AXIOMTEK

P1197E-861

**All-in-One
19" SXGA TFT Expandable
PANEL PC**

User's Manual

RoHS

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CAUTION

If you replace wrong batteries, it causes the danger of explosion. It is recommended by the manufacturer that you follow the manufacturer's instructions to only replace the same or equivalent type of battery, and dispose of used ones.

Safety Precautions

Before getting started, read the following important cautions.

1. Be sure to ground yourself to prevent static charge when installing the internal components. Use a grounding wrist strap and place all electronic components in any static-shielded devices. Most electronic components are sensitive to static electrical charge.

2. Disconnect the power cords from the P1197 Series before making any installation. Be sure both the system and the external devices are turned OFF. Sudden surge of power could ruin sensitive components. Make sure the P1197 Series is properly grounded.

3. Do not open the system's top cover. If opening the cover for maintenance is a must, only a trained technician is allowed to do so. Integrated circuits on computer boards are sensitive to static electricity. To avoid damaging chips from electrostatic discharge, observe the following precautions:

   ■ Before handling a board or integrated circuit, touch an unpainted portion of the system unit chassis for a few seconds. This will help to discharge any static electricity on your body.

   ■ When handling boards and components, wear a wrist-grounding strap, available from most electronic component stores.

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Chapter 1
Introduction

This chapter contains general information and detailed specifications of the P1197E-861. Chapter 1 includes the following sections:

- **General Description**
- **Specification**
- **Dimensions and Outlines**
- **I/O Outlets**
- **Package List**

1.1   General Description

The P1197E-861 adopts a 19-inch SXGA TFT LCD with 350-nits brightness and Intel® 3rd&2nd Core™ i7/i5/i3 series, Pentium® and Celeron® processors and Intel® H61 chipset to provide excellent and powerful computing performance. Furthermore, P1197E-861 adopts built-in speaker and option WLAN module for wireless connectivity.

Industrial-grade front bezel

P1197E-861 adopts industrial-grade material front bezel which incorporates the advantages of light weight, high degree of hardness better heat releasing, easy-to-shape and anti-corrosion ability. Therefore, P1197E-861 is especially suitable for most rugged industrial environments.

Expandable for 1 PCIe (1 PCI optional)

P1197E-861 has 1 PCIe (1 PCI optional) for expansion purpose. User can easily plug in standard half-size PCI or PCIe card for any requirement.

Speaker and WLAN Antenna Supported

P1197E-861 features built-in speakers for kiosk application to display multimedia content program. It also supports WLAN module (optional) antenna for wireless network connectivity.

Powerful computing: Intel® 3rd Generation Core i7/i5/i3/Celeron processors

P1197E-861 features Intel® 3rd&2nd Core™ i7/i5/i3 series, Pentium® and Celeron® processors and Intel® H61 chipset which deliver high computing performance capability. Ivy Bridge CPU offers reliable and stable performance and rugged environment.

1.2 Specifications

Main CPU Board

- **CPU**
  - Intel® 3rd&2nd Core™ i7/i5/i3 series, Pentium® and Celeron® processors

- **System Chipset**
  - Intel® H61 Express Chipset

- **System Memory**
  - 2 x 204-pin DDR3 SO-DIMM socket
  - Supporting 8GB per DIMM, maximum memory size up to 16GB

- **BIOS**
  - America Megatrends BIOS (AMI UEFI BIOS)

I/O System

- **Standard I/O**
  - 1 x RS-232/422/485 (COM1), 1 x RS-232 with 5V/12V(COM3), 3 x RS-232(COM4)
  - 2 x USB 2.0 (front)
  - 6 x USB 2.0 (back)
  - 1 x DVI-D
  - 1 x VGA

- **Ethernet**
  - 2 x RJ45 for Giga Ethernet

- **Audio**
  - 1 x Line-out
  - 1 x Mic-in

- **Expansion**
  - 1 x Wireless Module(optional)
  - 1 x PCIe x 4 slots Riser card (1 x PCI slots Riser card optional)

- **Storage**
  - 2 x 2.5" SATA HDD

- **Power connector**
  - 1 x AC plug

System Specification

- **19" SXGA(1280 X 1024)LCD**

- **5 wired resistive Touch**

- **IP65/NEMA4 aluminum front bezel**

- **IP65 aluminum front bezel**

- **Net Weight**
  - 8Kgs (17.64 lb)

- **Dimension (Main Body Size)**
  - 482 x 94.7 x 380mm

- **Operation Temperature**
  - 0℃ to 45℃

- **Relative Humidity**
  - 10% to 95% @ 40℃, Non-Condensing

- **Power Input**
  - 100~240VAC power connector

NOTE: 1. All specifications and images are subject to change without notice.
2. The speed of expansion card will depend on your CPU.
3. On-Screen Display Combo keys: Pressing VOL+ & VOL- means Audio mute.

1.3   Dimensions and Outlines

The following diagrams show the dimensions and outlines of P1197E-861.

1.4   I/O Outlets

Please refer to the following illustration for I/O locations of the P1197E-861.
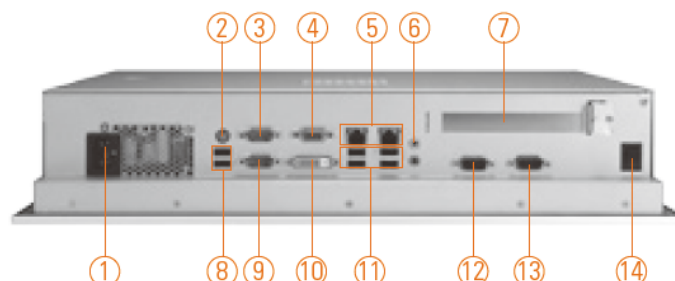
1. AC Plug
2. PS2 Keyboard & Mouse combo
3. 1x RS-232/422/485 (COM1)
4. 1x VGA
5. Ethernet x2
6. Audio (Mic-in/Line-out)
7. 1x PCIe x 4 or 1 x PCI
8. 2x USB2.0
9. 1x RS-232(COM2)
10. 1x DVI-D
11. 4x USB2.0
12. 1x RS-232(COM3)
13. 1x RS-232(COM4)
14. Power Switch

1.5   Packing List

When you receive the P1197E-861, the bundled package should contain the following items:

- **P1197E-861 unit x 1**
- **Driver CD x1**
- **Panel mount kit x 9**
- **Wall/VESA mount kit x 1 (optional)**
- **Power cord x 1**

If you can not find the package or any items are missing, please contact Axiomtek distributors immediately.

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Chapter 2
Hardware and Installation

The P1197E-861 provides rich I/O ports and flexible expansions for you to meet different demand. The chapter will show you how to install the hardware. It includes:

- **Open back cover**
- **Serial Port Interface**
- **Ethernet**
- **Mounting Method**
- **Hard disk**
- **DRAM**
- **CPU**
- **CPU Cooler**
- **Wireless LAN Module(optional)**
- **Add-on Card**
- **Optical Drive**

2.1　　Open back cover

This section tells users how to open back cover. Please follow the steps below.

Step 1　　**Unscrew 3 screws on the back cover and push to the right side. Please refer the photo below.**

Step 2　　**Remove the back cover and unscrew 2 screws.**
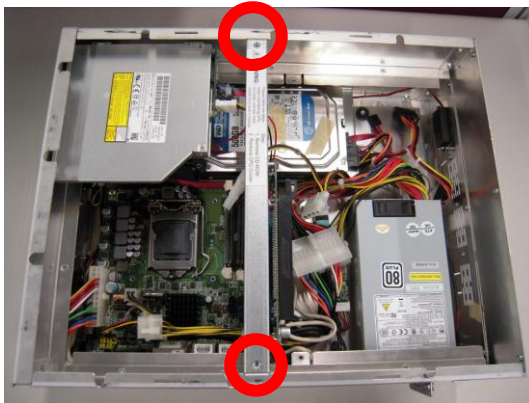
2.2　Serial Ports Interface

The P1197E-861 has four serial ports. COM1 is RS-232/422/485, while COM2, COM3 and COM4 are RS-232.

2.2.1　COM1&COM2 Connector

The COM1&COM2 are double-deck DB-9 connectors. The upper connector is for COM1 and the lower connector is for COM2.

Pin	Pin	Signal
1	10	Data Carrier Detect (DCD)
2	11	Receive Data (RXD)
3	12	Transmit Data (TXD)
4	13	Data Terminal Ready (DTR)
5	14	Ground (GND)
6	15	Data Set Ready (DSR)
7	16	Request to Send (RTS)
8	17	Clear to Send (CTS)
9	18	Ring Indicator (RI)

COM1

COM2
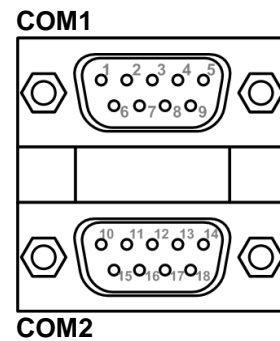
2.2.2　COM3 & COM4 Connectors

The COM3 and COM4 interfaces are available through COM34 and **COM56**, respectively.

Pin	Signal	Pin	Signal
1	DCD#	2	DSR#
3	RXD	4	RTS#
5	TXD	6	CTS#
7	DTR#	8	RI#
9	GND	10	GND
11	DCD#	12	DSR#
13	RXD	14	RTS#
15	TXD	16	CTS#
17	DTR#	18	RI#
19	GND	20	GND

COM34, COM56
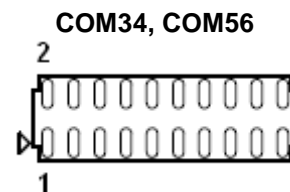
2.2.3   Jumper and Switch Setting

Jumpers and Connectors Layout
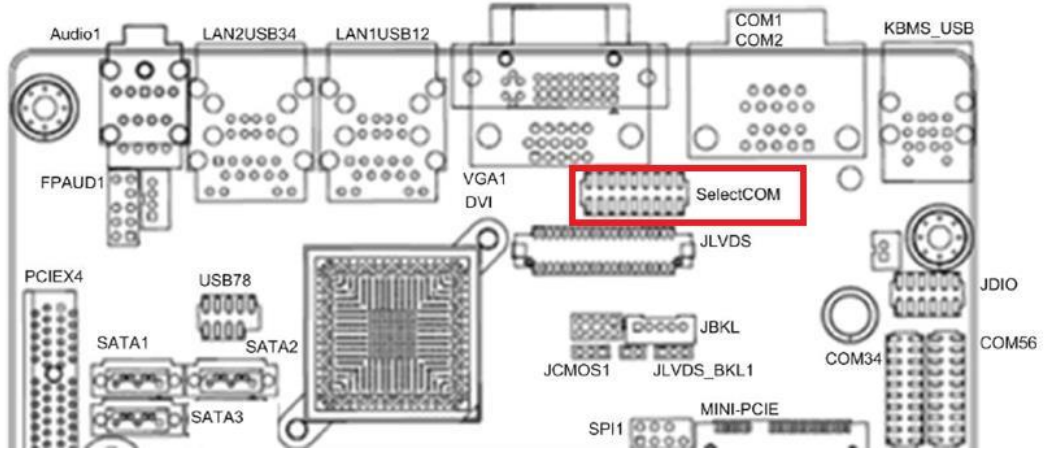
Jumper Settings

Jumper is a small component consisting of jumper clip and jumper pins. Install jumper clip on 2 jumper pins to close. And remove jumper clip from 2 jumper pins to open. The following illustration shows how to set up jumper.
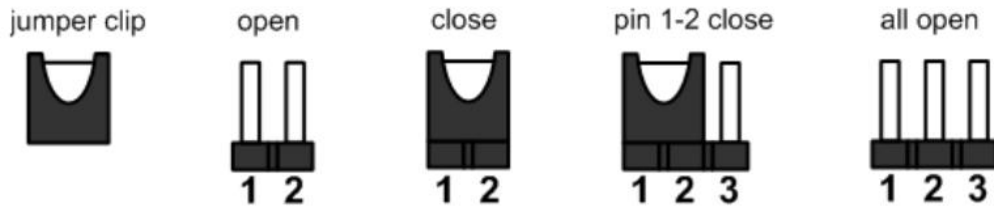
Select COM for RS-232/422/485

Pin	Signal	Pin	Signal
1	UART1_RXD	2	COM1_485_RXD
3	UART1_RXD	4	COM1_422_RXD
5	UART1_RXD	6	COM1_232_RXD
7	COM1_BUF_DCD#	8	COM1_BUF_TXD
9	COM1_DCD#	10	COM1_TXD
11	COM1_TXD422-	12	COM1_RXD422+
13	COM1_BUF_RXD	14	COM1_BUF_DTR#
15	COM1_RXD	16	COM1_DTR#
17	COM1_ TXD422+	18	COM1_RXD422-

SelectCOM
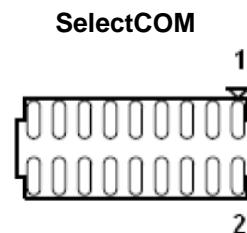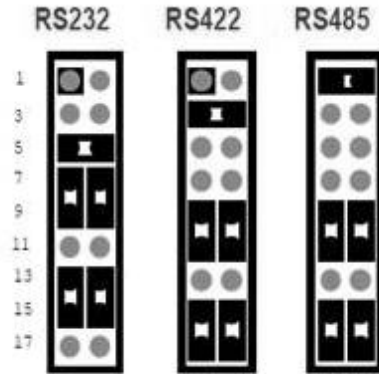
2.3   Ethernet

The P1197E-861 is equipped with two high performance plug and play Ethernet interfaces (RJ-45). Connection can be established by plugging one end of the Ethernet cable into this RJ-45 connector and the other end to a 1000/100/10-Base-T hub.

Each of these ports allows Gigabit connection to a Local Area Network (LAN) through a network hub. Refer to the table below for the LAN port LED indications.

SPEED LED		ACT / LINK LED	
Status	**Description**	**Status**	**Description**
OFF	10Mbps connection	OFF	No link
Orange	100Mbps connection	Green	Link
Green	1Gbps connection	Blinking	Data activity
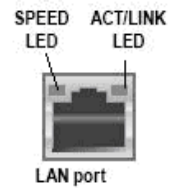
2.4 Mountings: Panel / Wall / Rack / Desktop / VESA

There are 5 application options for the P1197E-861, including Panel/Wall/Rack/ Desktop/VESA mounting ways.

2.4.1 VESA-ARM / Wall-Mount / Desktop-mount

The P1197E-861 provides VESA mount: 75x75 mm or 100x100mm. Screw six screws to fix the kit in the back chassis.

▲VESA/ Wall mount bracket

▲Putting the bracket on the back of system

▲Fixing the bracket by four screws on the left and right side.

2.4.2 Panel-mount Kit Assembly

The P1197E-861 is designed for panel mount application. To mount the P1197E-861, the standard set of mounting kit (included in the system packaging) is needed.
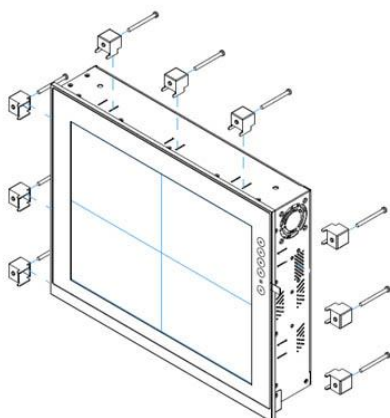
2.4.3 Rack-mount Kit Assembly

The P1197E-861 is designed for rack mount application.
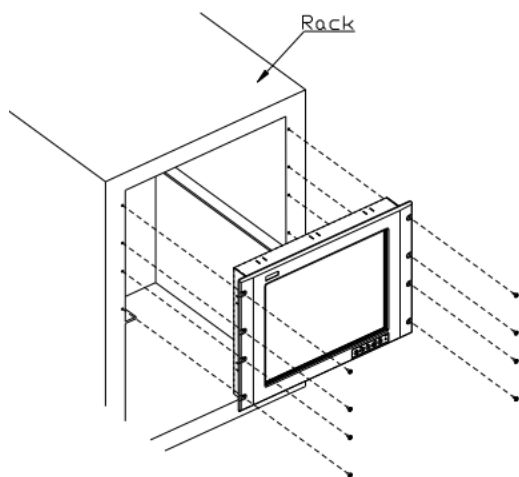
Step 1   Remove 8 seal pads in front panel.
Step 2   P1197E-861 could mount directly to standard 19" industrial rack.

2.5   HDD Installation

The P1197E-861 provides a convenient Hard Disk Drive (HDD) bracket for users to install 2 x 2.5" SATA HDD. Please follow the steps:

Step 1   Unscrew 1 screws to take off the HDD door.

Step 2   Unscrew two screws and pull the HDD out directly.
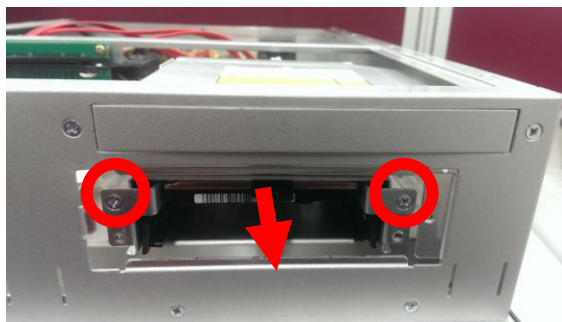
2.6   DRAM Installation

The P1197E-861 provides two 204-pin DDR3 SO-DIMM socket that support system memory up to 16GB. Please follow steps below to install the memory modules:

Step 1   Refer to section 2.1 to open the back cover and find out DIMM socket on mainboard (MANO871).

Step 2   Push the latches on each side of the SO-DIMM slot down.

Step 3 **Install the SO-DIMM module into the slot and press it firmly down until it seats correctly.**

Step 4 **The slot latches are levered upwards and latch on to the edges of the SO-DIMM.**

2.7   CPU Installation

The P1197E-861 has an LGA1155 socket supporting Intel® 3rd&2nd Core™ i7/i5/i3 series, Pentium® and Celeron® processors and provides high computing performance for users.

Step 1   Press the hook of lever down with your thumb and pull it to the right side to release it from retention tab.

Step 2   Lift the tail of the load lever and rotate the load plate to fully open position. And, remove the protective plastic cover.
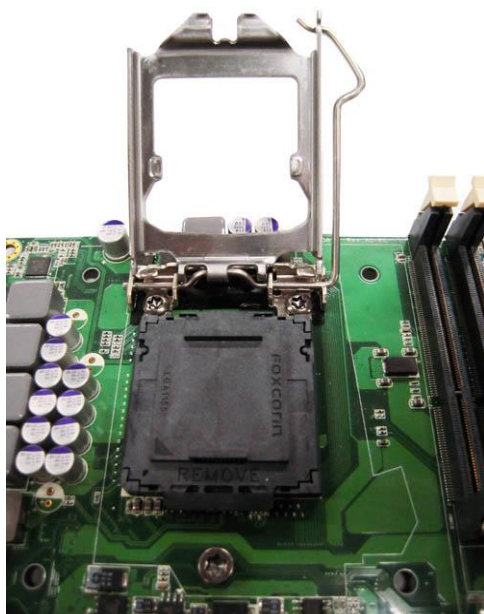
Step 3   **CPU aims at the socket and places the package carefully into the socket by purely vertical motion.**
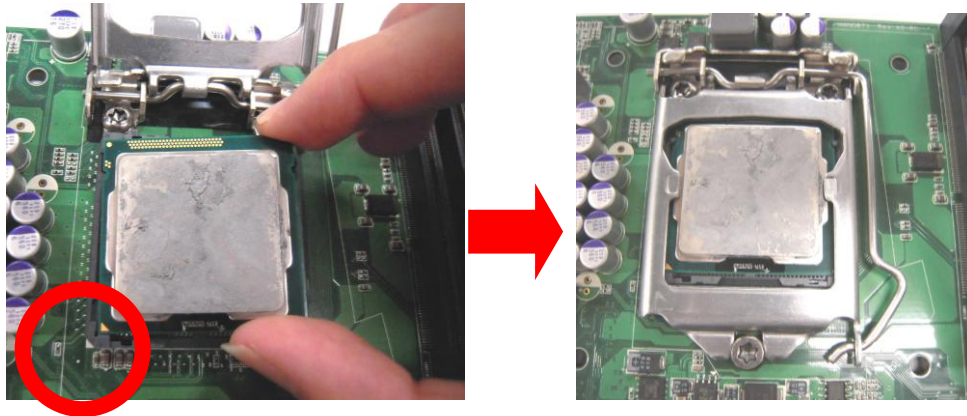
NOTE *Never touch fragile socket contacts to avoid damage and do not touch processor sensitive contacts at any time during installation.*

2.8   CPU Cooler Installation

Step 1   Making sure your CPU settled correctly on the socket.

Step 2   Screw the cooling fan supporting base onto the CPU socket on the Motherboard and make sure the CPU fan is plugged to the CPU fan connector. And, Connect the CPU cooler power connector to the FAN1 connector
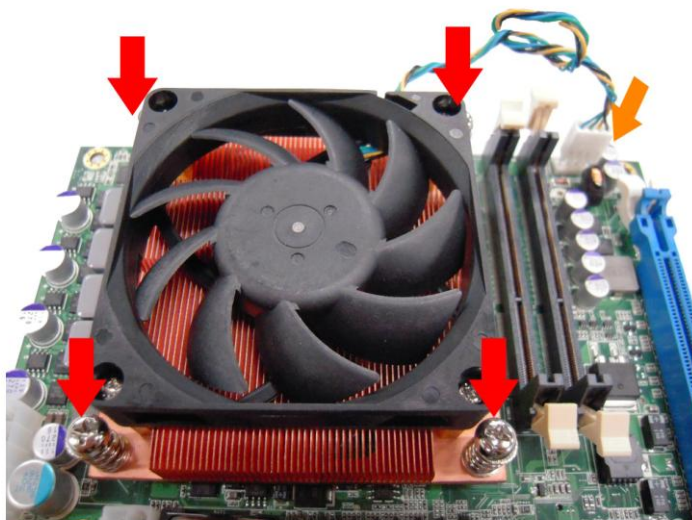
2.9　Wireless LAN Module Installation (optional)

The P1197E-861 provides one wireless LAN module to install. When installing the wireless LAN module, refer to the following instructions and illustration:

Step 1　**Refer to section 2.1 to open the back cover and find out the wireless LAN module located.**
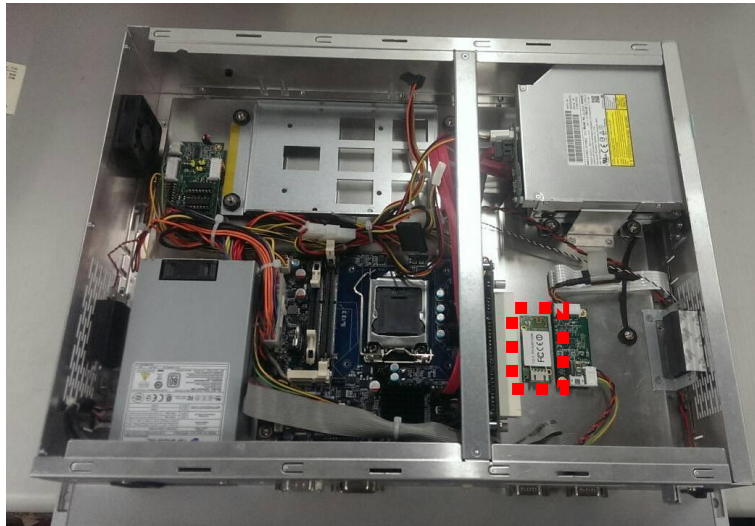
Step 2　**Fixing the wireless LAN module by 2 screws.**

Step 3   Plug in USB cable to the connector of WIFI module. And, find the built-in Antenna cable and connect it wireless LAN card.

Step 4   Lift the rubber stopper from the top of back cover.
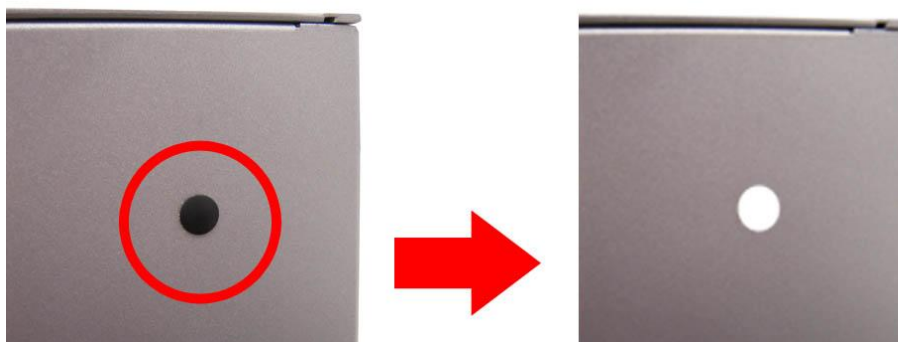
Step 5   Install the antenna on the antenna connector.

2.10   Add-on Card Installation

The P1197E-861 provides a riser card (PCIex4 interface) for 1 x PCIe x 4 or 1 x PCI slots expansion. The riser card assembly can accommodate both half-size expansion cards. To install the riser card, refer to the following figure and instructions below:

Step 1   **Refer section 2.1 to open the back cover and unscrew 2 screws, and then remove the riser card fix kit and plate.**
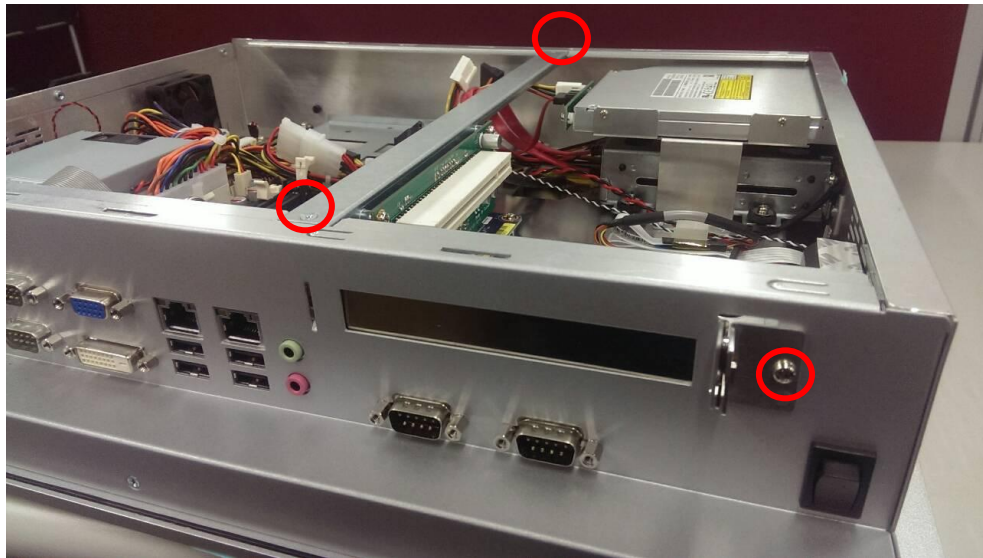
Step 2   **Insert the riser card in the socket firmly until it is completely seated. And, insert the add-on card you need to the socket of riser card.**
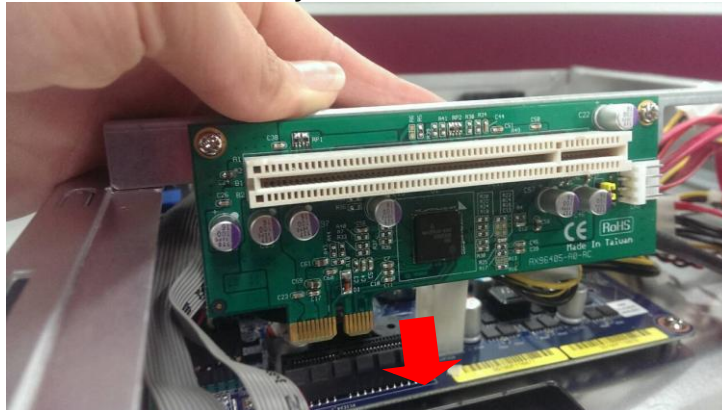
Step 3   Secure the metal bracket of the card to the system case with four screws. Installations complete.
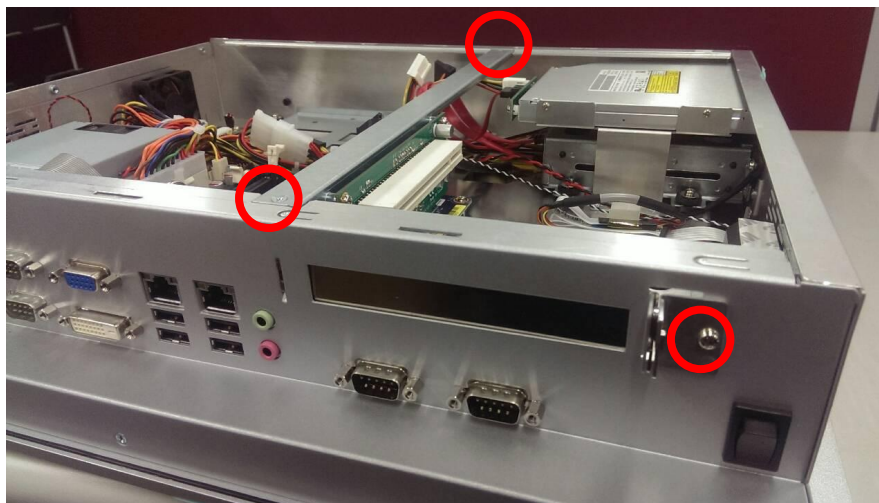
![note icon] *NOTE: Please use the standard size of add-on card to avoid conflicting the mechanism.*

2.11   Optical Drive Installation (optional)

The P1157E-871 offers a convenient drive bay module for users to install optical drive. When installing the optical drive, refer to the following instructions and illustration:

Step 1   Refer section 2.1 to open the back cover.

Step 2   Unscrew four screws to remove the plate from the right side.

Step 3   Fixing the optical drive on the bracket.

▲ optical drive Kit
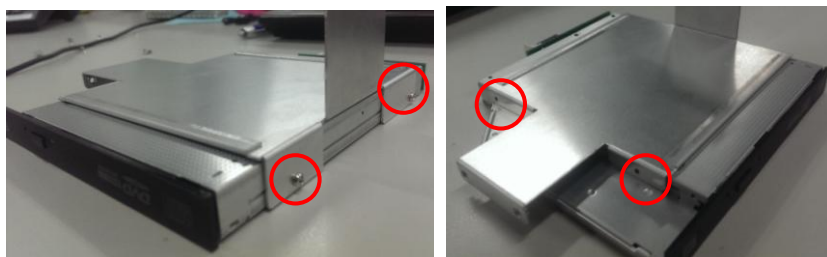
▲Fixing optical drive by 4 screws.

Step 4   **Fixing the optical drive kit on the chassis by 4 screws.**
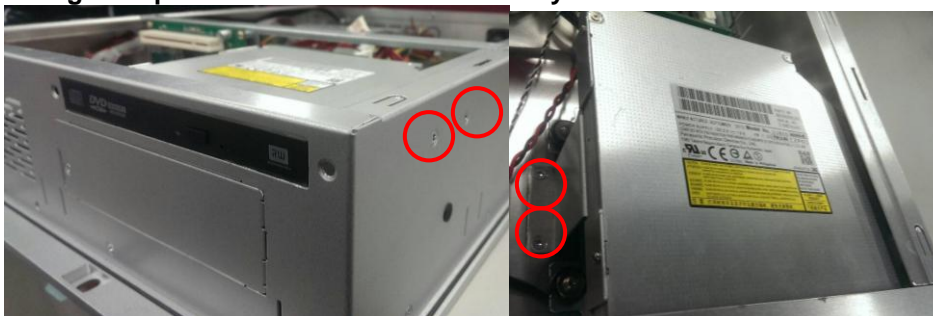
Step 5   **Plug the power and SATA cables to connectors. Installation completes.**

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Chapter 3
AMI BIOS Setup Utility

The AMI UEFI BIOS provides users with a built-in setup program to modify basic system configuration. All configured parameters are stored in a flash chip to save the setup information whenever the power is turned off. This chapter provides users with detailed description about how to set up basic system configuration through the AMI BIOS setup utility.

3.1   Starting

To enter the setup screens, follow the steps below:
1.   Turn on the computer and press the <Del> key immediately.
2.   After you press the <Del> key, the main BIOS setup menu displays. You can access the other setup screens from the main BIOS setup menu, such as the Advanced and Chipset menus.

It is strongly recommended that you should avoid changing the chipset's defaults. Both AMI and your system manufacturer have carefully set up these defaults that provide the best performance and reliability.

3.2   Navigation Keys

The BIOS setup/utility uses a key-based navigation system called hot keys. Most of the BIOS setup utility hot keys can be used at any time during the setup navigation process. These keys include <F1>, <F2>, <Enter>, <ESC>, <Arrow> keys, and so on.

NOTE: Some of the navigation keys differ from one screen to another.

Hot Keys	Description
→← Left/Right	The Left and Right <Arrow> keys allow you to select a setup screen.
↑↓ Up/Down	The Up and Down <Arrow> keys allow you to select a setup screen or sub-screen.
+− Plus/Minus	The Plus and Minus <Arrow> keys allow you to change the field value of a particular setup item.
Tab	The <Tab> key allows you to select setup fields.
F1	The <F1> key allows you to display the General Help screen.
F2	The <F2> key allows you to Load Previous Values.
F3	The <F3> key allows you to Load Optimized Defaults.
F4	The <F4> key allows you to save any changes you have made and exit Setup. Press the <F4> key to save your changes.
Esc	The <Esc> key allows you to discard any changes you have made and exit the Setup. Press the <Esc> key to exit the setup without saving your changes.
Enter	The <Enter> key allows you to display or change the setup option listed for a particular setup item. The <Enter> key can also allow you to display the setup sub- screens.

3.3 Main Menu

When you first enter the setup utility, you will enter the Main setup screen. You can always return to the Main setup screen by selecting the Main tab. System Time/Date can be set up as described below. The Main BIOS setup screen is shown below.

```
                Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
     Main   Advanced   Chipset   Boot   Save & Exit

 BIOS Information                                             Set the Date. Use Tab to
 BIOS Vendor                    American Megatrends           switch between Date elements.
 Core Version                   4.6.5.3
 Compliancy                     UEFI 2.3; PI 1.2
 Project Version                COFO 1.10 x64
 Build Date and Time            07/06/2012 10:22:04

 System Date                    [Thu 01/01/2009]
 System Time                    [02:24:38]



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



                Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.
```

BIOS Information
Display the auto-detected BIOS information.

System Date/Time
Use this option to change the system time and date. Highlight System Time or System Date using the <Arrow> keys. Enter new values through the keyboard. Press the <Tab> key or the <Arrow> keys to move between fields. The date must be entered in MM/DD/YY format. The time is entered in HH:MM:SS format.

3.4   Advanced Menu

The Advanced menu also allows users to set configuration of the CPU and other system devices. You can select any of the items in the left frame of the screen to go to the sub menus:

- ► ACPI Settings
- ► CPU Configuration
- ► SATA Configuration
- ► PCH-FW Configuration
- ► USB Configuration
- ► Second Super IO Configuration
- ► Super IO Configuration
- ► H/W Monitor
- ► Option Rom Policy
- ► CPU PPM Configuration

For items marked with "►", please press <Enter> for more options.

```
         Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
    Main   Advanced   Chipset   Boot   Save & Exit

 ► ACPI Settings                                    System ACPI Parameters.
 ► CPU Configuration
 ► SATA Configuration
 ► PCH-FW Configuration
 ► USB Configuration
 ► Second Super IO Configuration
 ► Super IO Configuration
 ► H/W Monitor
 ► Option Rom Policy
 ► CPU PPM 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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```

⚠ Caution

Take caution when changing the settings of the Advanced menu items. Incorrect field values can cause the system to malfunction.

● **ACPI Settings**

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

```
                  Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
          Advanced

   ACPI Settings                                                    Select ACPI sleep state the
                                                                    system will enter when the
   ACPI Sleep State                   [S3 only(Suspend to ...]      SUSPEND button is pressed.
   S3 Video Repost                    [Disabled]

   Resume On RTC Alarm                [Disabled]
   Wake On PCIE                       [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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```
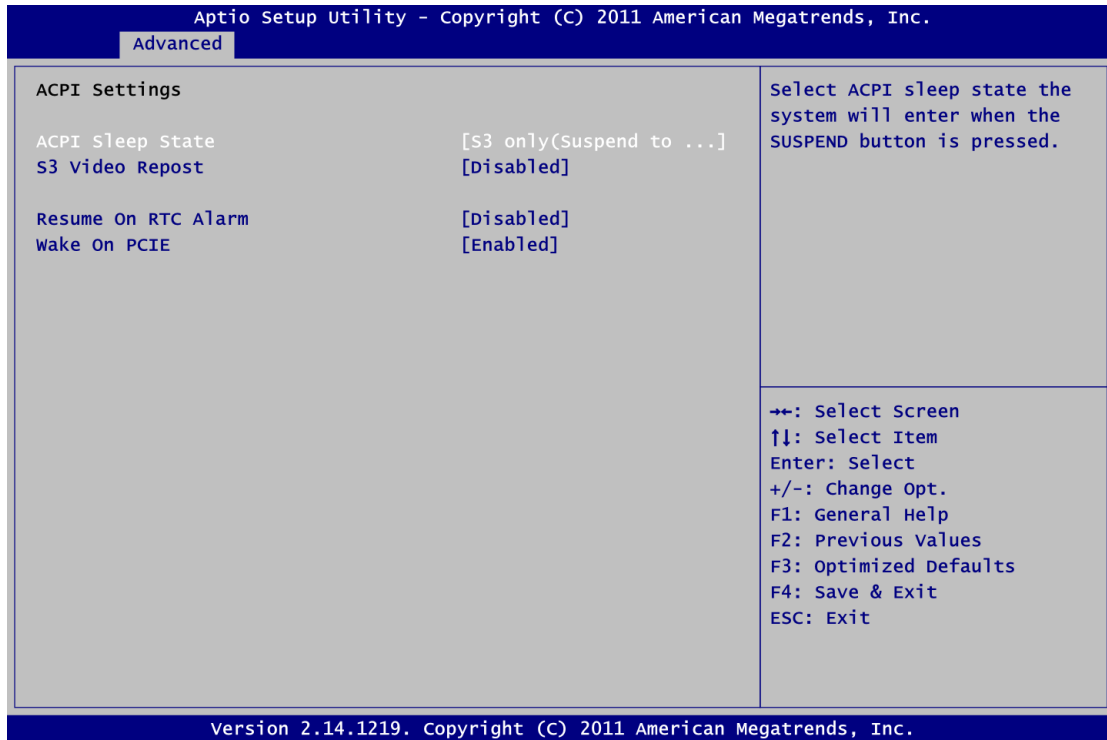
ACPI Sleep State

Select the highest ACPI sleep state the system will enter when the suspend button is pressed. Configuration options are Suspend Disabled, S1 only (CPU Stop Clock), and S3 only (Suspend to RAM).

To correctly support wake by use of USB from the S3 system power state, please refer to the following Microsoft's link:

http://support.microsoft.com/kb/841858/en-us

S3 Video Repost

Enable or disable video repost.

Resume On RTC Alarm

Enable or disable system wake on alarm even. When enabled, system will wake upon the hr/min/sec specified.

Wake On PCIE#

Enable or disable PCIE to generate a wake event.

AMI BIOS Setup Utility

● **CPU Configuration**
This screen shows the CPU information.

```
              Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
      Advanced

   CPU Configuration                                    Number of cores to enable in
                                                        each processor package.
   Genuine Intel(R) CPU @ 2.00GHz
   CPU Signature                 306a4
   Microcode Patch               7
   Max CPU Speed                 2000 MHz
   Min CPU Speed                 1600 MHz
   CPU Speed                     2000 MHz
   Processor Cores               4
   Intel HT Technology           Not Supported
   Intel VT-x Technology         Supported
   Intel SMX Technology          Supported
   64-bit                        Supported
                                                        →←: Select Screen
                                                        ↑↓: Select Item
   L1 Data Cache                 32 kB x 4              Enter: Select
   L1 Code Cache                 32 kB x 4              +/-: Change Opt.
   L2 Cache                      256 kB x 4            F1: General Help
   L3 Cache                      6144 kB               F2: Previous Values
                                                        F3: Optimized Defaults
   Active Processor Cores        [All]                 F4: Save & Exit
   Intel Virtualization Technology  [Disabled]         ESC: Exit



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```

Active Processor Cores
Allow users to set how many processor cores should be active.

Intel Virtualization Technology
This item allows a hardware platform to run multiple operating systems separately and simultaneously, enabling one system to virtually function as several systems.

NOTE: This functions will depend on your CPU supported or not.

● **SATA Configuration**

In this Configuration menu, you can see the currently installed hardware in the SATA ports. During system boot up, the BIOS automatically detects the presence of SATA devices.

```
           Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
        Advanced

 SATA Controller(s)                    [Enabled]             Enable or disable SATA Device.
 SATA Mode Selection                   [IDE]

 mSATA Port                            Empty
 Serial ATA Port 1                     Empty
 Serial ATA Port 2                     Empty
 Serial ATA Port 3                     Empty



                                                             →←: 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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```

SATA Controller(s)

Enable or disable SATA device.

SATA Mode Selection

Determine how SATA controller(s) operate. Operation mode options are: IDE Mode, AHCI Mode and RAID Mode.

● **PCH-FW Configuration**
This screen displays Management Engine (ME) Firmware information.

```
          Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
   Advanced

 ME FW Version                    8.0.0.1351
 ME Firmware Mode                 Normal Mode
 ME Firmware Type                 Full Sku Firmware
 ME Firmware SKU                  1.5MB




                                                  →←: 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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```

● **USB Configuration**

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

```
            Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
    Advanced

 USB Configuration                                              Enables Legacy USB support.
                                                               AUTO option disables legacy
 USB Devices:                                                  support if no USB devices are
       1 Keyboard, 2 Hubs                                      connected. DISABLE option will
                                                               keep USB devices available
 Legacy USB Support                    [Enabled]               only for EFI applications.




                                                               →←: 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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```

USB Devices
Display all detected USB devices.

Legacy USB Support
Use this item to enable or disable support for USB device on legacy operating system. The default setting is Enabled. Auto option disables legacy support if no USB devices are connected. Disable option will keep USB devices available only for EFI applications.

● **Second Super IO Configuration**
You can use this screen to select options for the Second Super IO Configuration, and change the value of the selected option. A description of the selected item appears on the right side of the screen. For items marked with "►", please press <Enter> for more options.

```
             Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
      Advanced

  Second Super IO Configuration                              Set Parameters of Serial Port
                                                             3 (COMC).

   Super IO Chip                      Fintek F81216
 ►Serial Port 3 Configuration
 ►Serial Port 4 Configuration
 ►Serial Port 5 Configuration
 ►Serial Port 6 Configuration


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


             Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.
```
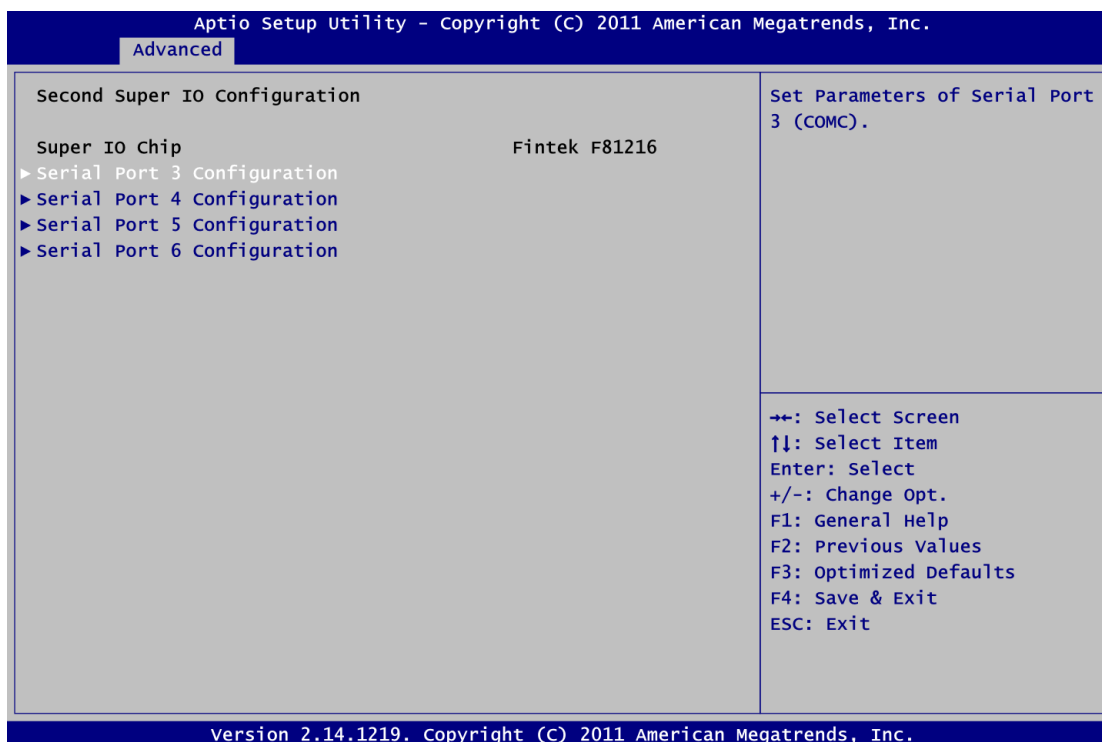
Serial Port 3~6 Configuration
Use these items to set parameters of serial port 3~6.

● **Super IO Configuration**

You can use this screen to select options for the Super IO Configuration, and change the value of the selected option. A description of the selected item appears on the right side of the screen. For items marked with "►", please press <Enter> for more options.

```
        Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
          Advanced

   Super IO Configuration                                      Set Parameters of Serial Port
                                                               1 (COMA)
   Super IO Chip                    NCT6776F
  ► Serial Port 1 Configuration
  ► Serial Port 2 Configuration
  ► Parallel Port Configuration

   Watch Dog Timer                  [Disabled]
   Chassis Opened Warning           [Disabled]

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


            Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.
```
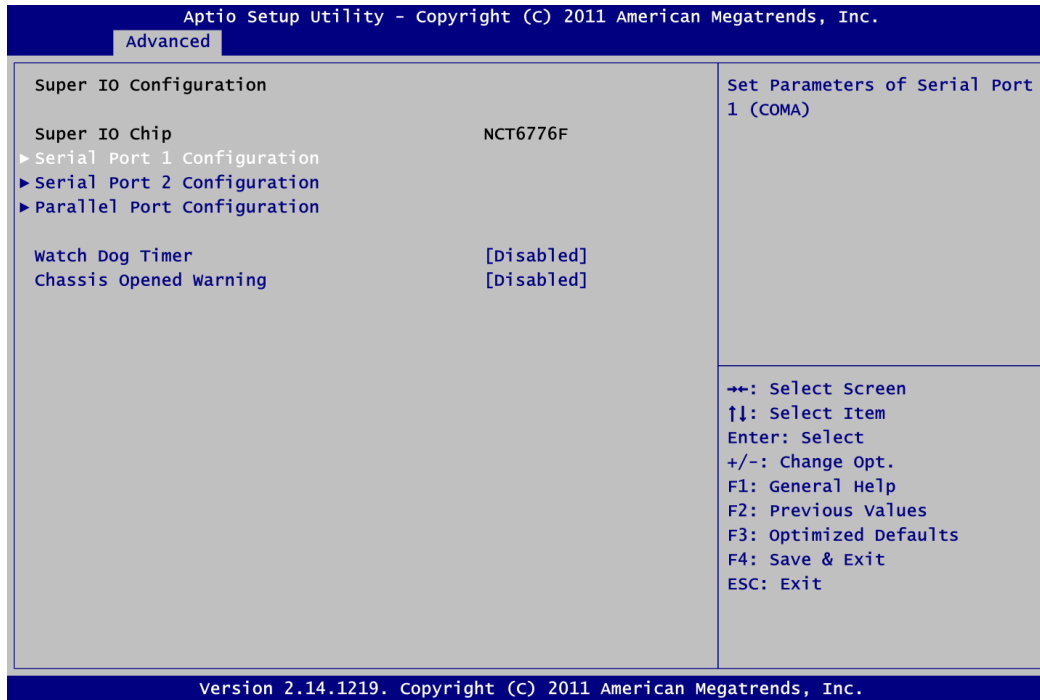
Serial Port 1~2 Configuration
Use these items to set parameters of serial port 1~2.

Parallel Port Configuration
Use this item to set parameters of parallel port.

Watch Dog Timer
Enable or disable watchdog timer function.

Chassis Opened Warning
Enable or disable chassis opened warning setting.

- ● **H/W Monitor**
Use this screen for Smart Fan configuration and hardware health status monitoring.

```
            Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
   Advanced

   Pc Health Status                                        Smart Fan function page.

  ▶ Smart Fan
   System temperature              : +35 C
   CPU temperature                 : +20 C
   CPU Fan Speed                   : 2518 RPM
   System Fan Speed                : N/A
   VCORE                           : +0.984 V
   +12V                            : +11.904 V
   +5V                             : +5.022 V
   5VSB                            : +5.120 V
   3VCC                            : +3.344 V
   3VSB                            : +3.296 V          →←: Select Screen
   VBAT                            : +2.992 V          ↑↓: Select Item
                                                       Enter: Select
                                                       +/-: Change Opt.
                                                       F1: General Help
                                                       F2: Previous Values
                                                       F3: Optimized Defaults
                                                       F4: Save & Exit
                                                       ESC: Exit



            Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.
```

This screen displays the temperature of system and CPU, cooling fan speed in RPM and system voltages (VCORE, +12V, +5V, 5VSB, etc).

Smart Fan
This option allows users to configure Smart Fan function.

● **Option Rom Policy**

```
              Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
        Advanced

   Boot option filter                    [UEFI and Legacy]           This option controls what
   Launch PXE OpROM policy               [Disabled]                  devices system can boot to.
   Launch Storage OpROM policy           [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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```

Boot Option Filter
This option controls what devices system can boot to.

Launch PXE OpROM policy
Enable or disable boot options for legacy network devices.

Launch Storage OpROM policy
Control the execution of UEFI and legacy storage OpROM.

● **CPU PPM Configuration**
Use this screen for CPU PPM configuration.

```
              Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
       Advanced

   CPU PPM Configuration                                        Enable/Disable Intel SpeedStep

   EIST                           [Enabled]
   Turbo Mode                     [Enabled]
   CPU C3 Report                  [Enabled]
   CPU C6 Report                  [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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```

EIST
Enable or disable Intel® SpeedStep. When enabled, CPU speed is controlled by the operating system. When disabled, CPU runs at its default speed.

Turbo Mode
This item is for enabling or disabling turbo mode. When enabled, it allows processor cores to run faster than marked frequency under certain conditions.

CPU C3 Report
Enable or disable CPU C3 report to the operating system.

CPU C6 Report
Enable or disable CPU C6 report to the operating system.

NOTE:This functions will depend on your CPU supported or not.

3.5 Chipset Menu

The Chipset menu allows users to change the advanced chipset settings. You can select any of the items in the left frame of the screen to go to the sub menus:

> ► PCH-IO Configuration
> ► System Agent (SA) Configuration

For items marked with "►", please press <Enter> for more options.

```
          Aptio Setup Utility – Copyright (C) 2011 American Megatrends, Inc.
     Main    Advanced   Chipset   Boot   Save & Exit

 ► PCH-IO Configuration                            PCH Parameters
 ► System Agent (SA) Configuration




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


          Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.
```
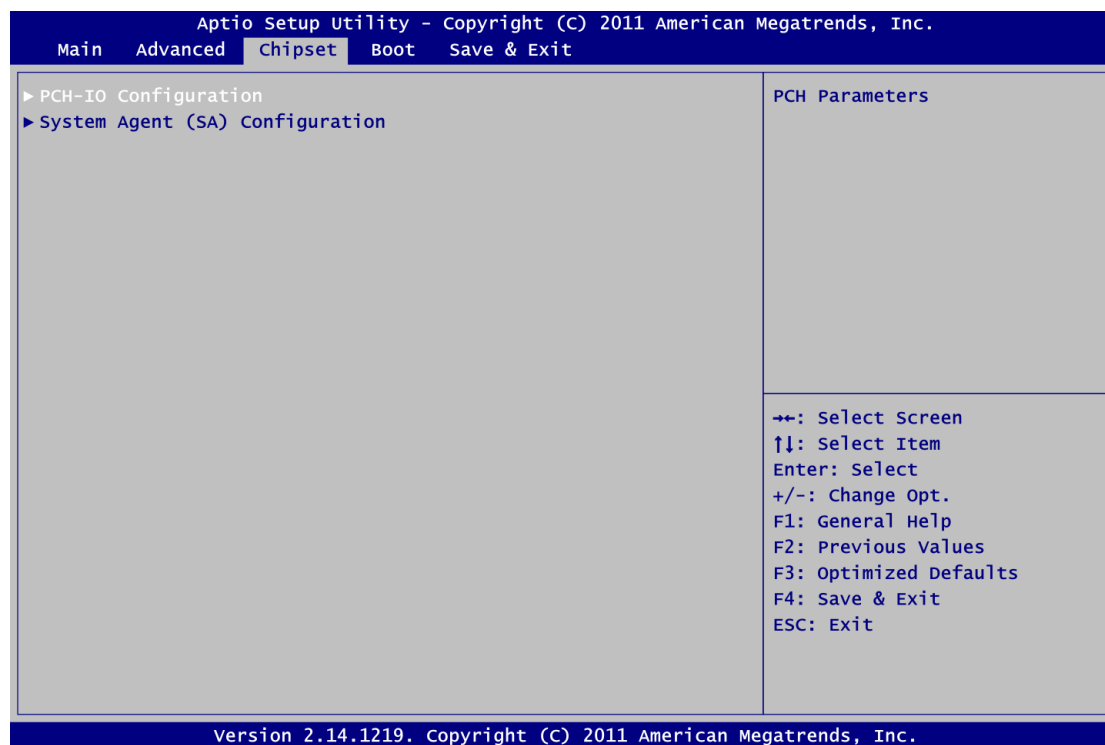
● **PCH-IO Configuration**
This screen allows users to set PCH parameters.

```
            Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
             Chipset

 Intel PCH RC Version              1.1.0.0                USB Configuration settings.
 Intel PCH SKU Name                H61
 Intel PCH Rev ID                  05/B3

▶ USB Configuration
▶ PCH Azalia Configuration

 LAN1 Controller                   [Enabled]
 LAN2 Controller                   [Enabled]
 Mini-PCIe Speed                   [Auto]

 Restore AC Power Loss             [Power Off]
                                                          →←: 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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```

USB Configuration
USB configuration settings.

PCH Azalia Configuration
PCH Azalia device configuration settings.

LAN1 Controller
Enable or disable LAN1 controller.

LAN2 Controller
Enable or disable LAN2 controller.

Mini-PCIe Speed
Allow you to select mini PCI-Express speed.

Restore AC Power Loss
Set the system power status when power returns from a power failure situation. The system power status options are Power Off, Power On and Last State.

● **PCH USB Configuration**

```
          Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
            Chipset

 USB Configuration                                            Control the USB EHCI (USB 2.0)
 EHCI1                              [Enabled]                 functions.
 EHCI2                              [Enabled]                 One EHCI controller must
 USB Ports Per-Port Disable Control  [Disabled]              always be 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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```

EHCI1/EHCI2
Enable or disable the EHCI controller.

USB Ports Per-Port Disable Control
Enable or disable each USB port individually.

● **PCH Azalia Configuration**

```
           Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
          Chipset

  PCH Azalia Configuration                                    Control Detection of the
                                                              Azalia device.
  Azalia                            [Auto]                    Disabled = Azalia will be
                                                              unconditionally disabled
                                                              Enabled = Azalia will be
                                                              unconditionally Enabled
                                                              Auto = Azalia will be enabled
                                                              if present, disabled otherwise


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



           Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.
```
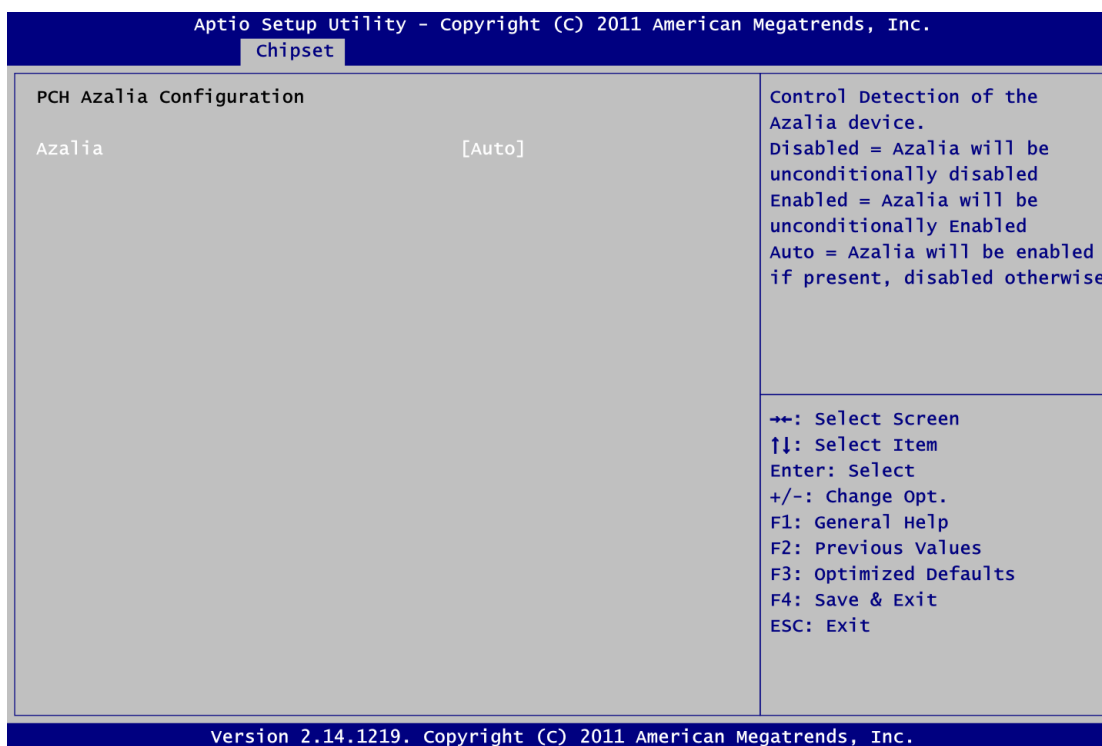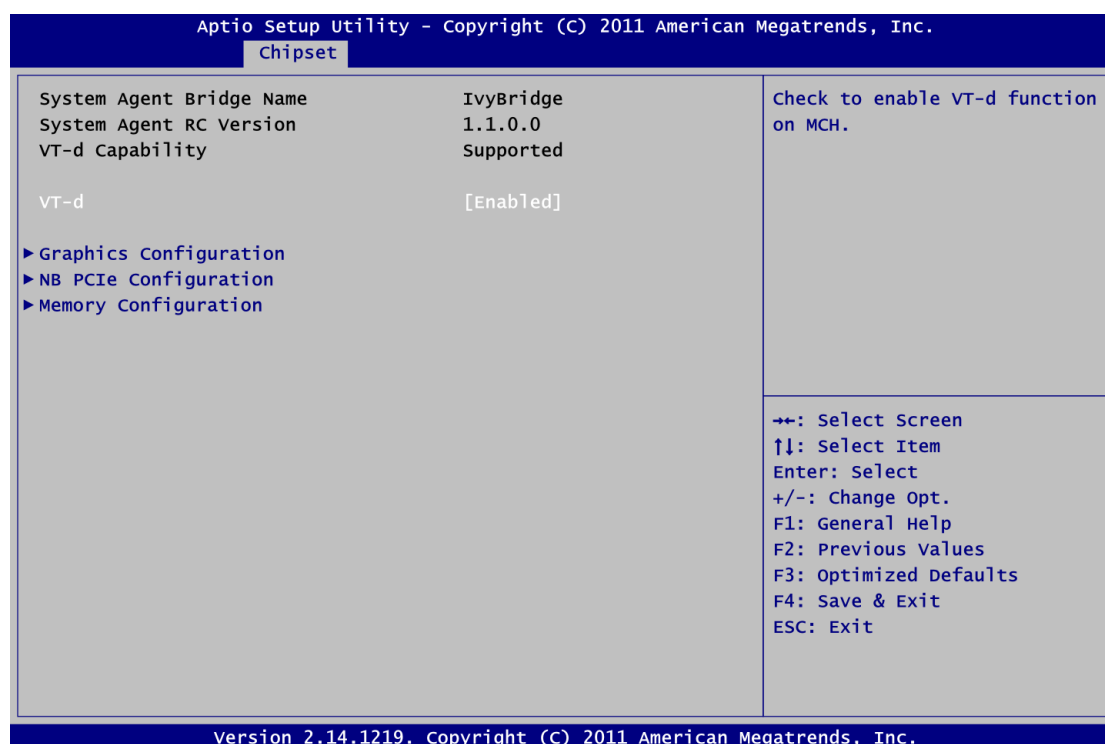
Azalia
Control detection of the Azalia device. Configuration options are Disabled, Enabled and Auto.
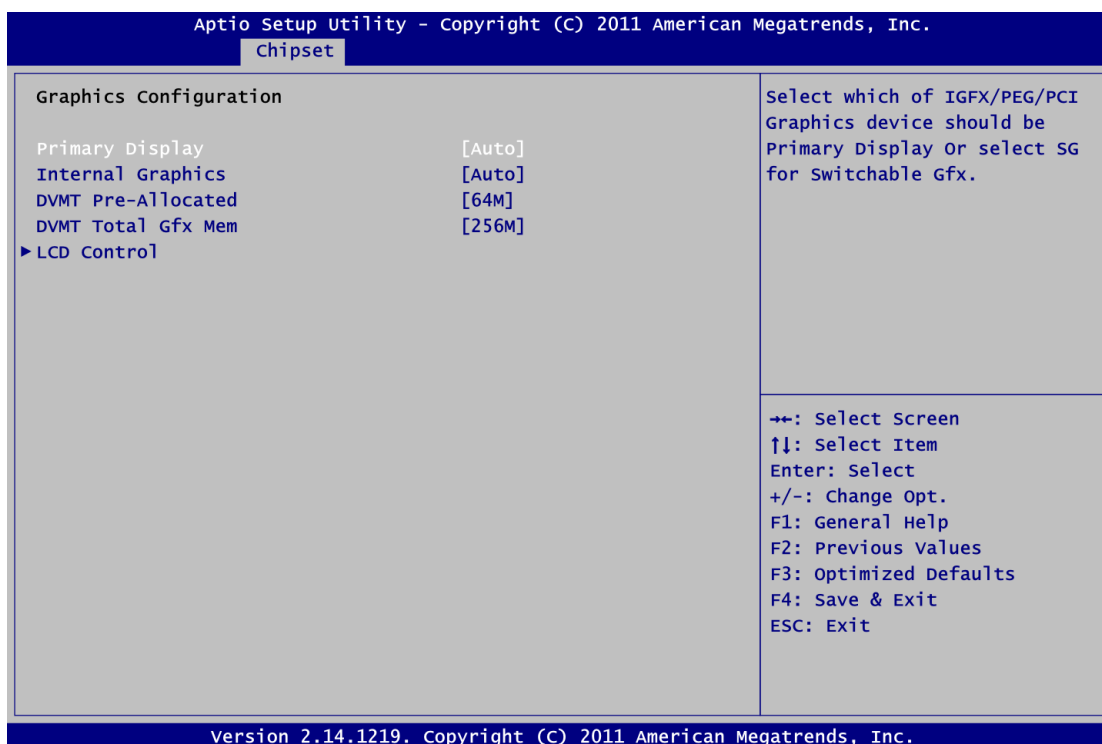
● **System Agent (SA) Configuration**
This screen shows System Agent information and provides function for specifying related parameters. For items marked with "►", please press <Enter> for more options.

```
          Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
            Chipset

   System Agent Bridge Name        IvyBridge          Check to enable VT-d function
   System Agent RC Version         1.1.0.0            on MCH.
   VT-d Capability                 Supported

    VT-d                           [Enabled]

   ►Graphics Configuration
   ►NB PCIe Configuration
   ►Memory 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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```

VT-d
Enable or disable Intel® chipset virtualization technology for directed I/O. VT-d can help end users improve security and reliability of the systems and also improve performance of I/O devices in virtualized environment.

● **Graphics Configuration**

```
         Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
          Chipset

 Graphics Configuration                              Select which of IGFX/PEG/PCI
                                                     Graphics device should be
 Primary Display                 [Auto]              Primary Display Or select SG
 Internal Graphics               [Auto]              for Switchable Gfx.
 DVMT Pre-Allocated              [64M]
 DVMT Total Gfx Mem              [256M]
 ▶ LCD Control




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



         Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.
```

Primary Display
Allow you to select which graphics controller to use as the primary boot device.
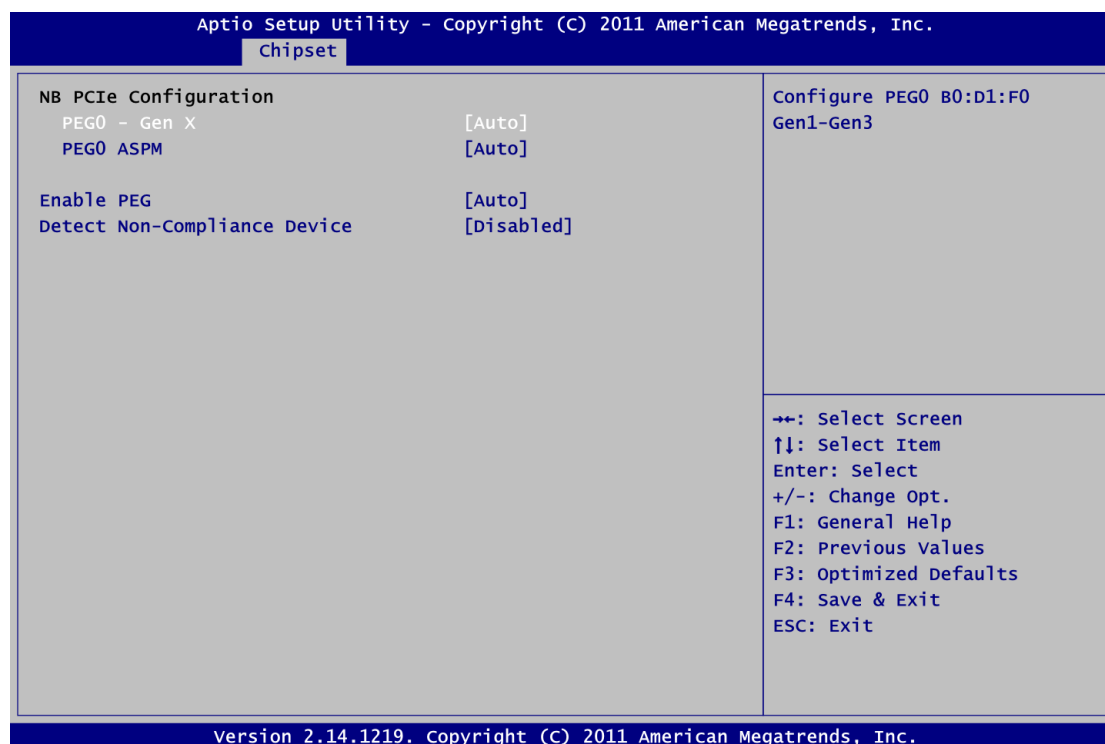
Internal Graphics
Enable or disable IGD.

DVMT Pre-Allocated
Select DVMT pre-allocated memory size.

DVMT Total Gfx Mem
Select DVMT total memory size.

● **NB PCIe Configuration**

```
              Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
                   Chipset

  NB PCIe Configuration                                     Configure PEG0 B0:D1:F0
    PEG0 - Gen X                    [Auto]                  Gen1-Gen3
    PEG0 ASPM                       [Auto]

  Enable PEG                        [Auto]
  Detect Non-Compliance Device     [Disabled]




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



              Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.
```
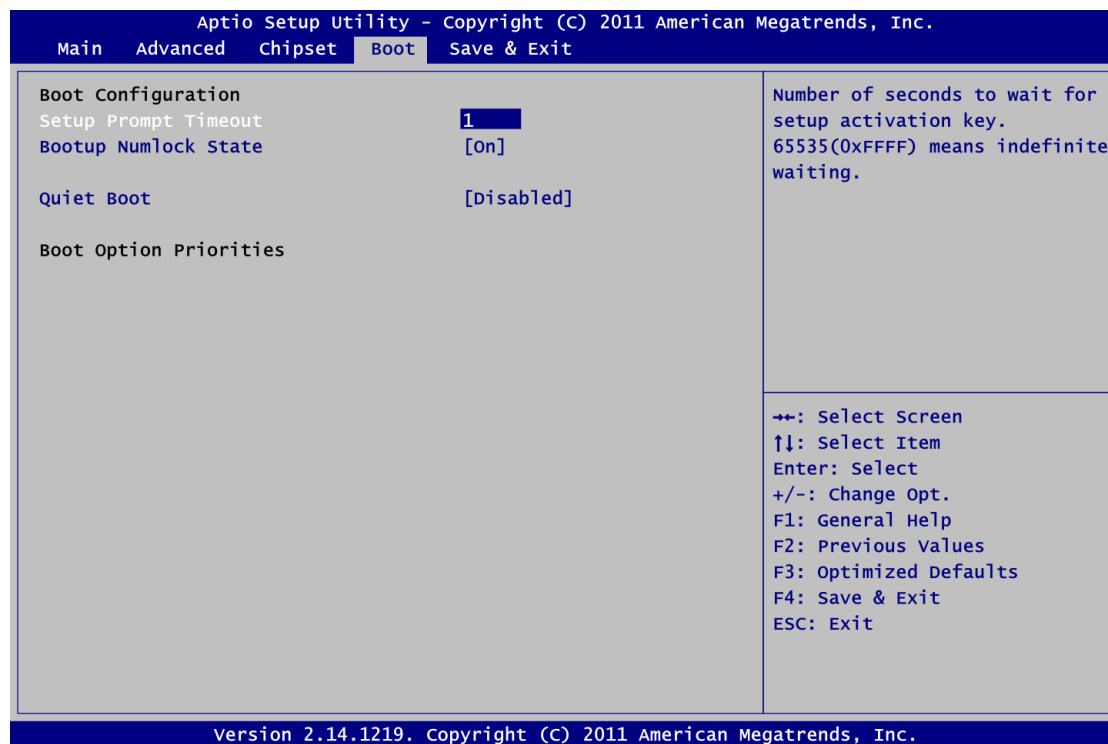
PEG0 – Gen X
Select PEG0 speed.

PEG0 ASPM
Control ASPM support for the PEG device.

Enable PEG
Enable or disable PEG always.

Detect Non-Compliance Device
Enable or disable the detection of a non-compliance PCI-Express device in PEG.

● **Memory Configuration**
This screen displays system memory information.

```
            Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
             Chipset

   Memory Information

   Memory RC Version                1.5.0.0
   Memory Frequency                 1067 Mhz
   Total Memory                     1024 MB (DDR3)
   DIMMA1                           1024 MB (DDR3)
   DIMMB1                           Not Present
   CAS Latency (tCL)                7
   Minimum delay time
       CAS to RAS (tRCDmin)         7
       Row Precharge (tRPmin)       7
       Active to Precharge (tRASmin)   20
   XMP Profile 1                    Not Supported            →←: Select Screen
   XMP Profile 2                    Not Supported            ↑↓: Select Item
                                                             Enter: Select
                                                             +/-: Change Opt.
                                                             F1: General Help
                                                             F2: Previous Values
                                                             F3: Optimized Defaults
                                                             F4: Save & Exit
                                                             ESC: Exit



             Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.
```

3.6   Boot Menu

The Boot menu allows users to change boot options of the system.

```
          Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
   Main   Advanced   Chipset   Boot   Save & Exit

   Boot Configuration                                      Number of seconds to wait for
   Setup Prompt Timeout              1                     setup activation key.
   Bootup Numlock State             [On]                   65535(0xFFFF) means indefinite
                                                           waiting.
   Quiet Boot                       [Disabled]

   Boot Option 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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```

Setup Prompt Timeout
Number of seconds to wait for setup activation key. 65535(0xFFFF) means indefinite waiting.

Bootup NumLock State
Use this item to select the power-on state for the keyboard NumLock.

Quiet Boot
Select to display either POST output messages or a splash screen during boot-up.

Boot Option Priorities
These are settings for boot priority. Specify the boot device priority sequence from the available devices.

3.7   Save & Exit Menu

The Save & Exit menu allows users to load your system configuration with optimal or fail-safe default values.

```
             Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
     Main    Advanced    Chipset    Boot    Save & Exit

     Save Changes and Exit                          Exit system setup after saving
     Discard Changes and Exit                       the changes.
     Save Changes and Reset

     Restore Defaults

     Boot Override


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


             Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.
```

Save Changes and Exit
When you have completed the system configuration changes, select this option to leave Setup and return to Main Menu. Select Save Changes and Exit from the Save & Exit menu and press <Enter>. Select Yes to save changes and exit.

Discard Changes and Exit
Select this option to quit Setup without making any permanent changes to the system configuration and return to Main Menu. Select Discard Changes and Exit from the Save & Exit menu and press <Enter>. Select Yes to discard changes and exit.

Save Changes and Reset
When you have completed the system configuration changes, select this option to leave Setup and reboot the computer so the new system configuration parameters can take effect. Select Save Changes and Reset from the Save & Exit menu and press <Enter>. Select Yes to save changes and reset.

Restore Defaults
It automatically sets all Setup options to a complete set of default settings when you select this option. Select Restore Defaults from the Save & Exit menu and press <Enter>.

Boot Override
Select a drive to immediately boot that device regardless of the current boot order.

This page is intentionally left blank.

Chapter 4
Drivers Installation

4.1   System

P1197E-861 supports Windows 7 and WES 7. To facilitate the installation of system driver, please carefully read the instructions in this chapter before start installing.

Step 1   Insert Driver CD and select the "\Drivers".
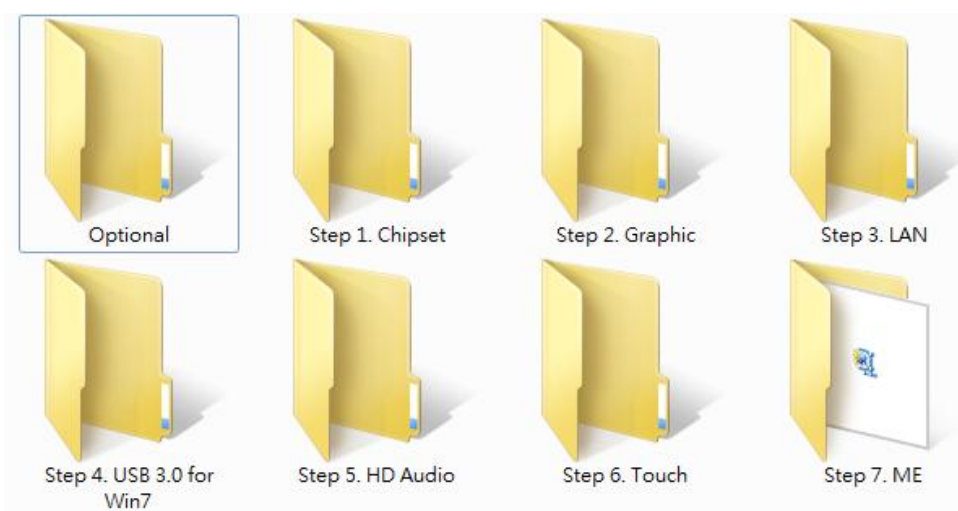
Step 2   Select all files and follow the installing procedure.

4.2   Touch Screen

The P1197E-861 uses the 5-wire analog resistive. There are the specification and driver installation which are listed below.

● **Specification**

Touch Screen	5-wire Analog Resistive type
Touch Screen Controller	PenMount 6500 USB Touch Screen Controller IC
Communications	USB interface
Baud Rate	19200 baud rate fixed
Resolution	1280 X 1024

● **Driver Installation- Windows 7**

The P1197E-861 provides a touch screen driver that users can install it under the operating system Windows 7. To facilitate installation of the touch screen driver, you should read the instructions in this chapter carefully before you attempt installation.

Step 1   Insert Driver CD and follow the path to select the "\Drivers\Step 6. Touch".
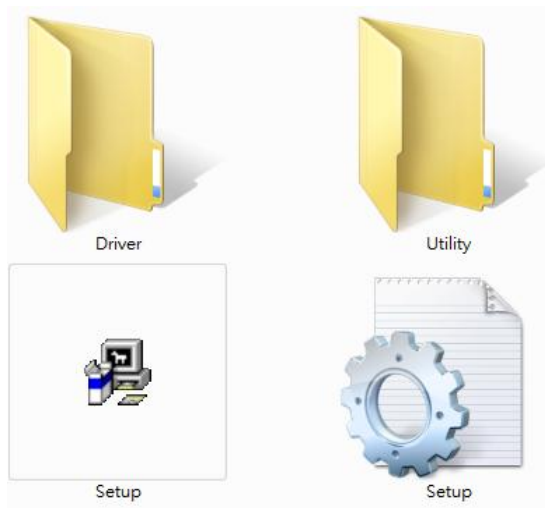
Step 2   Follow the installing procedure and press OK.

Step 3   Click Start menu and select "PenMount Utilities"; and then, a "PenMount Control Panel" pops out.
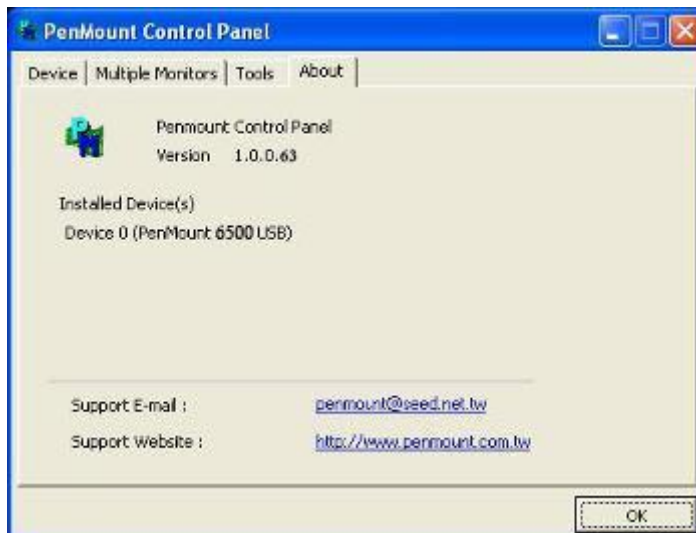
Step 4   **Select the "Standard Calibrate" tab.**
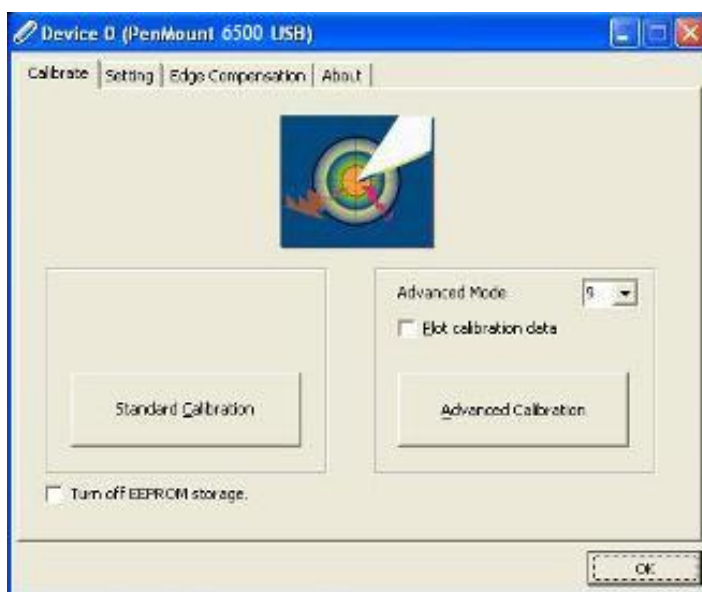
Step 5   **Calibrations:**
To adjust the display with touch panel, click "Calibration" and follow the calibrate point to do calibration; there are five points on screen for calibration.
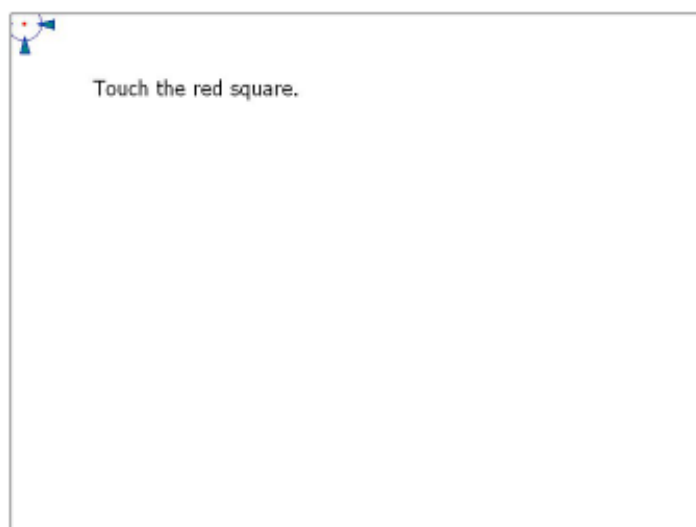
Step 6   **Press OK.**

4.3   Embedded O.S.

The P1197E-861 provides the Windows 7 Embedded. The O.S. is supported devices which are listed below.

- **WES 7**

Here are supported onboard devices:
- **Onboard Multi I/O**
- **SATA HDD**
- **USB**
- **PS2 Keyboard and mouse**
- **CRT/LCD display**
- **10/100/1000 base-T Ethernet**
- **Onboard Audio**
- **Touch Screen**

PenMount Touch screen

Before you can use and calibrate it, here is what you should do:
1. Set up Penmount touch device driver by executing C:\Penmount\ Windows 2000-XP V5.0\setup.exe. When the installation is finished, an icon "PM" appears on the Taskbar.
2. Calibrate Penmount touch by clicking on the "PM" icon, and the go on the calibration.
3. Restart the computer.

Appendix A
Watchdog Timer

About Watchdog Timer

After the system stops working for a while, it can be auto-reset by the watchdog timer. The integrated watchdog timer can be set up in the system reset mode by program

WatchDog sample code

```
#define NCT6776F_CONFIG_INDEX                           0x2e
#define NCT6776F_CONFIG_DATA                            0x2f
#define NCT6776F_CONFIG_MODE_ENTER_VALUE                0x87
#define NCT6776F_CONFIG_MODE_EXIT_VALUE                 0xAA
#define NCT6776F_LDN_SEL_REGISTER                       0x07
#define NCT6776F_ACTIVATE_REGISTER                      0x30
#define NCT6776F_LDN_GPIO3                              0x09
#define NCT6776F_LDN_WDT1                               0x08

#ifdef        Oem_NCT6776F_WDT_PRESENT
#if Oem_NCT6776F_WDT_PRESENT

UINT8                     Data8=0;

    IoWrite8 (NCT6776F_CONFIG_INDEX , NCT6776F_CONFIG_MODE_ENTER_VALUE);
    IoWrite8 (NCT6776F_CONFIG_INDEX , NCT6776F_CONFIG_MODE_ENTER_VALUE);

    IoWrite8 (NCT6776F_CONFIG_INDEX , 0x2B);
// Pin80 function selection to GP34
    Data8 = IoRead8(NCT6776F_CONFIG_DATA) | 0x10;
    IoWrite8 (NCT6776F_CONFIG_DATA , Data8);

    IoWrite8 (NCT6776F_CONFIG_INDEX , NCT6776F_LDN_SEL_REGISTER); //LDN 0x09
    IoWrite8 (NCT6776F_CONFIG_DATA , NCT6776F_LDN_GPIO3);

    IoWrite8 (NCT6776F_CONFIG_INDEX , NCT6776F_ACTIVATE_REGISTER);
//CR 30h
    Data8 = IoRead8(NCT6776F_CONFIG_DATA) | 0x08;
    IoWrite8 (NCT6776F_CONFIG_DATA , Data8);

    IoWrite8 (NCT6776F_CONFIG_INDEX , 0xE4);
//Set GP34 to output mode
    Data8 = IoRead8(NCT6776F_CONFIG_DATA) & 0xEF;
    IoWrite8 (NCT6776F_CONFIG_DATA , Data8);

    IoWrite8 (NCT6776F_CONFIG_INDEX , 0xE5);
//Set GP34 to output High
    Data8 = IoRead8(NCT6776F_CONFIG_DATA) | 0x10;
    IoWrite8 (NCT6776F_CONFIG_DATA , Data8);
```

```
     IoWrite8 (NCT6776F_CONFIG_INDEX , 0xEA);
// selection Pin 34 to WDTO
     Data8 = IoRead8(NCT6776F_CONFIG_DATA) | 0x10;
     IoWrite8 (NCT6776F_CONFIG_DATA , Data8);


     IoWrite8 (NCT6776F_CONFIG_INDEX , NCT6776F_LDN_SEL_REGISTER);
//LDN 0x08
     IoWrite8 (NCT6776F_CONFIG_DATA , NCT6776F_LDN_WDT1);


     IoWrite8 (NCT6776F_CONFIG_INDEX , NCT6776F_ACTIVATE_REGISTER);
//CR 30h
     Data8 = IoRead8(NCT6776F_CONFIG_DATA) | gSetup.WDT_Control;
     IoWrite8 (NCT6776F_CONFIG_DATA , Data8);


     IoWrite8(NCT6776F_CONFIG_INDEX, 0xF5);
//Watchdog Timer: CR F5h Bit3
     Data8 = IoRead8(NCT6776F_CONFIG_DATA) | gSetup.WDT_CountMode;
     IoWrite8 (NCT6776F_CONFIG_DATA , Data8);


     IoWrite8(NCT6776F_CONFIG_INDEX, 0xF6);
//Watchdog Timer Counter Register
     IoWrite8(NCT6776F_CONFIG_DATA, gSetup.WDT_TimeOut);


     IoWrite8 (NCT6776F_CONFIG_INDEX , NCT6776F_CONFIG_MODE_EXIT_VALUE);
#endif // #if Oem_NCT6776F_WDT_PRESENT
#endif // #ifdef    Oem_NCT6776F_WDT_PRESENT
```

Appendix B
Digital I/O

Using Digital Output Function

SIO		Function
Pin93	GP70	SIO_GPIO0
Pin92	GP71	SIO_GPIO1
Pin91	GP72	SIO_GPIO2
Pin90	GP73	SIO_GPIO3
Pin89	GP74	SIO_GPIO4
Pin88	GP75	SIO_GPIO5
Pin87	GP76	SIO_GPIO6
Pin86	GP77	SIO_GPIO7

DIO sample code

```
#define NCT6776F_CONFIG_INDEX                       0x2e
#define NCT6776F_CONFIG_DATA                        0x2f
#define NCT6776F_CONFIG_MODE_ENTER_VALUE            0x87
#define NCT6776F_CONFIG_MODE_EXIT_VALUE             0xAA
#define NCT6776F_LDN_SEL_REGISTER                   0x07
#define NCT6776F_ACTIVATE_REGISTER                  0x30
#define NCT6776F_LDN_GPIO1                          0x07
#define NCT6776F_LDN_GPIO3                          0x09


#ifdef        Oem_NCT6776F_Digital_IO_PRESENT
#if Oem_NCT6776F_Digital_IO_PRESENT

UINT8                    Data8=0;

    IoWrite8 (NCT6776F_CONFIG_INDEX , NCT6776F_CONFIG_MODE_ENTER_VALUE);
    IoWrite8 (NCT6776F_CONFIG_INDEX , NCT6776F_CONFIG_MODE_ENTER_VALUE);

    IoWrite8 (NCT6776F_CONFIG_INDEX , 0x27);
// CR27 bit6, bit7 need to set 1, GP70 to GP77
    Data8 = IoRead8(NCT6776F_CONFIG_DATA) | 0xC0;
    IoWrite8 (NCT6776F_CONFIG_DATA , Data8);

    IoWrite8 (NCT6776F_CONFIG_INDEX , NCT6776F_LDN_SEL_REGISTER);
    IoWrite8 (NCT6776F_CONFIG_DATA , NCT6776F_LDN_GPIO3);

    IoWrite8 (NCT6776F_CONFIG_INDEX , NCT6776F_ACTIVATE_REGISTER);
    Data8 = IoRead8(NCT6776F_CONFIG_DATA) | 0x80;
//Active GPIO7
    IoWrite8 (NCT6776F_CONFIG_DATA , Data8);

    IoWrite8 (NCT6776F_CONFIG_INDEX , NCT6776F_LDN_SEL_REGISTER);
    IoWrite8 (NCT6776F_CONFIG_DATA , NCT6776F_LDN_GPIO1);
```

```
        IoWrite8(NCT6776F_CONFIG_INDEX, 0xE0);
        IoWrite8(NCT6776F_CONFIG_DATA, 0xFF);

        IoWrite8 (NCT6776F_CONFIG_INDEX , NCT6776F_CONFIG_MODE_EXIT_VALUE);
#endif // #if Oem_NCT6776F_Digital_IO_PRESENT
#endif //#ifdef          Oem_NCT6776F_Digital_IO_PRESENT
```