Full IP66 Aluminum Flat Touch Panel PC Series

Class 1 Division 2





R19IHAT-66EX

Version 6.0

File Number : PPM201404282 06.08.2015



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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 1W08Axxxxxx 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.



Safety Information

WARNING!



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.

CAUTION!



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.

Safety Precautions

- Please read these safety instructions carefully.
- Please keep this user's manual for later reference.
- Please disconnect this equipment from any AC outlet before cleaning. Do not use liquid or spray detergents for cleaning. Use a damp cloth.
- Do not touch the LCD panel surface with sharp or hard objects.
- For pluggable equipment, the power outlet must be installed near the equipment and must be easily accessible.
- Keep this equipment away from humidity.
- Place this equipment on a reliable surface during installation. Dropping it or letting it fall could cause damage.
- The openings on the enclosure are for air convection. Protect the equipment from overheating. DO NOT COVER THE OPENINGS.
- Make sure the voltage of the power source is correct before connecting the equipment to the power outlet.
- Position the power cord so that people cannot step on it. Do not place anything over the power cord.
- All cautions and warnings on the equipment should be noted.
- If the equipment is not used for a long time, disconnect it from the power source to avoid damage by transient over-voltage.
- Never pour any liquid into an opening. This could cause fire or electrical shock.
- Never open the equipment. For safety reasons, only qualified service personnel should open the equipment.
- This equipment is designed to be used in restricted access location. Only service persons or trained persons are allowed to access this equipment.



- If any of the following situations arises, get the equipment checked by service personnel:
 - □ The power cord or plug is damaged.
 - Liquid has penetrated into the equipment.
 - □ The equipment has been exposed to moisture.
 - □ The equipment does not work well, or you cannot get it to work according to the user's manual.
 - □ The equipment has been dropped and damaged.
 - □ The equipment has obvious signs of breakage.
- Do not leave this equipment in an uncontrolled environment where the storage temperature is below -20°C (-4°F) or above 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.
- **ATTENTION** 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.



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Introduction

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 2.6GHz Intel Haswell Core i5-4300U. The panel PC also offers brilliant visibility with its true flat design, transflective sunlight-viewable, resistive touchscreen with 1280 x 1024 pixel resolution, all in a compact form factor

Features

- Intel Haswell Core i5-4300U turbo max 2.6 GHz
- 19" SXGA High brightness panel, 800 nits
- Sunlight readable, transflective, resistive 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



Package Contents

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

Panel PC	24V 50W AC to DC adapter for test only	Power Connector
Operating System Recovery DVD (Optional)	Manual & Driver CD	User Manual
Power Cord		



Product Overview (Unit: mm)

Front View



Side and Rear Views



Front Button

	Hester PWR Hester EANI Hoto LANI Hoto LANI Hoto LANI		
Button Type	Function		
٩	Power on/off		
	Increase the brightness of the Panel		
\mathbf{O}	Decrease the brightness of the Panel		
G	Suspend the touch's function temporarily		
Fn	Programmable function key configured by Hot Tab Utility		



Getting Started

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.



• When the system hangs, press the **Reset** button to restart the device.



Adjusting the LCD Display Brightness

- 1. Tap the arrow on the system tray to display the hidden icons.
- 2. Double-tap the 🔆 icon to display the brightness menu.



3. Drag the brightness bar to adjust the brightness level according to your preference.





Calibrating Touch Screen

When turning on the Panel PC for the first time, it is highly recommended to calibrate the touch screen to ensure touch accuracy.

Five-wire resistive touchscreens

The five-wire resistive touchscreens use a glass panel with a uniform resistive coating. A thick polyester coversheet is tightly suspended over the top of the glass, separated by small, transparent insulating dots. The coversheet has a hard, durable coating on the outer side and a conductive coating on the inner side.



When the screen is touched, the conductive coating makes electrical contact with the coating on the glass. The voltages produced are the analog representation of the position touched. The controller digitizes these voltages and transmits them to the computer for processing. The five-wire technology utilizes the bottom substrate for both X and Y-axis measurements. The flexible coversheet acts only as a voltage-measuring probe. This means the touchscreen will continue working properly even with non-uniformity in the cover sheet's conductive coating. The result is an accurate, durable and reliable touchscreen that offers drift free operation. The touchscreens are sealed against contamination and moisture. The coversheet is sealed to the glass substrate with an industrial grade caulk. This prevents wicking of fluid between the coversheet and glass. Also, the touchscreens are not air vented, thereby preventing fluid ingress through an air vent.

Brief Specifications

Subject	Details	
Input Method	Finger, gloved hand, or stylus activation	
Positional Accuracy	Standard deviation error is less than 0.080 (2 mm)	
Resolution	Touch point density is based on controller resolution of 4096 x 4096	
Touch Activation Force	Typically less than 4 ounces (113 grams)	
Light Transmission	HL products: 80% +/–5% at 550 nm wavelength Enhanced products: 60% +/–5% at 550 nm wavelength	

Update touch-screen driver or new information. Go to <u>www.elotouch.com</u>.



Elo Touch Correction

Winmate ELO Touch driver software provides a consistent software interface among all ELO touch screens and controllers.

Go to <u>http://www.elotouch.com/Support/dnld.asp</u> for a complete list of available supports.

After the driver installation is complete, do the following to perform touch screen calibration.

- 1. Tap the arrow on the system tray to display the hidden icons.
- 2. Double-tap the **1** icon to display the Elo Touchscreen menu.



3. Double-tap the

Align

icon to proceed to next step.





4. Follow the on-screen instructions to calibrate the touch screen.

	the Properties	
Computer-Shortcut		es 1 About Web alluments medies the computer to convert 1 bouchancern coordinates into image coordinates. Align the touchancern whenever your * Initially install the touchancern drivers. * Notice the cursor isn't lined up with your finger. * Notice the cursor isn't lined up with your finger. * Notice the cursor isn't lined up with your finger. * Notice the cursor isn't lined up with your finger. * Oracle targets from position of normal use

5. Tap the \checkmark icon if the cursor follows your finger to finish and exit the calibration utility.

Recycle Bin	Elo Touchscreen Properties			
Computer- Shortcut	General Mode Sound Property	es 1 About Video elignment enables the computer to convert to bucharcere coordinates into image coordinates. Align the touchscreen whenever your * Initially install the touchscreen drivers. * Change the touchnonitor or touchscreen hardware. * Notice the cursor isn't lined up with your finger. * Notice the cursor isn't lined up with your finger. Touch the screen. Does the cursor find Align * Cancel Anow Help	ollow your finger?	



Turning Off Your Device

To shut down your device, do the following: Tap **Start (**) > **Shut down**.



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



Installation Wiring Requirements

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

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

- Do not run signal or communication wiring and power wiring in the same conduit. To avoid interference, wires with different signal characteristics (i.e., different interfaces) should be routed separately.
- Be sure to disconnect the power cord before installing and/or wiring your device.
- Verify the maximum possible current for each wire gauge, especially for the power cords. Observe all electrical codes dictating the maximum current allowable for each wire gauge.
- If the current goes above the maximum ratings (80 W), the wiring could overheat, causing serious damage to your equipment.
- 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.



Connecting the Interface

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.



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.



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	3VVSYNC0
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	СТЅ
9	RI		

USB Port (Only used in safe area)



LAN1 Port (Only used in safe area)



Power terminal block



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

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-

Pin	Signal Name	
1	VCC+	
2	VCC-	
3	GND	

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



* 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 recommend.

Please refer to following drawing for grounding screw holes position





COM Port



Pin	Signal Name	Pin	Signal Name
1	DCD	2	RXD
3	TXD	4	DTR
5	GND	6	DSR
7	RTS	8	СТЅ
9	RI	10	+V5

LAN2 Port



Pin	Signal Name	Pin	Signal Name
1	MDIO3-	2	MDIO3+
3	MDIO2-	4	MDIO2+
5	MDIO1-	6	MDIO1+
7	MDIO0-	8	MDIO0+

USB Port



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



Ensure that the external power source is OFF before connecting or disconnecting the DC IN jack.

Mounting Solution

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





- 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





VESA Mount

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





Windows 7 Driver Installation

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.

🖌 🚖 Favorites	Name	Date modified	Туре	Size
🔲 Desktop	IIA 🚇	10/6/2014 3:14 PM	File folder	
🚺 Downloads	퉬 ia64	10/6/2014 3:13 PM	File folder	
🖳 Recent places	🍶 Lang	10/6/2014 3:13 PM	File folder	
	🎍 WIN7	10/6/2014 3:13 PM	File folder	
🖉 🔚 Libraries	퉬 x64	10/6/2014 3:13 PM	File folder	
👂 📑 Documents	SVer.dll	8/5/2013 11:50 AM	Application extens	52 KB
🗅 🍶 Music	difxapi.dll	5/10/2012 12:34 PM	Application extens	316 KB
P 🔄 Pictures	🗾 Help	9/15/2006 10:10 AM	Text Document	1 KB
🛛 📑 Videos	IIF2	2/12/2008 2:26 PM	Configuration sett	1 KB
	IIF2v	6/11/2013 3:45 PM	Configuration sett	472 KB
🕘 🌉 Computer	mup	8/5/2013 11:50 AM	XML File	158 KB
🕖 🏭 Local Disk (C:)	🔣 readme	8/5/2013 11:49 AM	Text Document	94 KB
PK (D:)	🔜 Setup	12/23/2013 5:09 PM	Application	936 KB
🛯 👊 Network				

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.





Graphic Driver Installation

IH70 Motherboard is with Intel mobile Core i7, Core i5, Core i3 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.

🔁 🚺 🗢			Graphics_V	/10.18.10.3379				×
File Home	Share	View						Y
€ 🕣 🔹 ↑	退 « PK	(D:) ► IH70 ► I	Driver ► Graphics_V10	.18.10.3379	~ C	Search Graphics	V10.18.10.3379	P
 F) TX TX T0X T0X	wirial Vin8 03 章前 02 tition 8.4 1032 1031 1083_SD 1983(D 00CKIN 9 IP65	(b:) I H70 I I Name DisplayAud Graphics I CCS Lang Not Autorun I Installation mup Readme Setup Setup.if2	Univer > Graphics_V10	LIB. 10.33/9 Date modif 10/6/2014 3 10/6/2014 3 10/6/2014 3 10/6/2014 3 10/6/2014 3 10/6/2014 3 10/6/2014 3 12/18/2013 11/2/2007 12/23/2013 12/23/2013 12/23/2013	 C ied 16 PM :14 PM :14 PM :14 PM :21 AM :6:43 PM :02 PM :04 PM :02 PM :02 PM 	Search Graphics, Type File folder File folder File folder File folder Setup Information Application extens Text Document XML File Text Document Application IF2 File	1 KB 312 KB 70 KB 12 KB 976 KB 13 KB	
IH83 Intel 623 2 items	5 new 👻							== (

Step 2. Click on "Next " to install Driver.



Step.3. Click on "Yes " to agree License.





Step.4. Click on "Next " to install Driver.

ntel® Graphics Driver		
eadme File Information		(intel)
lefer to the Readme file below to view th	re system recurements and inst	alaccn information.
README FILE		^
Release Version: Production Version		
Release Version: Production Version Driver Version: 15.33.11.64.3379		
Release Version: Production Version Driver Version: 15.33.11.64.3379 Operating System(s):		
Release Version: Production Version Driver Version: 15.33.11.64.3379 Operating System(s): Microsoft Windows* 3.64 Microsoft Windows* 3.164		

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





USB 3.0 Driver Installation

IH70 Motherboard is designed with Intel mobile Core i7, Core i5, Core i3 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.

	- ··· ^		-			_
Fav	Name	Date modified	Type	Size		
2 🗖	🍌 apps	3/25/2015 7:38 PM	File folder			
D	Drivers	3/25/2015 7:38 PM	File folder			
R	🍶 Lang	3/25/2015 7:38 PM	File folder			
	🍌 x64	3/25/2015 7:38 PM	File folder			
Lib	S DIFxAPI.dll	11/1/2006 3:21 PM	Application extens	312 KB		
🖻 C	💣 mup	12/20/2013 12:38	XML Document	9 KB		
1 L	📄 Readme	12/20/2013 12:38	Text Document	45 KB		
E P	🔽 😹 Setup	12/20/2013 12:38	Application	944 KB		
V	Setup.if2	12/20/2013 12:38	IF2 File	6 KB		
	🚳 USB3Ver.dll	12/20/2013 12:38	Application extens	41 KB		
Co						
🍒 L						
Ne						

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.

etup Pro	jress	(intel)
Please wait w	nile the following setup operations are pe	rformed:
Copying File: Copying File: Copying File: Copying File: Copying File: Copying File: Copying File: Copying File: Copying File: Creating Reg Click Next to	C: \Program Files (x86) \Intel \Intel (R) USB C: \Program Files (x86) \Intel \Intel (R) USB Stry Key: HKLM\SOFTWARE\Wicrosoft\Wi continue.	3.0 eXtensible Host Controller Driver (A 3.0 eXtensible Host Controller Driver (A 1.0 eXtensible (A 1.0 eXtensible (A 1
•	m	*

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





Step.7. When the "Setup Progress" is complete click "Next" to proceed.

etup Pro	gress	(intel)
Please wait i	vhile the following setup operations are per	formed:
Copying File Copying File	: C: \Program Files (x86) \Intel\Intel(R) USB : C: \Program Files (x86) \Intel \Intel(R) USB : C: \Program Files (x86) \Intel \Intel \Intel(R) USB : C: \Program Files (x86) \Intel \Inte	3.0 eXtensible Host Controller Driver \A 3.0 eXtensible Host Controller Driver \A
	III	r

Step.8. Lastly, the "Setup Complete" screen appears so click "Finish" to restart your computer.





Ethernet Driver Installation

The Users must make sure which operating system you are using in the IH70 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.

₩.	Intel(R) Network Connections Install Wizard	×
Welcon Networ	ne to the install wizard for Intel(R) A Connections	(intel)
	Instals drivers. Intel(R) Network Connections, and Advanced Networking Services.	
	WARNING: This program is protected by copyright law and international treaties.	
-	< Back Next >	Cance

Step.3 Click on "Next " to agree License.

	Intel(R) Network Connections Inst	all Wizard	
License Please	Agreement read the following license agreement carefully,		(intel)
	INTEL SOFT/VARE LICENSE AGREEM	ENT	^
	IMPORTANT - READ BEFORE COPYING, INSTALL		NG.
Do not co (collectiv ("Agreen	opy, install, or use this software and any associ voly, the "Software") provided under this license nent") until you have carefully read the following	ated materia agreement g terms and	onditions.
By copyi the term	ng, installing, or otherwise using the Software, j s of this Agreement. If you do not agree to the te you install or use the Software	you agree to erms of this .	be bound by Agreement, 🖕
By copyi the term	ng, installing, or otherwise using the Software, j s of this Agreement. If you do not agree to the te the terms in the Icense agreement	you agree to erms of this .	he bound by Agreement, Print
By copyi the term I accep	rg, installing, or otherwise using the Software, is s of this Agreement. If you do not agree to the te the terms in the Icense agreement taccept the terms in the Icense agreement	you agree to erms of this .	he bound by Agreement, ~



Step.4. Click on "Next" to install driver.

Intel(R) Ne	etwork Connections	
Setup Options Select the program features you want in	nstalled.	(intel)
Install:		
Intel(R) PROSet for Windows* Devi Advanced Network Services Windows* PowerShell Module Intel(R) Network Connections SNMP	ce Manager Agent	
Feature Description Enables sending event notices using Simpl Requires that the Microsoft SNMP Service	e Network Management Pr be installed.	rotocol (SNMP).
	< Back Ne	xt > Cancel

Step.5. Click on "Finish" to complete the driver installation.

B	Intel(R) Network Connections Install Wizard	×
Install y	vizard Completed	(intel)
	To access new features, open Device Manager, and view the properties of the network adapters.	
	< Back Finish	Cancel

Audio Driver Installation

The ALC886 series are high-performance 7.1+2 Channel High Definition Audio Codecs providing ten DAC channels that simultaneously support 7.1 sound playback, 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 IH70 Motherboard before installing the Audio drivers. Follow the steps below to complete the installation of the Realtek ALC886 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(64bit_Vista_Win7_Win8_R271 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.



Fintek COM Port Driver Installation

STEP 1.If the system is WIN7 please first do 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.



~					-
rganize	• • Open with	Newfolder		()=z •	
1.	Name	Date modified	Туре	Size	
202	🚳 sbp2port.sys	2010/11/21 上午 05:29	System file	84 KB	
	scfilter.sys	2010/11/21 上午 05:29	System file	26 KB	
9	🚳 scsiport.sys	2010/11/21 上午 05:29	System file	137 KB	
1	secdrv.sys	2009/7/14 上午 04:50	System file	20 KB	
	seren um.sys	2009/7/14 上午 07:45	System file	18 KB	
5	💰 serial.sys	2009/7/14 上午 07:45	System file	82 KB	
E	semouse.sys	2009/7/14 上午 07:45	System file	20 KB	
- 	🚳 sffdisk.sys	2009/7/14 上午 07:45	System file	11 KB	
	🚳 sffp_mmc.sys	2009/7/14 上午 07:45	System file	12 KB	
E	ffa effa ed ave	2010/11/21 5 4 05:20	Surteen Ele	10 60	

After the update and update success.

0	🖌 📕 🕊 Windows 🕨 System	m32 ► drivers ►	 ▼ 4→ Search drive 	75	3
Organize	• E Open with	New folder		}≣ • □	0
1.	Name	Date modified	Туре	Size	
2	sbp2port.sys	2010/11/21 上午 05:29	System file	84 KB	
1	🚳 scfilter.sys	2010/11/21 上午 05:29	System file	26 KB	
-	🚳 scsiport.sys	2010/11/21 上午 05:29	System file	137 KB	
8	🚳 secdrv.sys	2009/7/14 上午 04:50	System file	20 KB	
	🚳 serenum sys	2009/7/14 上午 07:45	System file	18 KB	
1	36 serial.sys	2011/6/22 上午11:39	System file	90 KB	
2	SETTIONSESSYS	2009/7/14 上午 07.45	System file	20 KD	
	🚳 sffdisk.sys	2009/7/14 上午 07:45	System file	11 KB	
	S sflp mmc.svs	2009/7/14 十年 07:45	System file	12 KB	

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

P Change User Acco	ount Contro	I settings	
Non-			
Care as a second sec			
p see more results			



To turn off UAC, move the slider to the Never notify position, and then click OK. If you're prompted for an administrator password or confirmation, type the password or provide confirmation.

😴 User Account Control Settings	
Choose when to b User Account Control H <u>Tell me more about Us</u> Always notify	be notified about changes to your computer helps prevent potentially harmful programs from making changes to your computer. er Account Control settings
	Default - Notify me only when programs try to make changes to my computer • Don't notify me when I make changes to Windows settings
Never notify	Recommended if you use familiar programs and visit familiar websites.
	Cancel

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.

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 drive	r DVD and select th	e "Intel ME 9.0"	' folder and click	"Setup.exe"
------	-----------------------------	---------------------	------------------	--------------------	-------------

Name	*	Date modified	Турс	Size
JAL DAL		10/6/2014 3:17 PM	Filefolder	
퉬 Drivers		10/6/2014 3:1/ PM	Filetolder	
🕌 Firmware Recovery Agent		10/6/2014 3:16 PM	Filefolder	
🎳 ITR		10/6/2014 3:16 PM	Filefolder	
📕 Intel Control Center		10/6/2014 3:16 PM	Filefolder	
🕌 IntelMEFWVER		10/6/2014 3:16 PM	Filefolder	
JUS SUL		10/6/2014 3:16 PM	Filefolder	
🕌 Lang		10/6/2014 3:16 PM	Filefolder	
JE LMS		10/6/2014 3:16 PM	Filefolder	
NAC_PP		10/6/2014 3:16 PM	Filefolder	
퉲 x64		10/6/2014 3:16 PM	Filefolder	
autorun 👔		8/8/2013 1:25 PM	Setup Information	1 KB
S DIFxAPI.d I		8/8/2013 1:25 PM	Application extens	312 KB
📋 mup		8/8/2013 1:25 PM	XML File	9 KB
My Setup		8/8/2013 1:25 PM	Application	966 KB
Setup.if2		8/8/2013 1:25 PM	IF2 File	24 KB
yersion		8/8/2013 1:25 PM	Configuration sett	1 KB

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

Intel® Mana Welcome to (agement Engine Compone the Setup Program	nts
This setup program It is strongly recom	will install the Intel® Management Engine mended that you exit all programs before o	Components. continuing. Click Next to continue.

Step.3.Click on "Yes " to agree License.



icense Agreement	Components	(intel
You must accept all of the terms of the licen program. Do you accept the terms?	se agreement in order	to continue the	: setup
INTEL SOFTWARE LICENSE AGREEMENT (O	EM / IHV / ISV Distribu	tion & Single Us	er) /
IMPORTANT - READ BEFORE COPYING, INS Do not use or load this software and any as until you have carefully read the following t Software, you agree to the terms of this Ag install or use the Software.	TALLING OR USING. sociated materials (co erms and conditions. E preement. If you do no	llectively, the "S by loading or usi ot wish to so ag dent Hardware	Software") ing the ree, do not Vendor
Please Also Note: * If you are an Original Equipment Manufac (IHV), or Independent Software Vendor (IS * If you are an End-User, then only Exhibit	V), this complete LICE A, the INTEL SOFTWA	NSE AGREEMEN	II applies; GREEMENT, '



Step.4. Click on "Finish" to complete the software installation.

Intel® Installation Framewo	ork – 🗆 🗙
Intel® Management Engine Components Setup Is Complete	intel
The setup program successfully installed the following components - Intel® Management Engine Interface - Intel® Identity Protection Technology (Intel® IPT) - Local Management Service Click Finish to complete the setup process.	Finish



Specification

Hardware Specifications

Item	Specifications
Computer	
CPU	Intel i7-4650U, 4M cache, up to 3.30GHz Intel i5-4300U ,3M cache, up to 2.90GHz
OS	Windows Embedded Standard 7
System Chipset	Intel [®] HD graphics 5000 (i7) / 4400 (i5)
Bios	AMI 16Mbit Flash
System Memory	8GB pre-installed
USB	1 x USB 3.0 / 2 x USB 2.0 A Type ; 1 x 4pins terminal block USB2.0
Storage	
Main Storage	GB industrial grade mSATA SSD to store OS; support up to 512GB
Optional Second Storage	2.5″ 128G SSD
Display	
Panel Size	19-inch 1280 x 1024, 800nit LED backlight LCD
Contrast Ratio	1000:1
Response Time	10ms
View Angles	 Horizontal: 170 degree (left to right) Vertical: 160 degree (up to down)
Max Colors	16.7M colors
Touch	Flat Resistive single point touch, suitable for use outdoors around heavy equipment
Ethernet Interface	
Hardware Interface	1 x RJ45; 1 x 8pins terminal block
Serial Interface	
Serial Standard	1x DB9 RS232; 1 x 10pins terminal block
Power Requirements	
Input Voltage	Typical 9~36V DC with isolation (There is no tolerance for the DC input voltage)



Item	Specifications		
Physical Characteristics			
Housing	Stainless steel		
Dimensions	396 x 310 x 49mm (W x H x D)		
Mounting	Mounting hole for VESA 100 x 100, yoke mounting		
Environment Limits			
OperatingTemperature	-40°C to 70°C		
Storage Temperature	-40°C to 70°C		
Ambient Relative Humidity	5 to 95% (non-condensing)		
Standard and Certification			
Hazardous Environments	Class1, Division2, Groups A, B, C, D; T4		



Appendix

Appendix A: 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 B: Statement of Regulatory Approval

Refer the following descriptions for various approvals and certifications

Low Voltage Directive European Safety for Industrial Control Equipment

CE

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

CE

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