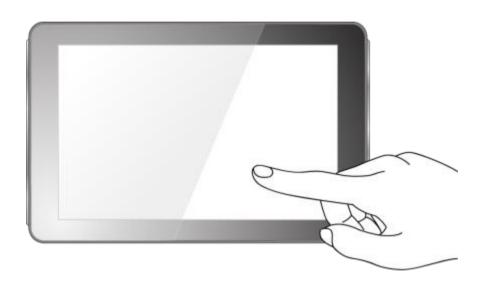


# 10.1"S-Series HMI

W10IB3S-PCH2AC-PoE (with LED light bar) W10IB3S-PCH2-PoE (without LED light bar)



# Slim-line

# **User Manual**

Version 1.1

Manual Part Number: 91521111100M

### **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**

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### **Disclaimer**

We reserve the right to make changes, without notice, to any product, including circuits and/or software described or contained in this manual in order to improve design and/or performance. We assume no responsibility or liability for the use of the described product(s) conveys no license or title under any patent, copyright, or masks work rights to these products, and make no representations or warranties that these products are free from patent, copyright, or mask work right infringement, unless otherwise specified. Applications that are described in this manual are for illustration purposes only. We make no representation or guarantee that such application will be suitable for the specified use without further testing or modification.

### Warranty

Our warranty guarantees that each of its products will be free from material and workmanship defects for a period of one year from the invoice date. If the customer discovers a defect, we will, at his/her option, repair or replace the defective product at no charge to the customer, provide it is returned during the warranty period of one year, with transportation charges prepaid. The returned product must be properly packaged in its original packaging to obtain warranty service. If the serial number and the product shipping data differ by over 30 days, the in-warranty service will be made according to the shipping date. In the serial numbers the third and fourth two digits give the year of manufacture, and the fifth digit means the month (e. g., with A for October, B for November and C for December).

For example, the serial number 1W14Axxxxxxxx means October of year 2014.

#### **Customer Service**

We provide a service guide for any problem by the following steps: First, visit the website of our distributor to find the update information about the product. Second, contact with your distributor, sales representative, or our customer service center for technical support if you need additional assistance.

You may need the following information ready before you call:

- Product serial number
- Software (OS, version, application software, etc.)
- Description of complete problem
- The exact wording of any error messages

In addition, free technical support is available from our engineers every business day. We are always ready to give advice on application requirements or specific information on the installation and operation of any of our products.

### **Advisory Conventions**

Four types of advisories are used throughout the user manual to provide helpful information or to alert you to the potential for hardware damage or personal injury. These are Notes, Important, Cautions, and Warnings. The following is an example of each type of advisory.



#### NOTE:

A note is used to emphasize helpful information



#### **IMPORTANT:**

An important note indicates information that is important for you to know.



#### **CAUTION/ ATTENTION**

A Caution alert indicates potential damage to hardware and explains how to avoid the potential problem.

Une alerte d'attention indique un dommage possible à l'équipement et explique comment éviter le problème potentiel.



### **WARNING!/ AVERTISSEMENT!**

An Electrical Shock Warning indicates the potential harm from electrical hazards and how to avoid the potential problem.

Un Avertissement de Choc Électrique indique le potentiel de chocs sur des emplacements électriques et comment éviter ces problèmes.



### **ALTERNATING CURRENT / MISE À LE TERRE!**

The Protective Conductor Terminal (Earth Ground) symbol indicates the potential risk of serious electrical shock due to improper grounding.

Le symbole de Mise à Terre indique le risqué potential de choc électrique grave à la terre incorrecte.

# **Safety Information**

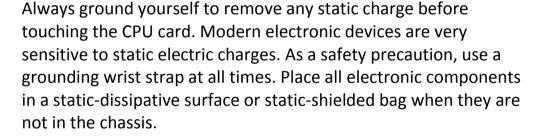
### **WARNING! / AVERTISSEMENT!**



Always completely disconnect the power cord from your chassis whenever you work with the hardware. Do not make connections while the power is on. Sensitive electronic components can be damaged by sudden power surges. Only experienced electronics personnel should open the PC chassis.

Toujours débrancher le cordon d'alimentation du chassis lorsque vous travaillez sur celui-ci. Ne pas brancher de connections lorsque l'alimentation est présente. Des composantes électroniques sensibles peuvent être endommagées par des sauts d'alimentation. Seulement du personnel expérimenté devrait ouvrir ces chassis.

### **CAUTION/ATTENTION**





Toujours verifier votre mise à la terre afin d'éliminer toute charge statique avant de toucher la carte CPU. Les équipements électroniques moderns sont très sensibles aux décharges d'électricité statique. Toujours utiliser un bracelet de mise à la terre comme précaution. Placer toutes les composantes électroniques sur une surface conçue pour dissiper les charge, ou dans un sac anti-statique lorsqu'elles ne sont pas dans le chassis.

# **Safety Precautions**

For your safety carefully read all the safety instructions before using the device. Keep this user manual for future reference.

- Always disconnect this equipment from any AC outlet before cleaning.
   Do not use liquid or spray detergents for cleaning. Use a damp cloth.
- For pluggable equipment, the power outlet must be installed near the equipment and must be easily accessible.
- Keep this equipment away from humidity.
- Put this equipment on a reliable surface during installation. Dropping it or letting it fall could cause damage.
- The openings on the enclosure are for air convection and to protect the equipment from overheating.



### **CAUTION/ATTENTION**

Do not cover the openings! Ne pas couvrir les ouvertures!

- Before connecting the equipment to the power outlet make sure the voltage of the power source is correct.
- Position the power cord so that people cannot step on it. Do not place anything over the power cord.
- If the equipment is not used for a long time, disconnect it from the power source to avoid damage by transient over-voltage.
- Never pour any liquid into an opening. This could cause fire or electrical shock.
- Never open the equipment. For safety reasons, only qualified service personnel should open the equipment.
- All cautions and warnings on the equipment should be noted.

# \*Let service personnel to check the equipment in case any of the following problems appear:

- The power cord or plug is damaged.
- o 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 manual.
- The equipment has been dropped and damaged.
- The equipment has obvious signs of breakage.
- Do not leave this equipment in an uncontrolled environment where the storage temperature is below -20°C (-4°F) or above 60°C (140°F). It may damage the equipment.



#### **CAUTION/ATTENTION**

Use the recommended mounting apparatus to avoid risk of injury.

Utiliser l'appareil de fixation recommandé pour éliminer le risque de blessure.



### **WARNING! / AVERTISSEMENT!**

Only use the connection cords that come with the product. When in doubt, please contact the manufacturer.

Utiliser seulement les cordons d'alimentation fournis avec le produit. Si vous doutez de leur provenance, contactez le manufacturier.



### WARNING!/ AVERTISSEMENT!

Always ground yourself against electrostatic damage to the device.

Toujours vérifier votre mise à la terre afin que l'équipement ne se décharge pas sur vous.

- Cover workstations with approved anti-static material. Use a wrist strap connected to a work surface and properly grounded tools and equipment.
- Use anti-static mats, heel straps, or air ionizer for added protection.
- Handle electrostatic-sensitive components, PCB's and assemblies by the case or the edge of the board.
- Avoid contact with pins, leads, or circuitry.
- Turn off power and input signals before inserting and removing connectors or test equipment.
- Keep the work area free of non-conductive materials, such as ordinary plastic assembly aids and Styrofoam.
- Use filed service tools, such as cutters, screwdrivers, and vacuum cleaners that are conductive.
- Always put drivers and PCB's component side on anti-static foam.

# **Important Information**

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

### **Federal Communications Commission Radio Frequency Interface Statement**



This device complies with part 15 FCC rules.

Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a class "B" digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at him own expense.

Refer to **Certificates** for the original document.

# **EC Declaration of Conformity**



## [English]

The object of the declaration described above [A] is in conformity with the requirement of the following EU legislations [B] and harmonized standards [C]. Product also complies with the Council directions [D].

### [German]

Das oben beschriebene Objekt [A] entspricht den Anforderungen der nachfolgend aufgeführten EU-Vorgben [B] und den harmonisierten Normen [C]. Das Produkt entspricht außerdem den EU-Direktiven [D].

### [French]

L'objet de la déclaration décrite ci-dessus [A] est conformité aux conditions stipulées dans les législations de l'Union européenne énoncées ci-après [B] et aux normes harmonisées [C]. Ce produit est également conforme aux directives du Conseil européen [D].

# [Other languages]

Other languages are available upon request.

Refer to Certificates for the original document.

# **Revision History**

Version	Date	Note	Author
1.1	15-Jan-2016	Update BIOS Setup, mounting solutions, connector pinouts	Kent Ou-Yong

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# Introduction

This chapter gives you product overview, describes features and hardware specification. You will find all accessories that come with the HMI device in the packing list. Mechanical dimensions and drawings included in this chapter.

1

### 1 Introduction

Interactive and smart automation systems of intelligent buildings are in a fast growing phase. Winmate multi-touch S-Series HMI is suitable for home automation and room management systems. Flat surface is easy-to-clean and delivers aesthetically pleasing look for any interior. The device provides real time update for booking status and available schedule, or performs as a synchronous display in meetings. Optional HF RFID 13.56 MHz is especially useful in access control applications.

S-Series HMI run on 1.83GHz Intel® Celeron® N2930 processor and support Windows 10 IoT, Windows Embedded 8.1 Industry Pro, Windows Embedded 8 Standard, Windows 7 Pro for Embedded Systems, and Windows Embedded Standard 7 – WS7P. The HMI features P-Cap touchscreen with 1280 x 800 pixel resolution. For easy, quick and cost effective network installations both models support PoE. These models sealed with front IP 65 dust and water proof, and IP22 on the back side.

The W10IB3S-PCH2AC-PoE model supports an exceptional feature - LED light bar. With the help of red, green, blue and orange LED indicators you can see the status of the machine or processes afar. It significantly reduces power consumption by keeping the display turned off.

# 1.1 Product Features

	Model Name	
	W10IB3S-PCH2AC-PoE	W10IB3S-PCH2-PoE
Product Line	10.1" S-Series HMI (Slim-line)	
Resolution	1280 x 80	00
	Windows 10	) IoT
	Windows Embedded 8	3.1 Industry Pro
Operating System	Windows Embedded 8 Standard	
	Windows 7 Pro for Embedded Systems	
	Windows Embedded Standard 7 – WS7P	
CPU	Ultra-low power consumption with Intel® Celeron® N2930	
CFO	processor	
Cooling System	Fanless cooling	system
ID Pating	Front: IP65 water and dust proof	
IP Rating	Rear: IP22	
LED Light Bar	Default	N/A
HF RFID	Optional	N/A
РоЕ	Default (IEEE 802.3at)	

# **1.2 Hardware Specifications**

System:		
Processor	Intel <sup>®</sup> Celeron <sup>®</sup> Bay Trail-M N2930 1.83GHz	
System Chipset	Intel® ATOM SoC Integrated	
System Memory	2GB DDR3L 1066/1333 SO-DIMM (optional 4GB)	
Storage	64GB mSATA SSD	
LAN	Dual Intel® WG82574L GbE LAN	
Display:		
Size/Type	10.1" TFT (widescreen)	
Resolution	1280x800	
Brightness	300 cd/m (typ.)	
Contrast Ratio	800:1 (typ.)	
Viewing Angle	-89~89 (H);-89~89(V)	
Max Colors	262K (6bit)	
Touch	Projective-capacitive touch (up to 4 points)	
Input / Output:		
Serial Ports	1 x RS-232/422/485	

USB Ports	1 x USB 3.0, 1 x USB 2.0	
Ethernet	2 x RJ 45-10/100/1000 Mbps	
HDMI	1 x HDMI	
Speaker	1 x 1 watt speaker	
*Digital I/O	1 x 1 digital I/O	
Mechanical Specification:		
Cooling System	Fanless design	
Mounting	VESA Mount (75 x 75mm)	
Dimensions	263.28 x 171 x 35.7 (mm)	
(W x H x D)	200.20 x 272 x 30.7 (mm)	
Environment:		
Operating Temperature	0 °C to +50 °C	
Operating Humidity	10% to 90% (non-condensing)	
IP Rating	Front: IP65 water and dust proof	
	Rear: IP22	
Power Considerations:		
Power Input	12V DC in terminal block (phoenix type)	
	Support IEEE 802.3at PoE	

<sup>\*</sup>optional

# 1.3 Software Support

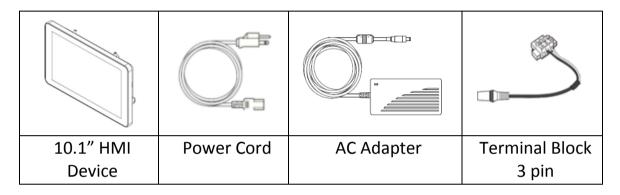
Drivers:
Chipset Driver
Graphics Driver
Intel Sideband Fabric Device (Intel MBI) Driver (Windows 8)
Intel Trusted Engine Interface (Intel TXE) Driver
Audio Driver
USB 3.0 Driver (Windows 7)
SDK:
LED Light Bar Porting Guide
RFID Porting Guide

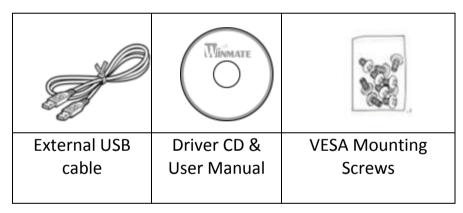
# 1.4 Packing List

Carefully remove the box and unpack your HMI device. Please check if all the items listed below are inside your package. If any of these items are missing or damaged contact us immediately.

### 1.4.1 Accessories

# Standard factory shipment list:





# **1.4.2 Options**

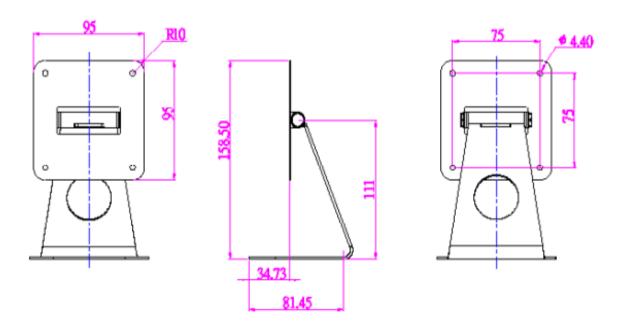
Package may include optional accessories based on your order.

## 1.4.2.1 VESA Desk Stand

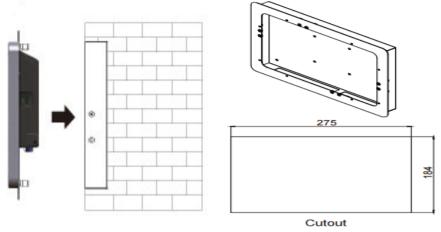


Model Name: PCVS-V1 Number: 99KK00A0000E

## **Dimensions**



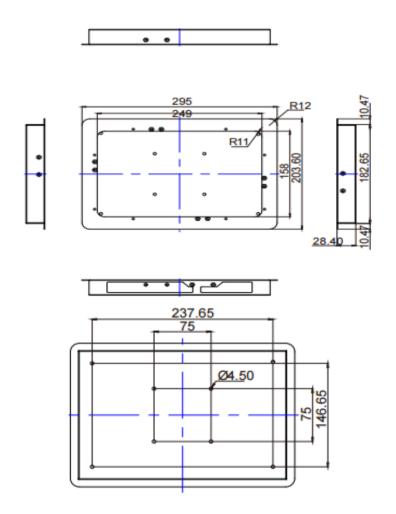
## 1.4.2.2 Front Side In-Wall Mount



Model Name: PCFW-V1

Part Number: 99KK00A0000C

# **Dimensions**



# 1.5 Appearance

## 1.5.1 W10IB3S-PCH2AC-PoE

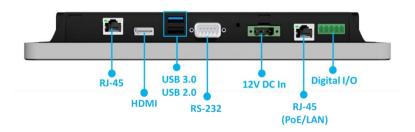
# Front View



# Rear and Top View



## **Bottom View**



### 1.5.2 W10IB3S-PCH2-PoE

## Front View



# Rear and Top View



### **Bottom View**

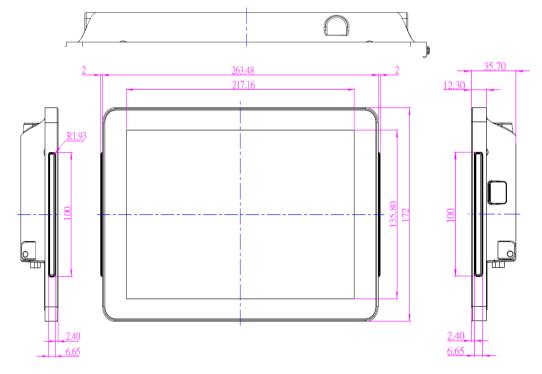


# \*optional

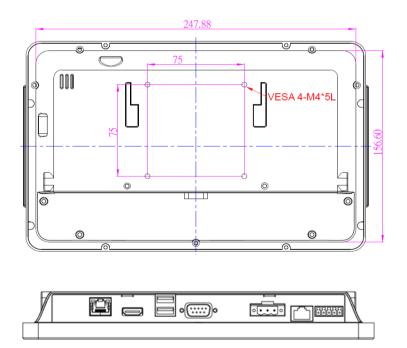
# **1.6 Dimensions**

# 1.6.1 W10IB3S-PCH2AC-PoE

# Front, Top and Side

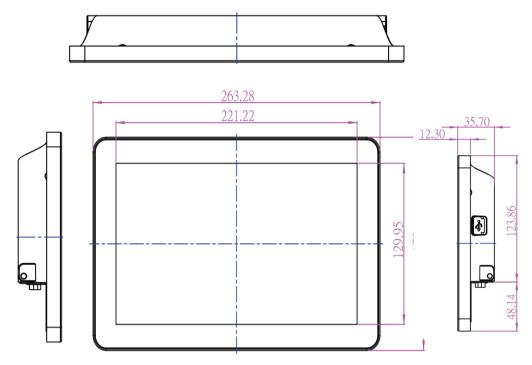


## **Rear and Bottom**

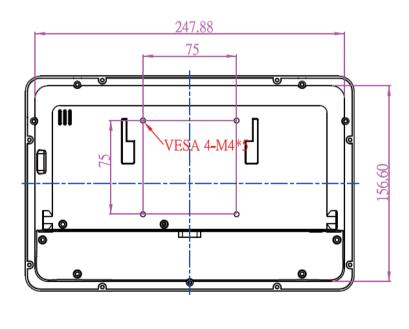


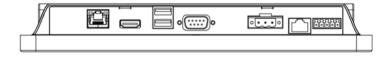
### 1.6.2 W10IB3S-PCH2-PoE

# Front, Top and Side



Rear and Bottom





# **Getting Started**

This chapter tells you important information on power supply, adapter and precautions tips. Pay attention to power considerations. 2

# 2 Getting Started

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

# 2.1 Powering On

### 2.1.1 AC Adapter Components



### **Safety Precautions:**

- Do not use the adapter in a high moisture environment
- Never touch the adapter with wet hands or foot
- Allow adequate ventilation around adapter while using
- Do not cover the adapter with paper or other objects that will reduce cooling
- Do not use the adapter while it is inside a carrying case
- Do not use the adapter if the cord is damaged
- There are NO serviceable parts inside
- Replace the unit if it is damaged or exposed to excess moisture

### While using the AC Adapter always:

- Plug-in the power cord to easy accessible AC outlet
- Plug-in the AC adapter to a grounded outlet



### **ALTERNATING CURRENT / MISE À LE TERRE!**

This product must be grounded. Use only a grounded AC outlet. Install the additional PE ground wire if the local installation regulations require it.

\*If you do not use a grounded outlet while using the device, you may notice an electrical tingling sensation when the palms of your hands touch the device.

Ce produit doit être mis à la terre. Utiliser seulement un cordon d'alimentation avec mise à la terre. Si les règlements locaux le requiert, installer des câbles de mise à la terre supplémentaires.

\*Si vous n'utiliser pas une prise d'alimentation avec mise à la terre, vous pourriez remarquer une sensation de picotement électrique quand la paume de vos mains touche à l'appareil.

#### 2.1.2 Power Considerations

HMI device operates on external DC power. Use the AC adapter included in the package.

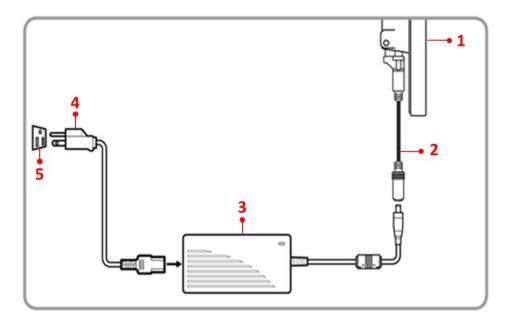


### **CAUTION/ATTENTION**

Use only the AC adapter included in your package (Rating: Output 4.2 A). Using other AC adapters may damage the device.

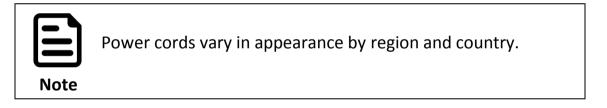
Utiliser seulement le convertisseur AC inclu avec votre appareil (Puissance: Sortie 4.2 A). Utiliser d'autres convertisseurs pourraient endommager l'appareil.

## **2.1.3** Connecting the Source of Power



# **Cable Mounting Steps:**

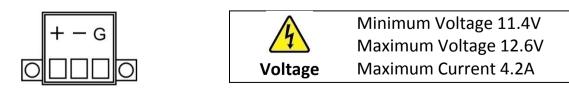
- 1. Connect HMI device (1) to a thermal block (2)
- 2. Connect thermal block (2) to the AC adapter (3)
- 3. Connect the AC adapter (3) to the power cord (4)



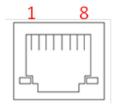
4. Plug in the power cord (4) to a working AC wall outlet (5). The device will boot automatically.

#### **2.2 Connector Pinouts**

### 2.2.1 DC In Terminal Block Connector

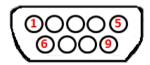


# 2.2.2 POE/LAN (RJ45) Connector



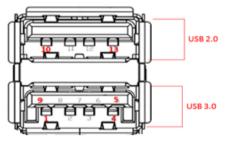
Pin №	Name	Pin Nº	Name
1	TX1+	2	TX1-
3	TX2+	4	TX2-
5	TX3+	6	TX3-
7	TX4+	8	TX4-

# 2.2.3 COM1 Serial Port (RS-232) Connector



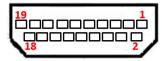
Pin Nº	RS232	RS422	RS485
1	DCD	TxD-	D-
2	RXD	TxD+	D+
3	TXD	RxD+	NC
4	DTR	RxD-	NC
5	GND	GND	GND
6	DSR	NC	NC
7	RTS	NC	NC
8	CTS	NC	NC
9	RI	NC	NC

# 2.2.4 USB 2.0/ USB 3.0 Connector



Pin Nº	Name	Pin Nº	Name
1	+5V	2	USB_D-
3	USB_D+	4	GND
5	STDA_SSRX-	6	STDA_SSRX+
7	GND_DRAIN	8	STDA_SSTX-
9	STDA_SSTX+	10	+5V
11	USB_D-	12	USB_D+
13	GND		

#### 2.2.5 HDMI Connector



Pin №	Name	Pin №	Name
1	TMDS_DATA2+	2	GND
3	TMDS_DATA2-	4	TMDS_DATA1+
5	GND	6	TMDS_DATA1-
7	TMDS_DATA0+	8	GND
9	TMDS_DATA0-	10	TMDS_CLOCK+
11	GND	12	TMDS_CLOCK-
13	CEC	14	NC
15	DDC_CLOCK	16	DDC_DATA
17	GND	18	5V
19	Hot Plug Detect		

## 2.2.6 Digital I/O Connector



Pin №	Name	Pin Nº	Name
1	GND	2	DO0
3	DO1	4	DI0
5	DI1		



**Digital output:** 

Open drain to 40V; Maximum load 2.0A

Voltage Di

**Digital input:** 

Level 0: close to GND; Level 1: 2.5~12V

# 2.3 Turning On

The unit is configured to **Power ON** when the HMI device is connected to the power source.

# 2.4 Configuring Serial Port COM1

Serial COM1 can be configured for RS-232, RS-422 or RS-485. Jumpers are located on the motherboard. You need to open the housing in order to access the jumpers.



### **CAUTION/ ATTENTION**

It is recommended to use factory jumper settings. Opening the housing when it is sealed may damage the device and its parts.

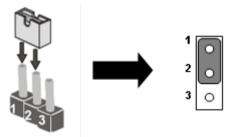
Il est recommandé d'utiliser la configuration d'usine de cavalier. Ouvrir le chassis lorsqu'il est scellé peut endommagé l'appareil et ses pièces.



#### Note:

A pair of needle nose pliers may be helpful when working with jumpers. If you have any doubts about the best hardware configuration for your application, contact your local distributor or sales representative before you make any changes. Generally, you simply need a standard cable to make most connections.

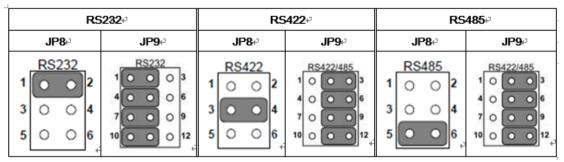
The jumper setting diagram is shown below. When the jumper cap is placed on both pins, the jumper is SHORT. The illustration below shows a 3-pin jumper; pins 1 and 2 are short. If you remove the jumper cap, the jumper is OPEN.



Both Jumper 8 and Jumper 9 allow setting the Serial Port COM1 configuration. Refer to the table below for PIN assignment.

	RS-232	RS-422	RS-485
JP8	1-2	3-4	5-6
JP9	1-2	2-3	2-3
	4-5	5-6	5-6
	7-8	8-9	8-9
	10-11	11-12	11-12

The picture below shows RS-232/422/485 (J8/J9) jumper setting.



**Example:** To make RS-232 Settings, set the Jumper 8 Pin 1-2 to the SHORT position, and Jumper 9 Pin1-2, 4-5, 7-8, 10-11 to the SHORT position.

# 2.5 Turning Off

You can **Turn OFF** the HMI device with the Windows power settings. To shut down the device:





2. Wait for your HMI device to completely turn off before disconnecting the power cord (if necessary).

# **Operating the Device**

3

This chapter provides detailed information on how to operate the device. If you have been using touch-screen Panel PCs before, the interface may look familiar. Sections include system settings parameters.

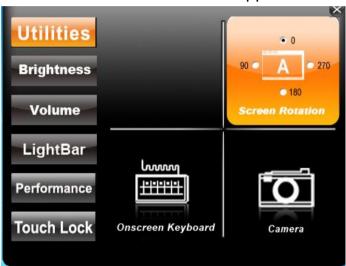
# **3 Operating the HMI Device**

In this chapter you will find instructions on how to operate the HMI device with Hot Tab.

### 3.1 System Settings

#### 3.1.1 Hot Tab Menu

- 1. Double-click the Hot Tab icon on the Windows desktop.
- 2. The Hot Tab main menu will appear on the screen as shown below.



#### 3.1.2 Utilities

**Utilities** category allows automatically changing orientation from landscape to portrait mode or rotating the desktop to a different degree as 0°, 90°, 180°, and 270°.

### 3.1.3 Brightness

Tap Brightness button to show current brightness level.



To **reduce** the brightness, drag by touch to **left**.

To enhance the brightness, drag by touch to right.

Tap **Close** to save the changes and exit the interface.

#### **3.1.4** *Volume*

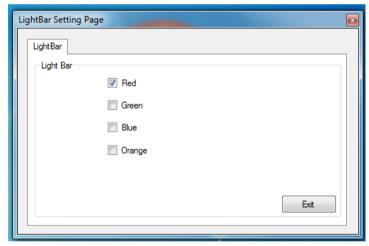
Tap this button to show your current volume level.



To **decrease** the volume, drag by touch to **left side**. To **increase** the volume, drag by touch to **right side**.

## 3.1.5 LED Light Bar (Easy-Testing)

Tap this button to access the LED light bar control panel, and select Red / Green / Blue/ Orange color to be displayed on the LED Bar.



#### 3.1.6 Performance

User can adjust the performance level of the HMI device. There are four options available:



- Extreme performance
- Office Document
- High performance
- Power Saving

#### 3.1.7 Touch Lock

To **LOCK** touch screen, double-click the Hot Tab icon on the Windows desktop, and tap Touch Lock.

To **UNLOCK** Touch Screen, tap button to the **right**.



#### 3.1.8 HF RFID

HF RFID is commonly used for ticketing, payment, and data transfer applications.

The RFID Reader is located on the bottom right front side of the HMI device. , the COM Port setting in RFID Reader is "COM 14"



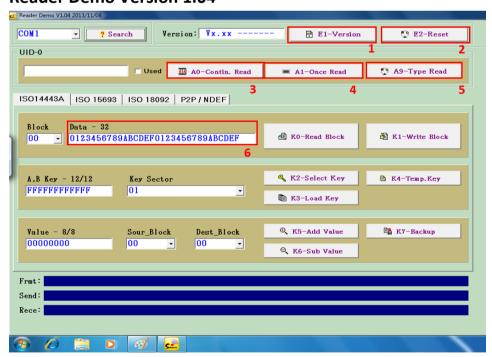
- 1. Double-click the RFID icon on the Windows desktop.
- 2. Reader menu appears on the screen as shown below.



#### Note:

The picture below of Reader Demo Version 1.4 is for illustration purposes only. Your Reader version may differ from the picture below.

#### **Reader Demo Version 1.04**



The RFID Reader can read and write data according to different HF RFID

#### standards.

HF RFID Standard	Purpose	
ISO-14443 A	Standard for MIFARE technology, which used	
	in smart cards and proximity cards	
ISO-15693	Standard for tracking items	
ISO-18092	Standard for Near Field Communication (NFC),	
	a short range technology that is commonly	
	used for data exchange between devices	
P2P/NDEF	NFC Data Exchange Format	

#### **Read Mode**

Select the default RFID Reader **COM14** or press **Search** on the upper left corner of the screen. The system will automatically find RFID **COM port**, show the **Version**.

Item	Key button	Function	
Nº			
1	E1- Version	Displays the current version of RFID Reader	
		system	
2	E2- Reset	Reset all settings	

#### **UID0** Menu

The system will read the data once the card will be near. You can select different reader modes. Each mode is described below.

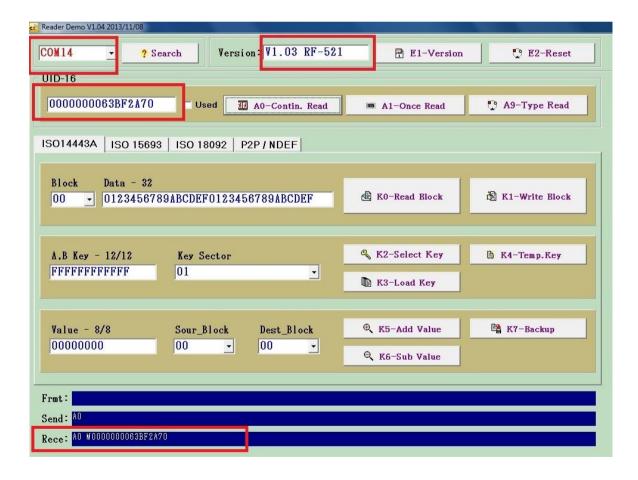
Item Nº	Key button	Function	
3	*A0- Continuous	The RFID Reader will perform a series of	
	Read	multiple scanning operations	
4	A1- Once Read	The RFID Reader will perform a single scanning	
		operation during the card is near	
5	A9- Type Read	The RFID Reader will perform a scanning	
		operation of IC type tag	

<sup>\*</sup> Default

To scan the card, bring it close to the right bottom front side of device with RFID icon.



Nº	Data 32	Function	
6	XXXXXXXXXXXXABCDEF	Display the information written in the card	



#### Write Mode

Refer to the RFID Porting Guide SDK to configure Write Mode parameters.

## 3.2 Operating System

S-series HMI support several versions of Windows OS: Windows 10 IoT, Windows Embedded 8.1 Industry Pro, Windows Embedded 8 Standard, Windows 7 Pro for Embedded Systems, and Windows Embedded Standard 7 – WS7P.



#### **IMPORTANT:**

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

# **Driver Installation**



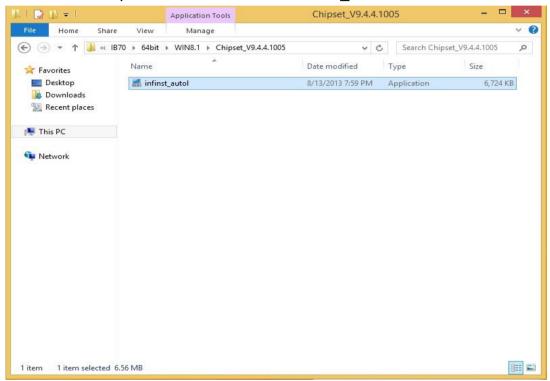
This chapter describes how to install all necessary drivers.

#### **4 Driver Installation**

This chapter provides guideline to driver installations.

## **4.1 Installing Chipset Driver**

**Step 1** Insert the CD that comes with the motherboard. Open the file document "Chipset Driver" and click "infinst auto.exe" to install driver.



Step 2 Click Next to continue.



**Step 3** Click **Yes** to agree the license terms.



**Step 4** Click **Next** to install the driver.



**Step 5** Software setup progress window will appear, click **Next** to continue. **Step 6** Click **"Yes, I want to restart this computer now"** to finish the installation.

## 4.2 Installing Graphics Driver

**Step 1** Insert the CD that comes with the motherboard. Open the file document **"Graphics Driver"** and click **Setup** to execute the setup.

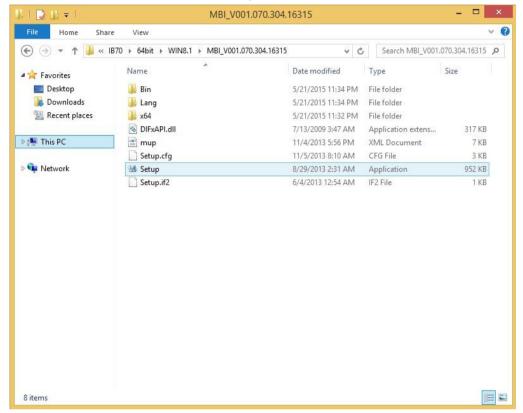
**Step 2** Setup Welcome Window will appear, click **Next** to continue the process.



- Step 3 Carefully read the license terms and click Yes to agree.
- **Step 4** Check Readme file information, and click **Next** to install driver.
- Step 5 Click Next to continue.
- **Step 6** Windows Security window will appear, click "Install this driver software anyway" to continue.
- **Step 7** Setup Progress window will appear, click **Next** to continue the installation.
- **Step 8** Setup is complete, click **"Yes, I want to restart this computer now"** to finish the installation and restart the computer.

# 4.3 Installing Intel Sideband Fabric Device (Intel MBI) Driver (Windows 8)

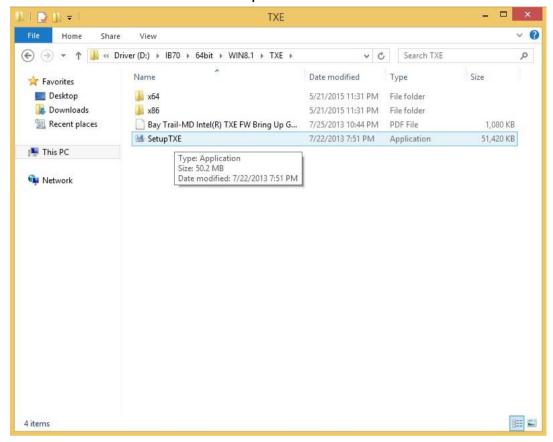
**Step 1** Insert the CD that comes with the motherboard. Open the file document "MBI" and click "Setup.exe" to install the driver.



- **Step 2** Welcome to the setup program window will appear, click **Next** to start the installation.
- Step 3 Carefully read the License Agreement terms and click Yes to agree.
- **Step 4** Setup progress will appear, please wait for the operations to be performed, then click **Next** to continue.
- **Step 5** The installation is complete, click "**Yes, I want to restart this computer now**" to finish and restart the computer.

## 4.4 Installing Intel Trusted Engine Interface (Intel TXE) Driver

**Step 1** Insert the CD that comes with the motherboard. Open the file document "TXE" and click "Setup TXE.exe" to install the driver.



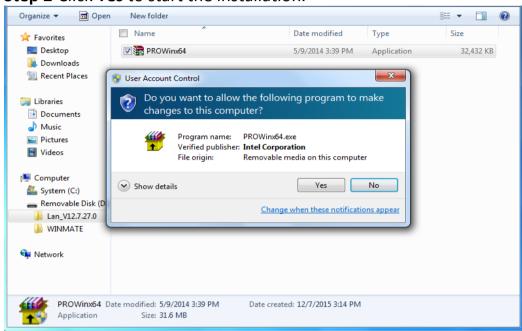
- **Step 2** Welcome to the setup program window will appear, click **Next** to start the installation.
- **Step 3** Carefully read the license terms and click **Yes** to agree.
- **Step 4** Confirmation window will appear, click **Next** to continue the driver installation.
- **Step 5** Please wait while the product is being installed.
- **Step 6** The installation is complete, click **Finish** to complete the installation and restart the computer.

## **4.5 Installing Intel Network Connections**

User must confirm the type of operating system is being used before installing Intel Network Connections. Follow the steps below to complete the installation.

Step 1 Click "PROWin64.exe"

**Step 2** Click **Yes** to start the installation.



**Step 3** Welcome window will appear, click **Next** to install the driver.

**Step 4** In the program maintenance window you will see two options available. "Remove" is to remove Intel Networks Connections from your computer, and "Modify" is to make any changes. Choose **Modify** to continue.

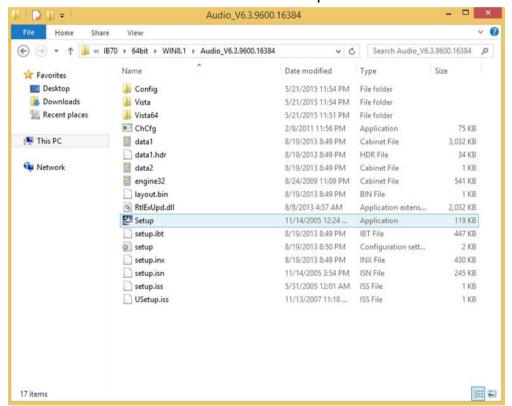
Step 5 In the Setup Options window choose "Intel® PRO Set for Windows® Device Manger", "Intel ® Network Connections SNMP Agent" and "Advanced Network Services".

**Step 6** The wizard is ready to begin installation, click **Install** to continue. **Step 7** Install wizard completed, click **Finish** to complete the installation.

## 4.6 Installing Audio Driver

The ALC886 series are high-performance 7.1+2 channel high definition audio codecs that provide ten DAC channels for simultaneous support of 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.

**Step 1** Insert the CD that comes with the motherboard. Open the file document "Audio Driver" and click "Setup.exe" to install the driver.



- **Step 2** Please wait while the InstalShield Wizard prepares the setup.
- **Step 3** Welcome window will appear, click **Next** to install the driver.
- **Step 4** It might take some time to configure new software installation. Please wait.
- **Step 5** Windows security will appear, click **Install** to install the audio driver.
- **Step 6** The installation is complete, select "Yes, I want to restart my computer now", and click Finish to complete the installation.

## 4.7 Installing USB 3.0 Driver (Windows 7)



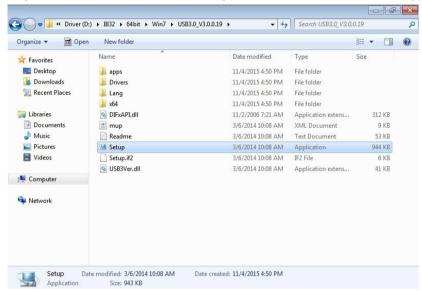
#### NOTE:

If your operation system is Windows Embedded 8.1 Industry or Windows Embedded 8 Standard, you should skip the USB 3.0 driver installation.

This HMI features Intel Celeron <sup>Bay</sup> Trail-M N2930 CPU with the Intel<sup>®</sup> USB 3.0 extensible Host Controller. You need to install the Intel<sup>®</sup> 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** Welcome window will appear, Click **Next** to install the driver.
- **Step 4** Carefully read the license terms and click **Yes** to agree.
- **Step 5** Review Readme file information and click **Next** to continue the installation.
- **Step 6** When the Setup Progress is complete click **Next** to continue.
- **Step 7** Click **"Yes, I want to restart this computer now"** to finish and then restart your computer.

# **BIOS Setup**

BIOS Setup Utility is a program for configuration basic Input / Output system settings of the HMI for optimum use. This chapter provides information on how to use BIOS setup, its functions and menu.

5

## **5 BIOS Setup**

## 5.1 When and How to Use BIOS Setup

To enter the BIOS setup, you need to connect an external USB keyboard, press **<Del>** key when the prompt appears on the screen during start up. The prompt screen shows only few seconds, you need to press **<Del>** key quickly. If the message disappears before your respond, restart the system by turning it OFF and ON, and enter the BIOS again.



#### **IMPORTANT:**

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

#### Run BIOS setup utility for:

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

#### **5.2 BIOS Functions**

## **BIOS Navigation Keys**

BIOS navigation keys for keyboard control are listed below.

The following keys are enabled during POST:

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

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

Key	Function
F1	General Help
F2	Previous Values
F3	Optimized Defaults
F4	Save & Exit
Esc	Exit
+/-	Change Opt.
Enter	Select or execute command
Cursor ↑	Moves to the previous item
Cursor ↓	Goes to the next item
Cursor ←	Moves to the previous item
Cursor →	Goes to the next item



#### **NOTE:**

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

#### 5.2.1 Main Menu

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

Immediately after the **[DEL]** key is pressed during startup, the main BIOS setup menu appears:



BIOS	Description	Setting Option	Effect
Setting			
System	Displays the system	Adjustment of the	Set the language in
Language	language. [English]	language	other language. The
	is set up by default.		language in this
			device is English.
System	This is current date	Date and time	Set the date in the
Date/Time	setting. The time is	changes.	format
	maintained by the		[mm/dd/yyyy];
	battery when the		The time in the
	device is turned		format:
	off.		[hh/mm/ss]
Access	The current user	Changes to the	Administrator is set
Level	access settings	level of access	up by the default

#### 5.2.2 Advanced Menu

The advanced menu also uses to set configuration of the CPU and other system devices. There are sub menus on the left frame of the screen.

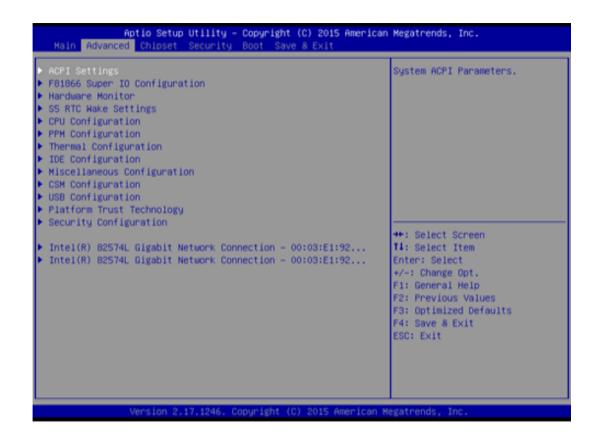


#### **IMPORTANT:**

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

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

Advanced Configuration and Power Interface (ACPI) settings allow to control how the power switch operates. The power supply can be adjusted for power requirements. You can use the screen to select options of ACPI configuration. A description of the selected items will appear on the right side of the screen.



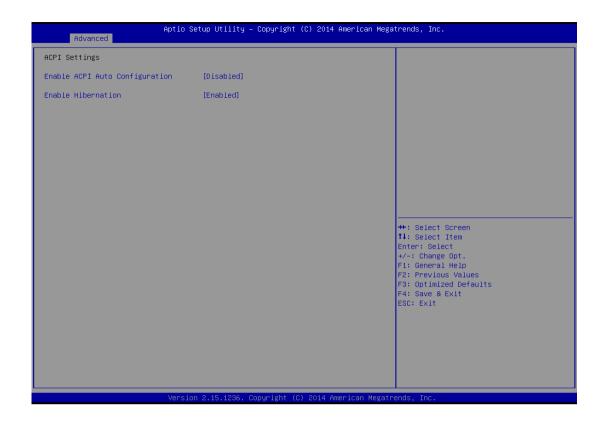
<b>BIOS Setting</b>	Description	Setting	Effect
		Option	
ACPI Settings	Configures ACPI settings	Enter	Opens
			submenu
F81866 Super IO	Configures IO settings	Enter	Opens
Configuration			submenu
Hardware Monitor	Configures Hardware	Enter	Opens
	Monitor settings		submenu
S5 RTC Wake	Configures RTC Wake	Enter	Opens
Settings	parameters		submenu
CPU Configuration	Configures CPU settings	Enter	Opens
			submenu
PPM Configuration	Configures PPM settings	Enter	Opens
			submenu
Thermal	Configures Thermal	Enter	Opens
Configuration	Parameters		submenu

IDE Configuration	Configures IDE	Enter	Opens
	Parameters		submenu
Miscellaneous	Configures	Enter	Opens
Configuration	Miscellaneous		submenu
	Parameters		
CSM Configuration	Configures CSM	Enter	Opens
	Parameters		submenu
USB Configuration	Configures USB Settings	Enter	Opens
			submenu
Platform Trust	Configures Platform	Enter	Opens
Technology	Trust Technology		submenu
	parameters		
Security	Configures Security	Enter	Opens
Configuration	parameters		submenu

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

## **5.2.2.1** ACPI Settings

Advanced Configuration and Power Interface (ACPI) settings allow to control how the power switch operates. The power supply can be adjusted for power requirements. You can use the screen to select options of ACPI configuration. A description of the selected items will appear on the right side of the screen.



<b>BIOS Setting</b>	Description	Setting	Effect
		Option	
Enable ACPI Auto	BIOS ACPI	Enable/	Enables or
Configuration	Auto	Disable	Disables this
	Configuration		function
Enable	Control	Enable/	Enables or
Hibernation	hibernation	Disable	Disables this
			function

## 5.2.2.2 F81866 Super IO Configuration

You can use the screen to select options for Super IO Configuration, and change the value of the option selected. A description of the selected item appears on the right side of the screen.

For items marked with ▶, please press **<Enter>** for more options.

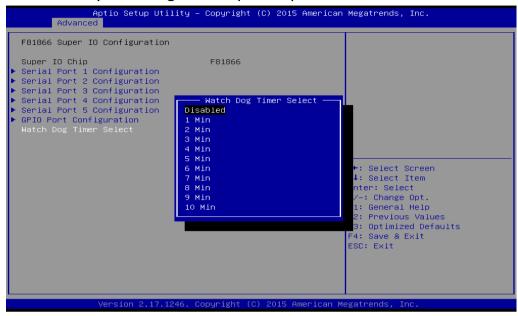
#### Serial Port 1~5

Use these items to set parameters related to serial port 1~5.



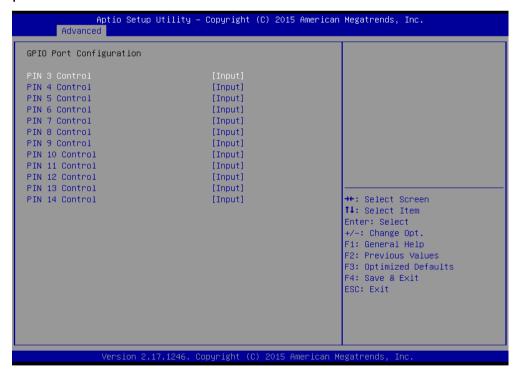
#### **Watch Dog Time Select**

You can either disable **Watch Dog Time Select**, or set up the time.Use **<Arrow>** keys to navigate and please press **<Enter>** to select the item.



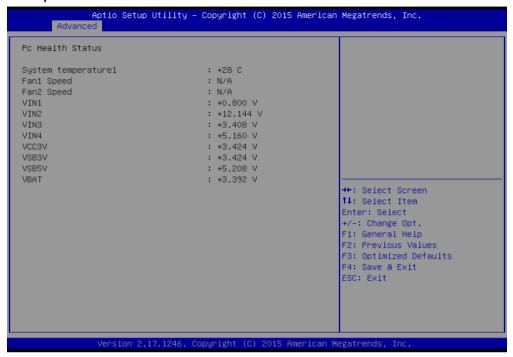
## **GPIO Port Configuration**

You can use the screen to change GPIO Port setting. Use these items to set parameters related to **PIN3-PIN14 Control**.



#### 5.2.2.3 Hardware Monitor

You can check PC Health Status parameters such as system temperature, fan speed etc.



## 5.2.2.4 S5 RTC Wake Settings

Wake system from S5 enables or disables system wake on alarm event. It allows you to wake up the system in a certain time.

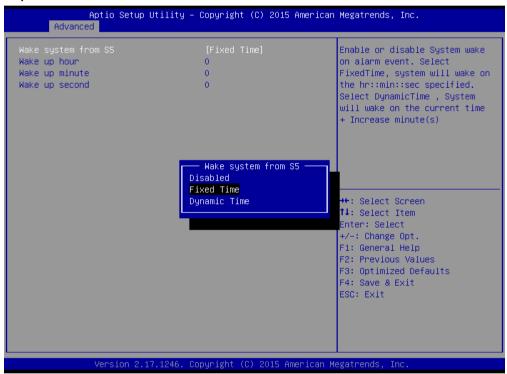


## Wake System from S5 with fixed time setting

Select **Fixed Time** to set the system to wake on the specified time.

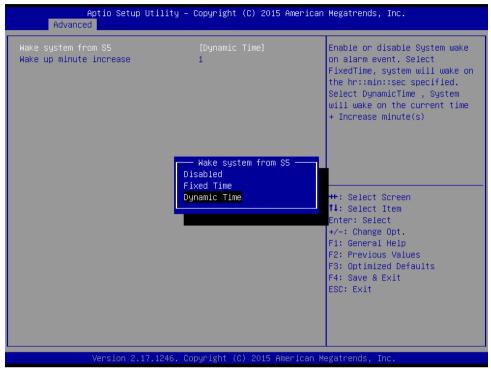
Use Navigation Keys to switch among the items: Day, Hour, Minute and Second. Type the desired value in the selected item.

**For example:** If you want the system to start up automatically at 15:30:30, the 10th day of each month, then you should enter 10, 15, 30, and 30 from top to bottom.



#### Wake system from S5 after dynamic time setting

Select **Dynamic Time** to set the system to wake on the current time + increase minute (s).



#### 5.2.2.5 CPU Configuration



BIOS Setting	Description	Setting Option	Effect
Socket CPU	This item contains socket	Enter	Open sub-
Information	specific CPU information.		menu
CPU Thermal	Thermal control	Enter	Open sub-
Configuration			menu
Limit CPUID	Limits CPIID Maximum	Disabled/	Enable/Disable
Maximum		Enabled	this function
Execute	Execute Disable Bit	Disabled/	Enable/Disable
Disable Bit		Enabled	this function
Intel	Allows to run recent OS and	Enabled/	Enable/Disable
Virtualization	applications	Disabled	this function
Technology			
Power	Control the performance	Disabled	Disable this
Technology	and power management		function
	functions of the processors	Energy	Enable energy
		Efficient	efficient mode

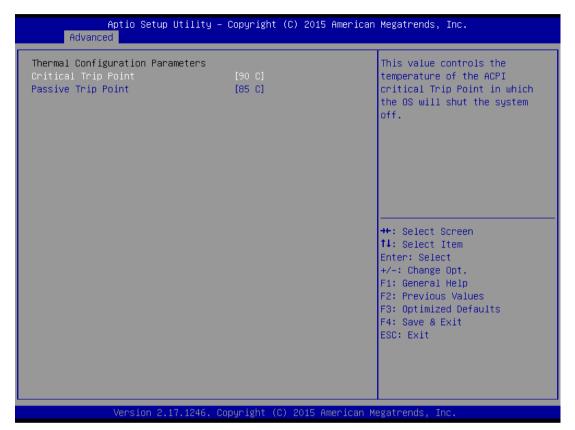
## **5.2.2.6 PPM Configuration**



<b>BIOS Setting</b>	Description	Setting	Effect
		Option	
CPU C State	Shows CPU C State	Enabled/	Enable or Disable
Report	Report	Disabled	CPU C state report
			to OS
Max CPU C-	Allows to enter power-	C1E, C3,	Enable or Disable
State	saving mode in order	C6, C7,	CPU C Max CPU S-
	to save energy	Auto	Sate

## **5.2.2.7 Thermal Configuration**

This menu allows controlling thermal settings of the computer. Refer to the descriptions on the top right side of the screen for detailed information about each setting.



BIOS	Description	Setting Option	Effect
Setting			
Critical	Specifies the	90C, 87C, 85C,	Select the disable
Trip Point	temperature at	79C, 71C,	temperature for the
	which the OS	63C,55C,47C,	system to shut down
	will shut down	39C, 31C, 23C,	
	the system	15C	
Passive	Specifies the	90C, 87C, 85C,	Select the disable
Trip Point	temperature at	79C, 71C,	temperature for the
	which the OS	63C,55C,47C,	system to start
	will begin	39C, 31C, 23C,	adjusting the
	adjusting the	15C	processor
	processor		

## **5.2.2.8 IDE Configuration**

Aptio Setup Uti Advanced	lity – Copyright (C) 2015 A	merican Megatrends, Inc.
IDE Configuration		Enable / Disable Serial ATA
Serial–ATA (SATA)	[Enabled]	
SATA Speed Support SATA Mode	[Gen2] [AHCI Mode]	
Serial—ATA Port 0 SATA PortO HotPlug	[Enabled] [Disabled]	
Serial—ATA Port 1 SATA Port1 HotPlug	[Enabled] [Disabled]	
SATA PortO SSE032GPTCO-S8 (32.0GB)		→+: Select Screen ↑↓: Select Item
SATA Port1 Not Present		Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
Version 2 17 1	246. Copyright (C) 2015 Ame	rican Megatrends Inc

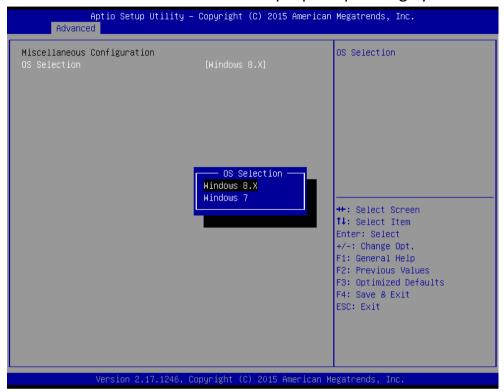
BIOS	Description	Setting	Effect
Setting		Option	
Serial- ATA	Responsible for	Enabled/	Enable or disable this
(SATA)	supporting chipset	Disabled	function
	drives with SATA		
	interface.		
SATA Speed	Allows forcing the	Gen1	The maximum speed will
Support	speed limit SATA II		be limited to 150 MB/s
	ports standard IDE /	Gen2	The maximum speed will
	SATA-controller		be limited to 300 MB/s
	chipset.	Disabled	Disables manual
			configuration of SATA II
			ports (mode will be
			selected based on the
			specifications of

			connected drives)
SATA Mode	This option specifies	[AHCI]	Selecting this option
	the operation mode		allows you to take full
	of modern IDE /		advantage of the
	SATA-controller		extended host controller
	chipset		SATA II
		[IDE]	SATA controller will
			operate in a mechanism
			similar to a conventional
			IDE-controller
		[RAID]	Allows combining hard
			drives in RAID-arrays in
			order to improve the
			reliability of data storage,
			or to increase the speed.
Serial- ATA	The option turns on	Enabled/	Turn on (Enabled) or turn
Port 0	or off Port 0 of SATA	Disabled	off (Disabled) Port 0
	channels of standard		
	IDE / SATA-		
CATAB	controller chipset.	E 11 1/	e 11 1: 11 11:
SATA Port0	This feature that	Enabled/	Enable or disable this
HotPlug	allows you to attach	Disabled	function
	and remove a SATA		
Serial- ATA	Port0	Enabled/	Turn on (Enabled) or turn
Port 1	The option turns on or off Port 1 of SATA	Disabled	Turn on (Enabled) or turn
POILI	channels of standard	Disabled	off (Disabled) Port 1
	IDE / SATA-		
	controller chipset.		
SATA Port1	This feature that	Enabled/	Enable or disable this
HotPlug	allows you to attach	Disabled	function
Tiotriug	and remove a SATA	ואסטוכע	Turicuon
	Port1		
	1 OILL		

## **5.2.2.9** Miscellaneous Configuration

#### **OS Selection**

This item allows users to select the proper Operating System.



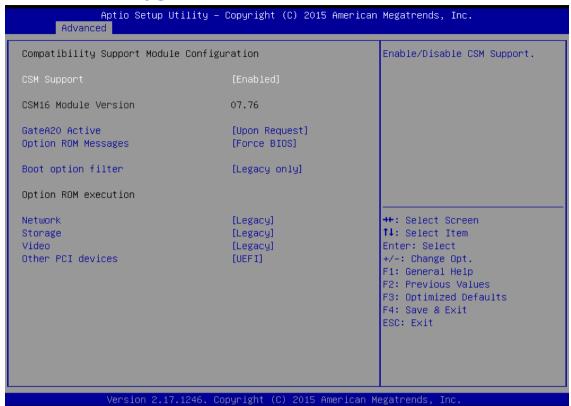
<b>BIOS Setting</b>	Description	Setting	Effect
		Option	
Windows 8.X	Allows user to choose the	Enter	Use Windows 8.X
	proper OS.		
Windows 7	Allows user to choose the	Enter	Use Windows 7
	proper OS.		



#### **IMPORTANT:**

The device will be shipped with OS according to your order. BIOS OS Selection menu varies accordingly.

## 5.2.2.10 CSM Configuration



BIOS Setting	Description	Setting Option	Effect
CSM	The Compatibility Support	Enabled/	Enable or disable
Support	Module (CSM) is a	Disabled	the Compatibility
	component of the UEFI		Support Module
	firmware that provides		
	legacy BIOS compatibility by		
	emulating a BIOS		
	environment, allowing		
	legacy operating systems		
	and some option ROMs that		
	do not support UEFI to still		
	be used.		
GetaA20	Activate GetaA20	Upon	Enable or disable
Active		Request	this function
Option	Receiving ROM Messages	Force	Set ROM
ROM	Settings	BIOS	messages
Messages			parameters

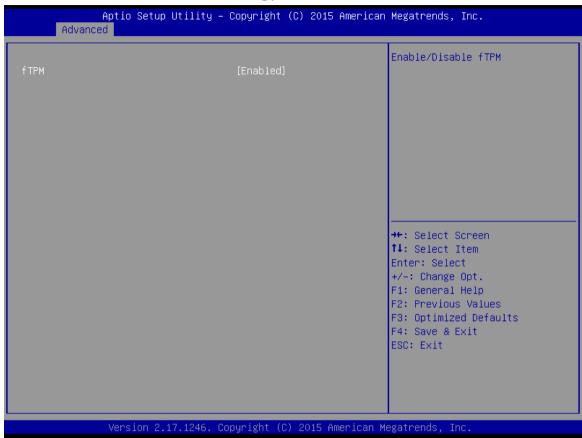
Network	Specifies which Network	UEFI	Only UEFI option
	option ROM is booted		ROMs are booted
		Legacy	
Storage	Specifies which Storage	UEFI	Only UEFI option
	option ROM is booted		ROMs are booted
		Legacy	Only Legacy
			option ROMs are
			booted
Video	Specifies which Video option	UEFI	Only UEFI option
	ROM is booted		ROMs are booted
		Legacy	Only Legacy
			option ROMs are
			booted
Other PCI	Specifies which option ROM	UEFI	Only UEFI option
Devices	is booted for devices other		ROMs are booted
	than the network, storage or	Legacy	Only Legacy
	video		option ROMs are
			booted

## 5.2.2.11 USB Configuration



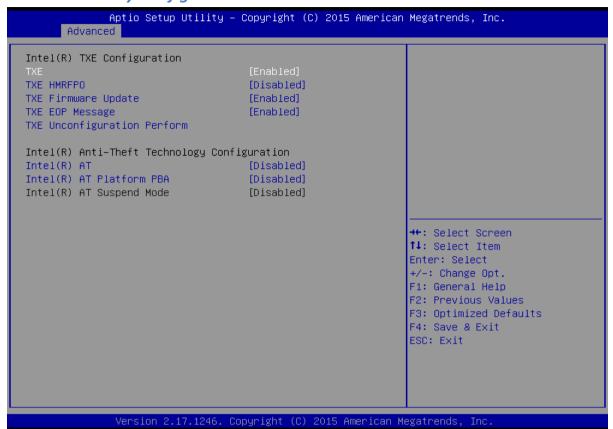
BIOS Setting	Description	Setting Option	Effect
Legacy USB	User can enable or	Disable	Will keep USB devices
Support	disable USB port.		available only for EFI
			applications.
		Enable	Enable all the USB
LICE 2 C	11	E. J.L.	devices
USB 3.0	User can enable or	Enable	Enable USB 3.0 is
Support	disable USB 3.0 (XHCI) controller support.	Disable	enable USB 3.0 is disable
XHCI Hand-	This is a workaround for	Disable	Disables this function
off	OSs without XHCI hand-	Disable	Disables this function
	off support.	Enable	Enables this function
EHCI Hand-	This is a workaround for	Disable	Disables this function
off	OSs without ECHI hand- off support.	Enable	Enables this function
USB mass	User can Enable or	Disable	Disables this function
storage	disable USB mass storage	Enable	Enables this function
driver	driver support.		
support			
USB	The time-out value for	1 Sec	Depends on the time-
Transfer	control, bulk, and	5 Sec	out value
time- out	interrupt transfers.	10 Sec	
Device	USB mass storage device	20 Sec 10 Sec	Depends on the time-
Reset time-	start unit command time-	20 Sec	out value
out	out.	30 Sec	out value
July		40 Sec	
Device	Maximum time the	Auto	Uses default value: for
power-up	device will take before it		a root port it is 100
delay	properly reports itself to		ms, for a Hub port the
	the host controller.		delay is taken from
			Hub descriptor

# 5.2.2.12 Platform Trust Technology



<b>BIOS Setting</b>	Description	Setting Option	Effect
fTPM	Trusted Platform Module	Enabled/Disabled	Enables or
	parameters		disables this
			function

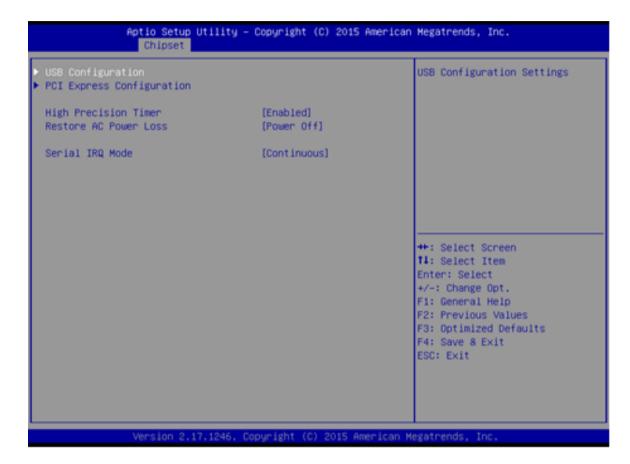
## 5.2.2.13 Security Configuration



BIOS Setting	Description	Setting	Effect
		Option	
TXE	Trusted Execution	Enabled/	Enables or disables
	Technology parameters	Disabled	this function
TXE HMRFPO	TXE HMRFPO parameters	Enabled/	Enables or disables
		Disabled	this function
TXE Firmware	TXE Firmware Update	Enabled/	Enables or disables
Update	parameters	Disabled	this function
TXE EOP	TXE EOP Message	Enabled/	Enables or disables
Message	parameters	Disabled	this function
Intel ® AT	Intel ® AT parameters	Enabled/	Enables or disables
		Disabled	this function
Intel ® AT	Intel ® AT Platform PBA	Enabled/	Enables or disables
Platform PBA	parameters	Disabled	this function

## 5.2.3 Chipset Menu

For items marked with ▶, please press **<Enter>** for more options.



BIOS Setting	Description	Setting Option	Effect
High	Allow to set up High Precious	Enabled/	Enables/Disa
Precious	Timer settings	Disabled	bles this
Timer			function
Restore	This function allows to set up	Power on/	Boot
AC Power	booting options after a power	Power off	automatically
Loss	failure		after a power
			failure
Serial IRQ	When working with personal	Continuous	Allow user to
Mode	computer hardware, installing		set up
	and removing devices, the		desired IRQ
	system relies on interrupt		Mode
	requests. Interrupt request		

### 5.2.4 Security Menu

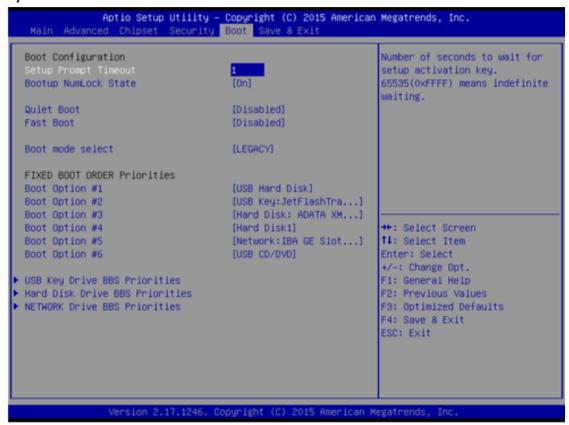
In the Security menu, users can set administrator password, user password, and HDD security configuration.



70, 010	37 2.10.12 12. 00pg. 1811c (0) 2010 Hillor 10dil Ho	Sacronas, Inc.	
<b>BIOS Setting</b>	Description	Setting	Effect
		Option	
Administrator	Displays whether or not an	Enter	Enter
Password	administrator password has		password
	been set.		
User Password	Display whether or not a user	Enter	Enter
	Password has been set.		password

### **5.2.5** Boot Configuration

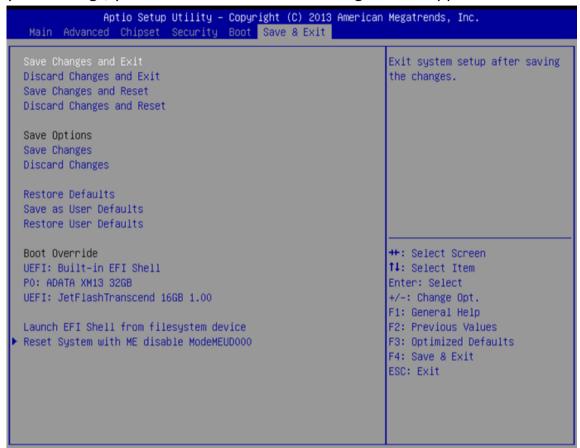
The Boot menu sets the sequence of the devices to be searched for the operating system. The bootable devices will be automatically detected during POST and shown here, allowing you to set the sequence that the BIOS uses to look for a boot device from which to load the operating system.



<b>BIOS Setting</b>	Description	Setting Option	Effect
Setup	Allows user to configure the	Enter	Set the prompt
Prompt	number of seconds to stay in		timeout
Timeout	BIOS setup prompt screen.		
Boot	Enables or disables NumLock	On	Remains On
NumLock	feature on the numeric		
State	keypad of the keyboard after the POST (Default: On).	Off	Remains OFF
Quite Boot	Determines if POST message	Disabled	Disables this
	or OEM logo (default = Black		function
	background) is displayed.	Enabled	Enables this
			function
Fast Boot	Enables or disables Fast Boot	Disabled	Disables this
	to shorten the OS boot		function
	process. (Default: Disabled).	Enabled	Enables this
			function
Boot Mode	Specifies which mode will be	Legacy	Only Legacy
Select	used for booting		option is booted
		UEFI	Only UEFI option
			is booted
<b>Boot Option</b>	Specifies the overall boot	Ex: Boot	Hard drive as the
#1~#6	order from the available	Option#1	first priority
	devices	(hard	
		drive)	
USB Key	USB Key Drive BBS Priorities	Enter	Open sub-menu
Drive BBS			
Priorities			
Hard Disk	Hard Disk Drive BBS Priorities	Enter	Open sub-menu
Drive BBS			
Priorities			
Network	Network Drive BBS Priorities	Enter	Open sub-menu
Drive BBS			
Priorities			

#### 5.2.6 Save & Exit

The Exit menu displays a way how to exit BIOS Setup utility. After finishing your settings, you must save and exit for changes to be applied.



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BIOS Setting	Description	Setting Option	Effect
Save Changes and Exit	This saves the changes to the CMOS and exits the BIOS Setup program.	Enter <yes></yes>	Save changes
Discard Changes and Exit	This exits the BIOS Setup without saving the changes made in BIOS Setup to the CMOS.	Enter <yes> Enter <no></no></yes>	Saves the changes Return to the BIOS Setup Main Menu
Save Changes and Reset	Reset the system after saving the changes.	Enter <yes> Enter <no></no></yes>	Saves the changes Return to the BIOS Setup Main

			Menu
Discard	Reset system setup without	Enter	Saves the
Changes	saving any changes	<yes></yes>	changes
and Reset		Enter	Return to the
		<no></no>	BIOS Setup Main
			Menu
Save	Save changes done so far to	Enter	Saves the
Changes	any of the setup options.	<yes></yes>	changes
		Enter	Return to the
		<no></no>	BIOS Setup Main
			Menu
Discard	Discard changes done so far	Enter	Saves the
Changes	to any of the setup options.	<yes></yes>	changes
		Enter	Return to the
		<no></no>	BIOS Setup Main
			Menu
Restore	Restore/load default values	Enter	Saves the
Default	for all the setup options.	<yes></yes>	changes
		Enter	Return to the
		<no></no>	BIOS Setup Main
			Menu
Save as	Save the changes done so	Enter	Saves the
User	far as User defaults.	<yes></yes>	changes
Defaults		Enter	Return to the
		<no></no>	BIOS Setup Main
			Menu
Restore	Restore the User Defaults to	Enter	Saves the
User	all the setup options.	<yes></yes>	changes
Defaults		Enter	Return to the
		<no></no>	BIOS Setup Main
			Menu

#### **5.3 Using Recovery Wizard to Restore Computer**



#### Note:

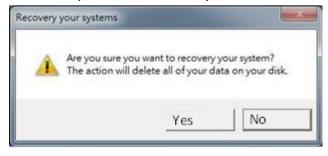
Before starting the recovery process, make sure to backup all user data. The data will be lost after the recovery process.

To enable quick one-key recovery procedure:

- Plug-in the AC adapter to Bay Trail series computer. Make sure the computer stays plugged in to power source during the recovery process.
- Turn on the computer, and when the boot screen shows up, press the **F6** to initiate the Recovery Wizard.
- The following screen shows the Recovery Wizard. Click **Recovery** button to continue.



A warning message about data loss will show up. Make sure the data is backed up before recovery, and click **Yes** to continue.



Wait the recovery process to complete. During the recovery process, a command prompt will show up to indicate the percent of recovery process complete. The system will restart automatically after recovery completed.



# **Mounting Solutions**

6

This chapter provides step-by-step mounting guide for all available mounting options.

## **6 Mounting Solutions**

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

#### **6.1 Cable Mounting Considerations**

For a nice look and safe installation, make sure cables are neatly hidden behind the HMI device. Refer to <a href="Chapter 2">Chapter 2</a>, section 2.1 for the Cable Installation instruction.

# CAUTION/ ATTENTION



Observe all local installation requirements for connection cable type and protection level.

Suivre tous les règlements locaux d'installations, de câblage et niveaux de protection.

## **CAUTION/ ATTENTION**



Turn off the device and disconnect other peripherals before installation.

Éteindre l'appareil et débrancher tous les périphériques avant l'installation.

# ALTERNATING CURRENT / MISE À LE TERRE!



To prevent electrical shock, the Safety Ground location on the rear must be bonded to the local earth ground through a minimum 12 AWG wire as short as possible

Pour éviter les chocs électriques, l'emplacement de la prise terre à l'arrière doit être lié à terre locale, à travers un 12 AWG minimum et aussi court que possible.

## **5.2 Safety Precautions**

Observe the following common safety precautions before installing any electronic device:

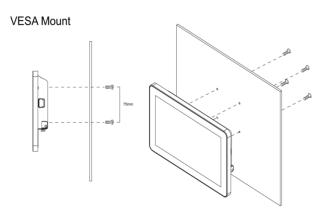
- Use separate, non-intersecting paths to route power and networking wires. If power wiring and device wiring paths must be crossed make sure the wires are perpendicular at the intersection point.
- Keep the wires separated according to the interface. Wires that share similar electrical characteristics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

### **5.3 Mounting Guide**

S-series HMI devices come with different mounting options suitable for most of the industrial and commercial applications. The main mounting approach is chassis - very user-friendly in terms of installation. Refer to subsections below for more details.

#### 5.3.1 VESA Mount

- Dimensions: 75 x 75mm
- Screw hole diameter: VESA M4 x 5mm
- Compatible with swimming arms mounting kits.



\*with customer's bracket

#### **Mounting Steps:**

- 1. Screw VESA Bracket to the fixture (ex. wall) with M4 flat-head screws.
- 2. Place the device on VESA bracket.



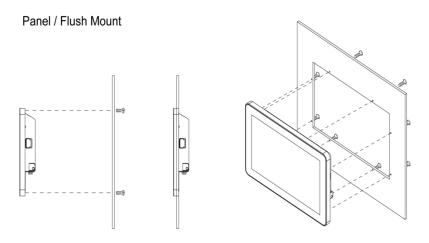
#### NOTE:

Please notice that both hooks on bracket should lock the notches on the back cover of the device.

### **5.3.2 Flush Mount / Panel Mount**

• Wall cut-out: 157.6 x 249mm

• Screw hole diameter: M3 x 4mm



### **Mounting Steps:**

- 1. Prepare a fixture for the specific dimensions of the device
- 2. Cut a hole on a sub frame or panel according to the cut-out dimensions 157.6 x 249mm
- 3. Install the device properly onto the cut-out area of the sub frame or panel with the sides of the front bezel



#### NOTE:

Please make sure that the eight holes on gasket can fit in the mounting holes on the device.

4. Fix the device to fixture with eight M3 screws

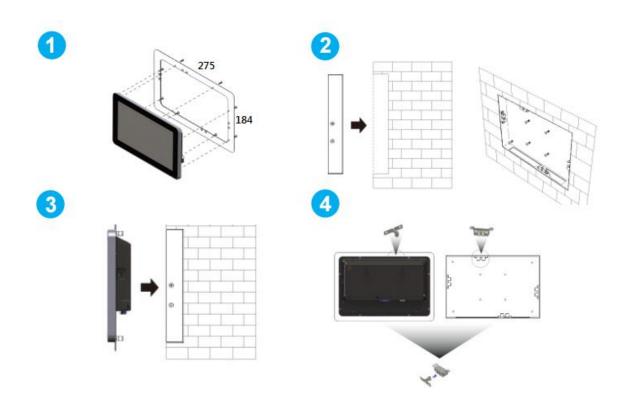
## **5.4 Optional Mounting Solutions**

#### 5.4.1 Front Side Wall Mount

The device can be mounted in the wall.

Wall cut-out: 275 x 184mm

• Screw hole diameter: M4 x 5mm



# **Mounting Steps:**

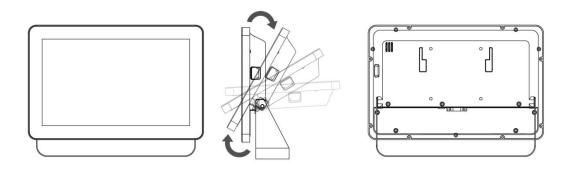
- 1. Cut a hole in the wall according to the cut-out dimensions 275 x 184mm
- 2. Attach the bezel with clips to the device, fix the bezel with M4 screws
- 3. Connect the device to the power source with the power cord
- 4. Install the device properly onto the in-wall cut-out area; fix the device using the clips

#### 5.4.2 Desk Stand

The device can be installed on a desk with the stand. You can purchase desk stand as an optional accessory.

• Screw Hole Diameter: M4 x 5 mm

#### Stand



# **Mounting Steps:**

• Use provided M4 screws to fix the desk stand to VESA holes on the back cover of the device.

# **Technical Support**

7

This chapter includes information where to find technical support.

## 7 Technical Support

This chapter includes information where to find technical support and Winmate's Software Developing Kit (SDK). If any problem occurs fill in Problem Report Form enclosed and immediately contact us.

## 7.1 Software Developer Support

We provide the SDK in the User Manual and SDK CD , or you can download the SDK from Winmate Download Center or Winmate Partner Portal.

## 7.1.1 Digital I/O SDK

To find the Digital I/O Sample code, please contact us.

#### 7.1.2 Watchdog SDK

To find the Watchdog Sample code, please contact us.

## 7.1.3 LED Light Bar Porting Guide

Please find the SDK file in User Manual and SDK CD or download from below

#### 1. Winmate Download Center:

http://www.winmate.com.tw/
PPC > W10IB3S-PCH2 > Development Kit > LED Light Bar SDK
Follow the link below:

http://www.winmate.com.tw/DownCenter/DownLoadCenter.asp?DownType=3005

#### 2. Winmate Partner Portal

http://www.winmate.com.tw/ > Support > Partner Portal > Public Documents > Panel PC > Multi-Touch HMI > S-Series HMI > IB32 > SDK > LED Light Bar SDK

#### 7.1.4 RFID Porting Guide

Please find the SDK file in User Manual and SDK CD or download from below

#### 1. Winmate Download Center:

http://www.winmate.com.tw/ > Support > Download Center > Multi-Touch
PPC > W10IB3S-PCH2 > Development Kit > RFID SDK

Follow the link below:

http://www.winmate.com.tw/DownCenter/DownLoadCenter.asp?DownType=3005&Onl
yContent=

#### 2. Winmate Partner Portal

http://www.winmate.com.tw/ Support > Partner Portal > Public Documents > Panel PC > Multi-Touch HMI > S-Series HMI > IB32 > SDK > RFID SDK

# 7.2 Problem Report Form

# 10.1" S-Series HMI (Slim-line)

Customer name:	
Company:	
Tel.:	Fax:
E-mail:	Date:
Product Serial Number:	
Problem Description: Please describe	the problem as clearly as possible.
Detailed description of the occurred p	roblem will allow us to find the best
solution to solve the problem as soon	as possible.
	_

# **Certificates**



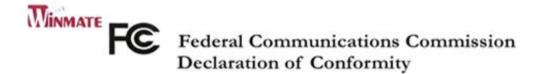
This chapter includes FCC and EC Declarations of Conformity.

### 8 Certificates

This chapter includes FCC and EC Declarations of Conformity.

#### 8.1 FCC Declaration of Conformity

#### 8.1.1 W10IB3S-PCH2AC-PoE



The following equipment: Panel PC (Product Name) W10IB3S-PCH2AC - PoE (Model Designation / Trade Name) Winmate Communication INC. (Manufacturer Name) 9F, No. 111-6, Shing-De Rd., San-Chung Dist, New Taipei 24158, Taiwan, R.O.C. ( Manufacturer Address ) is hereby confirmed to comply with the requirements set out in ANSI C63.4 & FCC Part 15 Subpart B Regulations. This Device Complies With Part 15 Of The FCC Rules, Operation Is Subject To The Following Two (1) This Device May Not Cause Harmful Interference And, (2) This Device Must Accept Any Interference Received, Including Interference That May Cause Undesired Operation. Certificate Issue Date: 2014-12 The following manufacturer / importer or authorized representative established within the EUT is responsible for this declaration: Winmate Communication INC. (Company Name) 9F, No. 111-6, Shing-De Rd., San-Chung Dist, New Taipei 24158, Taiwan, R.O.C. (Company Address) Person responsible for making this declaration: Sam Liao (Name, Surname) R&D Center/ Manager (Position / Title) Taipei, Taiwan, R.O.C 2015-12-10 (Place) (Date) (Legal Signature)

#### 8.1.2 W10IB3S-PCH2AC-POE



The following equipment: Panel PC (Product Name) WIGIB3S-PCI-I2-PoE ( Model Designation / Trade Name ) Winmate Communication INC. (Manufacturer Name) 9F, No. 111-6, Shing-De Rd., San-Chung Dist, New Taipei 24158, Taiwan, R.O.C. (Manufacturer Address) is hereby confirmed to comply with the requirements set out in ANSI C63.4 & FOC Part 15 Subpart B Regulations. This Device Complies With Part 15 Of The FCC Rules. Operation Is Subject To The Following Two Conditions: (1) This Device May Not Cause Harmful Interference And, (2) This Device Must Accept Any Interference Received, Encluding Interference That May Cause Undesired Operation. Certificate Issue Date: 2014-12 The following manufacturer / importer or authorized representative established within the EUT is responsible for this declaration: Winmate Communication INC. (Company Name) 9F, No. 111-6, Shing-De Rd., San-Chung Dist, New Taipei 24158, Taiwan, R.O.C. (Company Address) Person responsible for making this declaration: Sam Liao (Name, Surname) R&D Center/ Manager (Position / Title) Taipei, Taiwan, R.O.C. 2015-12-10 (Place) (Date) (Legal Signature) (Place )

LARGE J

[ Legal Signature )

# **8.2 EC Declaration of Conformity**

## 8.2.1 W10IB3S-PCH2AC-PoE

<u>-</u>				
WINMATE CE				
CE	EC-Declar	ation of Con	nformity	
The following equipment:				
Panel PC				
(Product Name)				- A
W10IB3S-PCH2AC-PoE				
(Model Designation / Trade	Name )			•
Winmate Communication IN				
(Manufacturer Name)				•
9F, No. 111-6, Shing-De Rd.,	San-Chung Dist, New?	Taipei 24158, Taiwan,	R.O.C.	
(Manufacturer Address)				•
Is hereby confirmed to compl Approximation of the Laws of Electromagnetic Compatib ☑ EN55024: 2010 IEC61000-4-2: 2008 IEC61000-4-3: 2006+A1 IEC61000-4-5: 2014 IEC61000-4-6: 2013 IEC61000-4-8: 2009 IEC61000-4-11: 2004 Low Voltage Directive (2006 ☑ EN 60950-1:2006/A11:2005 Certificate Issue Date: 2015-0	f the Member States relability Directive (2004/10): 2007+A2: 2010  6/95/EC) 209/A1:2010/A12:2011  importer or authorized	ating to 08/EC)  EN 55022: 20  EN61000-3-2	10 Class B : 2006+A1: 2009+A2: 2009 : 2013	C
responsible for this declaration				53-
Winmate Communication IN (Company Name)	G			•
	S Cl D' N'	Discipline Time	B O C	
9F, No. 111-6, Shing-De Rd., (Company Address)	San-Chung Dist, New	Taipei 24158, Taiwan,	, R.O.C.	•
Person responsible for mak	ing this declaration:			
Sam Liao				
( Name, Surname )				
R&D Center/ Manager				20
(Position / Title)				
Taipei, Taiwan, R.O.C	2015-12-10		San.	
(Place)	(Date)		(Legal Signature)	-

Refer to <a href="Preface">Preface</a> for letters abbreviations in English and other languages.

### 8.2.2 W10IB3S-PCH2AC-POE



The following equipment:			
Panel PC			A
(Product Name)			
W10IB3S-PCH2-PoE			
(Model Designation / Trade Na	ime)		
Winmate Communication INC.	1 -		
(Manufacturer Name)			
9F, No. 111-6, Shing-De Rd., Sa	n-Chung Dist, New	v Taipeii 24158, Taiwan, R.O.C.	
(Manufacturer Address)			
Is hereby confirmed to comply of Approximation of the Laws of the Electromagnetic Compatibilities EN55024; 2010  EC61000-4-2: 2008  IEC61000-4-3: 2006+A1: 2  IEC61000-4-4: 2012  IEC61000-4-5: 2014  IEC61000-4-6: 2013  IEC61000-4-8: 2009  IEC61000-4-11: 2004  Low Voltage Directive (2006//  EN 60950-1:2006/A11:2009  Certificate Issue Date: 2015-01	he Member States in ty Directive (2004) 2007+A2: 2010 95/EC)	/108/EC)  EN 55022: 2010 Class B  EN61000-3-2: 2006+A1: 2009+A2: 2009  EN61000-3-3: 2013	С
The following manufacturer / in responsible for this declaration:	nporter or authorize	ed representative established within the EUT is	D
Winmate Communication INC.			
(Company Name)			
9F, No. 111-6, Shing-De Rd., Sa	in-Chung Dist, New	v Taipe i 24158, Taiwan, R.O.C.	
(Company Address)			
Person responsible for makin	g this declaration:		
Sam Liao			
(Name, Surname)			
R&D Center/ Manager			
(Position / Title)			
Taipei, Taiwan, R.O.C	2015-12-1	Sam	
(Place)	(Date)	(Legal Signature)	

Refer to **Preface** for letters abbreviations in English and other languages.



## Winmate Inc.

9F, No.111-6, Shing-De Rd., San-Chung City, Taipei 241, Taiwan, R.O.C

Tel: 886-2-8511-0288 Fax: 886-2-8511-0211

Email: sales@winmate.com.tw

Official website: <a href="http://www.winmate.com.tw">http://www.winmate.com.tw</a>