AXIOMTEK

GOT610-837

10.4" XGA TFT
For Heavy-Duty Vehicle
Touch Panel Computer

User's Manual

RoHS

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CAUTION

Wrong type of batteries may cause explosion. It is recommended that users only replace with the same or equivalent type of batteries as suggested by the manufacturer once properly disposing of any used ones.

Safety Precautions

Before getting started, read the following important precautions.

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 GOT600 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 GOT600 series is properly grounded.

3. Do not open the top cover of the system. 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 a human body.

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

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Chapter 1
Introduction

This chapter contains general information and detailed specifications of the GOT610-837, including the following sections:

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

1.1 General Description

GOT610-837 is a fanless and compact-size touch panel computer, equipped with a 10.4" XGA LCD display and low power consumption Intel® Atom® E3845 1.91GHz processor. The GOT610-837 supports Windows® 7, Windows® 8.1, Windows® 10 and Linux Yocto OSs. In addition, this panel computer provides two Mini card slots of full-size for extension. Its excellent ID and friendly user interface make it a professional yet easy-to-use panel computer. The GOT610-837 is ideal for vehicle-mounted terminal applications in heavy-duty vehicles, especially suited for forklift and fleet management systems.

Sunlight readable design
Its sunlight readable technology with LED tech high brightness 500 nits color display allows the screen legible even strong sunlight.

Wide operating temperature
The Intel® Atom®-based Vehicle panel PC, GOT610-837, applies unique extended temperature technology with wide temperature range support as well as fanless operation. It also has a compact design for heavy-duty transport environment.

Designed for vehicle markets
The Axiomtek GOT610-837 is particularly suitable for demanding HMI applications in the vehicle-mounted sector, including arranging stocks and picking goods up and away.

1.2 Specifications

1.2.1 Main CPU Board

- **CPU**
  - Intel$^®$ Atom^{TM} E3845 1.91GHz processor onboard (Bay Trail).

- **System memory**
  - One DDR3L-1333 MHz(Bay Trail-I) 4GB
  - Maximum onboard memory up to 8 GB

- **BIOS**
  - America Megatrends UEFI BIOS

1.2.2 I/O System

- **Standard I/O**
  - 1 x RS-232/422/485 with isolated 1.5KV (default RS-232)
  - 4 x USB 2.0 (three in I/O line, one in top side)
  - 1 x DIO with isolated 1.5KV D-Sub connector (6 input / 2 output)
  - 1 x CAN bus with isolated / D-Sub connector

- **Ethernet**
  - One Intel$^®$ i-210IT Gigabit Ethernet (PXE and LAN wake up)

- **Audio**
  - 1 x Audio: Line out, MIC in

- **Expansion**
  - 2 x Mini PCI-E card with full-size

- **Storage**
  - 16 GB flash onboard
  - 1 x mSATA

1.2.3 System Specifications

- **10.4" TFT LCD**
  - 10.4" XGA 500 nits, resolution 1024 x 768
- **5 wired resistive touch**
- **IP65/ NEMA 4 protection, plastic front bezel**
- **Net weight**
  - 2.05 Kgs (4.52 lb)
- **Dimension (main body size)**
  - 291 mm x 266 mm x 50 mm
- **Operation temperature**
  - -30°C to +55°C
- **Relative humidity**
  - 10% to 95% @ 40°C, Non-Condensing
- **Power input**
  - Typical 24/48VDC
  - Working range: 18-60VDC
- **Vibration**
  - Refer to IEC60721-3-5 Class 5M3
  - 10 to 500 Hz, 3.38G, random for 2.5" SSD

NOTE

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

2. The GOT610-837 has been designed particularly for operation in harsh environments; please choose a wide-temperature SSD.

3. It is recommended to use a wide-temperature SSD if the operation temperature is higher than 45℃.

1.3 Dimensions

The following diagrams show the dimensions and outlines of the GOT610-837.
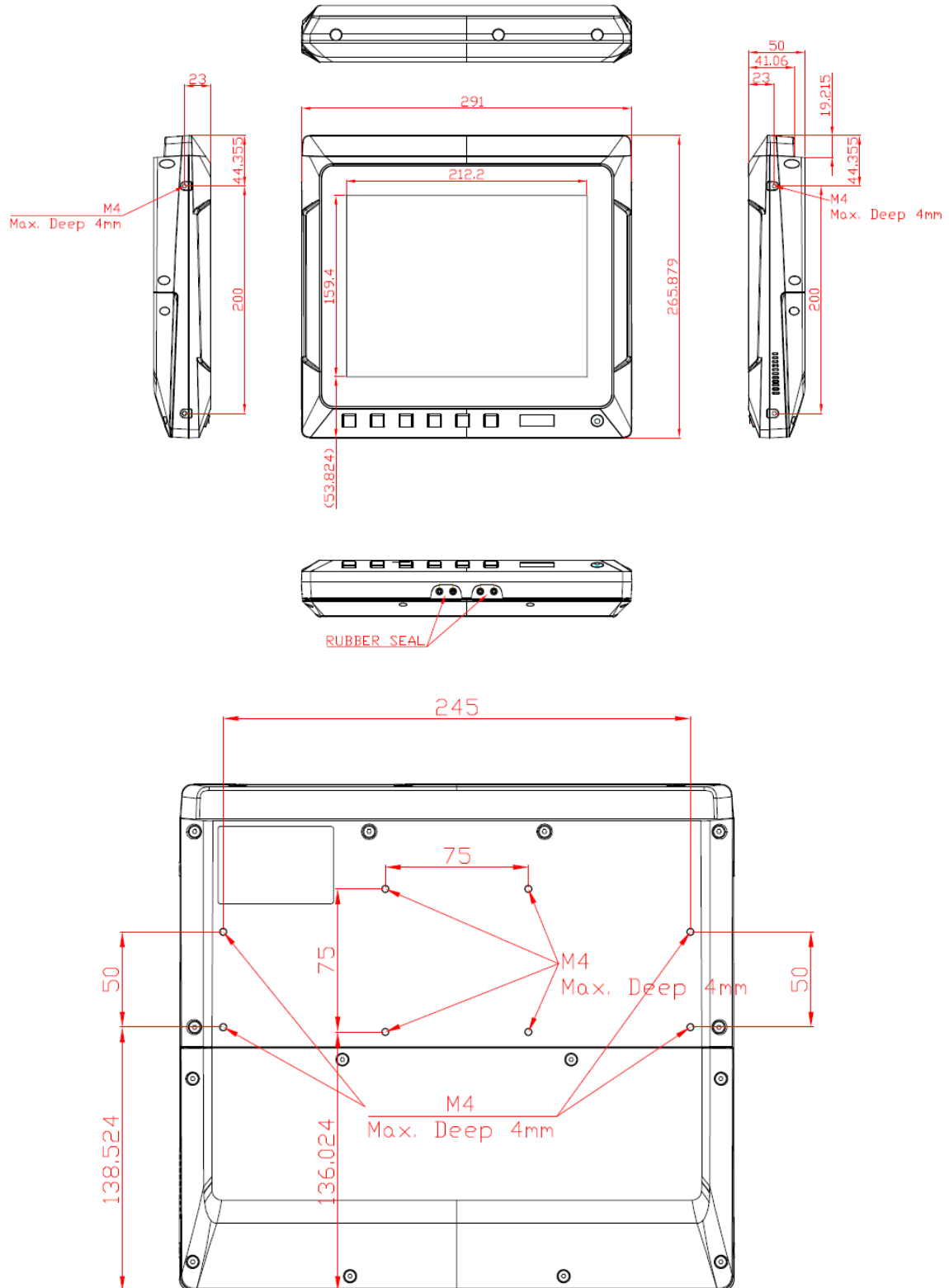
1.4   I/O Outlets

Please refer to the following illustration for I/O locations of the GOT610-837.

● Definitions of the front hot keys:

No	Function
1	Mult_Function key
2	Home Key, FN+Key = Brightness +
3	End Key, FN+Key = Brightness -
4	Keyboard Key, FN+Key = Volume +
5	Home Key, FN+Key = Volume -
6	LCD on/off Key
7	Temperature LED indicator
8	HDD access LED indicator
9	Power on/off LED indicator
10	LED light sensor

● Definitions of the rear I/O functions:
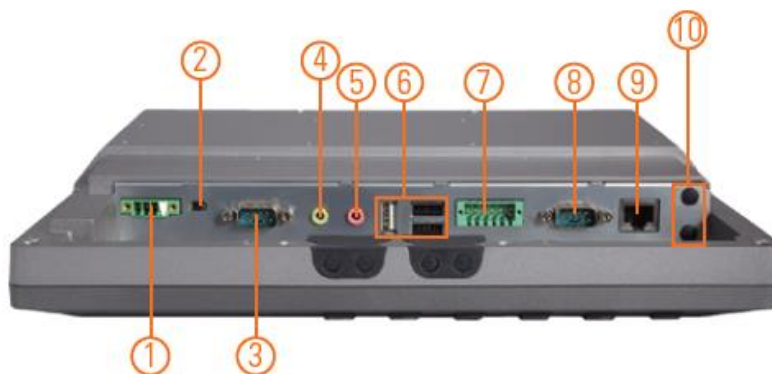
No	Function	No	Function
1	DC-in	6	3 x USB 2.0 type A
2	AX/ATX mode switch	7	DIO (6-in/2-out)
3	CANBus	8	1 x RS-232/422/485
4	1 x Line-out	9	1 x LAN
5	1 x Mic-in	10	2 x Wireless antenna hole

● Definitions of the top side USB / SIM card slot / Antenna:

No	Function
11	3G/LTE/WIFI antenna hole
12	3G/LTE SIM slot
13	USB 2.0 A type

1.5   Packing List

A complete bundled package of the GOT610-837 should contain the following items:

● **GOT610-837 unit x 1**
● **Driver CD x1**
● **Phoenix connector x 2 (Power 4Pin * 1 / DIO 12Pin * 1)**

Please contact an Axiomtek distributor immediately if you cannot find the package or any of the above-mentioned items is missing.

Chapter 2
Hardware and Installation

The GOT610-837 provides rich I/O ports and flexible expansions for you to meet different demands. The chapter explains how to install the hardware parts, including:

- Open cover: I/O cover, and back cover
- Vin 18-60VDC
- Serial ports
- USB ports
- Ethernet
- DIO
- Audio
- CANBus
- DC power
- Mini card
- System jumper setting
- System panel header
- Hard keys on front bezel
- LED indicators
- Auto-dimming

2.1   Open cover

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

● **Open I/O Cover**

Unscrew eight screws on the I/O cover. Please refer the photo below.

Eight screw holes for I/O cover
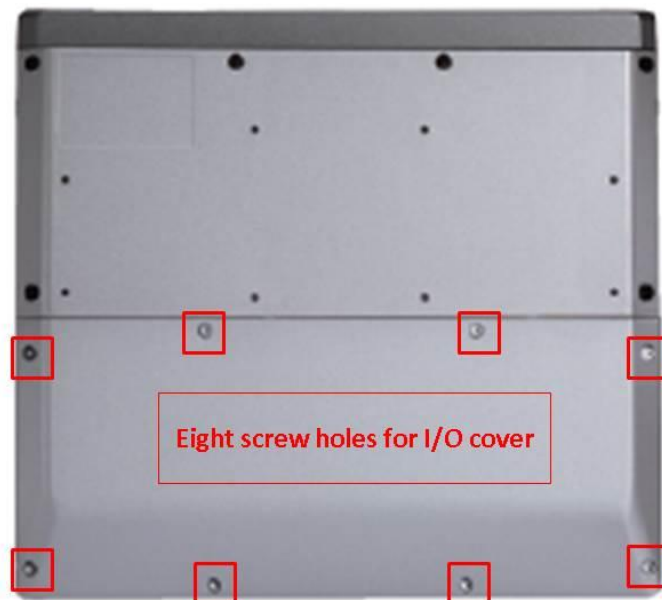
● **Open back cover**

Unscrew six screws on the back cover. Please refer to the photo below.

Ten screw holes for back cover

2.2   Vin 18-60VDC

The DC-in connector has four pins, as shown in the pin assignment table below.

Pin	Description	Definition
1	V+	For DC power in V+.
2	ACC	For ACC (Ignition)
3	V-	For DC power in V-
4	G	Chassis GND

2.3   CANBus

This system supports one CANBus with isolated 1.5KV. The pin assignments are listed in the table below.

Pin	Definition
1	NA
2	CAN_LO
3	ISO3_GND
4	NA
5	NA
6	ISO3_GND
7	CAN_HO
8	NA
9	NA
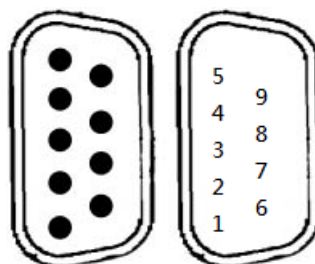
2.4   COM 1 (Serial Port Connector)

The COM1 connector is a standard DB-9 connector. The pin assignments of RS-232/RS-422/RS-485 are listed on the following table. If you need COM port to support RS-422 or RS-485, please select the matching COM port type from the BIOS items.

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+	NC
4	DTR, Data terminal ready	RX-	NC
5	GND, ground	NC	NC
6	DSR, Data set ready	NC	NC
7	RTS, Request to send	NC	NC
8	CTS, Clear to send	NC	NC
9	RI, Ring indicator	NC	NC
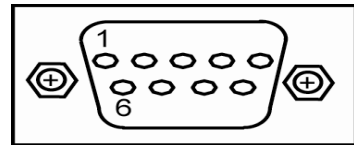
2.5   USB 2.0

This system supports four USB ports which are located in the rear side and the top side. The pin assignments are listed in the table below.

Pin	Signal USB Port 0
1	USB VCC
2	USB #0_D-
3	USB #0_D+
4	Ground (GND)

2.6 LAN

The system is equipped with an RJ-45 connector for Gigabit LAN. To connect the board to a 10/100/1000 Base-T hub, just plug one end of the cable into **LAN**, and connect the other end to a 10/100/1000 Base-T hub.

Pin	Description
1	MDI0+
2	MDI0-
3	MDI1+
4	MDI2+
5	MDI2-
6	MDI1-
7	MDI3+
8	MDI3-
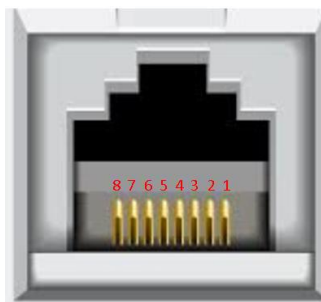
2.7 DIO

2.7.1 Digital I/O Specification

This system supports one DIO (6 input and 2 output) with isolated 1.5KV. The pin assignments are listed in the table below.

Digital Input:
Input channels: 6, Dry/Wet type
Input voltage: 0 to 30VDC at 25Hz
Input level for dry contacts:
Logic level 0: close to ground
Logic level 1: open
Input level for wet contacts:
Logic level 1: +/-3VDC max.
Logic level 0: +/- 10VDC min. to +/-30VDC max. (source to digital input)

Digital output:
Output channels: 2, sink type
Output current: 200mA max. per channel
On-state voltage:12~ 24VDC nominal
Max. voltage on COM+: 30VDC

Pin	Definition
1	Common PWR+
2	DI4
3	DI5
4	DO0
5	DO1
6	Common PWR-
7	EXT_POWER
8	DI0
9	DI1
10	DI2
11	DI3
12	Isolation GND
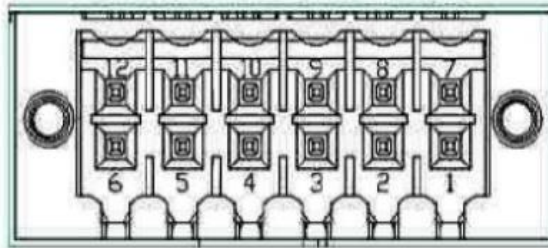
2.7.2 Digital I/O Software Programming

- I2C to GPIO PCA9554PW GPIO Group0[3:0] is Output, Group0[7:4] is Input.
- I2C address: 0b0100100x.
- Registers:

Register 0: Input Group0 register.

Table 4. Register 0 - Input Port register bit description

Bit	Symbol	Access	Value	Description
7	I7	read only	X	determined by externally applied logic level
6	I6	read only	X	
5	I5	read only	X	
4	I4	read only	X	
3	I3	read only	X	
2	I2	read only	X	
1	I1	read only	X	
0	I0	read only	X	

Register 2: Output Group0 register.

Table 5. Register 1 - Output Port register bit description
Legend: * default value.

Bit	Symbol	Access	Value	Description
7	O7	R	1*	reflects outgoing logic levels of pins defined as outputs by Register 3
6	O6	R	1*	
5	O5	R	1*	
4	O4	R	1*	
3	O3	R	1*	
2	O2	R	1*	
1	O1	R	1*	
0	O0	R	1*	

2.7.3 Digital Input Wiring

DRY contact
Logic level 0: close to ground   Logic level 1: open
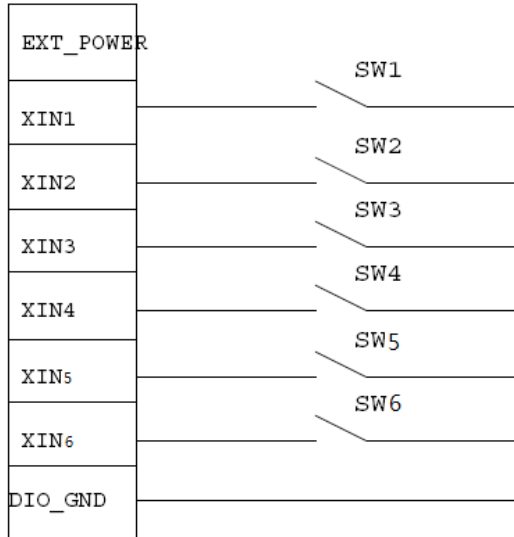
WET contact
Logic level 1: +/-3VDC max.
Logic level 0: +/- 10VDC min. to +/-30VDC max
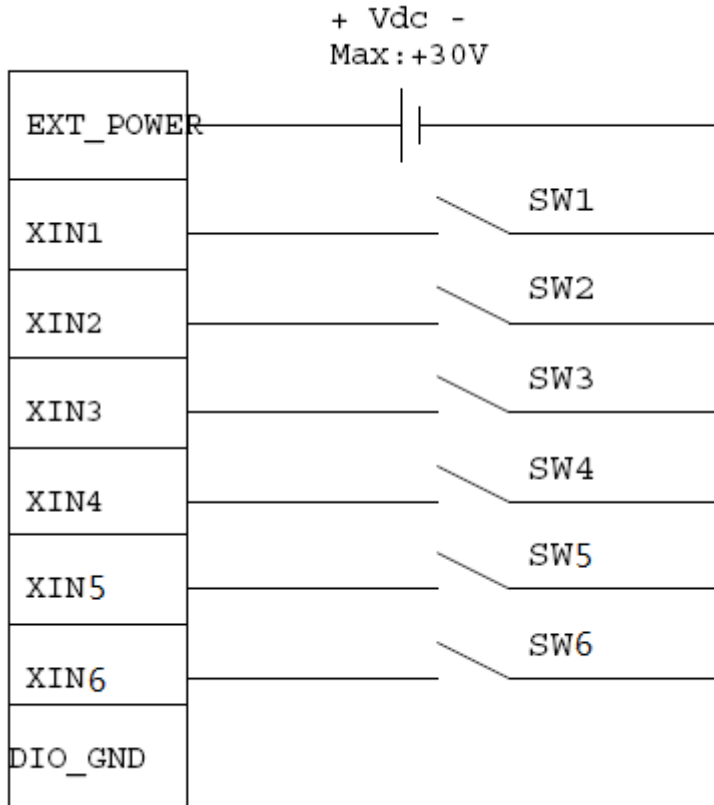
2.7.4   Digital Output Wiring
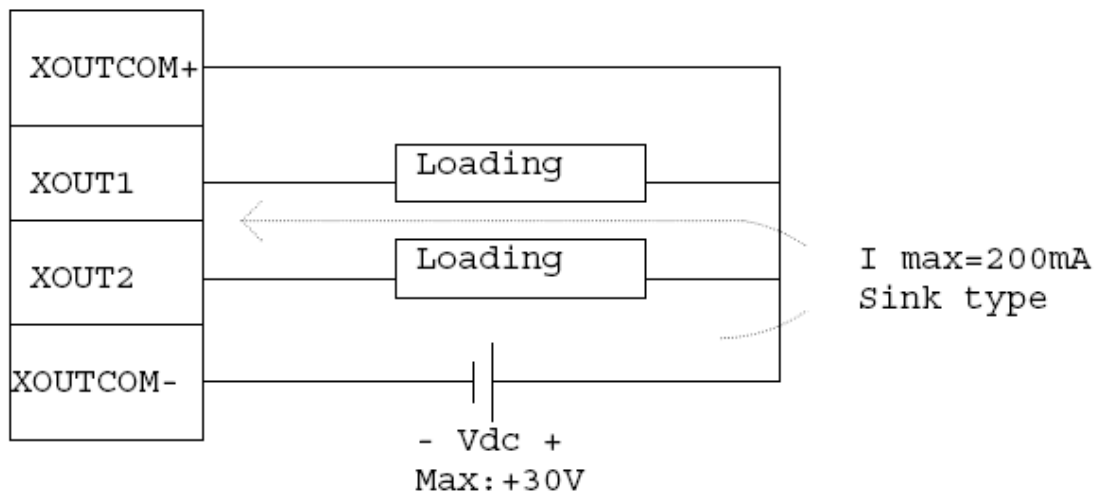
2.8 Mini card Installation

The GOT610-837 comes with two Mini Card slots for users to install a WiFi/3G module and mSATA card respectively.

2.8.1 WiFi/3G Module Installation

The GOT610-837 provides one Mini Card slot for users to install a WiFi/3G module. Please choose slot 1 when installing a WiFi/3G module and refer to the following instructions and illustrations to install the module:

Step 1   Open the back cover and locate the Mini Card slot (slot 1) on the main board.
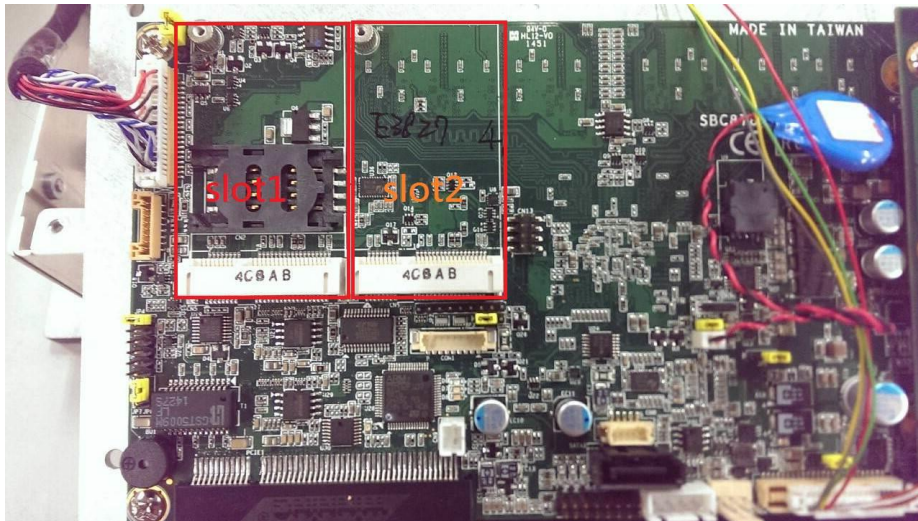
Step 2   Insert a wireless LAN card to slot 1. Screw it firmly on the slot.
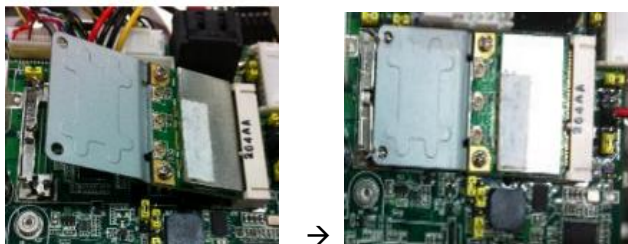
Step 3   There are two connectors on the wireless LAN card. One is the main connector; the other is the auxiliary connector. Connect the antenna cable to the main connector on the wireless LAN card.
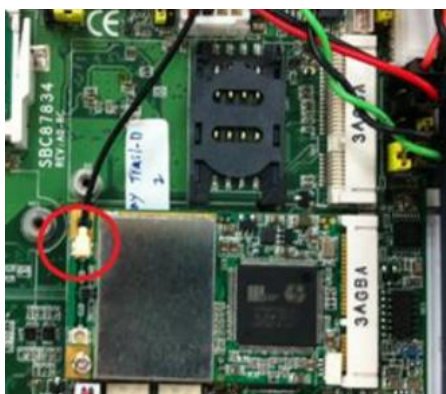
2.8.2 mSATA Card Installation

The GOT610-837 provides one Mini Card slot for users to install mSATA. Please choose slot 2 when installing an mSATA card and refer to the following instructions and illustration. In addition, please set up the BIOS IDE Configuration to mSATA.

Step 1 **Open the back cover and locate the Mini Card slot (slot 2) on the main board.**
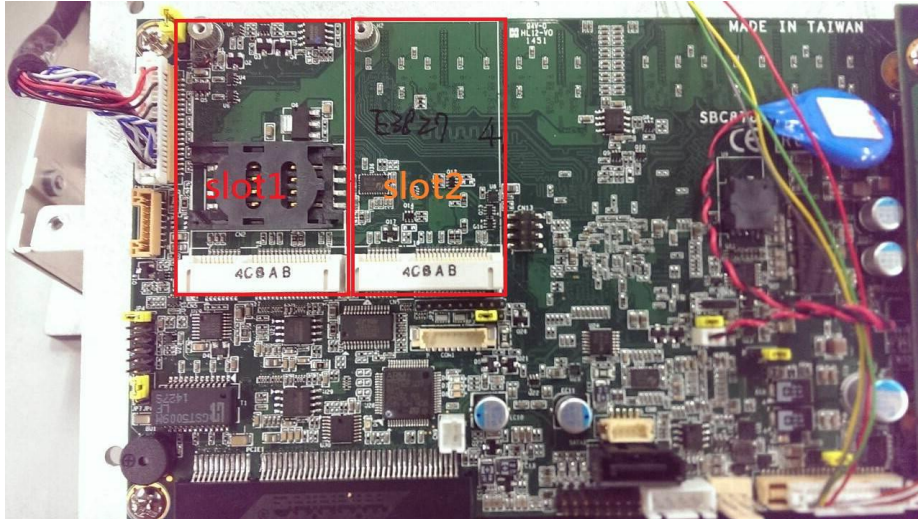
Step 2 **Insert an mSATA card to slot 2. Screw it firmly on the slot.**

2.9   System jumper settings

Please see the jumper settings below for your requirements.

● Jumper settings on the main board:

Jumper	★ Default Setting	Jumper Setting
JP5	★ Normal Clear CMOS	Short 1-2 Short 2-3
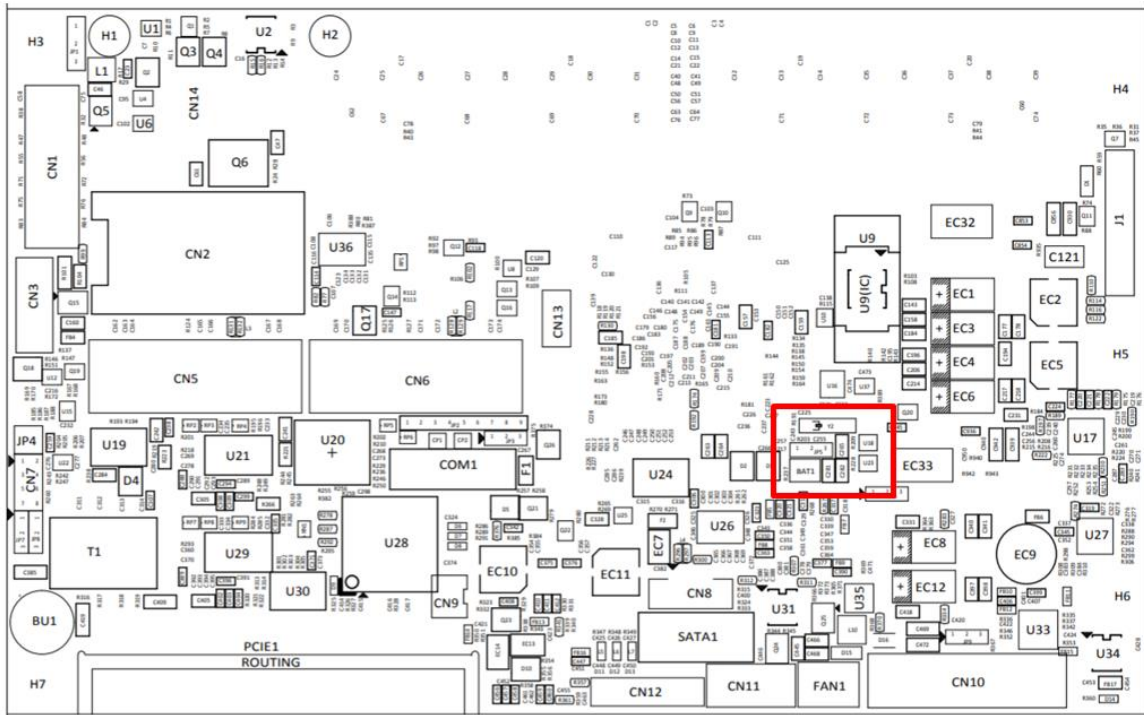
● Jumper settings on the I/O board:

Jumper	★ Default Setting	Jumper Setting
JP1	★CAN BUS 120Ω terminal Enable CAN BUS 120Ω terminal Disable	Short 1-2 Short 2-3
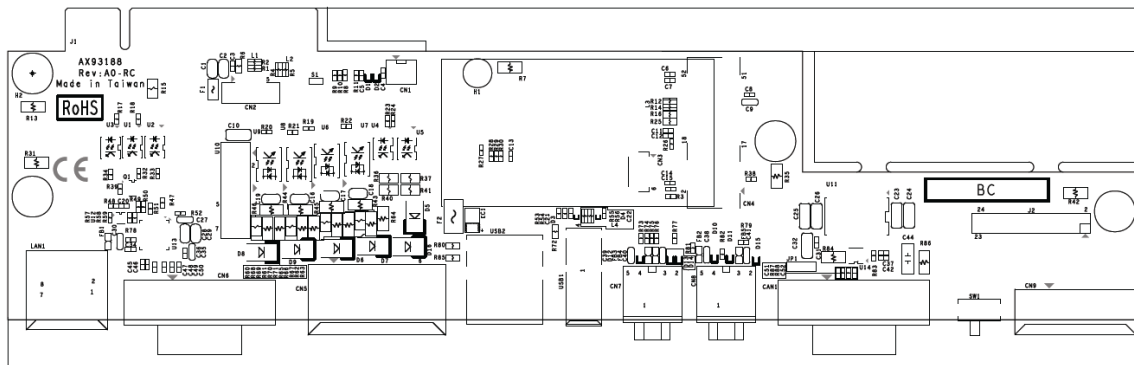
2.10 Hard keys Management

The hard keys on front panel can be managed by the API Programming Library, or by the Apps provided by Axiomtek.

2.10.1 API Programming Library

Definitions of the front panel hard keys can be set as follows:

- A front hard key can be defined by detecting the key code through the customized program.

- For CAN BUS, Light / Temperature sensor, and backlight / dimming control, please access the *programming library manual* included in the user's DVD used to call the API DLL.

1. GOT710_API.dll: AXIOMTEK API DLL file

2. GOT710_API_V1_2.pdf: AXIOMTEK API programming library user manual for CAN BUS, Light / Temperature sensor, Backlight & Dimming control.

2.10.2 APP_Configuration Center

Axiomtek has written an APP to provide an easy management interface for the configuration of hard keys.   After accessing the AXIOMTEK AP folder in the driver's CD, press "setup" to install the Configuration Center.

The user manual for this APP will be enclosed in the driver CD as well for your reference.
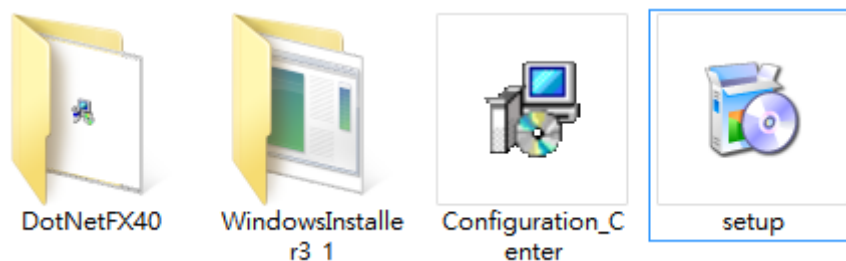
2.11 LED indicators

LED lights provide indications for users to make sure that whether the MCU is working properly, facilitating debug in the phase of research and development. It is not necessarily the actual system mounting LED lights.

The following table summarizes the LED indications of the device:

Status	Power LED(Green)	LED Red	LED Yellow
Power up	ON	ON	OFF
Device working properly	ON	OFF	OFF
Over-temperature warning	ON	OFF	OFF
Over-temperature LCD - saving	ON	OFF	OFF
Over-temperature Power off reached	Blink	Blink	OFF
HDD access			Blink

2.12 Auto-dimming

Because the human eye perceiving brightness is nonlinear, PWM duty must be set percentage at each stage of opening and closing
LCD Backlight:
> Level 10 = 100%
> Level 9 = 91%
> Level 8 = 82%
> Level 7 = 73%
> Level 6 = 64%
> Level 5 = 55%
> Level 4 = 46%
> Level 3 = 37%
> Level 2 = 28%
> Level 1 = 19%
> Level 0 = 10%

Auto dimming level

Surrounding environment	Light Sensor value	LCD dimming level
Tunnel (0~26 Lux)	0~50	23%~37%
Indoor (200~300 Lux)	200~300	72%~80%
Outdoor cloudy (1000 Lux)	1000	88%~100%
Outdoor sunny (2000 Lux up)	1200 up	100%

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 descriptions 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 <F2> or <Del> during the Power On Self Test (POST) to enter BIOS setup, otherwise POST will continue with its test routines.
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.

If you wish to enter BIOS setup after POST, you can restart the system by pressing <Ctrl>+<Alt>+ <Delete>, or by pressing the reset button on the system chassis. You may also restart by turning the system off and then back on.

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.

NOTE   *Because the BIOS setup software is constantly being updated, the following setup screens and descriptions are for reference purpose only, and they may not exactly match what you see on your screen.*

3.2 Menu Bar

The top of the screen has a menu bar with the following selections:

Menu Bar	Description
Main	To set up the system time/date information.
Advanced	To set up the advanced BIOS features.
Chipset	To display the North & South bridge (USB configuration) status.
Security	To set up the security features.
Boot	To set up the default system device to locate and load the operating system.
Exit	To exit the current screen or the BIOS setup utility.

Use <←> key or <→> key to choose among the selections on the menu bar, and then press <Enter> to get into the sub screen. You can also use the mouse to click your required item.

3.3 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>, <F7>, <Enter>, <ESC>, <Arrow> keys, and so on.

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

Please check the following table for the function description of each navigation key.

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.
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.
F1	The <F1> key allows you to display the General Help screen.
F7	Discard changes.
F9	The <F9> key allows you to load optimal default values for all the settings.
F10	The <F10> key allows you to save any changes you have made and exit Setup. Press the <F10> 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.

3.4 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) 2013 American Megatrends, Inc.
        Main  Advanced  Chipset  Security  Boot  Save & Exit

        Project Version              87837 XC006          Set the Date. Use Tab to
        Build Date and Time          04/20/2018           switch between Date elements.

        Memory Information
        Total Memory                 4096 MB (LPDDR3)

        TXE Information
        Sec RC Version               00.05.00.00
        TXE FW Version               01.01.00.1089

        System Date                  [Thu 06/06/2019]
        System Time                  [14:48:19]

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




              Version 2.16.1242. Copyright (C) 2013 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.

3.5 Advanced Menu

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

■ NCT6106D Super IO Configuration
■ NCT6106D H/W Monitor
■ CPU Configuration
■ IDE Configuration
■ Miscellaneous Configuration
■ CSM Configuration
■ USB Configuration

```
              Aptio Setup Utility - Copyright (C) 2013 American Megatrends, Inc.
       Main  Advanced  Chipset  Security  Boot  Save & Exit

  ▶ NCT6106D Super IO Configuration              System Super IO Chip
  ▶ NCT6106D HW Monitor                          Parameters.
  ▶ CPU Configuration
  ▶ IDE Configuration
  ▶ Miscellaneous Configuration
  ▶ CSM Configuration
  ▶ USB Configuration


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

              Version 2.16.1242. Copyright (C) 2013 American Megatrends, Inc.
```

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

NOTE Setting wrong values in this section may cause the system to malfunction.

NCT6106D Super IO Configuration

Use this screen to select options for the Super IO Configuration, and change the value of the selected option.
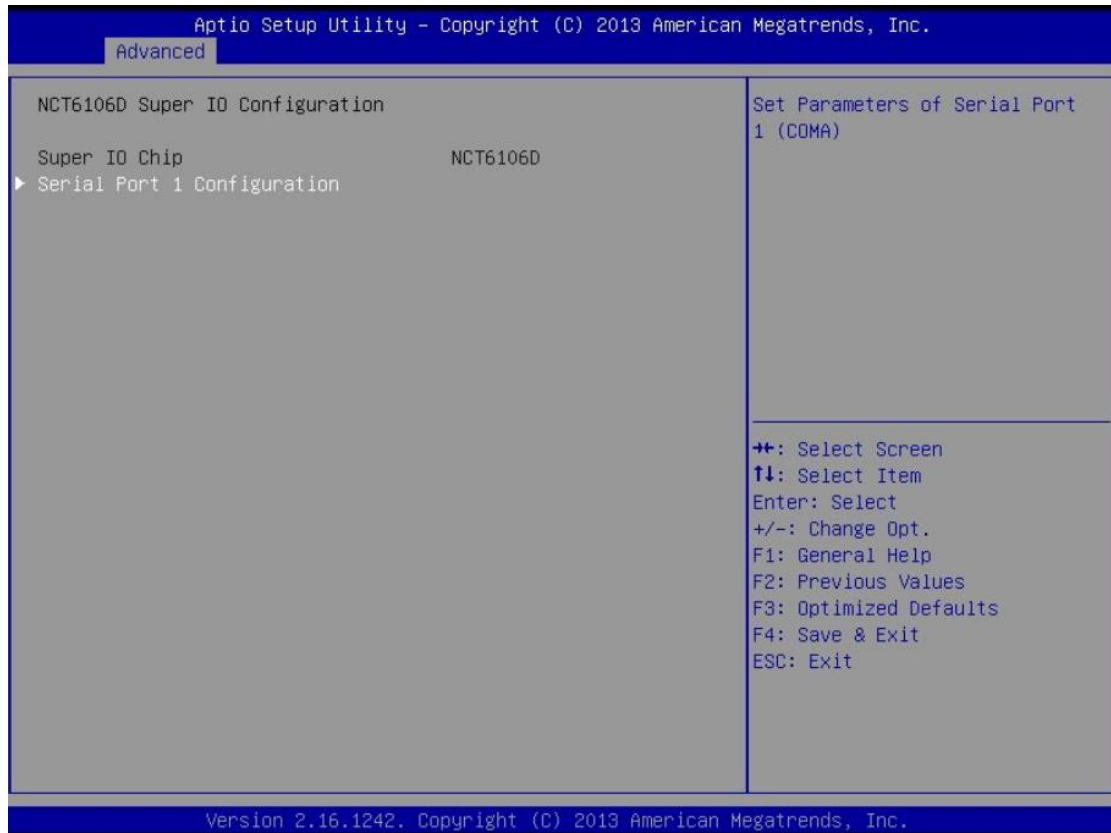
NCT6106D H/W Monitor

This screen shows the hardware health configurations.

```
            Aptio Setup Utility - Copyright (C) 2013 American Megatrends, Inc.
      Advanced

   Pc Health Status

   System temperature              : +33.5 C
   CPU temperature                 : +35.0 C
   VCORE                           : +0.848 V
   MEMORY                          : +1.332 V
   +12V                            : +11.968 V
   +5V                             : +5.096 V
   +3.3V                           : +3.280 V



                                                  →←: 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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```

CPU Configuration

This screen shows the CPU Configuration and Intel virtualization technology enable/disable selected.

```
         Aptio Setup Utility - Copyright (C) 2013 American Megatrends, Inc.
   Advanced

 CPU Configuration                                      Socket specific CPU Information

 ▶ Socket 0 CPU Information

   CPU Speed                        1918 MHz
   64-bit                           Supported


                                                       ↔: 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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```

IDE Configuration

You can use this screen to select options for SATA configurations, and change the value of the selected option.

SATA Mode

Use this item to choose the SATA operation mode. Here are the options for your selection: IDE Mode and AHCI Mode.

```
            Aptio Setup Utility - Copyright (C) 2013 American Megatrends, Inc.
      Advanced
    IDE Configuration                                      Select IDE / AHCI

    SATA Mode                          [AHCI Mode]
    SATA0 storage selection:           [mSATA]
    Serial-ATA Port 0                  [Enabled]

    Serial-ATA Port 1                  [Enabled]

    SATA Port0
    16GB NANDrive  (16.0GB)

    SATA Port1
    Not Present
                                                    ++: 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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```

Miscellaneous Configuration

Use this screen to select options for different OS: Windows 8.X, Android, and Windows 7.

```
            Aptio Setup Utility - Copyright (C) 2013 American Megatrends, Inc.
     Advanced

 Miscellaneous Configuration                               OS Selection
 OS Selection                      [Windows 8.X]




                                                           ++: 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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```

CSM Configuration
Enable is Legacy mode; Disable is UEFI mode.

```
                Aptio Setup Utility - Copyright (C) 2013 American Megatrends, Inc.
    Advanced

 Compatibility Support Module Configuration                    This option controls
                                                               Legacy/UEFI ROMs priority
   Boot option filter                  [UEFI and Legacy]

   CSM16 Module Version                 07.75

   Network                              [UEFI]




                                                              ↔: 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
Display USB device configurations.

```
                Aptio Setup Utility - Copyright (C) 2013 American Megatrends, Inc.
    Advanced

 USB Configuration                                           Mass storage device emulation
                                                             type. 'AUTO' enumerates
   USB Module Version                   8.11.01              devices according to their
                                                             media format. Optical drives
   USB Devices:                                              are emulated as 'CDROM',
         1 Drive, 2 Keyboards, 1 Mouse, 4 Hubs               drives with no media will be
                                                             emulated according to a drive
                                                             type.
   Mass Storage Devices:
   UFD 2.0 Silicon-Power4G PMAP          [Auto]



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




                Version 2.16.1242. Copyright (C) 2013 American Megatrends, Inc.
```

3.6   Chipset Menu
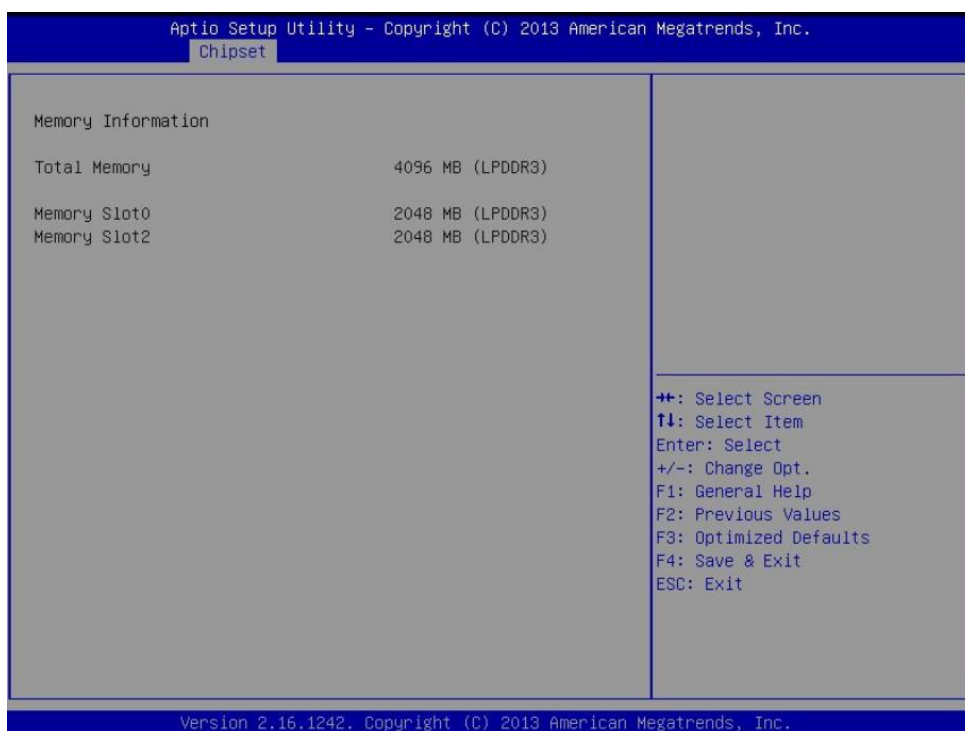
The Chipset menu will display the available devices on your system for you to configure the boot settings and the boot priority.
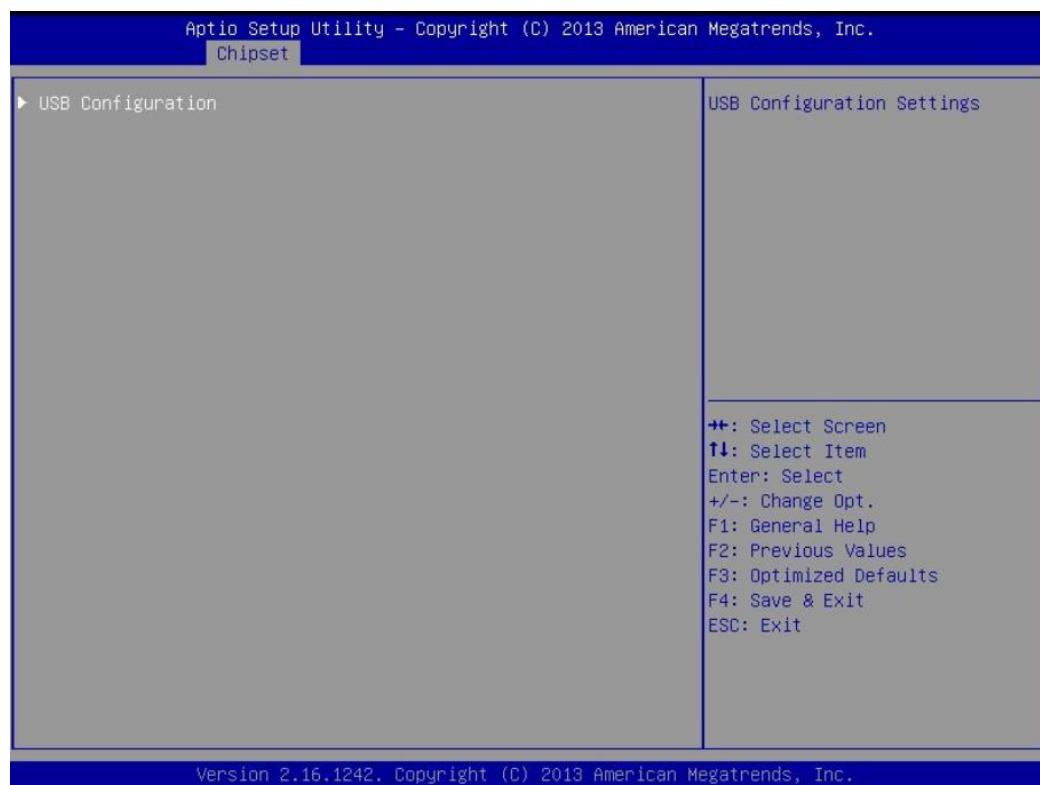
```
            Aptio Setup Utility - Copyright (C) 2013 American Megatrends, Inc.
      Main  Advanced  Chipset  Security  Boot  Save & Exit

 ▶ North Bridge                                      North Bridge Parameters
 ▶ South Bridge




                                                    ▶←: 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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```

North Bridge
This screen shows the North Bridge memory information.
You can use this screen to monitor the memory status of slot 0 and slot 2.

```
            Aptio Setup Utility - Copyright (C) 2013 American Megatrends, Inc.
                  Chipset

   Memory Information

   Total Memory                  4096 MB (LPDDR3)

   Memory Slot0                  2048 MB (LPDDR3)
   Memory Slot2                  2048 MB (LPDDR3)




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



            Version 2.16.1242. Copyright (C) 2013 American Megatrends, Inc.
```
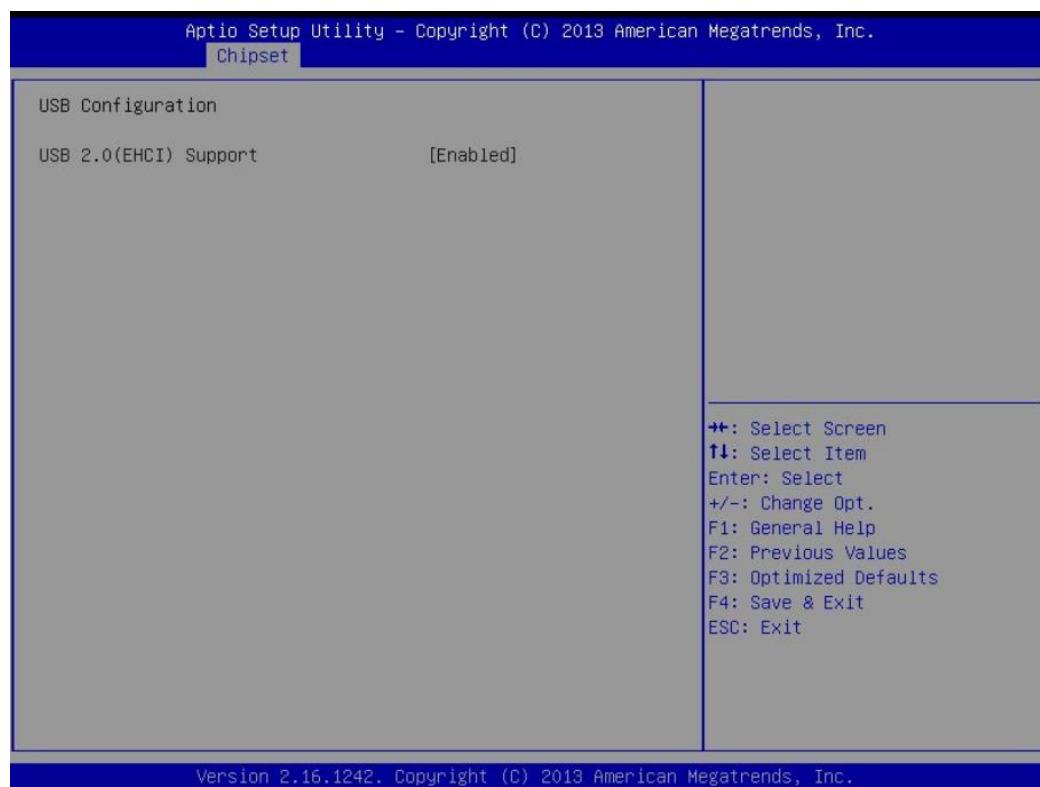
South Bridge

```
           Aptio Setup Utility - Copyright (C) 2013 American Megatrends, Inc.
            Chipset

▶ USB Configuration                                    USB Configuration Settings




                                                       ➔◆: 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
Only supports USB2.0 (EHCI).

```
           Aptio Setup Utility - Copyright (C) 2013 American Megatrends, Inc.
            Chipset

 USB Configuration

 USB 2.0(EHCI) Support                [Enabled]




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



           Version 2.16.1242. Copyright (C) 2013 American Megatrends, Inc.
```

3.7   Security Menu

In this section, you may set, change or clear the supervisor/user password for the system.
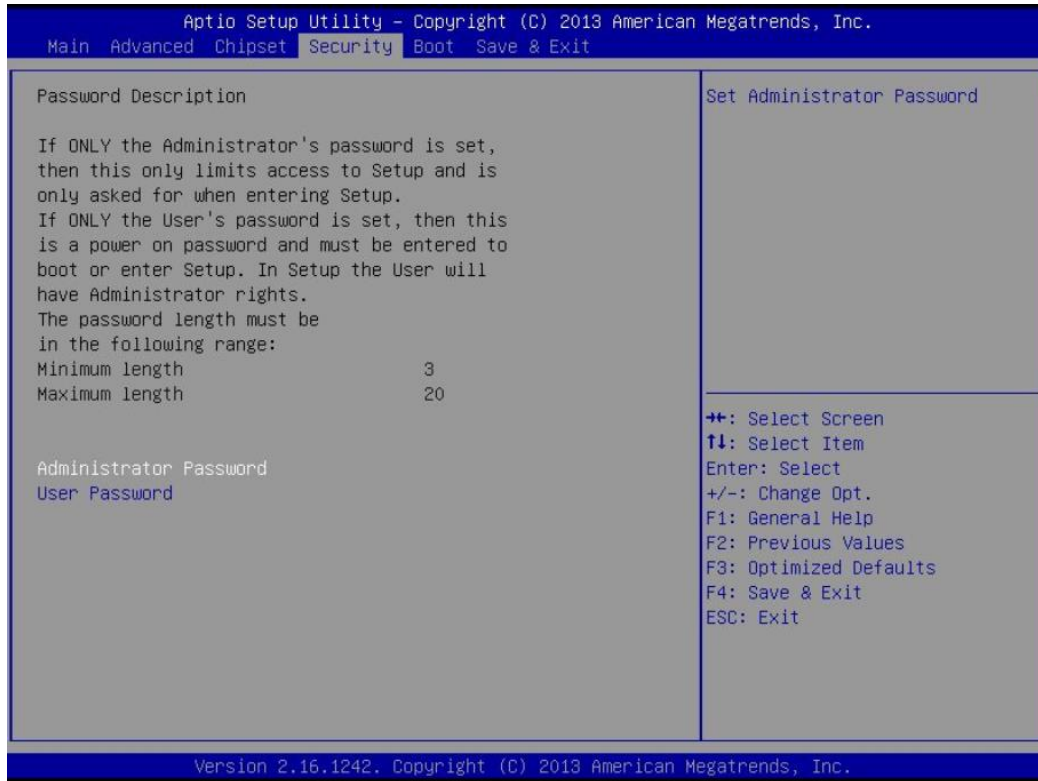
3.8   Boot Menu

The Boot menu allows users to change boot options of the system. You can select any of the items on the left frame of the screen to go to the sub menus:

```
              Aptio Setup Utility - Copyright (C) 2013 American Megatrends, Inc.
       Main  Advanced  Chipset  Security  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]
       Fast Boot                      [Disabled]


       Boot Option Priorities
       Boot Option #1                 [UEFI: UFD 2.0 Silic...]
       Boot Option #2                 [P0: 16GB NANDrive  ...]
       Boot Option #3                 [UEFI: Built-in EFI ...]

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




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```

Setup Prompt Timeout
Enter the number of seconds to wait for the setup activation key

Bootup NumLock State
Use this item to select the power-on state for the NumLock. The default setting is on.

Quiet Boot
Use this item to enable or disable the Quite Boot state. The default setting is [Disabled].

Legacy Pxe OPROM
Use this item to enable or disable the Preboot Execution Environment. The default setting is [Disabled].

Boot Option Priorities
Specify the overall boot order from the available devices.

3.9   Exit Menu
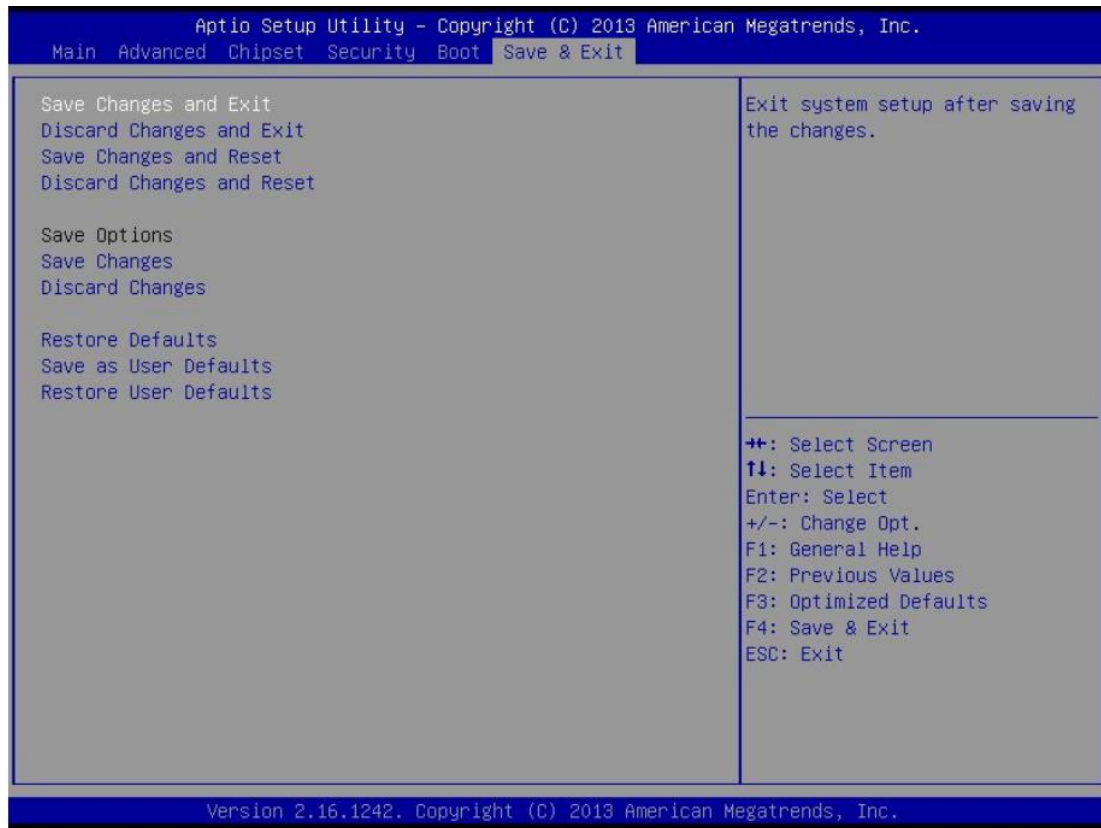
 NOTE **Load default before updating g TXE firmware and restart.**

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Chapter 4
Drivers and Installation

4.1   System

The GOT610-837 supports Windows 7, Windows 8.1, and Windows 10. To facilitate the installation of system drivers, please carefully read the instructions in this chapter before installation.

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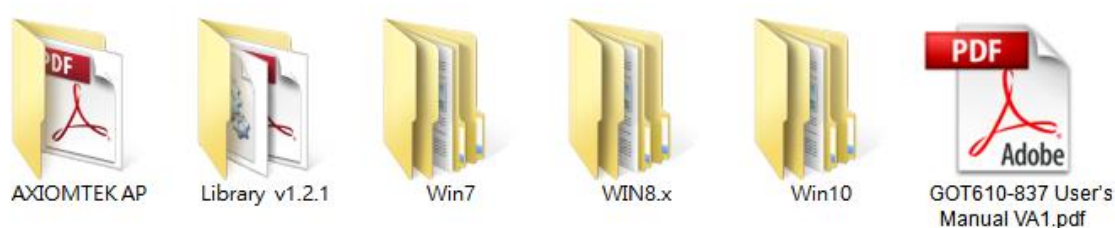
Step 2   Select all files and follow the installing procedure.

4.2   Touch Screen

The GOT610-837 adopts a 5-wire analog resistive touch screen. The specification and driver installation are listed below.

● **Specification**

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

● **Driver Installation- Windows OS**

The GOT610-837 provides a touch screen driver that users can install under the operating system Windows OS. To facilitate installation of the touch screen driver, you should read the instructions in this chapter carefully before you start installation.

Step 1   Insert the driver CD and follow the path to select "Win7\Step 6. Penmount Touch".
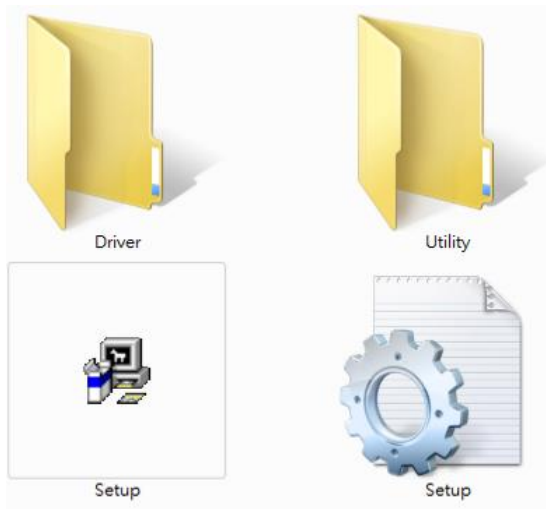
Step 2   Follow the installing procedure and press OK.

Step 3   Click Start menu and select "PenMount Utilities". Then a "PenMount Control Panel" pops out.
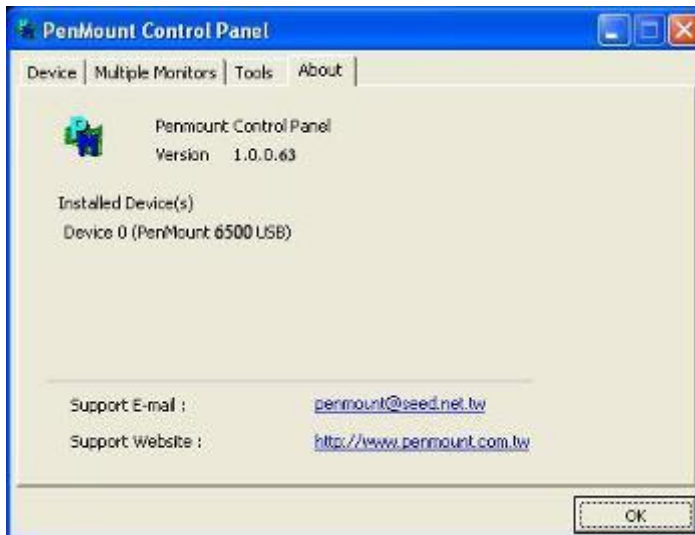
Step 4   Select the "Standard Calibrate" tab.

Step 5   Calibrations:
To adjust the display of the touch panel, click "Calibration" and follow the calibrating point to do calibration; there are five points on the screen for calibration.

Step 6   Press OK.

4.3   Configuration Center Software

This section will guide you to install the Configuration Center Software.Just follow the follow the on screen instructions step by step.Before you start, please be reminded to run the installer as administrator.
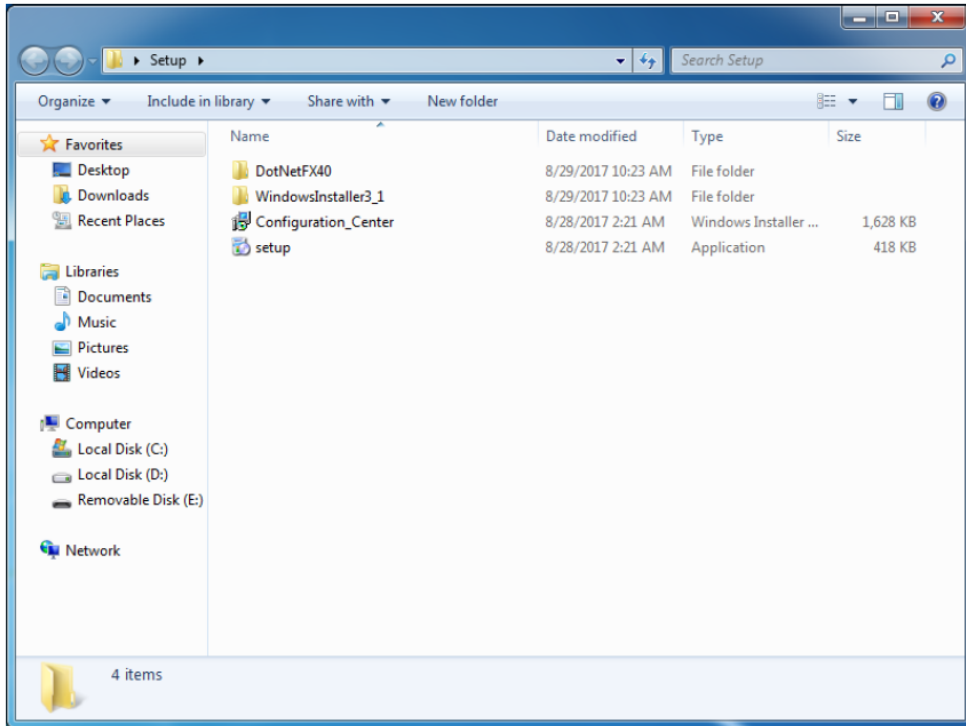
4.3.1   Started Install Configuration

Step 1   Double click"Setup.exe"and click "Next" to continue installing.
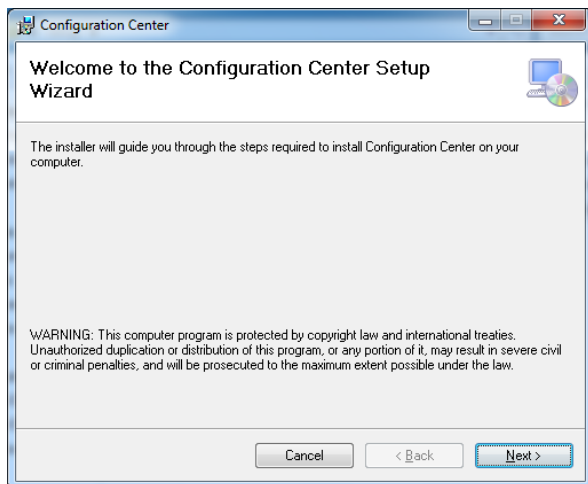
Step 2   Confirm installation and click "Next" to continue installing.
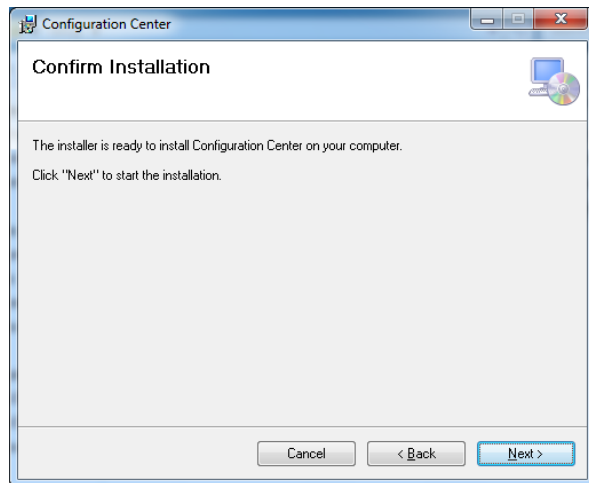
Step 3   Please wait when you see the following screen.
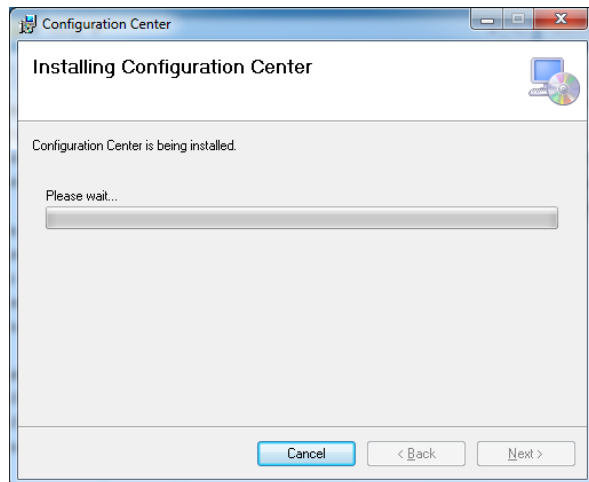
Step 4   When installation is completed, click"close" to exit.
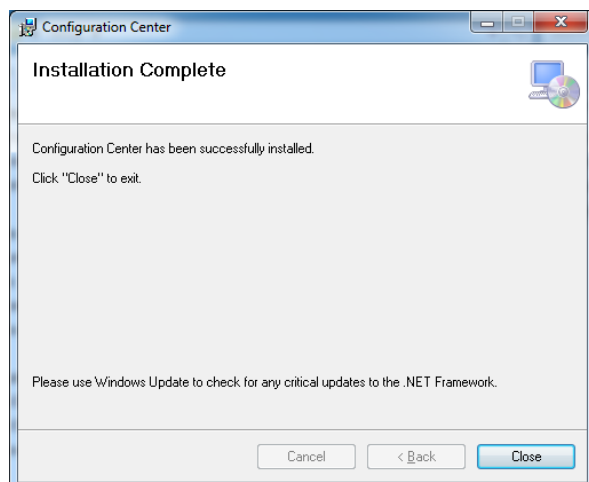
Step 5 **After installation completed, please reboot your system to activate the software.**

4.3.2   Configuration Center

Homepage
You **can double check the icon in notification area to show homepage.**
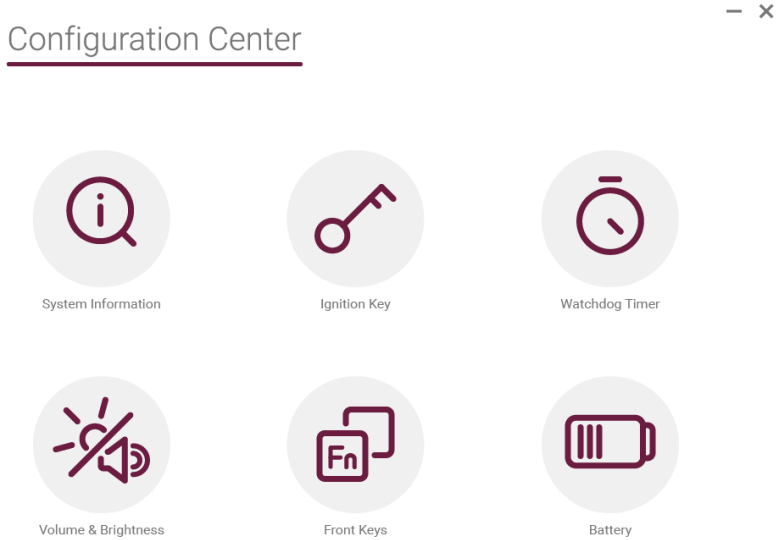
System Information:
This page provides the information about system and network interface.
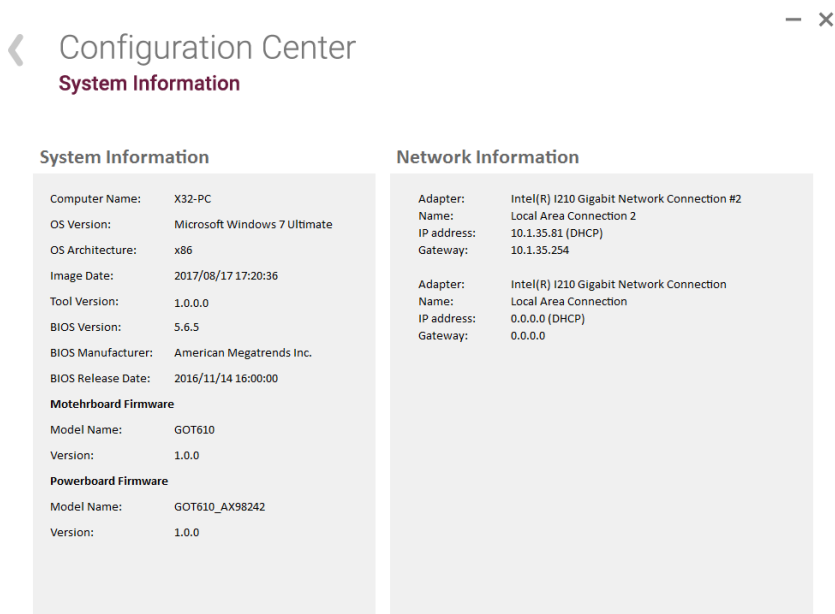
Ignition Key:

Ignition Key Function
Enable/Disable custom action when the engine is turned off.(Ignition Off)

Action
What action do you want to execute when the engine is turned off.

Timeout(Seconds)
If the action does not execute successfully in timeout seconds, the system will be shut down.(Hardware Shutdown)

Watchdog:

Configuration Center

Watchdog Timer

Watchdog

☑ Enable / Disable

Timer: 30   10~255

Mode: ⦿ Second   ○ Minute

Save

Timer
Watchdog timer Time-out value. (10~225)

Mode
Watchdog timer count mode. (second / minute)

Volume & Brightness:

Volume and Brightness
Set the system volume and brightness.

Automatic Brightness Dimming
Enable / Disable auto-dim feature.
(If you enable this feature, you will not be able to adjust the system brightness manually.)

Front Key:

Configuration Center
Front Key

Action
What action do you want to execute when front key click.
(Execute program / Custom key / Default action)

Execute Program
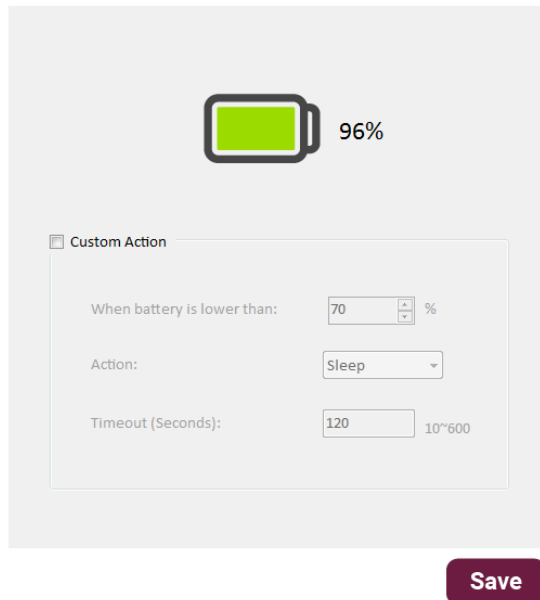Select the program you want to execute when front key click.

Custom Key
1. Click "Detect" button to start to record keys you want to simulate when front key click.
2. Click "Stop" to complete the recording.
*NOTE: Because of Windows security issue, some simulation key combinations will not be effective. ("ctrl + alt + delete", "Win + L ")

Battery:

Custom Action
Enable / Disable battery custom action.
When battery is lower than
The lower limit value of battery capacity percent.
Action
What action do you want to execute when battery is lower than lower limit.

Timeout
If the action does not execute successfully in timeout seconds, the system will be shut down.
(Hardware Shutdown)

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