AXIOMTEK

GOT3187W-881-PCT

**All-in-One
18.5" WXGA TFT Fanless
Multi-Touch 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 GOT3187W-881-PCT 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 GOT3187W-881-PCT 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 GOT3187W-881-PCT. Chapter 1 includes the following sections:

- General Description
- Specifications
- Dimensions and Outlets
- I/O Outlets
- Package List

1.1   General Description

The GOT3187W-881-PCT adopts a 18.5-inch TFT LCD and supports LGA1150 Socket 4th generation Intel® Core™ i7/i5/i3/Celeron processor that can support Windows 7, Windows 7 Embedded, Windows 8, Windows 8 Embedded and variety applications. This fanless platform has below abilities make it surely a robust and cost-effective solution.

Intel® Haswell H81 Platform

Support LGA1150 Socket Intel® Core™ i7/i5/i3/Celeron processors. User can choose different processors for different applications. It also supports up to 8GB DDR3 1333/1600 MHz memory modules. There are rich I/O, such as dual PCIe mini card slot、2.5" HDD bay、USB3.0 port、RS232/422/485、HDMI output. This platform is a power-efficient solution.

Reliable and Stable Design

The GOT3187W-881-PCT is a fanless cooling system, which makes it suitable for vibration environments, such as the industrial machinery markets. For high capacity storage requirement, GOT3187W-881-PCT can work under 1.2G (5 ~ 500Hz, random for CFast card) in operation mode with a patent of anti-vibration design. The patent improves the system reliability and sustainability.

18.5 Inch WXGA TFT LCD with projected capacitive multi-touch

18.5 inch WXGA TFT LCD is with 300nits higher brightness and can displays contents in HD resolution. With projected capacitive multi-touch, users can operate more directly and friendly. The hardness of touch glass surface is up to 7h and is better for anti-scratch purpose.

WLAN Antenna Supported (optional)

GOT3187W-881-PCT has dual PCIe Mini Card slots for optional add-ons such as mSATA storage、wireless LAN card for 802.11 b/g/n connections or 3G/GPRS applications, and more. It also provides an optional fixed rotational WLAN antenna (optional) for wireless network connection.

1.2   Specifications

Main CPU Board

- **CPU**
  - Support LGA1150 Socket Intel® Core™ i7/i5/i3/Celeron processor

- **System Chipset**
  - Intel® Haswell H81

- **System Memory**
  - One 204-pin DDR3 SO-DIMM socket
  - Maximum memory up to 8GB

- **BIOS**
  - American Megatrends Inc. UEFI (Unified Extensible Firmware Interface) BIOS

I/O System

- **Standard I/O**
  - 2 x RS-232/422/485
  - 2 x USB 2.0, 2 x USB 3.0

- **Video I/O**
  - 1 x HDMI out

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

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

- **Expansion**
  - 2 x Mini-card slot   (If you install 3G mini-card, you can't use mSATA storage card)
  - 2 x SATA 3 , 2 x SATA 2

- **Storage**
  - 1 x 2.5" HDD/SSD Bay
  - 1 x CFast slot and mSATA

- **Power connector**
  - 1 x 19V DC-IN power connector

System Specification

● **18.5" WXVGA(1366x768) LCD with LED backlight & 300nits brightness**

● **Projected Capacitive Multi Touch**

● **Fanless Heat Dispensing Design**

● **IP65 front bezel**

● **Disk drive housing:**
  ■ 1x 2.5" SATA drive

● **Net Weight**
  ■ 6.3Kg(13.9 lb)

● **Dimension (Main Body Size)**
  ■ 460x285x89.5mm

● **Operation Temperature**
  ■ 0℃ to 40℃

● **Relative Humidity**
  ■ 20% to 90% @ 40℃, Non-Condensing

● **Power input**
  ■ 19V DC-IN power connector

NOTE All specifications and images are subject to change without notice.

NOTE If the operation temperature is higher than 40℃, the wide temperature HDD/CF card are recommended to be used on the device.

NOTE If the operation temperature is higher than 45℃, the wide temperature DRAM is recommended to be used on the device.

1.3   Dimensions and Outlines

The following diagrams show the dimensions and outlines of GOT3187W-881-PCT

Outline Dimension: 460x285x89.5(mm)
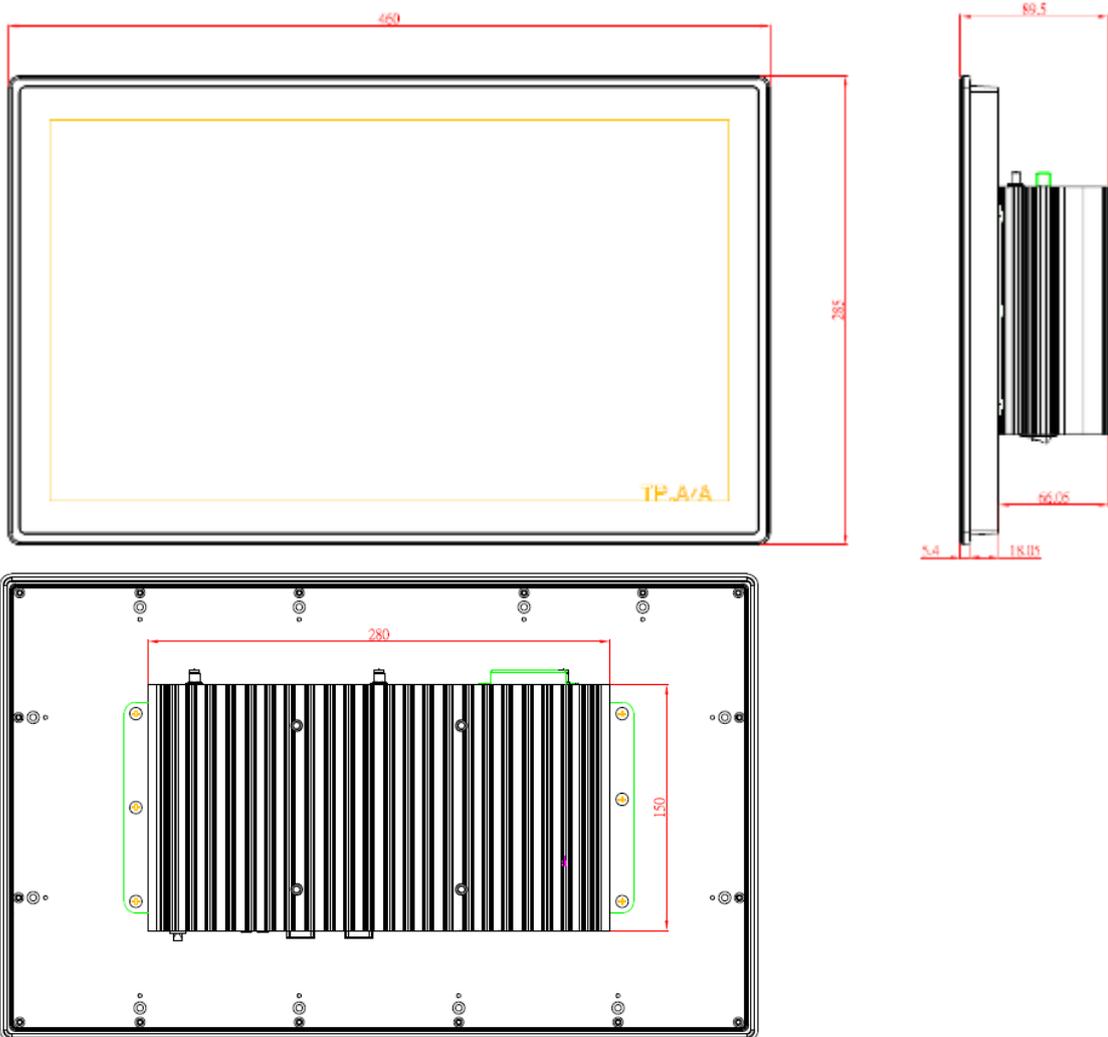
Cut out: 448.74x237.74mm
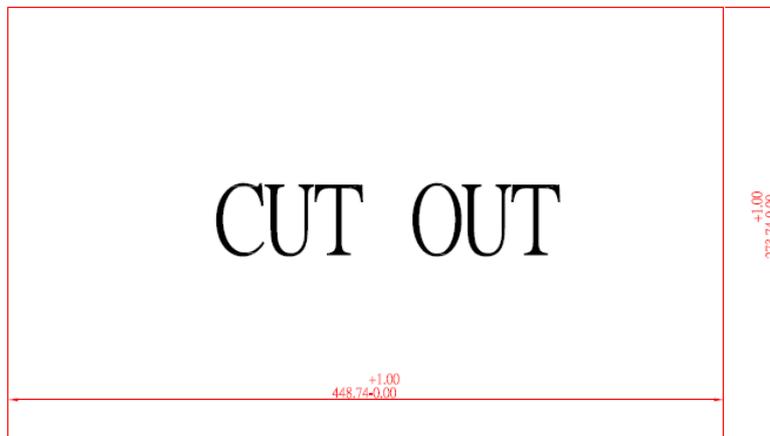
1.4   I/O Outlets

Please refer to the following illustration for I/O locations of the GOT3187W-881-PCT.
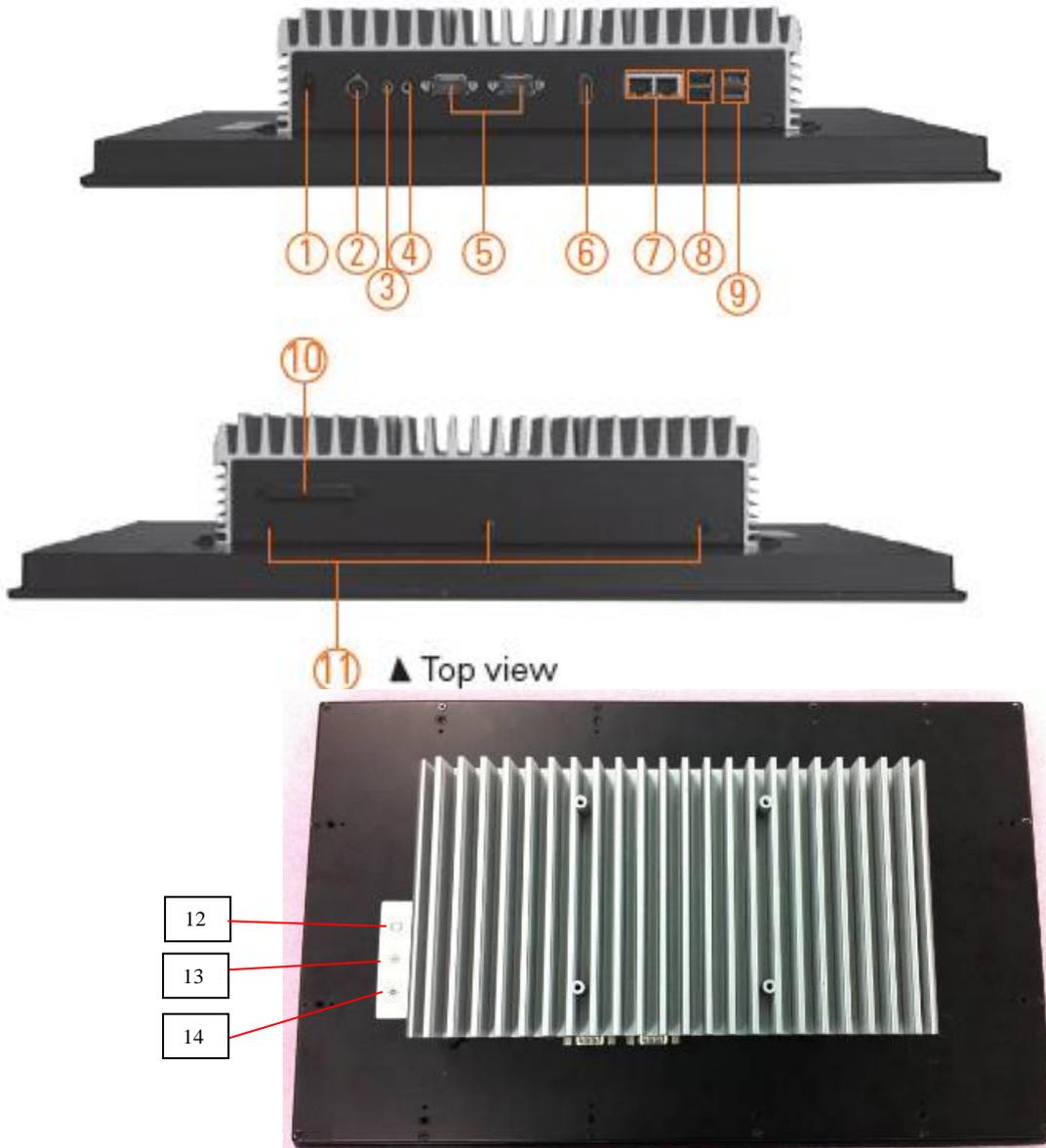
No	Function	No	Function
1	POWER SWITCH (ATX)	8	2 x USB 2.0
2	Power Input connector	9	2 x USB 3.0
3	Audio Line-out	10	CFast card slot
4	Audio MIC-in	11	For 3 x antennas
5	COM1/2 (RS-232/422/485)	12	LED Backlight Power On/off
6	HDMI output	13	Brightness +
7	Dual Giga Ethernet	14	Brightness -

1.5   Packing List

When you receive the GOT3187W-881-PCT, the bundled package should contain the following items:

● **GOT3187W-881-PCT unit x 1**
● **Driver CD x1**
● **Panel mount kit x 12**
● **Screws for HDD x 4**
● **SATA data cable x 1**
● **SATA power cable x 1**

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

Chapter 2
Hardware and Installation

The GOT3187W-881-PCT provides rich I/O ports and flexible expansions for you to meet different demand, for example CF card. The chapter will show you how to install the hardware. It includes:

● **CFast Card Installation**
● **Open Back Cover**
● **Jumper & COM Port Connector**
● **Mounting Method**
● **Hard Disk Installation**
● **Installing CPU and PCH Thermal Pad**
● **DRAM Installation**
● **Wireless LAN Card**
● **Power Adapter**

2.1 CFast card Installation

The GOT3187W-881-PCT provides one CFast card slot for users to install CFast card. Please refer to the following instructions for installation:

Step 1   Open the cover, unscrew 2 screws on the chassis.
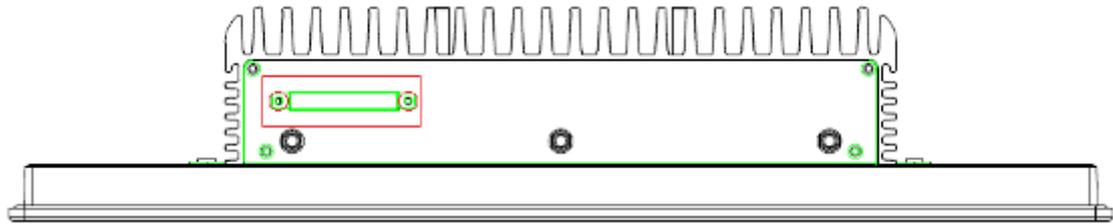
Step 2   Stick the mylar on the CFast card bottom side.

Step 3   Insert the CFast card to the CFast card slot, then finding the CFast cover and screw it.

2.2   Open back cover

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

Step 1   Unscrew 6 screws on the back cover. Please refer the drawing below.
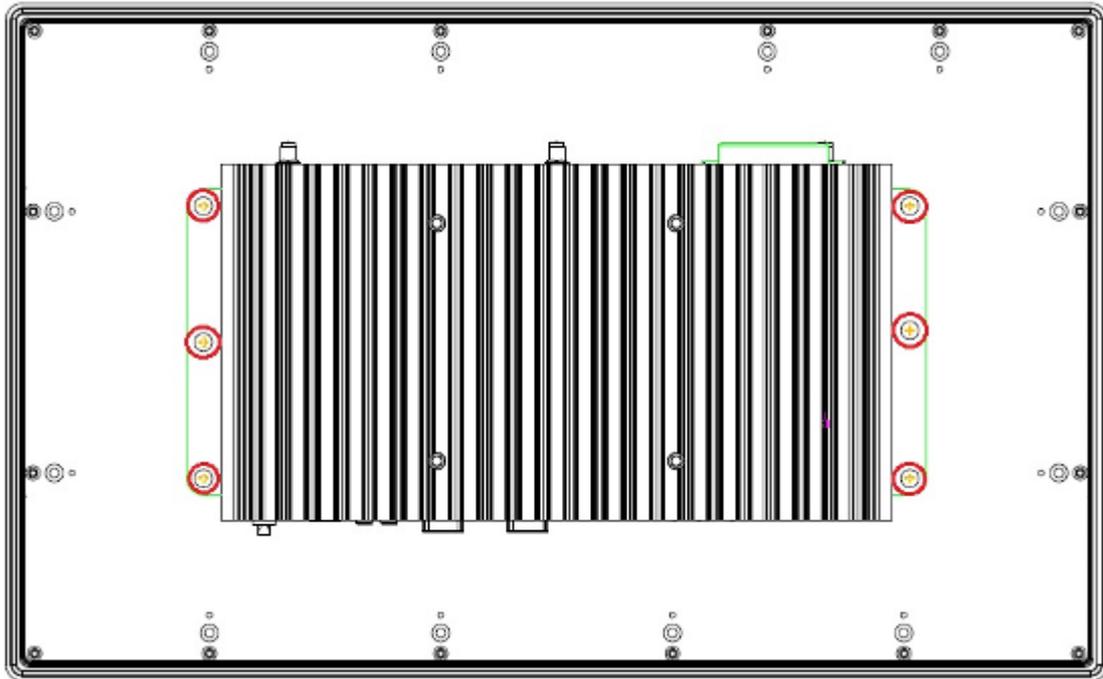
Step 2   Remove the back cover.

2.3   Jumper and COM port Connector

SBC87881 Top Side
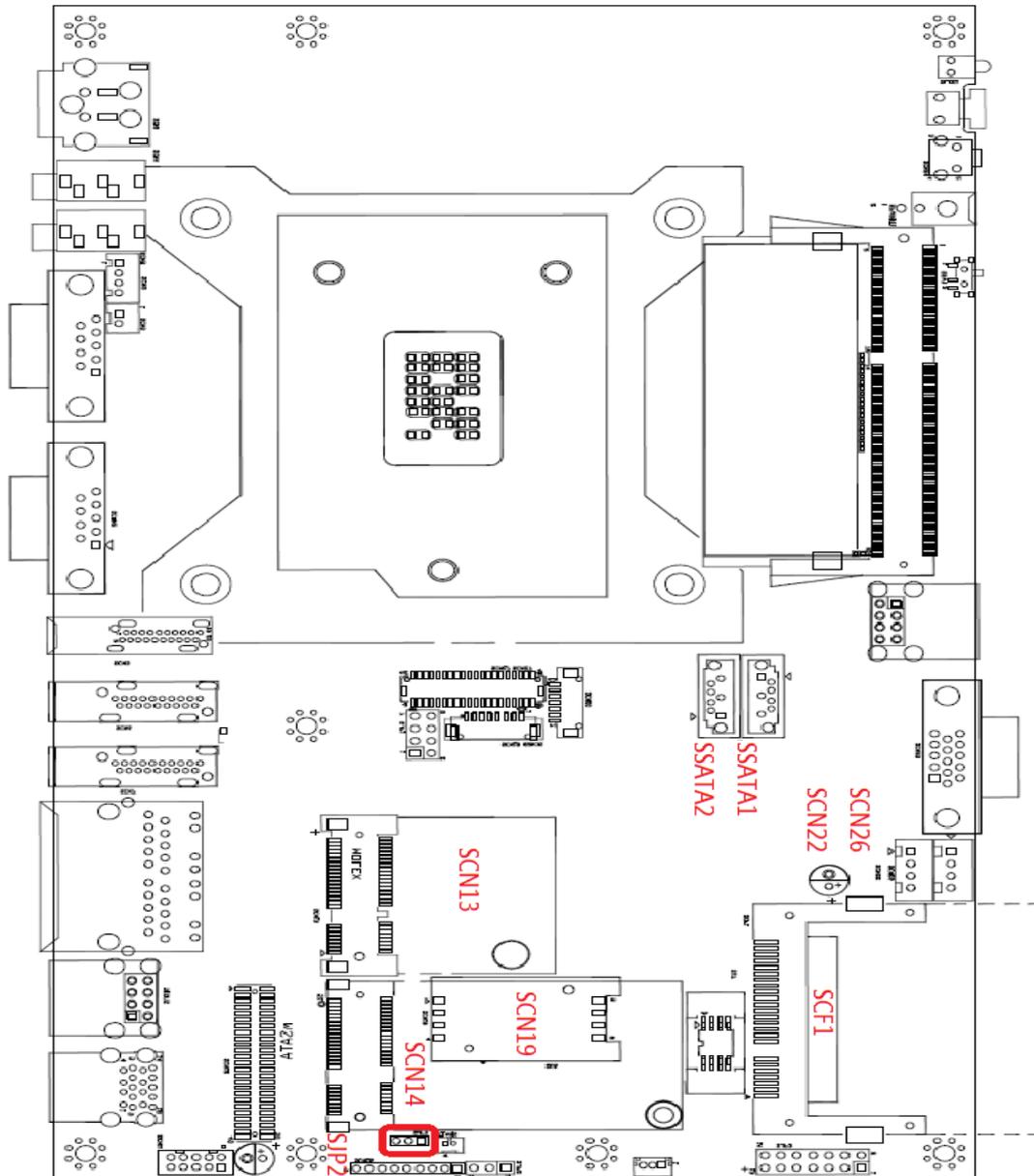
Jumper is a small component consisting of jumper clip and jumper pins. Install jumper clip on 2 jumper pins to close. And remove jumper clip from 2 jumper pins to open. The following illustration shows how to set up jumper.
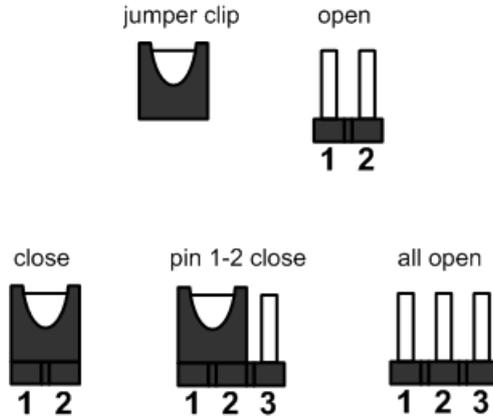
Before applying power to GOT3187W-832-PCT, please make sure all of the jumpers and switch are in factory default position. Below you can find a summary table and onboard default settings.

Jumper & Switch Setting	Section
CMOS Clear Jumper	2.3.1
External Connectors	Section
DC Power In Connector	2.3.2
HDMI Connector	2.3.3
COM Serial Port Connector	2.3.4
Ethernet Connector	2.3.5
Internal Connectors	Section
Serial ATA Connectors	2.3.6
SIM Card Slot	2.3.7
CFast™ Socket	2.3.8
Half-Size Mini Card Slot	2.3.9
Full-Size Mini Card w/ SIM Slot/ mSATA	2.3.10

2.3.1   CMOS Clear Jumper (SJP2 on SBC87881)

Function	Setting
Normal (Default)	1-2
Clear RTC	2-3

2.3.2   DC Power In Connector (SCN1)
The system supports a DC 19V power-din connector for system power input.

Pin	Signal
1	GND
2	GND
3	DC 19V
4	DC 19V
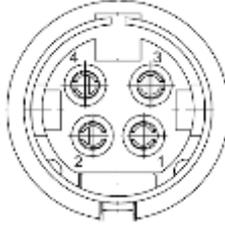
2.3.3   HDMI Connector
The HDMI (High-Definition Multimedia Interface) is a compact digital interface which is capable of transmitting high-definition video and high-resolution audio over a single cable. Its interface is available through connector SCN6 or SCN7.

Pin	Signal	Pin	Signal
1	HDMI OUT_DATA2+	11	GND
2	GND	12	HDMI OUT Clock-
3	HDMI OUT_DATA2-	13	N.C.
4	HDMI OUT_DATA1+	14	N.C.
5	GND	15	HDMI OUT_SCL
6	HDMI OUT_DATA1-	16	HDMI OUT_SDA
7	HDMI OUT_DATA0+	17	GND
8	GND	18	+5V
9	HDMI OUT_DATA0-	19	HDMI_HTPLG
10	HDMI OUT Clock+		
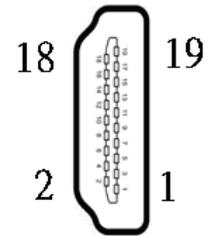
2.3.4   COM Serial Port Connector

The system has six serial ports. COM1/2 are RS-232/422/485 ports. Please refer to Chapter 3 for the detail of BIOS setting.

Pin	RS-232	RS-422	RS-485
1	DCD, Data Carrier Detect	TX-	Data-
2	RXD, Receive Data	TX+	Data+
3	TXD, Transmit Data	RX+	No use
4	DTR, Data Terminal Ready	RX-	No use
5	GND, Ground	No use	No use
6	DSR, Data Set Ready	No use	No use
7	RTS, Request To Send	No use	No use
8	CTS, Clear To Send	No use	No use
9	RI, Ring Indicator	No use	No use

COM1/2
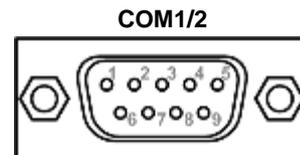
2.3.5   Ethernet Connector

The RJ-45 connector is for Ethernet. To connect the board to a 1000/100/10 Base-T hub, just plug one end of the cable into connector and connect the other end (phone jack) to a 1000/100/10-Base-T hub.

Pin	Signal	Pin	Signal
L1	MDI0+	L5	MDI2-
L2	MDI0-	L6	MDI1-
L3	MDI1+	L7	MDI3+
L4	MDI2+	L8	MDI3-
A	Active LED (Yellow)		
B	100 LAN LED (Green)/ 1000 LAN LED (Orange)		
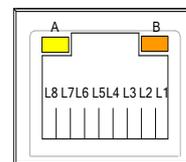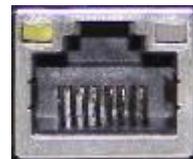
2.3.6 Serial ATA Connectors

These Serial Advanced Technology Attachment (Serial ATA or SATA) connectors are for high-speed SATA interfaces. They are computer bus interfaces for connecting to devices such as hard disk drives.

Pin	Signal
1	GND
2	SATA_TX+
3	SATA_TX-
4	GND
5	SATA_RX-
6	SATA_RX+
7	GND
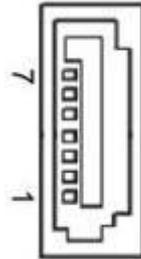
2.3.7 SIM Card Slots (SCN19)

GOT3187W-881-PCT includes one SIM slots on the bottom side of the system for inserting SIM Card. It is mainly used in 3G wireless network application.

Pin	Signal
1	PWR
2	RST
3	CLK
4	NC
5	GND
6	VPP
7	I/O
8	NC
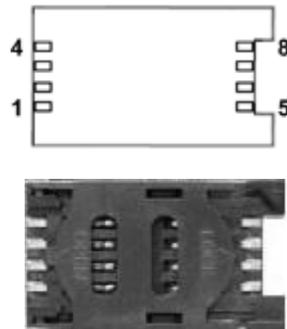
2.3.8   CFast™ Socket

The system is equipped with a CFast™ socket on the top size of rear housing to support a CFast™ card which is based on the Serial ATA bus. The socket is specially designed to avoid incorrect installation of the CFast™ card. When installing or removing the CFast™ card, please make sure the system power is off. The CFast™ card by default identifies itself as C: or D: drive in your PC system.

Pin	Signal	Pin	Signal
S1	GND	PC1	NC
S2	TX+	PC2	GND
S3	TX-	PC3	NC
S4	GND	PC4	NC
S5	RX-	PC5	NC
S6	RX+	PC6	NC
S7	GND	PC7	GND
		PC8	NC
		PC9	NC
		PC10	NC
		PC11	NC
		PC12	NC
		PC13	3.3V
		PC14	3.3V
		PC15	GND
		PC16	GND
		PC17	NC
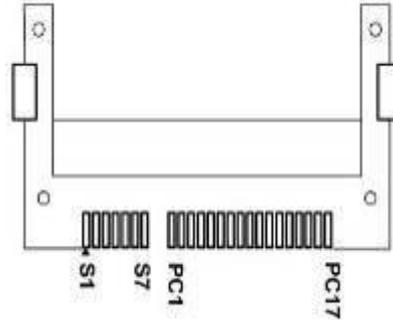
2.3.9   Half-Size Express Mini Card Slot (SCN13)

PCI Express Mini Card connector supports a PCI Express x1 link and a USB 2.0 link. A PCI Express Mini Card can be applied to either PCI Express or USB 2.0. It complies with PCI-Express Mini Card Spec. V1.2.

Pin	Signal	Pin	Signal
1	WAKE#	2	+3.3VSB
3	No use	4	GND
5	No use	6	+1.5V
7	CLKREQ#	8	No use
9	GND	10	No use
11	REFCLK-	12	No use
13	REFCLK+	14	No use
15	GND	16	No use
17	No use	18	GND
19	No use	20	W_DISABLE#
21	GND	22	PERST#
23	PE_RXN3	24	+3.3VSB
25	PE_RXP3	26	GND
27	GND	28	+1.5V
29	GND	30	SMB_CLK
31	PE_TXN3	32	SMB_DATA
33	PE_TXP3	34	GND
35	GND	36	USB_D8-
37	GND	38	USB_D8+
39	+3.3VSB	40	GND
41	+3.3VSB	42	No use
43	GND	44	No use
45	No use	46	No use
47	No use	48	+1.5V
49	No use	50	GND
51	No use	52	+3.3VSB
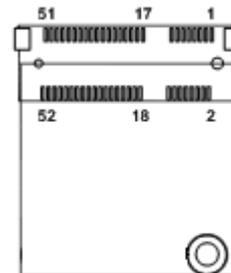
2.3.10   Full-Size Express Mini Card (w/ SIM Slot)/ mSATA (SCN14)

You may need to adjust the BIOS setting to select mSATA or Mini card PCI-E interface.
This is a PCI-Express Mini Card connector which supports PCI-Express x1 link ,SATA link , USB 2.0 link and 3G wireless network application(SCN19). A PCI-Express Mini Card can be applied to either PCI-Express or USB 2.0 or SATA. It complies with PCI-Express Mini Card Spec. V1.2.

Pin	Signal	Pin	Signal
1	WAKE#	2	+3.3VSB
3	No use	4	GND
5	No use	6	+1.5V
7	CLKREQ#	8	UIM_PWR
9	GND	10	UIM_DATA
11	REFCLK-	12	UIM_CLK
13	REFCLK+	14	UIM_RESET
15	GND	16	UIM_VPP
17	No use	18	GND
19	No use	20	W_DISABLE#
21	GND	22	PERST#
23	PE_RXN4/ SATA4_RXP	24	+3.3VSB
25	PE_RXP4/ SATA4_RXN	26	GND
27	GND	28	+1.5V
29	GND	30	SMB_CLK
31	PE_TXN4/ SATA4_TXN	32	SMB_DATA
33	PE_TXP4/ SATA4_TXP	34	GND
35	GND	36	USB #10_D-
37	GND	38	USB #10_D+
39	+3.3VSB	40	GND
41	+3.3VSB	42	No use
43	GND	44	No use
45	No use	46	No use
47	No use	48	+1.5V
49	No use	50	GND
51	No use	52	+3.3VSB
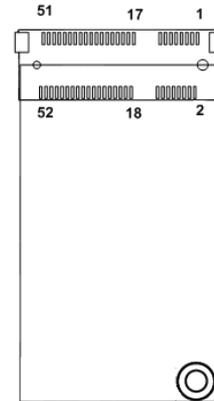
2.4 Mountings: Panel / Wall / Desktop / VESA

There are 4 applications for the GOT3187W-881-PCT, Panel/Wall/Desktop/VESA mountings.

2.4.1 VESA/Wall-Mount

The GOT3187W-881-PCT provides VESA mount: 100x100 mm. Screw four screws to fix the kit in the back chassis. About the mount, users need to buy optional wall mount kit via Axiomtek and install it on the rear cover.

Wall mount:
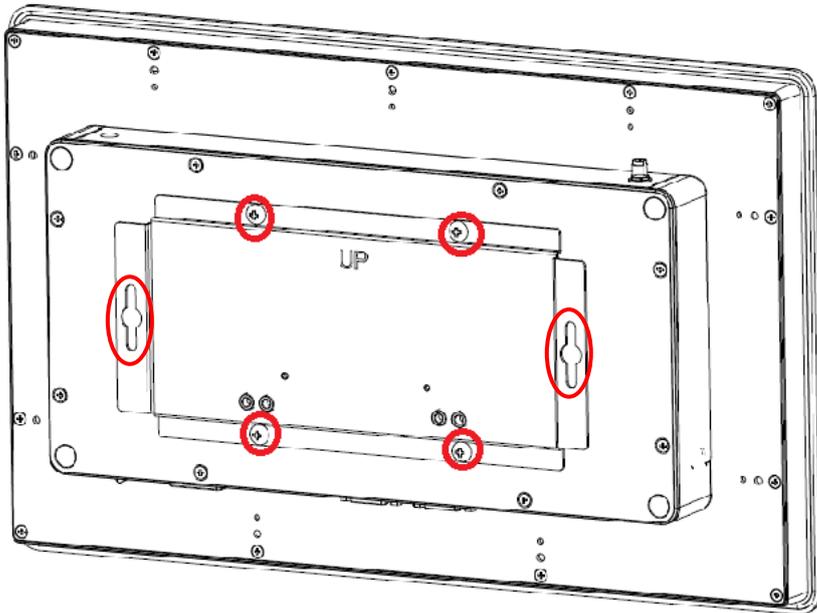
VESA mount:
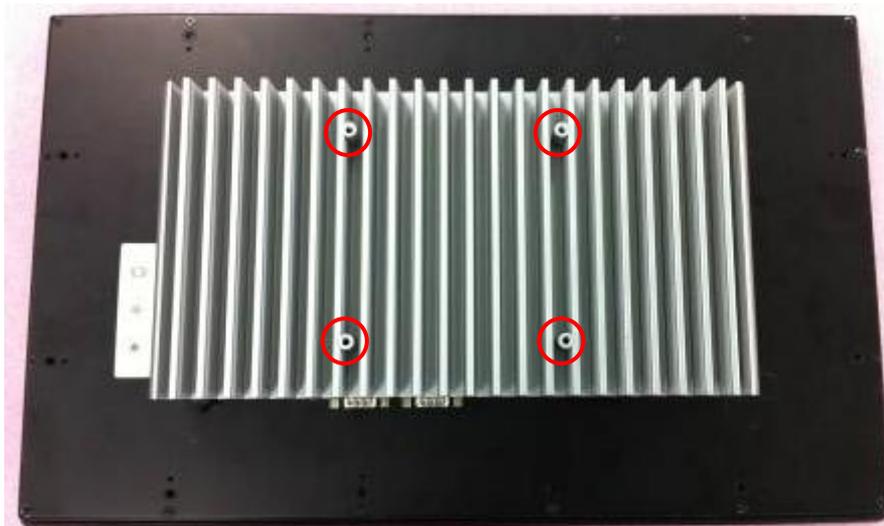
2.4.2 Panel-mount Kit Assembly

The GOT3187W-881-PCT is designed for panel mount application. To mount the GOT3187W-881-PCT, the standard set of mounting kit (included in the system packaging) is needed.

2.5   HDD Installation

The GOT3187W-881-PCT provides a convenient Hard Disk Drive (HDD) bracket for users to install 2.5" SATA HDD. Please follow the steps:

Step 1   **Refer section 2.2 to open the back cover.**

Step 2   **Remove the HDD tray and install 2.5" HDD driver with 4 screws.**

Step 3   **Plug the cables to connectors and screw the HDD tray on the bracket. Installation completes.**

2.6   Installing CPU and PCH Thermal Pad

It also offers CPU & PCH thermal pad for spare parts, thus you can get them from your accessory box. Please refer to the following information to replace your thermal pad if original thermal pad is damaged.

Step 1   **There are CPU and PCH locations on bottom site.**

Step 2   **Please remove original thermal pad and set new one on CPU and PCH, you can refer to below picture.**
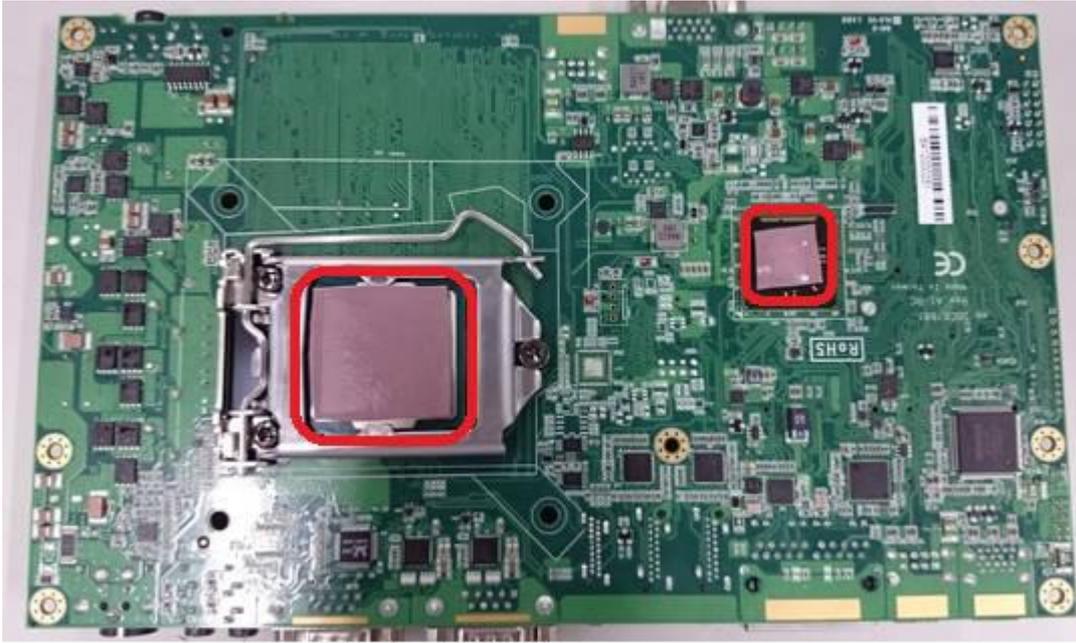
🔧 *NOTE*   *We have installed CPU and thermal pads already. This chapter just to let you know how to replace new thermal pad by yourself. If any further information is requested, please feel free to contact Axiomtek distributors or FAE immediately.*

2.7   DRAM Installation

The GOT3187W-881-PCT provides one 204-pin DDR3 SODIMM socket that supports system memory up to 8GB. Please follow steps below to install the memory modules:

Step 1   Refer to section 2.2 to open the back cover.

Step 2   Find out DIMM socket on mainboard (SBC87881).

Step 3   Insert the DRAM to the DIMM socket, and then push it down firmly until it is clipped by the socket. Installation completed

2.8　　Wireless LAN Card Installation

The GOT3187W-881-PCT provides one Mini card slot for user to install one wireless LAN card. When installing the wireless LAN card, refer to the following instructions and illustration:

Step 1　　**Refer to section 2.2 to open the back cover and find out mini-card slot on mainboard.**

Step 2　　**Insert the wireless LAN card to the slot. Push it down firmly until it is clipped by the slot.**

Step 3   Find the Antenna cable and connect it on wireless LAN card.

....
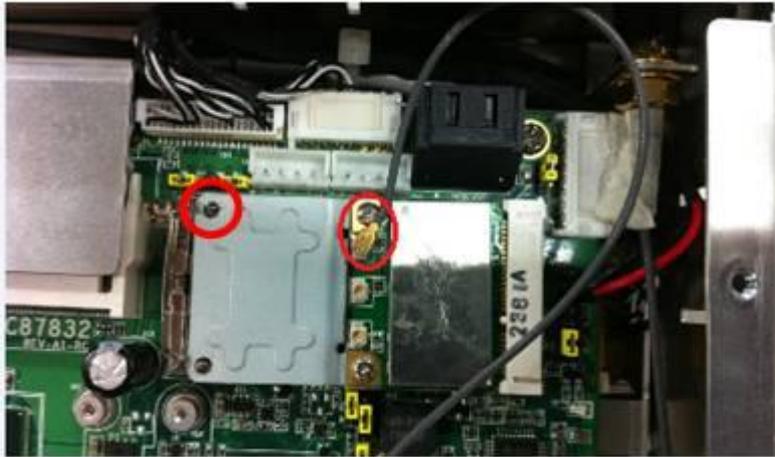
Step 4 Remove the antenna plug from the top of back cover, and then install the antenna on the antenna connector
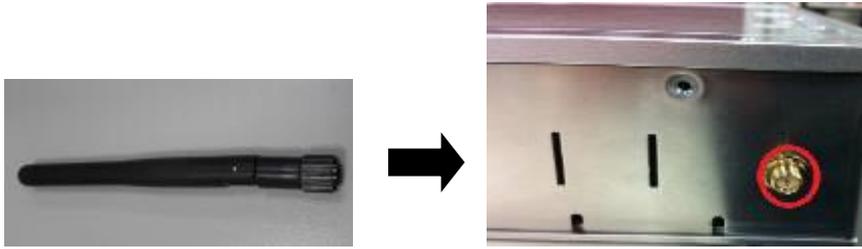
NOTE *Please have the extended bracket when using half-size mini card.*

2.9 Power Adapter Installation

Step 1 Please connect power adapter to GOT3187W-881-PCT at first.
The connector is with special shape to prevent wrong connection.

POWER DIN PLUG(WITH LOCK)
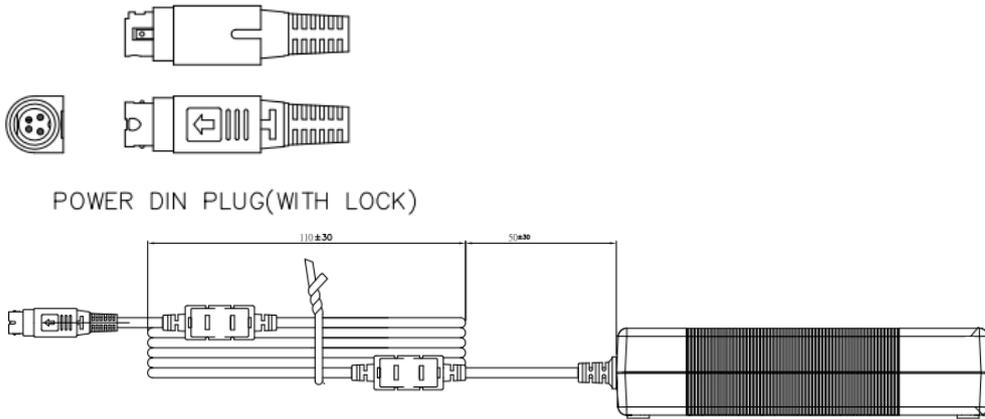
Step 2 Connect power cord to power adapter.
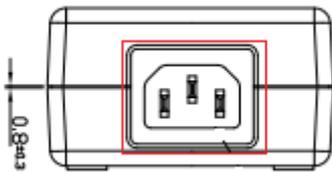
Step 3 Connect power cord to AC power source.

Chapter 3
AMI BIOS Setup Utility

The AMI BIOS provides users with a built-in setup program to modify basic system configuration. All configured parameters are stored in a battery-backed CMOS 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.

● **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

```
             Aptio Setup Utility - Copyright (C) 2012 American Megatrends, Inc.
   Main  Advanced  Chipset  Boot  Security  Save & Exit

   mSATA/PCIE select                    [PCIE]                    mSATA/PCIE select
   Launch PXE OpROM                     [Disable]

   ▶ ACPI Settings
   ▶ CPU Configuration
   ▶ SATA Configuration
   ▶ PCH-FW Configuration
   ▶ USB Configuration
   ▶ NCT6106D Super IO Configuration
   ▶ NCT6106D HW Monitor

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

              Version 2.15.1236. Copyright (C) 2012 American Megatrends, Inc.
```

●   **mSATA/PCIE select**
Use this item to select the SCN14 to mSATA or Mini-PCIE mode.

●   **Launch PXE OpROM**
Use this item to enable or disable the boot ROM function of the onboard LAN chip when the system boots up.

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
> ►   NCT6106D Super IO Configuration
> ►   NCT6106D HW Monitor

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

● **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) 2012 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]



                                                             ++: 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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```

```
Aptio Setup Utility - Copyright (C) 2012 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]




                      ┌─── ACPI Sleep State ───┐
                      │ Suspend Disabled        │
                      │ S3 only(Suspend to RAM) │            ++: 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
Allow you to select the Advanced Configuration and Power Interface (ACPI) sleep state. Here are the options for your selection: Suspend Disabled and S3 (Suspend to RAM)

S3 Video Repost
Determine whether to invoke VGA BIOS POST on S3/STR resume.
[Disabled] When set to [No], the system will not invoke VGA BIOS POST on S3/STR resume.
[Enabled] When set to [Yes], the system invokes VGA BIOS POST on S3/STR resume.

● **CPU Configuration**

This screen shows the CPU Configuration, and you can change the value of the selected option.

```
           Aptio Setup Utility - Copyright (C) 2012 American Megatrends, Inc.
    Advanced

   CPU Configuration                                       Enabled for Windows XP and
                                                           Linux (OS optimized for
   Intel(R) Core(TM) i7-4770 CPU @ 3.40GHz                 Hyper-Threading Technology)
   CPU Signature                    306c3                  and Disabled for other OS (OS
   Hyper-threading                  [Enabled]              not optimized for
   Intel Virtualization Technology  [Enabled]              Hyper-Threading Technology).
                                                           When Disabled only one thread
                                                           per enabled core is 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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```

```
           Aptio Setup Utility - Copyright (C) 2012 American Megatrends, Inc.
    Advanced

   CPU Configuration                                       When enabled, a VMM can
                                                           utilize the additional
   Intel(R) Core(TM) i7-4770 CPU @ 3.40GHz                 hardware capabilities provided
   CPU Signature                    306c3                  by Vanderpool Technology
   Hyper-threading                  [Enabled]
   Intel Virtualization Technology  [Enabled]




                 ┌─── Intel Virtualization Technology ───┐
                 │ Disabled                               │
                 │ Enabled                                │ lect Screen
                 └────────────────────────────────────────┘ lect Item
                                                           Enter: Select
                                                           +/-: Change Opt.
                                                           F1: General Help
                                                           F2: Previous Values
                                                           F3: Optimized Defaults
                                                           F4: Save & Exit
                                                           ESC: Exit



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```

Hyper-threading

This item can set enable or disable for support Hyper-threading Technology.

Intel Virtualization Technology

Allow you to enable or disable Intel Virtualization Technology. When enabled, a VMM can utilize the additional hardware capabilities provided by Vanderpool Technology.

● **SATA Configuration**
In the SATA 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.
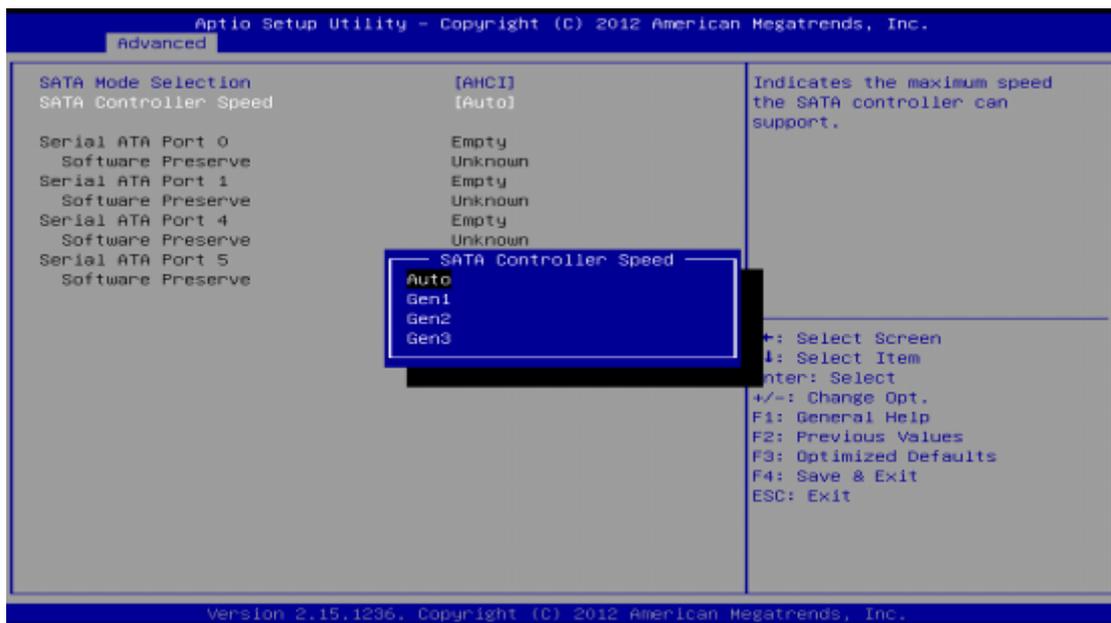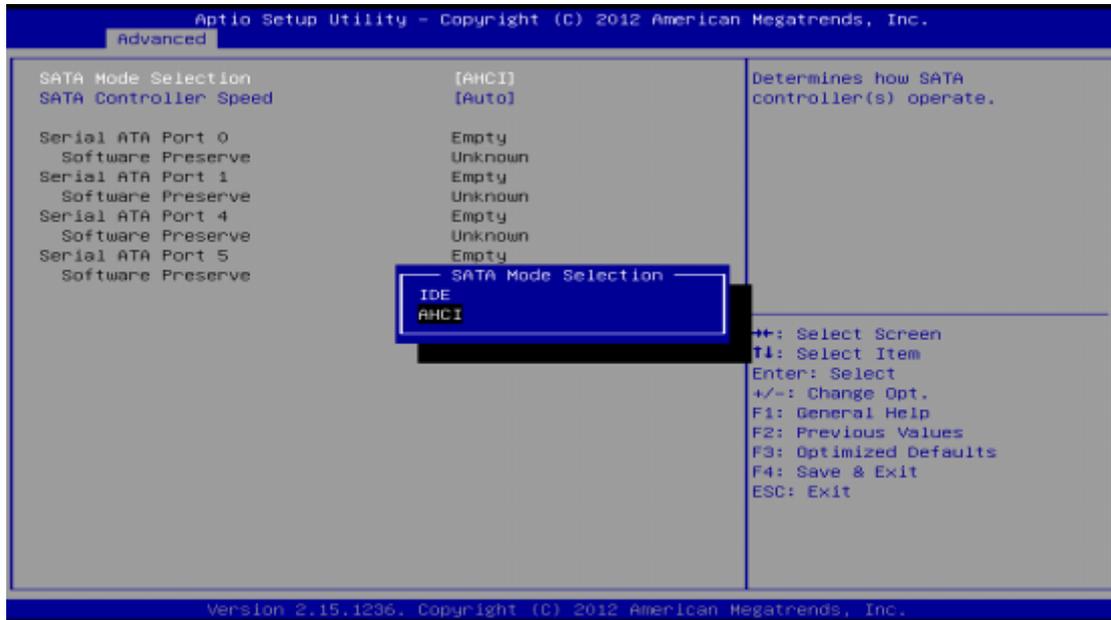
SATA Mode Selection
Use this item to choose the SATA operation mode. Here are the options for your selection: , IDE Mode and AHCI Mode.

SATA Controller Speed
Use this item to choose the SATA speed. Here are the options for your selection: Auto , Gen1, Gen2 and Gen3.

● **PCH-FW Configuration**
This screen shows the ME Firmware version, and its detail information.
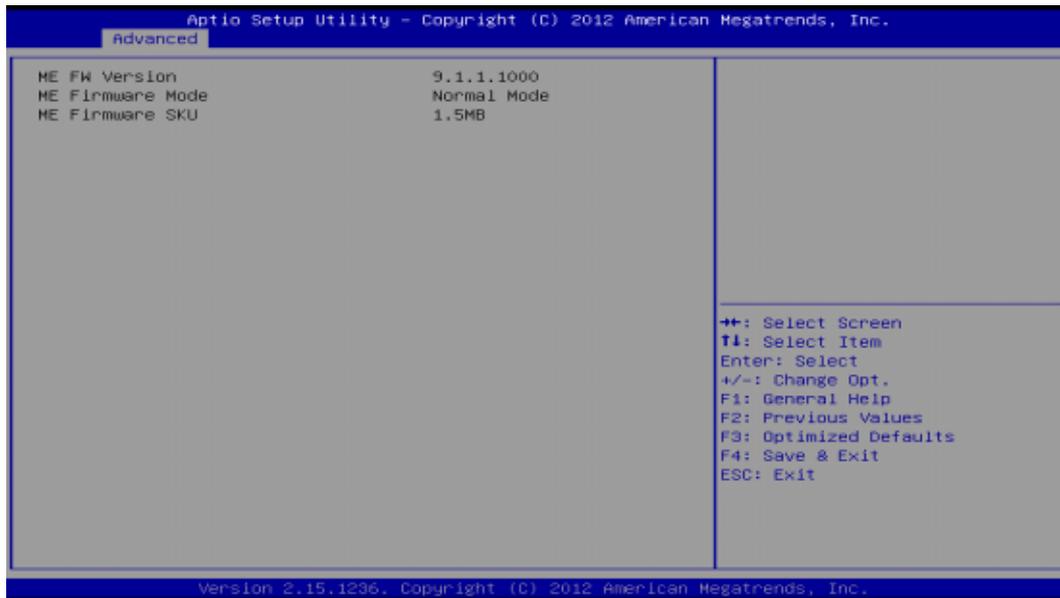
● **USB Configuration**
  USB3.0 Support:
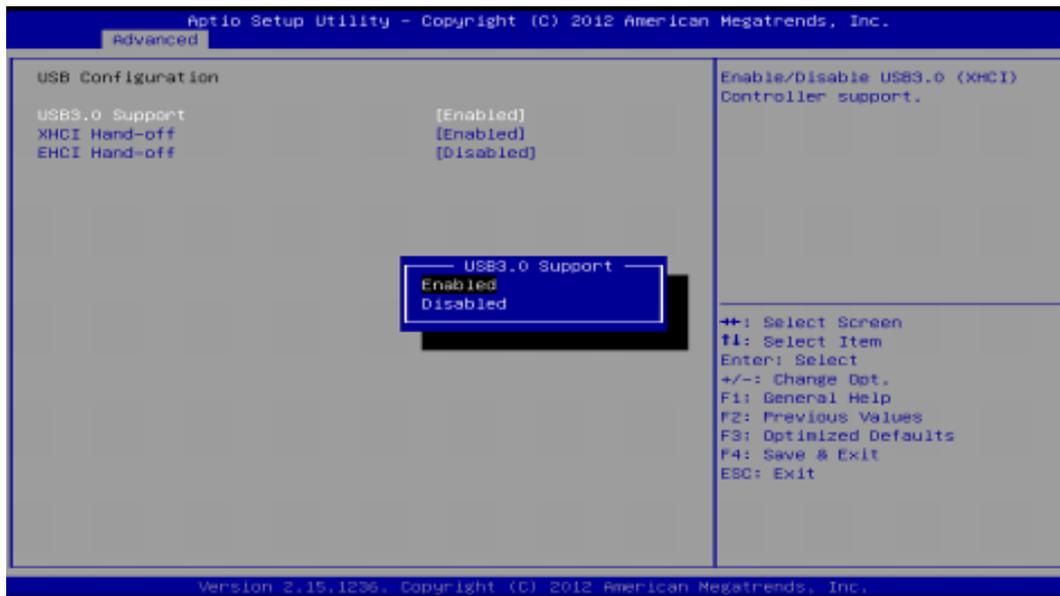
XCHI Hand-off:
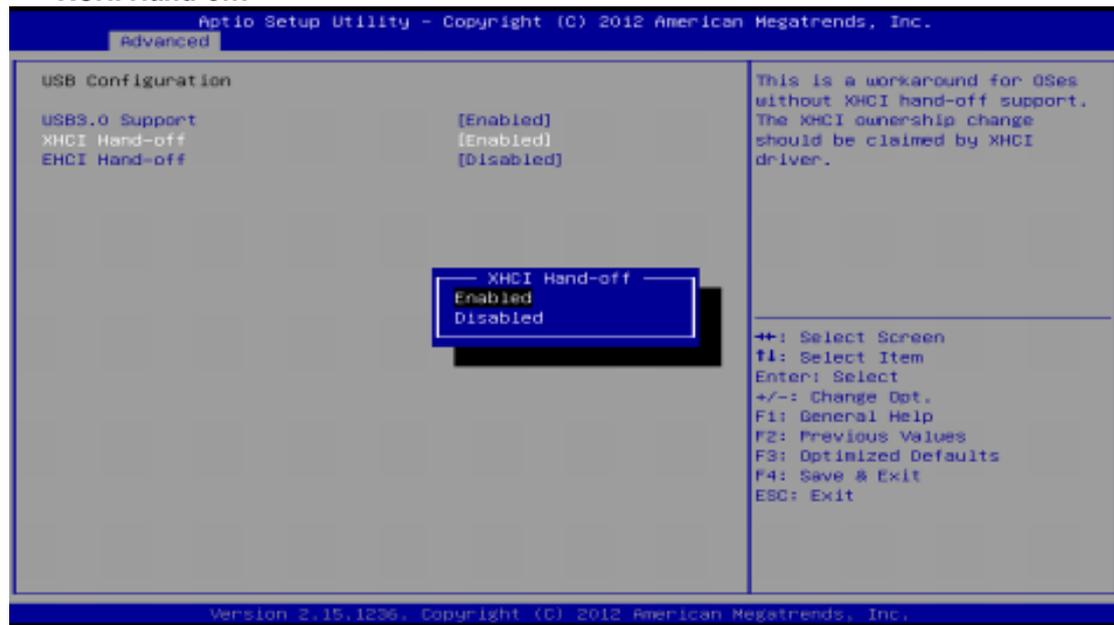
EHCI Hand-off:
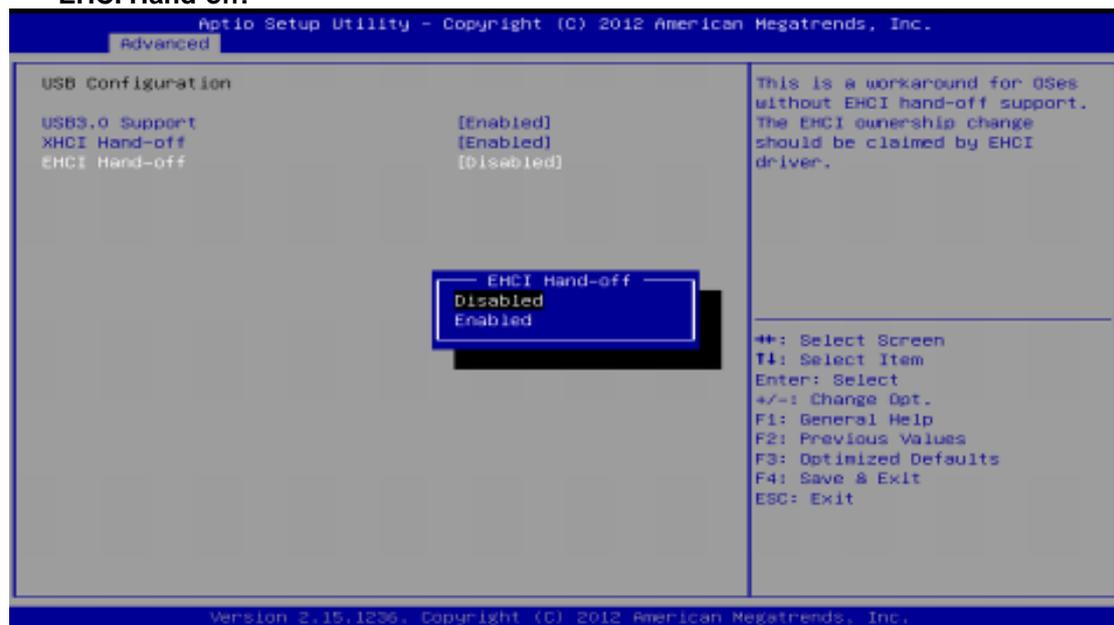
● **NCT6106D Super IO Configuration**

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.
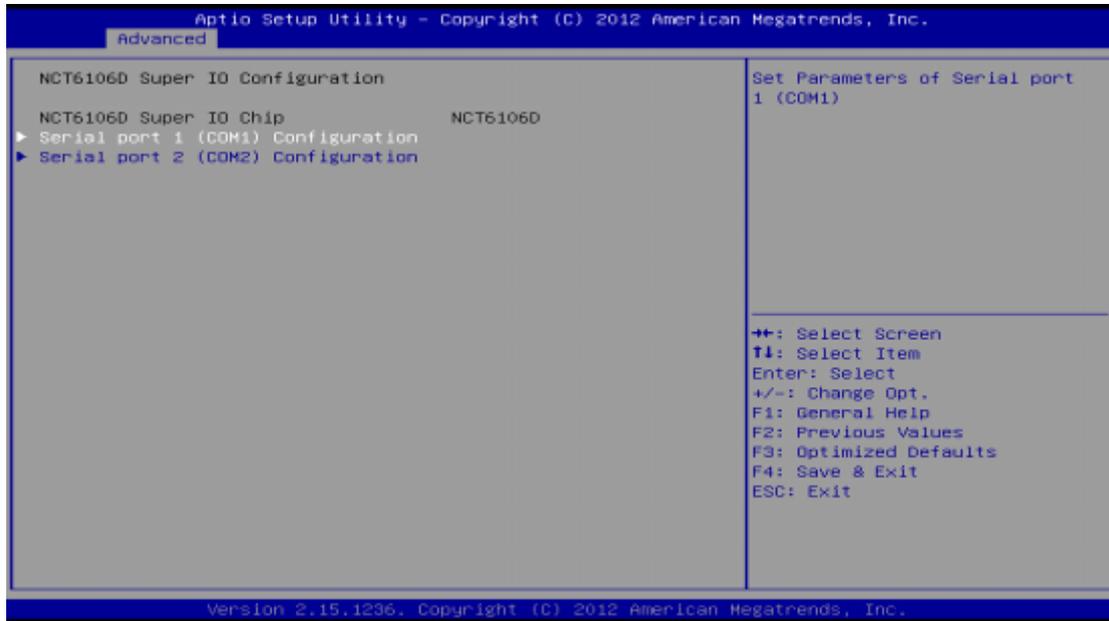
Serial Port 1 Configuration
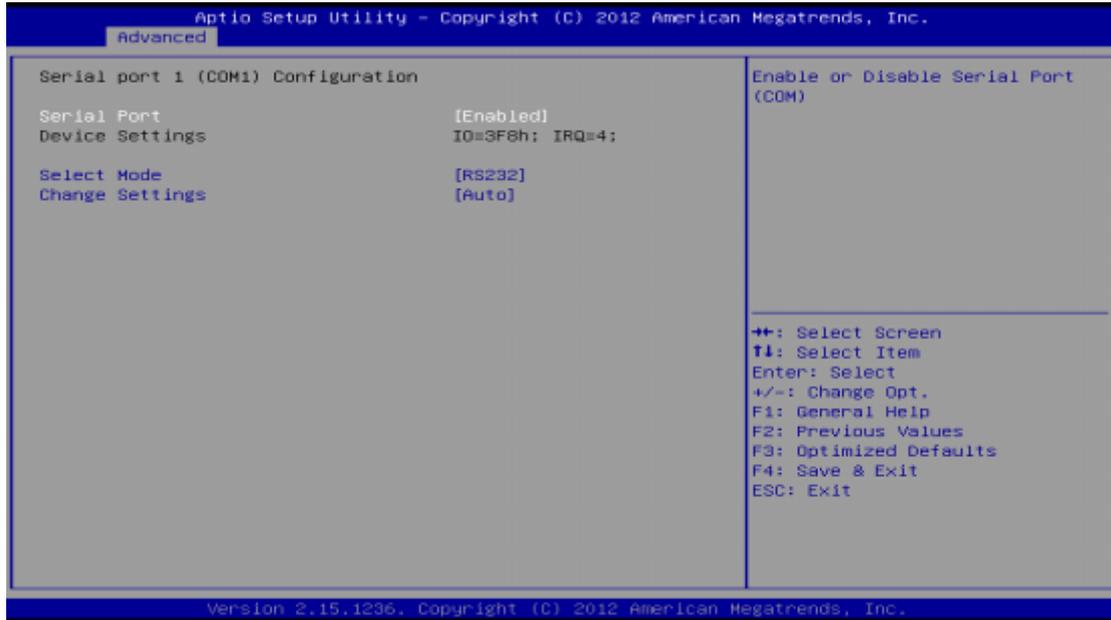
Serial Port
Use this item to enable or disable serial port 1. The optimal setting for base I/O address is 3F8h and for interrupt request line is IRQ4.

Change Settings
Here are the options for your selection;
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;

Transmission Mode
Use this item to configure serial port 0. Here are the options for your selection:
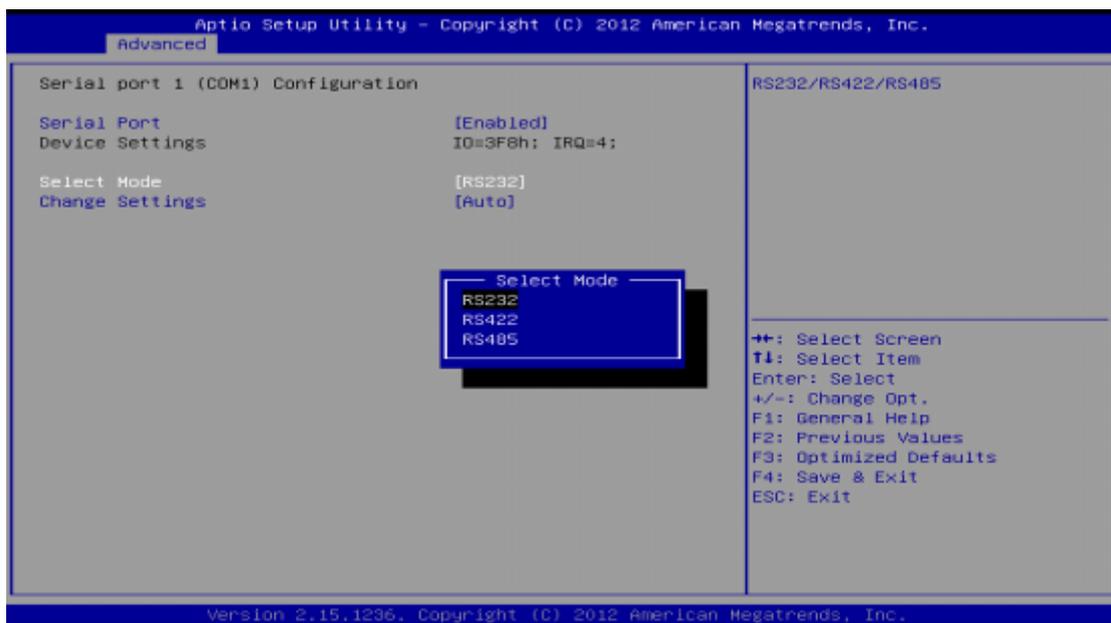
Serial Port 2 Configuration
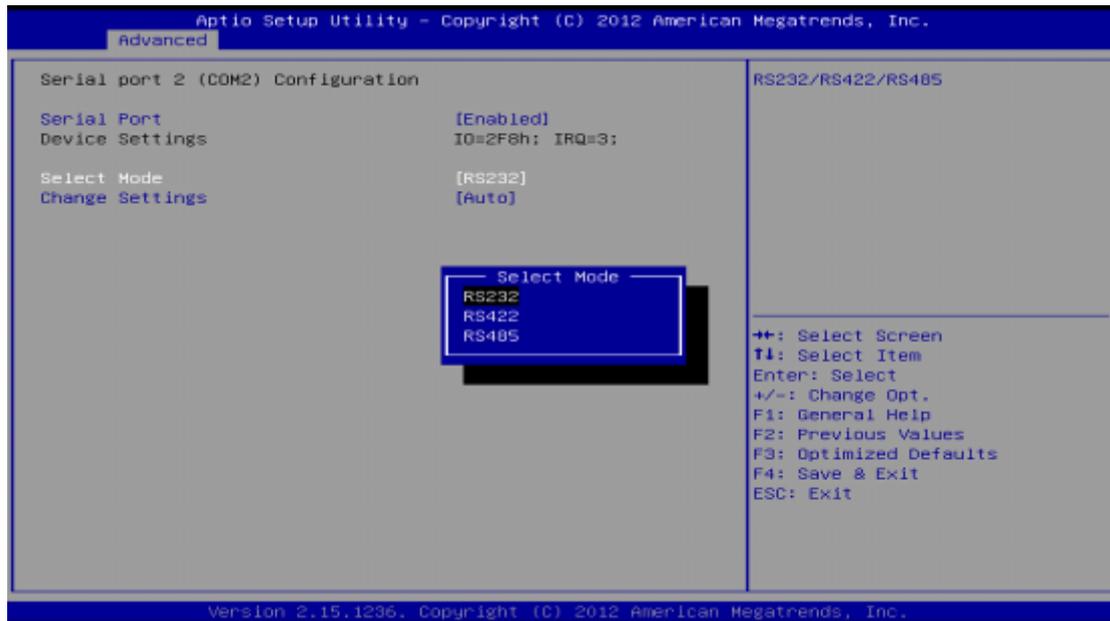
Serial Port
Use this item to enable or disable serial port 2. The optimal setting for base I/O address is 2F8h and for interrupt request line is IRQ3.

Change Settings
Here are the options for your selection;
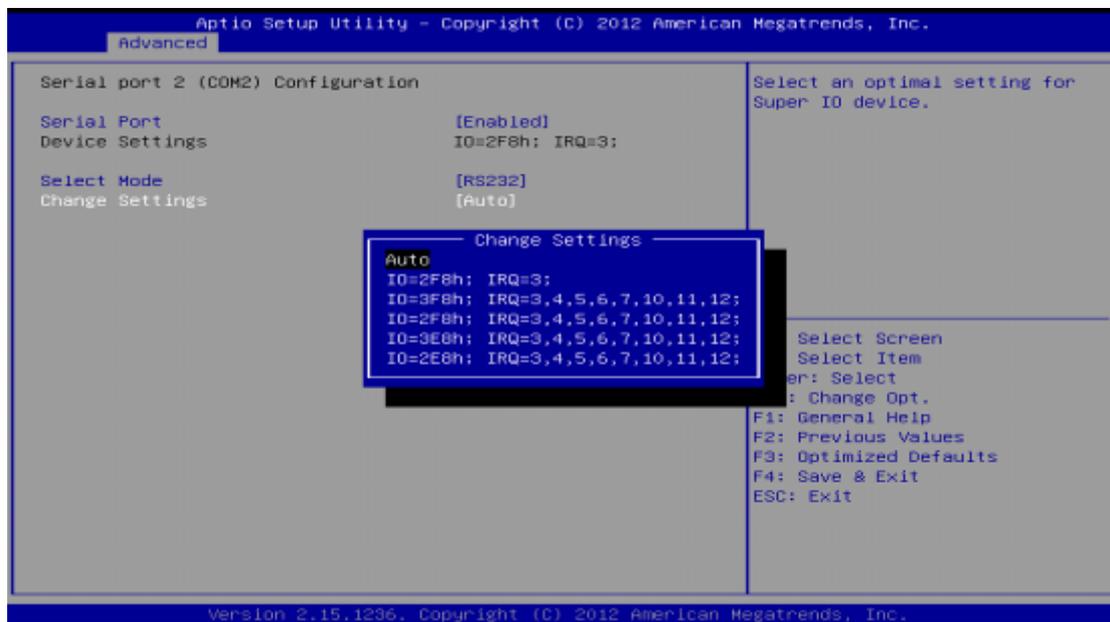
Transmission Mode
Use this item to configure serial port 0. Here are the options for your selection:
RS232
RS422
RS485

● **NCT6106D HW Monitor**
  PC Health Status

```
           Aptio Setup Utility - Copyright (C) 2012 American Megatrends, Inc.
   Advanced

  Pc Health Status

  CPU Diode Temp              : +44.0 C
  VCORE                       : +1.752 V
  +1.5V                       : +1.512 V
  +12V                        : +12.096 V
  +5V                         : +4.960 V



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



           Version 2.15.1236. Copyright (C) 2012 American Megatrends, Inc.
```
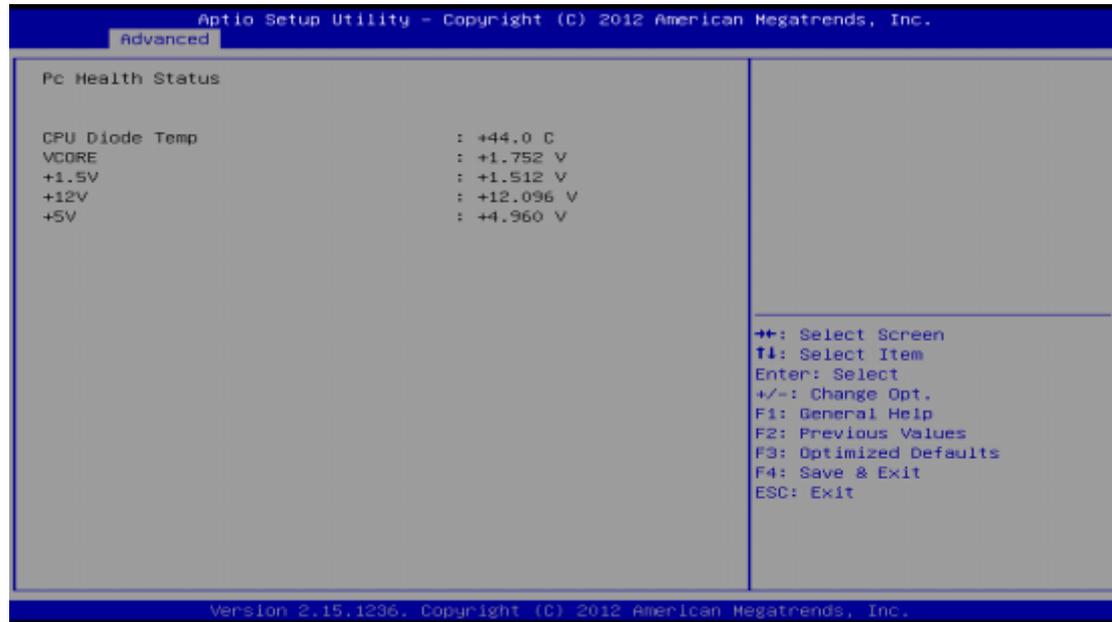
3.5 Chipset Menu

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.
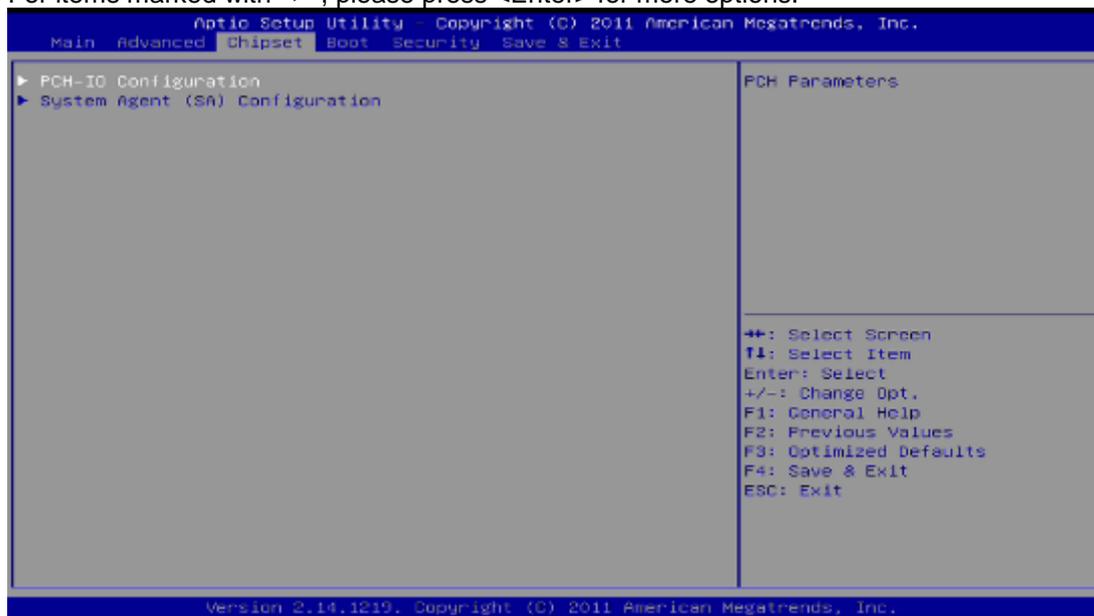
● **PCH - IO Configuration**

This screen allows users to configure PCH – IO Configuration parameters. For items marked with "▶", please press <Enter> for more options.
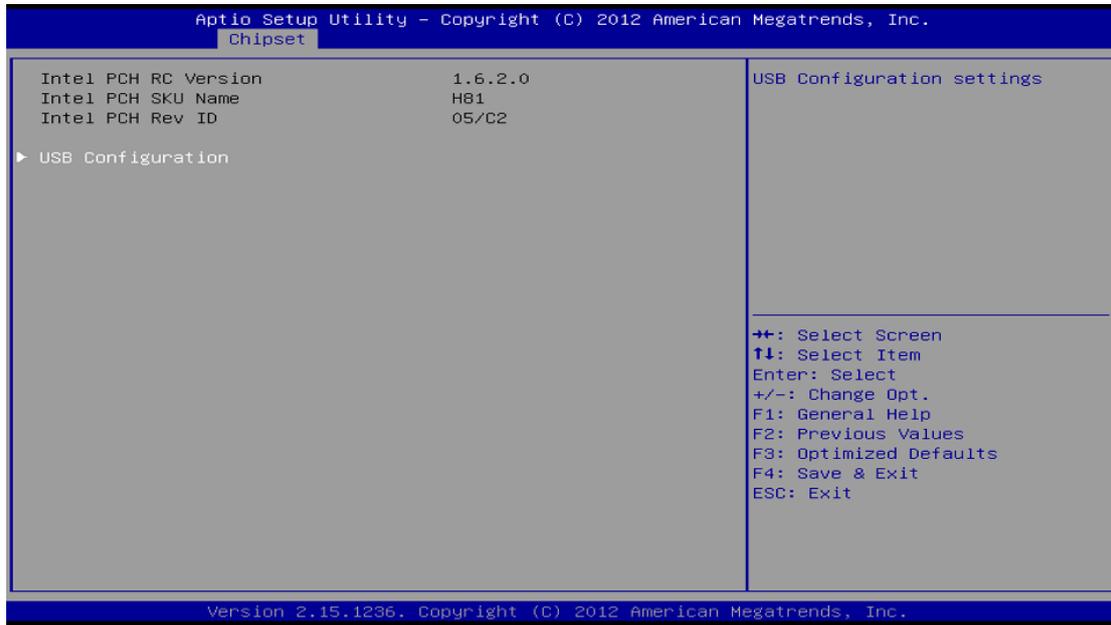
USB Configuration

Use this item for further setting of USB configuration.
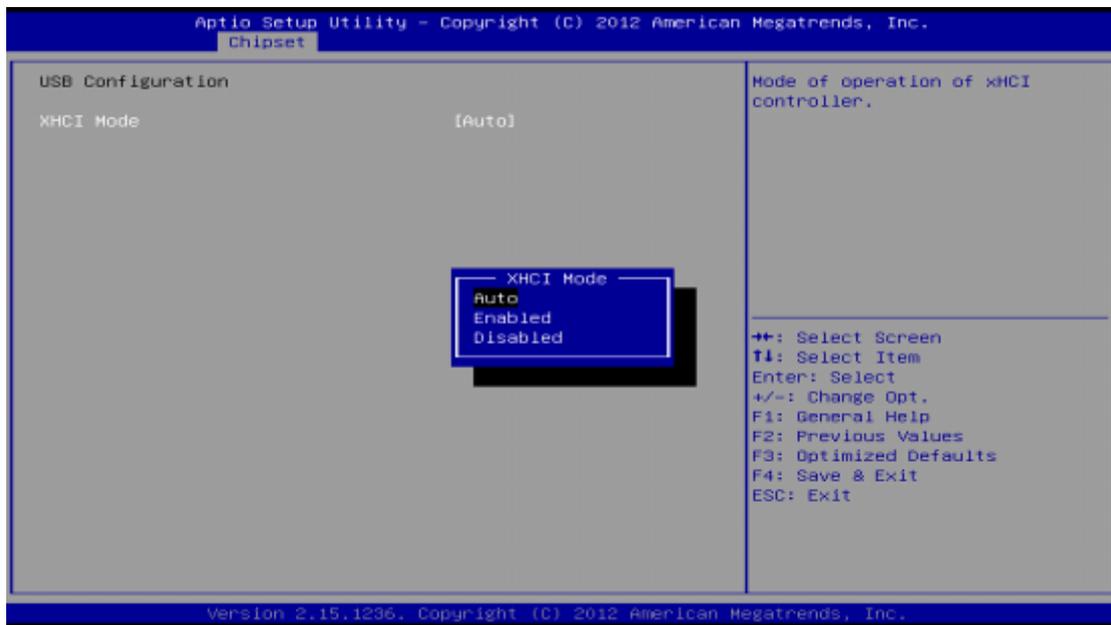
● **System Agent (SA) Configuration**
This screen allows users to configure System Agent (SA) parameters. For items marked with
"►", please press <Enter> for more options.

● **Graphics Configuration**
Use this item for further setting of graphics configuration.
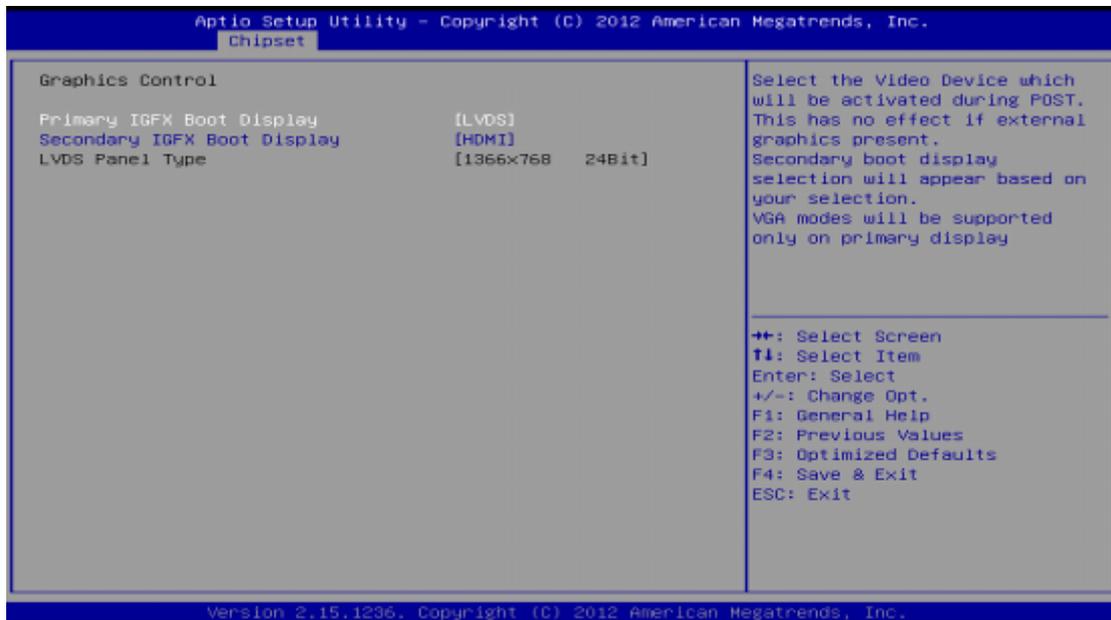
Primary IGFX Boot Display
The only one option is LVDS.
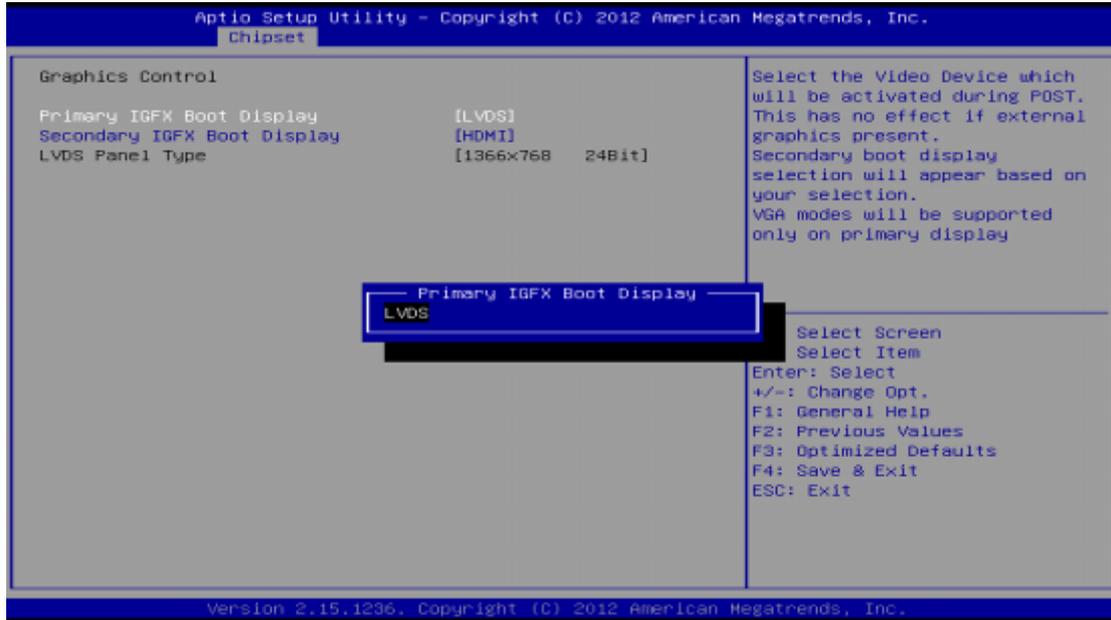
Secondary IGFX Boot Display
Use this item for further setting of graphics control; we can get following items to choose HDMI interface, or disable it.
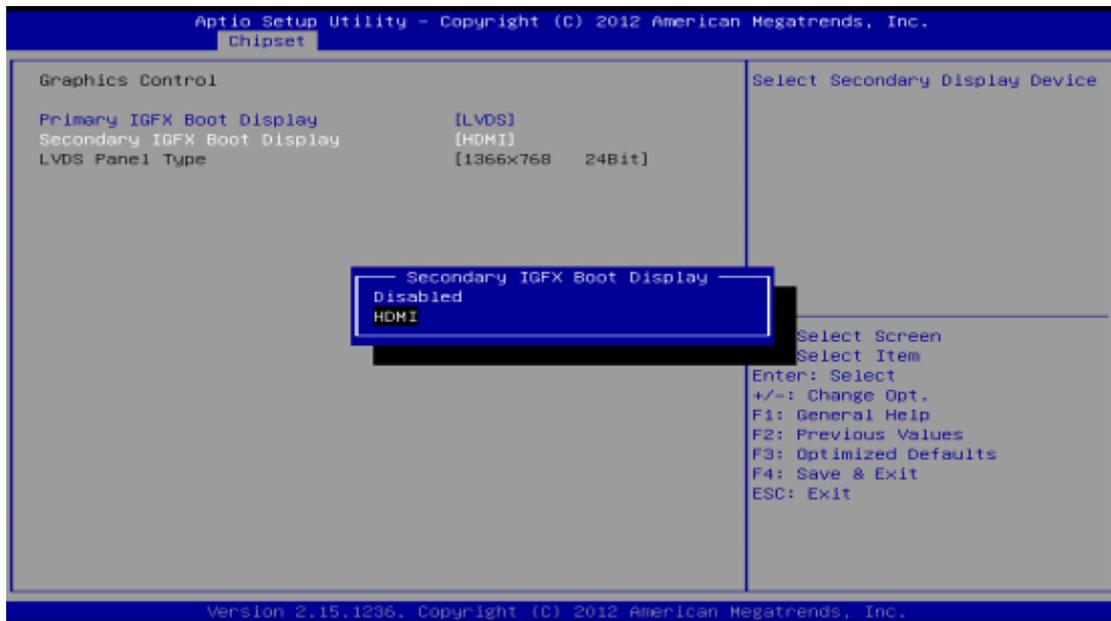
LVDS Panel Type
It shows the LVDS setting of panel. It is not able to change via BIOS setup. About GOT3187W-881-PCT, the configuration is "1366x768   24bit"

● **Memory Configuration**

Use this item for further setting of memory configuration, this screen displays memory information, and allows user to set memory configuration.

```
        Aptio Setup Utility - Copyright (C) 2012 American Megatrends, Inc.
        Chipset

    Memory Information

    Memory RC Version              1.6.2.1
    Memory Frequency               1600 Mhz
    Total Memory                   8192 MB (DDR3)
    Memory Voltage                 1.50v
    DIMM#0                         8192 MB (DDR3)


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



        Version 2.15.1236. Copyright (C) 2012 American Megatrends, Inc.
```

3.6   Boot Menu

The Boot menu allows users to change boot options of the system.
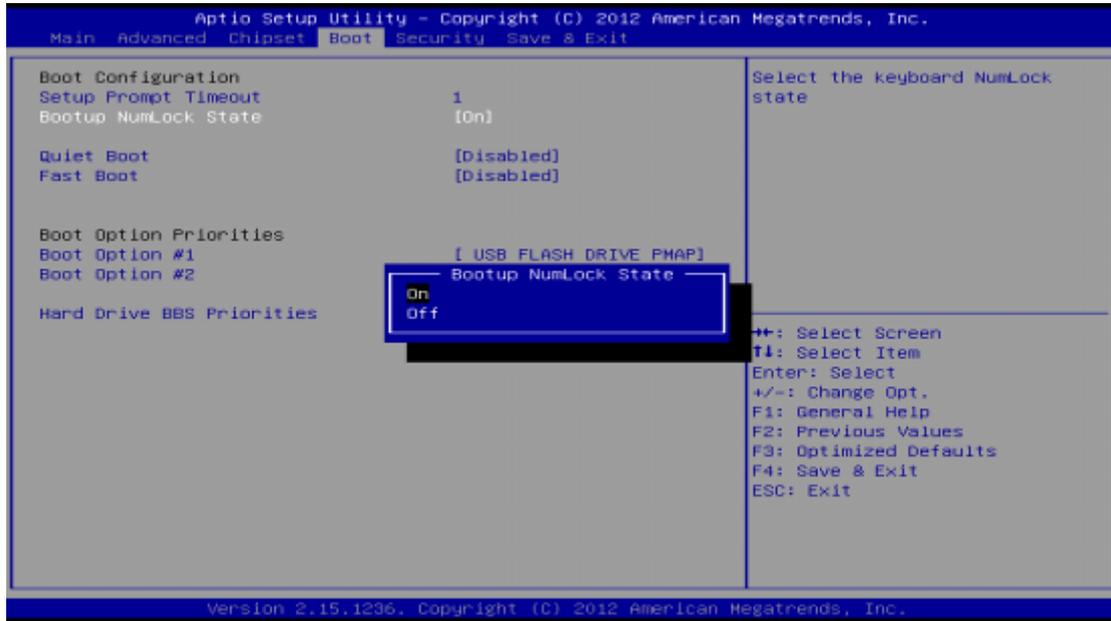
● **Setup Prompt Timeout**
Number of seconds to wait for setup activation key. 65535(0xFFFF) means indefinite waiting.

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

● **Quiet Boot**
Enable or disable Quiet Boot option.

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

3.7　　　Security Menu

The Security menu allows users to change the security settings for the system.
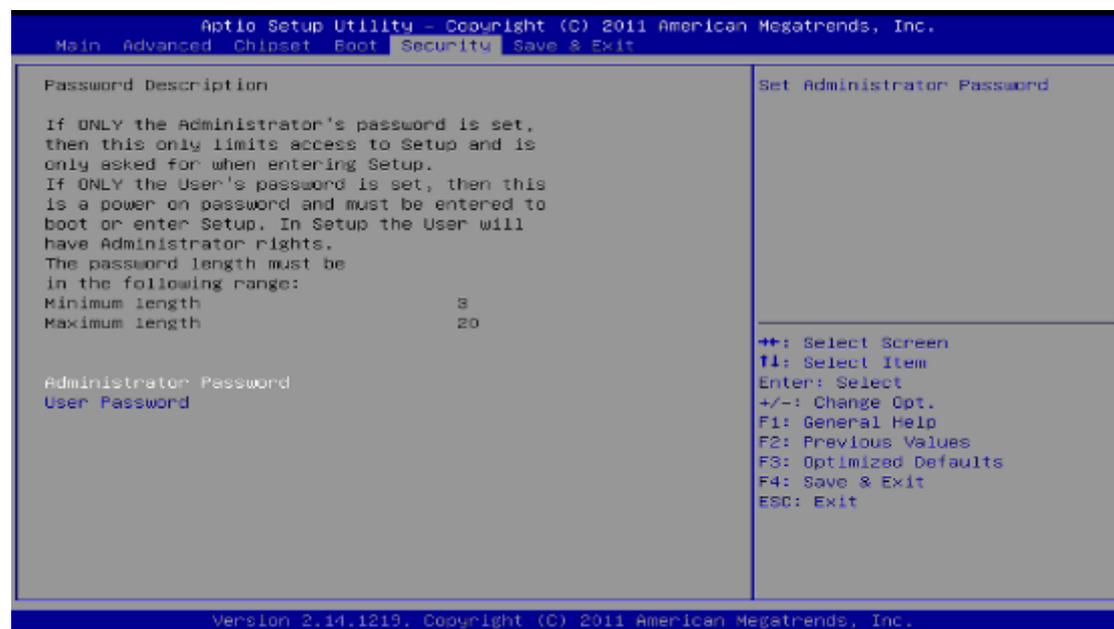
● **Administrator Password**

This item indicates whether an administrator password has been set (installed or uninstalled).

● **User Password**

This item indicates whether an user password has been set (installed or uninstalled).

3.8 Save & Exit Menu

The Save & Exit menu allows users to load your system configuration with optimal or fail-safe default values.
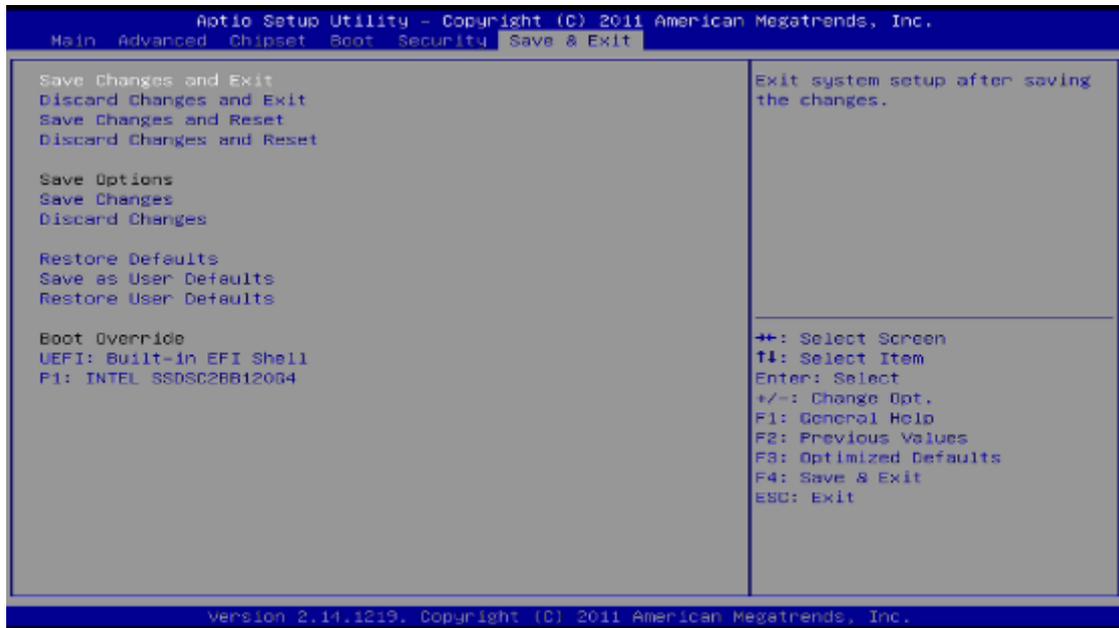
Save Changes and Exit
When you have completed the system configuration changes, select this option to leave Setup and return to Main Menu. Select Save Changes and Exit from the Save & Exit menu and press <Enter>. Select Yes to save changes and exit.

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.

Discard Changes and Reset
Select this option to quit Setup without making any permanent changes to the system configuration and reboot the computer. Select Discard Changes and Reset from the Save & Exit menu and press <Enter>. Select Yes to discard changes and reset.

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

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

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>.

Save as User Defaults
Select this option to save system configuration changes done so far as User Defaults. Select Save as User Defaults from the Save & Exit menu and press <Enter>.

Restore User Defaults
It automatically sets all Setup options to a complete set of User Defaults when you select this option. Select Restore User 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.

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Chapter 4
Drivers Installation

4.1 Driver CD/DVD content

Please insert driver CD/DVD and browse it. It includes items as below Enter GOT3187W-881 folder. You can find two folders as "Driver" & "User's Manual".

- GOT812LR-834
- GOT3156T-834
- GOT3177T-834
- GOT3187W-881
- GOT5100T-834
- GOT5152T-834
- Brows AXIOMTEK Website
- Download Adobe Reader
- Follow AXIOMTEK Facebook

→

- Driver
- User's Manual
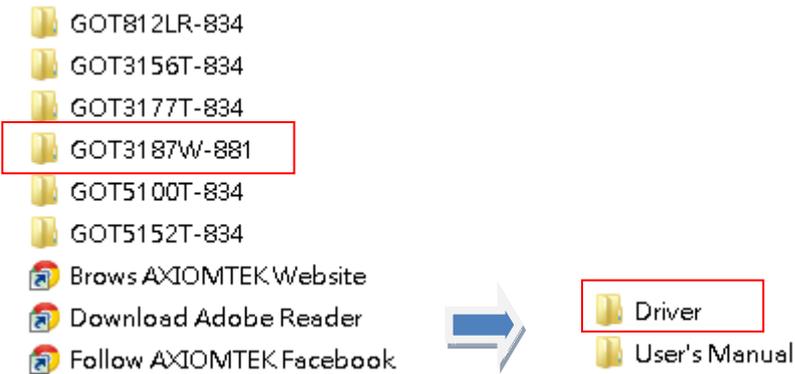
● **Select and enter "Driver", you can find different OS folders.**

- Win7
- Win8-10
- Linux

● **Win 7 driver installations. Enter Win7 folder and see 7 folders as below. Please install driver from Step 1 to 6 and reboot system.**

- Optional
- Step 1. Chipset
- Step 2. Graphic
- Step 3. LAN
- Step 4. USB 3.0
- Step 5. HD Audio
- Step 6. MEI
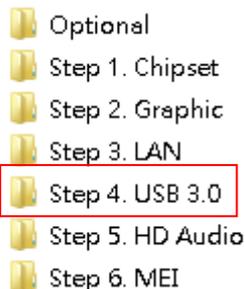
Note: Enter "Step 4 USB3.0" folder and you will find a self-execute file. Please execute it and will install driver automatic.

setup_3.0.0.33 →
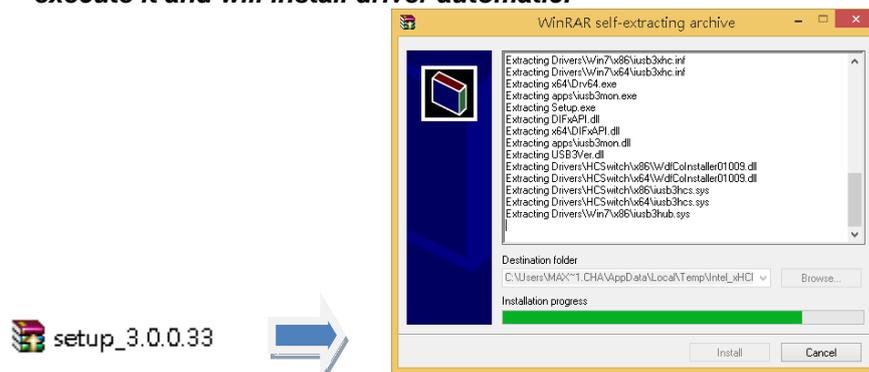
● **Win 8 & above driver installations. Enter Win8-10 folder and see 6 folders as below. Please install driver from Step 1 to 5 and reboot system.**

📁 Optional
📁 Step 1. Chipset
📁 Step 2. Graphic
📁 Step 3. LAN
📁 Step 4. HD Audio
📁 Step 5. MEI

4.2   Touch Screen

The GOT3187W-881-PCT uses the projected capacitive multi-touch. The specification is listed below.
It also can drive the touch panel to get two fingers touch function that based on the Windows 7 & above support.

● **Specification**

Touch Screen	projected capacitive multi-touch
Touch Screen Controller	Mastouch USB Touch Screen Controller IC
Communications	USB interface
Power Supply	5V
Power Consumption	40mA
Input Method	Finger or Cap.Stylus
Resolution	25ppi(Min.) Note: Base on WIN7 definition, ppi(Pixcel per inch)
Win7 USB Driver	Non-Driver
Calibration	Non-Calibration