HPC-1010

10.1"Fanless Panel PC w/ Dual Core Intel® Atom™ Processor N2800

User's Guide

TEXIM
E U R O P E

Contact Info: **Quanmax Inc.**

5F, No. 415, Ti-Ding Blvd. Sec. 2, NeiHu District,

Taipei, Taiwan 114

Tel: +886-2-2799-2789

Fax: +886-2-2799-7399

Visit our site at: **www.quanmax.com**

Content

Figures & Tables

Safety Instructions

■ Before You Begin

Before handling the product, read the instructions and safety guidelines on the following pages to prevent damage to the product and to ensure your own personal safety. Refer to the "Advisories" section in the Preface for advisory conventions used in this user's guide, including the distinction between Warnings, Cautions, Important Notes, and Notes.

- Always use caution when handling/operating a computer. Only qualified, experienced, authorized electronics service personnel should access the interior of a computer. The power supplies produce high voltages and energy hazards, which can cause bodily harm.
- Use extreme caution when installing or removing components. Refer to the installation instructions in this user's guide for precautions and procedures. If you have any questions, please contact Quanmax Post-Sales Technical Support.
- Access can only be gained by service persons or by users who have been instructed about the reasons for the restrictions applied to the location and about any precautions that shall be taken; and access is through the use of a tool or lock and key, or other means of security, and is controlled by authority responsible for the location.

WARNING

High voltages are present inside the chassis when the unit's power cord is plugged into an electrical outlet. Turn off system power, turn off the power supply, and then disconnect the power cord from its source before removing the chassis cover. Turning off the system power switch does not remove power to components.

■ When Working Inside a Computer

Before taking covers off a computer, perform the following steps:
1. Turn off the computer and any peripherals.
2. Disconnect the computer and peripherals from their power sources or subsystems to prevent electric shock or system board damage. This does not apply when hot swapping parts.
3. Follow the guidelines provided in "Preventing Electrostatic Discharge" on the following page.
4. Disconnect any telephone or telecommunications lines from the computer.

In addition, take note of these safety guidelines when appropriate:
■ To help avoid possible damage to system boards, wait five seconds after turning off the computer before removing a component, removing a system board, or disconnecting a peripheral device from the computer.
■ When you disconnect a cable, pull on its connector or on its strain-relief loop, not on the cable itself. Some cables have a connector with locking tabs. If you are disconnecting this type of cable, press in on the locking tabs before disconnecting the cable. As you pull connectors apart, keep them evenly aligned to avoid bending any connector pins. Also, before connecting a cable, make sure both connectors are correctly oriented and aligned.

CAUTION

Do not attempt to service the system yourself except as explained in this user's guide.

Follow installation and troubleshooting instructions closely.

■ Preventing Electrostatic Discharge

Static electricity can harm system boards. Perform service at an ESD workstation and follow proper ESD procedure to reduce the risk of damage to components. Quanmax strongly encourages you to follow proper ESD procedure, which can include wrist straps and smocks, when servicing equipment.

You can also take the following steps to prevent damage from electrostatic discharge (ESD):

■ When unpacking a static-sensitive component from its shipping carton, do not remove the component's antistatic packing material until you are ready to install the component in a computer. Just before unwrapping the antistatic packaging, be sure you are at an ESD workstation or grounded. This will discharge any static electricity that may have built up in your body.

■ When transporting a sensitive component, first place it in an antistatic container or packaging.

■ Handle all sensitive components at an ESD workstation. If possible, use antistatic floor pads and workbench pads.

■ Handle components and boards with care. Don't touch the components or contacts on a board. Hold a board by its edges or by its metal mounting bracket.

■ Do not handle or store system boards near strong electrostatic, electromagnetic, magnetic, or radioactive fields.

■ Instructions for Lithium Battery

WARNING

Danger of explosion when battery is replaced with incorrect type. Only replace with the same or equivalent type recommended by the manufacturer.

Do not dispose of lithium batteries in domestic waste. Dispose of the battery according to the local regulations dealing with the disposal of these special materials (e.g. to the collecting points for disposal of batteries)

Preface

■ How to Use This Guide

This guide is designed to be used as step-by-step instructions for installation, and as a reference for operation, troubleshooting, and upgrades.

NOTE

Driver downloads and additional information are available under Downloads on our web site: www.quanmax.com.

■ Unpacking

When unpacking, follow these steps:
1. After opening the box, save it and the packing material for possible future shipment.
2. Remove all items from the box. If any items listed on the purchase order are missing, notify Quanmax customer service immediately.
3. Inspect the product for damage. If there is damage, notify Quanmax customer service immediately. Refer to "Warranty Policy" for the return procedure.

■ Regulatory Compliance Statements

This section provides the FCC compliance statement for Class A devices.

FCC Compliance Statement:

This equipment has been tested and found to comply with limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reason able protection against harmful interference in residential installations. This equipment generates, uses, and can radiate radiofrequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause

interference to radio or television equipment reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

■ Reorient or relocate the receiving antenna.

■ Increase the separation between the equipment and receiver.

■ Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.

■ Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by Quanmax could void the user's authority to operate the equipment.

NOTE

The assembler of a personal computer system may be required to test the system and/or make necessary modifications if a system is found to cause harmful interference or to be noncompliant with the appropriate standards for its intended use.

■ Warranty Policy

Limited Warranty

Quanmax Inc.'s detailed Limited Warranty policy can be found under Support at www.quanmax.com. Please consult your distributor for warranty verification.

The limited warranty is void if the product has been subjected to alteration, neglect, misuse, or abuse; if any repairs have been attempted by anyone other than Quanmax or its authorized agent; or if the failure is caused by accident, acts of God, or other causes beyond the control of Quanmax or the manufacturer. Neglect, misuse, and abuse shall include any installation, operation, or maintenance of the product other than in accordance with the user's guide.

No agent, dealer, distributor, service company, or other party is authorized to change, modify, or extend the terms of this Limited Warranty in any manner whatsoever. Quanmax reserves the right to make changes or improvements in any product without incurring any obligation to similarly alter products previously purchased.

Return Procedure

For any Limited Warranty return, please contact Support at www.quanmax.com and login to obtain a Return Material Authorization (RMA) Number. If you do not have an

account, send an email to support@quanmax.com to apply for one.

All product(s) returned to Quanmax for service or credit must be accompanied by a Return Material Authorization (RMA) Number. Freight on all returned items must be prepaid by the customer who is responsible for any loss or damage caused by common carrier in transit. Returns for Warranty must include a Failure Report for each unit, by serial number(s), as well as a copy of the original invoice showing the date of purchase.

To reduce risk of damage, returns of product must be in a Quanmax shipping container. If the original container has been lost or damaged, new shipping containers may be obtained from Quanmax Customer Service at a nominal cost. Quanmax owns all parts removed from repaired products. Quanmax uses new and reconditioned parts made by various manufacturers in performing warranty repairs and building replacement products. If Quanmax repairs or replaces a product, its warranty term is not extended.

Shipments not in compliance with this Limited Warranty Return Policy will not be accepted by Quanmax.

Limitation of Liability

In no event shall Quanmax be liable for any defect in hardware, software, loss, or inadequacy of data of any kind, or for any direct, indirect, incidental, or consequential damages in connection with or arising out of the performance or use of any product furnished hereunder. Quanmax's liability shall in no event exceed the purchase price of the product purchased hereunder. The foregoing limitation of liability shall be equally applicable to any service provided by Quanmax or its authorized agent.

■ Maintaining Your Computer

Environmental Factors

■ **Temperature**

The ambient temperature within an enclosure may be greater than room ambient temperature. Installation in an enclosure should be such that the amount of air flow required for safe operation is not compromised. Consideration should be given to the maximum rated ambient temperature. Overheating can cause a variety of problems, including premature aging and failure of chips or mechanical failure of devices.

If the system has been exposed to abnormally cold temperatures, allow a two-hour warm-up period to bring it up to normal operating temperature before

turning it on. Failure to do so may cause damage to internal components, particularly the hard disk drive.

■ **Humidity**

High-humidity can cause moisture to enter and accumulate in the system. This moisture can cause corrosion of internal components and degrade such properties as electrical resistance and thermal conductivity. Extreme moisture buildup inside the system can result in electrical shorts, which can cause serious damage to the system.

Buildings in which climate is controlled usually maintain an acceptable level of humidity for system equipment. However, if a system is located in an unusually humid location, a dehumidifier can be used to maintain the humidity within an acceptable range. Refer to the "Specifications" section of this user's guide for the operating and storage humidity specifications.

Power Protection

The greatest threats to a system's supply of power are power loss, power spikes, and power surges caused by electrical storms, which interrupt system operation and/or damage system components. To protect your system, always properly ground power cables and one of the following devices.

■ **Surge Protector**

Surge protectors are available in a variety of types and usually provide a level of protection proportional with the cost of the device. Surge protectors prevent voltage spikes from entering a system through the AC power cord. Surge protectors, however, do not offer protection against brownouts, which occur when the voltage drops more than 20 percent below the normal AC line voltage level.

■ **Line Conditioner**

Line conditioners go beyond the overvoltage protection of surge protectors. Line conditioners keep a system's AC power source voltage at a fairly constant level and, therefore, can handle brownouts. Because of this added protection, line conditioners cost more than surge protectors. However, line conditioners cannot protect against a complete loss of power.

■ **Uninterruptible Power Supply**

Uninterruptible power supply (UPS) systems offer the most complete protection against variations on power because they use battery power to keep the server running when AC power is lost. The battery is charged by the AC power while it is available, so when AC power is lost, the battery can provide power to the system for a limited amount of time, depending on the UPS system.

UPS systems range in price from a few hundred dollars to several thousand dollars, with the more expensive unit s allowing you to run larger systems for a longer period of time when AC power is lost. UPS systems that provide only 5 minutes of battery power let you conduct an orderly shutdown of the system, but are not intended to provide continued operation. Surge protectors should be used with all UPS systems, and the UPS system should be Underwriters Laboratories (UL) safety approved.

Chapter 1

Introduction

■ Overview

The HPC-1010 10.1" Panel PC is combining the Intel$^{®}$ Atom™ processor N2800 with the high integration of the Intel$^{®}$ NM10 Express chipset for a wide range of industrial applications. Storage includes a 2.5" SATA hard drive or a solid-state drive (SSD). Supported interfaces include 2x GbE LAN, 1x COM port, 6x USB 2.0 ports, 1x SATA,1x HDMI, 1x DVI-I thus easily meeting a broad range of customer requirements. The HPC series provide a compact, high performance human-machine interface for home automation demands.

Checklist
- HPC-1010
- Power Adapter
- Power Cord
- Driver CD
- Quick installation Guide
- Optional VESA Mounting Kit
- Optional wireless LAN
- Optional RFID

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Features
- 10.1" LCD Display with 1024 x 600 resolution
- Intel$^{®}$ Atom™ Processor N2800/ Intel$^{®}$ NM10 Express Chipset
- Intel$^{®}$ Graphics Media Accelerator 3650
- DDR3 800/1066MHz memory support up to 4GB
- 1x HDMI, 1x DVI-I
- 6x USB2.0, 1x COM, 2x GbE LAN, 1x SATA
- 1x Mini-PCIe slot supported
- Fanless design

■ Product Specifications

CPU Support	Intel$^®$ Atom™ Processor N2800 (1M Cache, 1.86 GHz)
Chipset	Intel$^®$ NM10 Express chipset
Memory	1x Single Channel DDR3 800/1066MHz SODIMM support (4GB max)
BIOS	AMI Plug & Play SPI BIOS
Graphic	Intel$^®$ Graphics Media Accelerator 3650
Touch Sensor	5-wire resistive touch sensor
LCD Display	Size: 10.1inch, 16:9 Resolution: 1024 x 600 Backlight: LED Contrast Ratio: 500:1 (typical) Brightness: 200cd/m2 (typical)
External Display	1x HDMI 1x DVI-I
LAN	2x Gigabit Ethernet (Realtek RTL8111E) PXE/WOL supported
Audio	Realtek ALC662 HD Codec w/ 2W Audio Amplifier Line-In, Line-Out and Mic-In Supported
Storage	1x 2.5" SATA HDD or SSD space
USB	6x USB 2.0
COM	1x COM port with RS-232/422/485 selection supported
Expansion slot	1x Mini-PCIe slot
Hardware Monitor	Operating voltage, CPU temperature
Watchdog Timer	1-255 step, can be set with software on Super I/O
Power	DC 12V Input
OS Support	Window 7
Dimensions	261.98 x 199.98 x 61mm (WxDxH)
Environment	Operating Temperature: With Industrial SSD: -10 ~ 50° C (Ambient with air flow) With 2.5" HDD: 0 ~ 40° C (Ambient with air flow) Storage Temperature: -20°C to 80°C, 0%-90%, non-condensing
Certification	CE, FCC Class A

Table 1 HPC-1010 product specification

■ System tour

Refer to the diagrams below to identify the components of the system.

■ I/Os
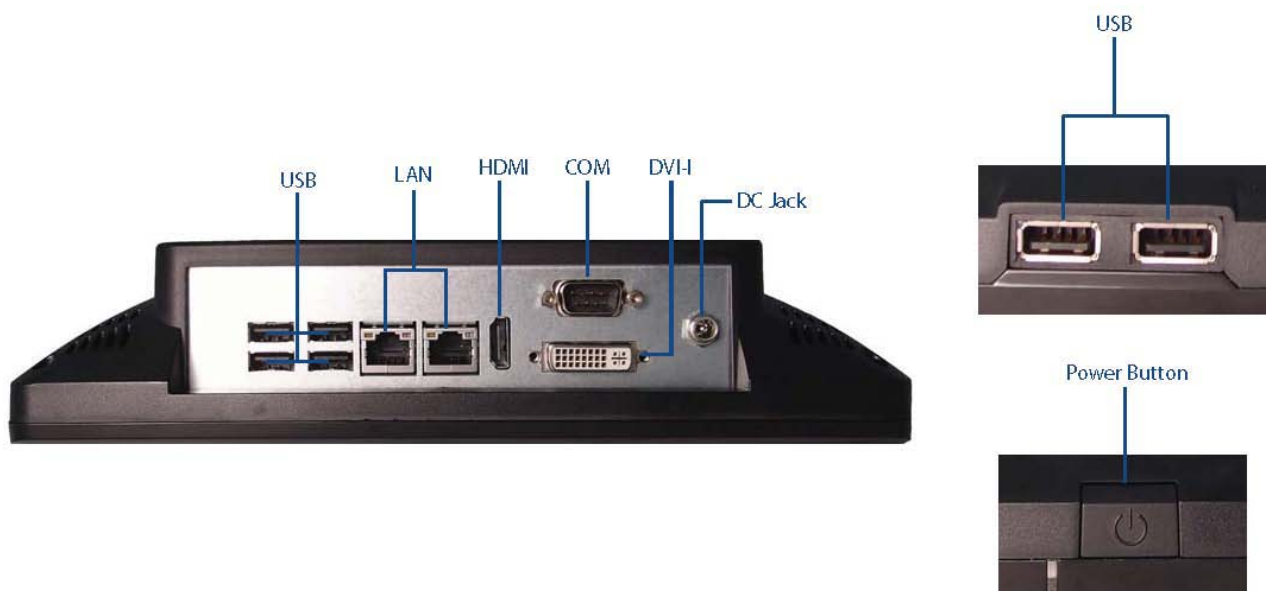
Figure 1 I/Os

USB

The USB (Universal Serial Bus) port is compatible with USB devices such as keyboards, mouse devices, cameras, and hard disk drives. USB allows many devices to run simultaneously on a single computer, with some peripheral acting as additional plug-in sites or hubs.

Power Button

The power button allows powering ON and OFF the system.

Ethernet

The eight-pin RJ-45 LAN port supports a standard Ethernet cable for connection to a local network.

DC Jack

The supplied power adapter converts AC power to DC for use with this jack. Power supplied through this jack supplies power to the PC. To prevent damage to the PC, always use the supplied power adapter.

HDMI

HDMI connector for display output

COM

D-Sub 9 pin connector for RS-232/422/485 connection

DVI-I

The DVI-I (Digital Visual Interface-Integrated) connector allows you to connect an LCD monitor. It provides a high-speed digital interconnection between the computer and its display device.

Mechanical Dimensions
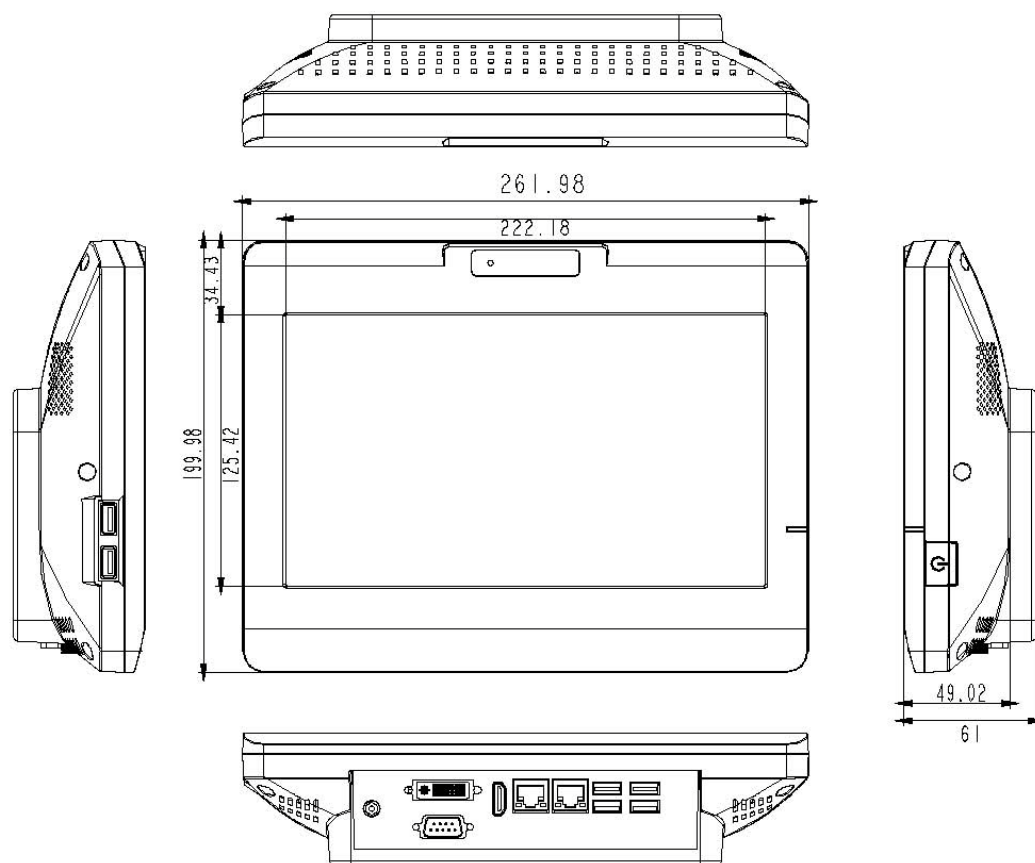
261.98 x 199.98 x 61 mm (W x D x H)

Figure 2 Mechanical Dimensions

Chapter 2

Getting Started

■ Setting up your PC

■ Connecting the monitor

Connect the HDMI / DVI-I cable from your display to the HDMI / DVI-I port.

HDMI   DVI-I
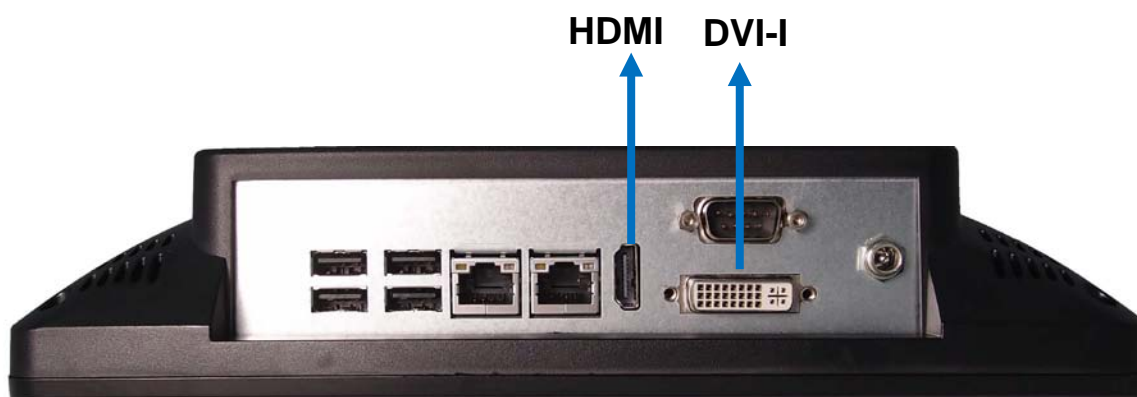
Figure 3 DVI- I/ HDMI

■ **Connecting USB mouse & keyboard**

Your HPC-1010 does not come with a keyboard and mouse, but you can use any USB keyboard or mouse with your computer.

USB   **USB**

Figure 4 Connect USB mouse & keyboard

NOTE

Using a third-party USB mouse or keyboard may require software drivers. Check the manufacturer's website for the latest software drivers.

■ **Connecting to a network device**

Connect one end of a network cable to the LAN port on the system rear panel and the other end to a hub or switch.

LAN
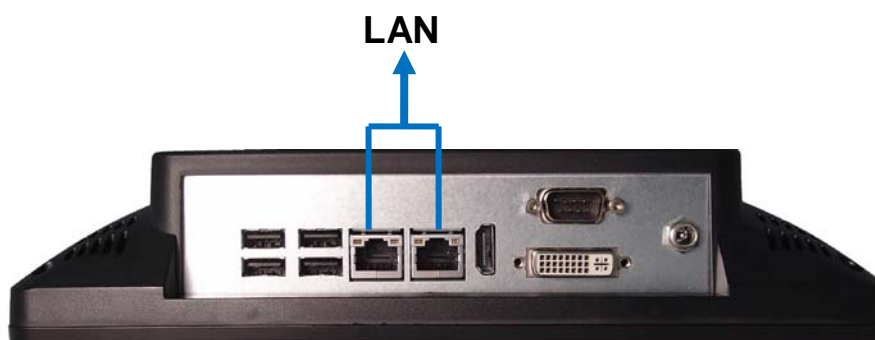
Figure 5 RJ45 connector

■ **COM port**

COM port with the pin definitions.

COM

COM1RS-232 / 422 / 485 Port DB-9
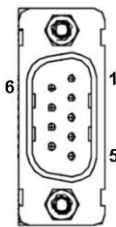
Pin	RS-232	RS-422	Half Duplex RS-485	Full Duplex RS-485
1	DCD	TX-	DATA-	TX-
2	RXD	RX+	N/A	RX+
3	TXD	TX+	DATA+	TX+
4	DTR	RX-	N/A	RX-
5	GND	GND	GND	GND
6	DSR	N/A	N/A	N/A
7	RTS	N/A	N/A	N/A
8	CTS	N/A	N/A	N/A
9	RI	RI	RI	RI

Figure 6 COM port

■ Turning on the system

1. Connect the power adapter cable to the DC jack (DC IN) of the HPC-1010
2. Connect the power cable to the power adapter
3. Connect the power cable to a power outlet
4. Press the power switch on the front panel to turn on the system

DC Jack   **Power button**
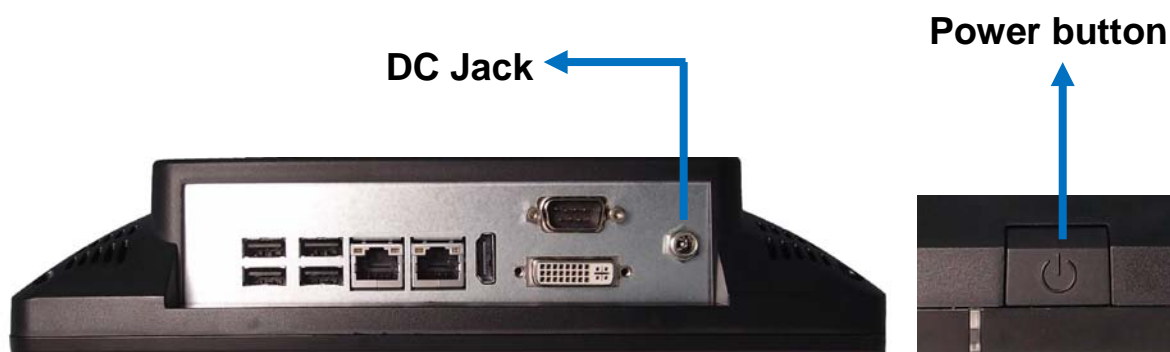
Figure 7 Turning on the system

■ VESA Mounting

The product comes with VESA FDMI 75 standard mounting holes as shown below. Use 4 screws with the appropriate length for your mounting bracket.
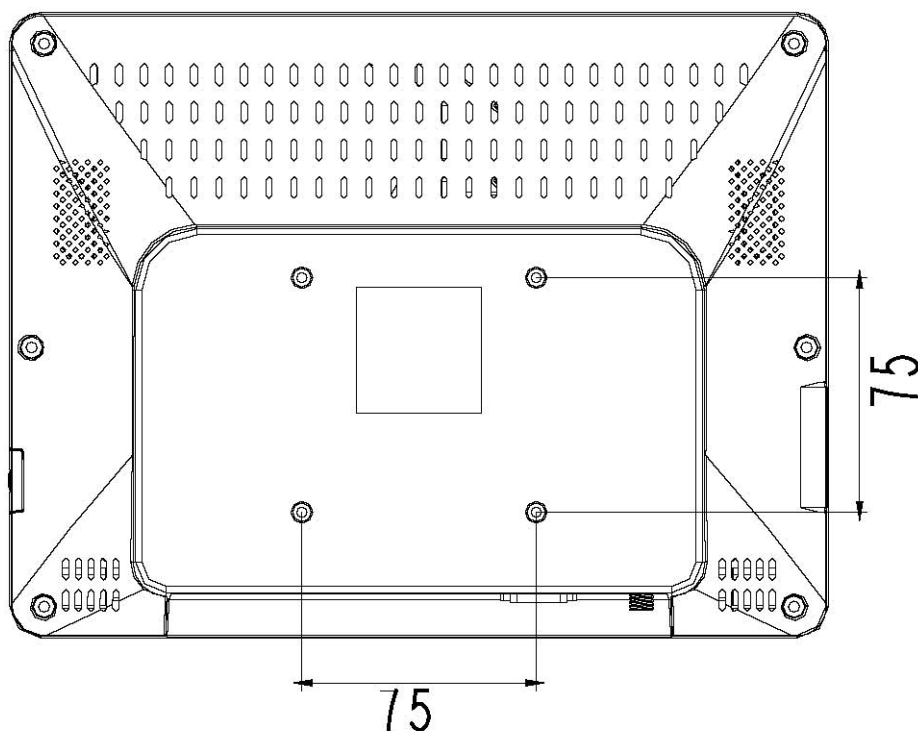
Figure 8 VESA Mounting Hole Locations

NOTE

To fasten the metal shelf, your monitor must comply with VESA75 standard. The VESA mounting kit is optional.

■ Wall Mount Kit

■   Below are the demonstrations of how to use Quanmax wall-mount kits

Step1
Secure the VESA kit to the panel PC using the 4 screws. (M4x5L flat head)
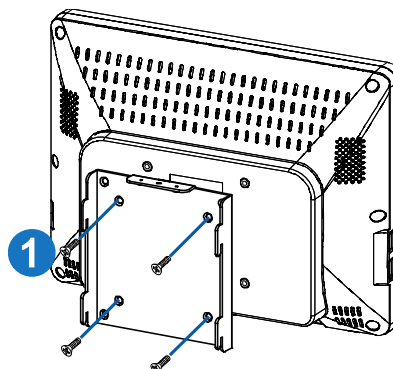
Step2
Install the wall-mount kit to the proper place of the wall by using the 6 screws.
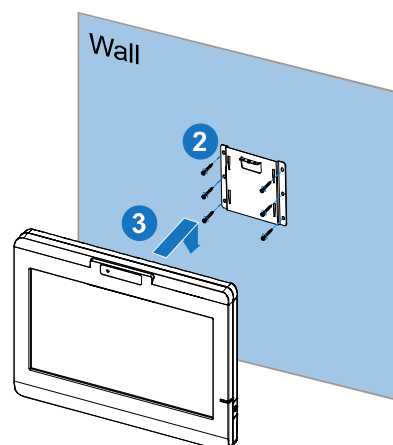
Step3
Attach the panel PC to the wall-mount kit which has been well fixed on the wall.
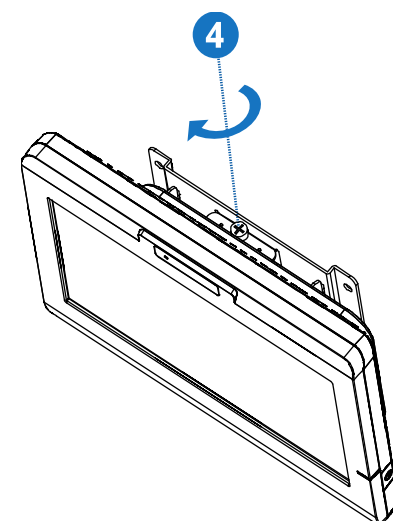
Step4
Secure the wall-mount kit and panel PC with screw by using Phillips Screwdriver

Figure 9 Wall Mounting Demonstrations

■ **Desktop Stand**

Step1
Assembling the desktop stand
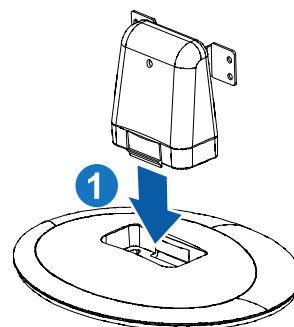
Step2
Secure the VESA kit to the desktop stand using the 4 screws. (M4x5L round head)
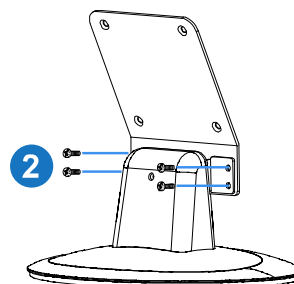
Step3
Secure the panel PC to the desktop stand using the 4 screws. (M4x5L flat head)
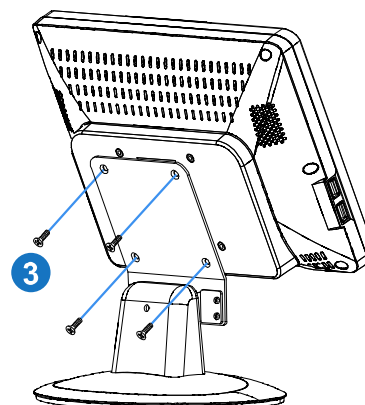
Figure 10 Install Desktop Stand

■ Operating System and Drivers

If your product does not come with an operating system pre-installed, you will need to install an operating system and the necessary drivers to operate it. After you have finished assembling your system and connected the appropriate power source, power it up using the power supply and install the desired operating system.
You can download the drivers for the product from the Quanmax website at www.quanmax.com and install as instructed there. For other operating systems, please contact Quanmax.

NOTE

1. To install the VGA driver, please double-click "Setup.exe" which is under below folder. **\Intel VGA\Utilities**

2. If your system goes into suspend mode, please push the power button for 2 seconds to wake up the system.

■ Maintenance and Prevention

Your HPC-1010 system requires minimal maintenance and care to keep it operating correctly.

- ■ Occasionally wipe the system with a soft dry cloth.
- ■ You should only remove persistent dirt by use of a soft, slightly damp cloth (use only a mild detergent).
- ■ Make sure the ventilation holes are clear of debris.

CAUTION

Do **NOT** do any of the following:
- ■ Allow water to enter the computer
- ■ Use a heavily dampened cloth
- ■ Spray water directly inside of computer

Chapter 3

AMI BIOS Setup

■ Overview

This chapter provides a description of the AMI BIOS. The BIOS setup menus and available selections may vary from those of your product. For specific information on the BIOS for your product, please contact Quanmax.

NOTE: The BIOS menus and selections for your product may vary from those in this chapter. For the BIOS manual specific to your product, please contact Quanmax

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AMI's ROM BIOS provides a built-in Setup program, which allows the user to modify the basic system configuration and hardware parameters. The modified data will be stored in a battery-backed CMOS, so that data will be retained even when the power is turned off.　In general, the information saved in the CMOS RAM will not need to be changed unless there is a configuration change in the system, such as a hard drive replacement or when a device is added.

It is possible for the CMOS battery to fail, which will cause data loss in the CMOS only. If this happens you will need to reconfigure your BIOS settings.

■ Main Menu

The BIOS Setup is accessed by pressing the DEL key after the Power-On Self-Test (POST) memory test begins and before the operating system boot begins. Once you enter the BIOS Setup Utility, the Main Menu will appear on the screen. The Main Menu provides System Overview information and allows you to set the System Time and Date. Use the "<" and ">" cursor keys to navigate between menu screens.

Table 2 BIOS Main Menu

BIOS SETUP UTILITY				
Main	Advanced	Boot	Security	Save & Exit

Product Information		
Product Name	HPC-1010	
BIOS Version	1.00	
BIOS Build Date	07/23/2012	
CPU Information Intel® Atom™ CPU N2800@1.86GHz		
Microcode Revision	10d	
Processor Cores	2	
		→ ← Select Screen
Memory Information		↑↓ Select Item
		Enter: Select
Total Size	1024 MB	+- Change Opt.
Frequency	1067 MHz (DDR3)	F1: General Help
System date	[Sun 11/20/2011]	F2: Previous Values
System time	[14:33:56]	F3: Optimized Defaults
		F4 Save & Exit
		ESC Exit
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■ Advanced Menu

Table 3 Advanced Menu

BIOS SETUP UTILITY						
Main	**Advanced**	Boot	Security	Server Mgmt	Save & Exit	

Onboard LAN1 Controller	[Enabled]	
Onboard LAN1 Boot	[Disabled]	
Onboard LAN2 Controller	[Enabled]	
Onboard LAN2 Boot	[Disabled]	→ ← Select Screen
Audio Controller	[Enabled]	↑↓ Select Item
		Enter: Select
> Display Configuration		+- Change Opt.
> Power Management Configuration		F1: General Help
> CPU Advanced Configuration		F2: Previous Values
> SATA Configuration		F3: Optimized Defaults
> USB Configuration		F4 Save & Exit
> Super IO Configuration		ESC Exit
> H/W Monitor		

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Onboard LAN 1 Controller
Options: Disabled, Enabled
Onboard LAN 1 Boot
Options: Disabled, Enabled
Onboard LAN 2 Controller
Options: Disabled, Enabled
Onboard LAN 2 Boot
Options: Disabled, Enabled
Audio Controller
Options: Disabled, Enabled

Table 4 Advanced Menu – Display Configuration

BIOS SETUP UTILITY					
Main	**Advanced**	Boot	Security	Server Mgmt	Save & Exit

Display Configuration		→ ← Select Screen
Fixed Graphics Memory Size	[128 MB]	↑↓ Select Item
		Enter: Select
IGFX – Boot Type	[VBIOS Default]	+- Change Opt.
Active LFP	[Int-LVDS]	F1: General Help
LCD Panel Type	[1024X600 18Bit 1CH]	F2: Previous Values
LVDS Backlight Control – Voltage M	[2.5V]	F3: Optimized Defaults
		F4 Save & Exit
		ESC Exit

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Fixed Graphics Memory Size

Options: 128MB, 256MB

IGFX – Boot Type

Options: VBIOS Default, CRT, DVI, HDMI, LVDS

LVDS Backlight Control – Voltage

Options: 0.0V, 0.5V, 1.0V, 1.5V, 2.0V, 2.5V, 3.0V, 3.5V, 4.0V, 4.5V, 5.0V

Table 5 Advanced Menu –Power Management Configuration

BIOS SETUP UTILITY					
M a i n	**A d v a n c e d**	B o o t	S e c u r i t y	S e r v e r M g m t	S a v e & E x i t

Power Management Configuration	
ACPI Sleep State	[S3 (Suspend to RAM)]
Restore AC Power Loss	[Power Off]
Resume From S3 By PS/2 Keyboard	[Disabled]
Resume From S3 By PS/2 Mouse	[Disabled]
Resume By PCIE Device	[Disabled]
Resume By RTC Alarm	[Disabled]
>Watchdog Timer Configuration	

→ ← Select Screen

↑↓ Select Item

Enter: Select

+- Change Opt.

F1: General Help

F2: Previous Values

F3: Optimized Defaults

F4 Save & Exit

ESC Exit

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ACPI Sleep State

Options: Suspend Disabled, S1 (CPU Stop Clock), S3 (Suspend to RAM)

Restore AC Power Loss

Options: Power Off, Power On, Last State

Resume From S3 By PS/2 Keyboard

Options: Disabled, Enabled

Resume From S3 By PS/2 Mouse

Options: Disabled, Enabled

Resume By PCIE Device

Options: Disabled, Enabled

Resume By RTC Alarm

Options: Disabled, Enabled

Watchdog Timer Configuration

■ **WDT Function   [Disabled]**

Options: Disabled, Enabled

Table 6 Advanced Menu –CPU Advanced Configuration

BIOS SETUP UTILITY				
Main	**Advanced**	Boot	Security	Save & Exit

CPU Advanced Configuration

Hyper-Treading	[Enabled]
Execute Disable Bit	[Enabled]
Limit CPUID Maximum	[Disabled]
EIST	[Enabled]

→ ← Select Screen
↑↓ Select Item
Enter: Select
+- Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4 Save & Exit
ESC Exit

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Hyper-Treading
Options: Disabled, Enabled
Execute Disable Bit
Options: Disabled, Enabled
Limit CPUID Maximum
Options: Disabled, Enabled
EIST
Options: Disabled, Enabled

Table 7 Advanced Menu –SATA Configuration

BIOS SETUP UTILITY				
Main	**Advanced**	**Boot**	**Security**	**Save & Exit**

		→ ← Select Screen
		↑↓ Select Item
Configure SATA as	[AHCI]	Enter: Select
SATA Port 1	TOSHIBA MK8046 (80.0G)	+- Change Opt.
SATA Port 2	Not Present	F1: General Help
		F2: Previous Values
		F3: Optimized Defaults
		F4 Save & Exit
		ESC Exit

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Configure SATA as

Options: IDE, AHCI

Table 8 Advanced Menu –USB Configuration

BIOS SETUP UTILITY				
Main	**Advanced**	**Boot**	**Security**	**Save & Exit**

USB Configuration		.
USB Devices:		
1 Drive, 1 Keyboard		→ ← Select Screen
Legacy USB Support	[Enabled]	↑↓ Select Item
EHCI Hand-off	[Disabled]	Enter: Select
Mass Storage Devices:		+- Change Opt.
San Disk	[Auto]	F1: General Help
		F2: Previous Values
		F3: Optimized Defaults
		F4 Save & Exit
		ESC Exit

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Legacy USB Support

Options: Disabled, Enabled, Auto

EHCI hand-off

Options: Disabled, Enabled

Mass Storage Device

Options: Auto, Floppy, Forced FDD, Hard Disk, CD-ROM

Table 9 Advanced Menu – Super IO Configuration

BIOS SETUP UTILITY				
Main	**Advanced**	Boot	Security	Save & Exit
Super IO Configuration			→ ← Select Screen	
			↑↓ Select Item	
>Serial Port 1 Configuration			Enter: Select	
			+- Change Opt.	
			F1: General Help	
			F2: Previous Values	
			F3: Optimized Defaults	
			F4 Save & Exit	
			ESC Exit	
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Table 10 Advanced Menu – Super IO Configuration – Serial Port 1 Configuration

BIOS SETUP UTILITY						
Main	**Advanced**	Boot	Chipset	P ower	Security	E xit
Serial Port 1 Configuration				→←: Select Screen		
				↑↓: Select Item		
Serial Port		[Enabled]		Enter: Select		
Device Settings		IO=3F8h ; IRQ=4;		+/-: Change Opt.		
				F1: General Help		
Change Settings		[Auto]		F2: Previous Values		
Serial Port 1 Type		[RS232]		F3: Optimized Defaults		
				F4: Save and Exit		
				ESC: Exit		
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Serial Port

Options: Disabled, Enabled

Change Settings

Options: Auto,

IO=3F8h; IRQ=4;

IO=3F8h; IRQ=3, 4, 5, 6, 7, 10, 11, 12;

IO=2F8h; IRQ=3, 4, 5, 6, 7, 10, 11, 12;

IO=3E8h; IRQ=3, 4, 5, 6, 7, 10, 11, 12;

IO=2E8h; IRQ=3, 4, 5, 6, 7, 10, 11, 12;

Serial Port Type

Options: RS232, RS422, RS485

Table 11 Advanced Menu –H/W Monitor

BIOS SETUP UTILITY				
Main	**Advanced**	Boot	Security	Save & Exit

PC Health Status		
CPU Warning Temperature	[Disabled]	
		→ ← Select Screen
CPU Temperature	: +55 C	↑↓ Select Item
SYS Temperature	: +47 C	Enter: Select
		+- Change Opt.
+VCORE	: +1.056 V	F1: General Help
+VGFX	: +0.960 V	F2: Previous Values
+3.3V	: +3.376 V	F3: Optimized Defaults
+5V	: +5.016 V	
+VIN	: +12.160V	F4 Save & Exit
+1.05V	: +1.072V	
+1.5V	: +1.508 V	ESC Exit
+USBVCC	: +4.989 V	
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CPU Warning Temperature

Options: Disabled, 80 ºC, 85 ºC, 90 ºC

■ Boot Menu

Table 12 Boot Menu

BIOS SETUP UTILITY				
Main	**Advanced**	**Boot**	**Security**	**Save & Exit**

Boot Configuration

Full Screen LOGO Display	[Disabled]
Setup Prompt Timeout	1
Bootup NumLock State	[On]

Boot Option Priorities

Boot Option #1	[UEFI: SanDisk]
Boot Option#2	[SanDisk]
Hard Drive BBS Priorities	

→ ← Select Screen
↑↓ Select Item
Enter: Select
+- Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4 Save & Exit
ESC Exit

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Full Screen LOGO Display

Options: Disabled, Enabled

Bootup Numlock State

Options: On, Off

Boot Option #1

Options: UEFI, SATA PM: Disabled

Boot Option #2

Options: UEFI, SATA PM: Disabled

Hard Drive BBS Priorities

■ **Boot Option #1**

Options: SanDisk, Disabled

■ Security Menu

Table 13 Security Menu

BIOS SETUP UTILITY				
Main	Advanced	Boot	**Security**	Save & Exit

Password Description	
If ONLY the Administrator's password is set, then this only limits access to Setup and is only asked for when entering Setup	→ ← Select Screen
If ONLY the User's password is set, then this is a power on password and must be entered to boot or enter Setup. In Setup the User will have Administrator rights	↑↓ Select Item
	Enter: Select
The password length must be in the following range:	+- Change Opt.
Minimum Length 3	F1: General Help
Maximum length 20	F2: Previous Values
	F3: Optimized Defaults
Administrator Password	F4 Save & Exit
User Password	ESC Exit

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■ Save & Exit Menu

Table 14 Save & Exit Menu

BIOS SETUP UTILITY				
Main	Advanced	Boot	Security	**Save & Exit**

Save Changes and Reset	→ ← Select Screen
Discard Changes and Reset	↑↓ Select Item
	Enter: Select
Save Options	+- Change Opt.
Save Changes	F1: General Help
Discard Changes	F2: Previous Values
	F3: Optimized Defaults
Restore Defaults	F4 Save & Exit
	ESC Exit

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Save Changes and Exit

Exit system setup after saving the changes. Once you are finished making your selections, choose this option from the Exit menu to ensure the values you selected are saved to the CMOS RAM. The CMOS RAM is sustained by an onboard backup battery and stays on even when the PC is turned off. When you select this option, a confirmation window appears. Select [Yes] to save changes and exit.

Discard Changes and Exit

Exit system setup without saving any changes. Select this option only if you do not want to save the changes that you made to the Setup program. If you made changes to fields other than system date, system time, and password, the BIOS asks for a confirmation before exiting.

Discard Changes

Discards changes done so far to any of the setup values. This option allows you to discard the selections you made and restore the previously saved values. After selecting this option, a confirmation appears. Select [Yes] to discard any changes and load the previously saved values.

Load Optimal Defaults

Load Optimal Default values for all the setup values. This option allows you to load optimal default values for each of the parameters on the Setup menus, which will provide the best performance settings for your system. The F9 key can be used for this operation.

Load Failsafe Defaults

Load Optimal Default values for all the setup values. This option allows you to load failsafe default values for each of the parameters on the Setup menus, which will provide the most stable performance settings. The F8 key can be used for this operation.

Chapter 4

Driver Installation

If your HPC-1010 does not come with an operating system pre-installed, you will need to install an operating system and the necessary drivers to operate it. After you have finished assembling your system and connected the appropriate power source, power it up using the power supply and install the desired operating system.
You can download the drivers for the HPC-1010 from the Quanmax website at www.quanmax.com and install as instructed there. For other operating systems, please contact Quanmax.