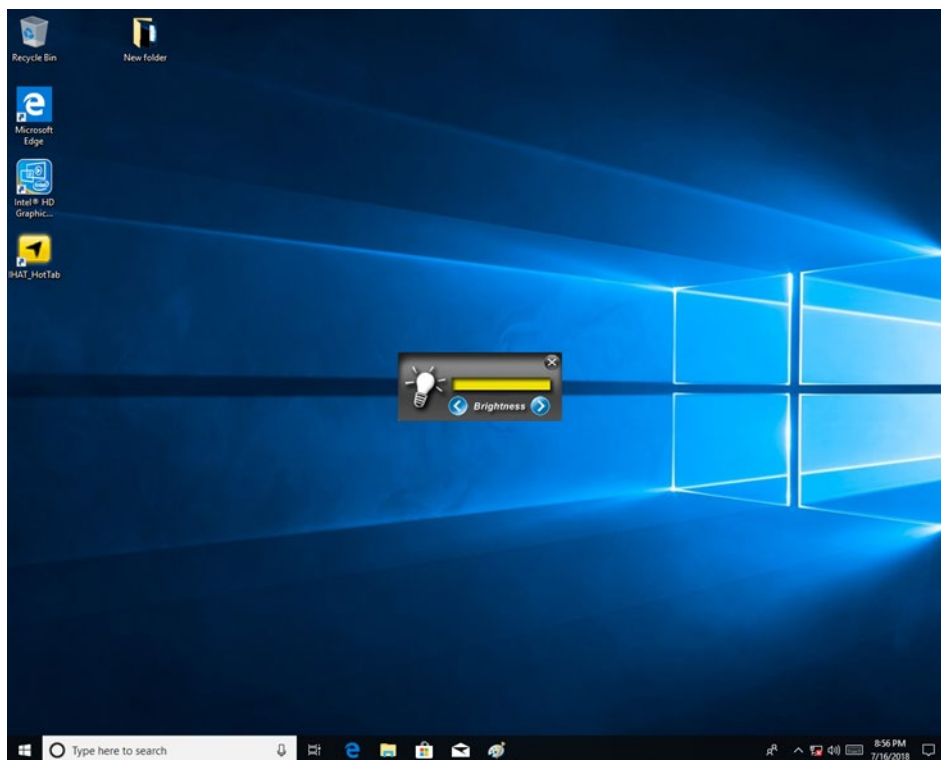
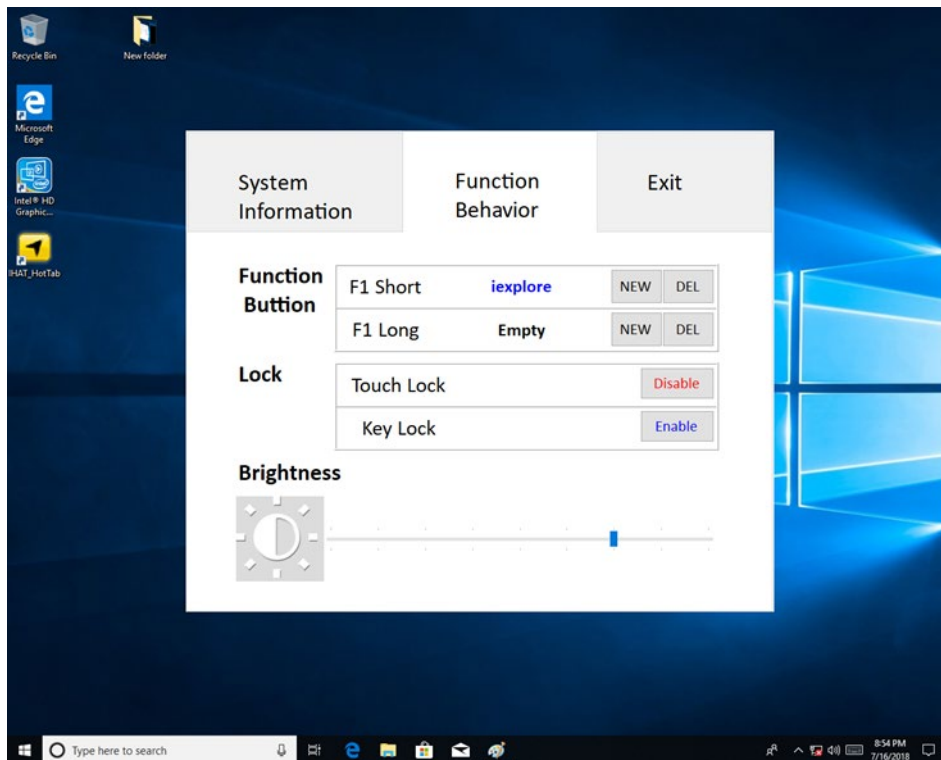


4.10 Touch Lock Setting

Under the Touch Lock mode, the touchscreen is locked from all touch inputs, while keypad input remains operational.



4.11 Brightness Adjustment






Appendix A: Hardware Specifications

Item	Specifications
Computer	
CPU	Intel® Core™ i5-4300U (3M Cache, up to 2.90 GHz) Intel® Core™ i7-4650U (4M Cache, up to 3.30 GHz) (Optional)
OS	Windows Embedded Standard 7 (Optional) Windows 7 PRO for Embedded System (Optional) Windows Embedded 8.1 Industrial (Optional) Windows 10 IoT Enterprise (Optional)
System Chipset	Intel® HD graphics 5000
BIOS	AMI 16Mbit Flash
System Memory	4GB pre-installed, support up to 8GB
USB	1 x USB 3.0 / 2 x USB 2.0 A Type, 1 x 4pins terminal block USB 2.0
Storage	
Main Storage	128 GB industrial grade mSATA SSD to store OS; support up to 512GB
Optional Second Storage	2.5" SSD up to 512GB.
Display	
Panel Size	19-inch 1280 x 1024, 800nit (Optional 1000nits) LED backlight LCD
Contrast Ratio	1000:1
Response Time	10ms
View Angles	<ul style="list-style-type: none"> Horizontal: 170 degree (left to right) Vertical: 160 degree (up to down)
Max Colors	16.7M colors
Touch	Projected capacitive touch (PCAP)
Ethernet Interface	
Hardware Interface	1 x RJ45; 1 x 8pins terminal block
Serial Interface	
Serial Standard	1 x DB9 RS232; 1 x 10pins terminal block
Video Interface	
VGA	1 x DB15 VGA
Power Requirements	
Input Voltage	Typical 9~36V DC with isolation (There is no tolerance for the DC input voltage)
Physical Characteristics	
Housing	Aluminum housing

Item	Specifications
Dimensions	396 x 310 x 49mm (W x H x D)
Cutout	462 x 386 mm (W x H)
Mounting	Mounting hole for VESA 100 x 100 mm
Environment Limits	
Operating Temperature	-40°C to 70°C
Storage Temperature	-40°C to 70°C
Ambient Relative Humidity	5 to 95% (non-condensing)
Standard and Certification	
Ordinary Location 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 ATEX II 3 G Ex ic nA IIC T4 Gc -40 ≤ Tamb ≤ 70 Meet Standards EN 60079-0, EN 60079-11, EN 60079-15 IECEx II 3 G Ex ic nA IIC T4 Gc -40 ≤ Tamb ≤ 70 Meet Standards IEC 60079-0, IEC 60079-11, IEC 60079-15
Ordinary Location Safety	UL 60950-1 CSA C22.2 No. 60950-1-07 EN 60950-1

NOTE:

- 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.
- All specifications are subject to change without prior notice.

Product Name : Embedded System Model No : R19IHAT-66EX Type : Panel PC Part Number : Manufactured Date : Rating: +9~36V = 16.6A Max. Serial No :	WARNING: WARNING - EXPLOSION HAZARD - DO NOT DISCONNECT CONNECTORS WHILE CIRCUIT IS LIVE UNLESS AREA IS KNOWN TO BE NON-HAZARDOUS. AVERTISSEMENT: AVERTISSEMENT - RISQUE D'EXPLOSION - NE PAS débrancher les connecteurs lorsque le circuit est moins que l'environnement est connu pour être non dangereux. Warning - Cable entry should by means of suitably-certified 'Ex' cable glands.	WARNING- DO NOT USE USB UNLESS THE AREA IS KNOWN TO BE NON-HAZARDOUS. Avertissement- Ne pas utiliser USB sauf si la zone est connue pour être non dangereux. WARNING- DO NOT USE AUDIO CONNECTORS UNLESS THE AREA IS KNOWN TO BE NON-HAZARDOUS. Avertissement- Ne pas utiliser les connecteurs audio sauf si la zone est connue pour être non dangereux. Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore the equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on such surfaces. In addition, the equipment shall only be cleaned with a damp cloth.
1. Class I, Division 2, Groups A, B, C, D T4 Class I, Zone 2, IIC T4 2. READ USER MANUAL BEFORE USE -40 °C ≤ Tamb ≤ 70 °C		
Winmate Inc. 9F, No. 111-6, Shing-De Rd., San-Chung Dist., New Taipei City 24158, Taiwan	 II 3 G Ex nA ic IIC T4 Gc 	

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.
- Don not use water or oil directly on the display screen. If droplets are allowed to drop on the screen, permanent staining or discoloration may occur.

Appendix C: Statement of Regulatory Approval

Refer the following descriptions for various approvals and certifications

Explosive Atmospheres Directive



Certification with ATEX Directive 94/9/EC; Independent 3rd party assessment (Notified Body: DEMKO)

Low Voltage Directive European Safety for Industrial Control Equipment



Self-Declaration in accordance with European LVD Directive 2006/95/EC; Independent 3rd party assessment (Accredited by IEC 17025)

Electromagnetic Compatibility Directive European EMC for Industrial Control Equipment



Self-Declaration in accordance with EMC Directive 2004/108/EC; Independent 3rd party assessment (Accredited by IEC 17025)

Winmate Inc.
9F, No.111-6, Shing-De Rd., San-Chung District,
New Taipei City 24158, Taiwan, R.O.C
www.winmate.com

