GOT710S-837-R-E3845-24-110VDC

Railway 10.4" SVGA TFT LCD PANEL PC

User's Manual

USER'S MANUAL



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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.
- Disconnect the power cords from the GOT710S 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 GOT710S 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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Section 1 Introduction

This chapter contains general information and detailed specifications of the GOT710S-837. Chapter 1 includes the following sections:



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

1.1 General Description

GOT710S-837 is used to keep the train driver informed about the status of the train' s functions. Its design allows it to be deployed in environment with an extended temperature (-40°C ~ 70°C) and it also complies with the EMC, shock and vibration test requirements of European standard EN 50155 for railway applications. GOT710S-837 is equipped with 10.4" TFT ruggedized touch panel computer and all lockable connectors are perfect choice for Human Machine Interface (HMI) in railway environments. The 10.4" railway touch panel PC includes a comprehensive feature set with one CAN Bus, DIO, audio, two Ethernet ports, USB ports and RS-232/422/485.

Railway application-EN50155 Class S3 certificated

Railway power module design support 20ms interruption, EMI EN 55022 CLASS A filter, over/short current protection for its railway application.

Sunlight readable design

Its sunlight readable technology with LED tech high brightness 1000 nits color display allows the screen legible even strong sunlight.

Powerful computing: Intel® Atom Bay Trail processors

GOT710S-837 features Intel[®] Atom processors that offers reliable and stable performance and rugged environment.

1.2 Specifications

Main CPU Board

- CPU
 - Intel[®] Atom[™] E3845 1.91GHz processor onboard
- System Memory
 DDR3L 4 GB onboard
- BIOS
 - America Megatrends Inc BIOS

I/O System

- Standard I/O
 - 2 x RS-232/422/485 with isolated 1.5KV (M12, A-coded)
 - 2 x Gigabit LAN with isolated 1.5KV (M12, X-coded)
 - 2 x USB 2.0 (M12, A-coded)
 - 1 x DIO (6 input/2 output) with isolated 1.5KV (Phoenix type)
 - 1 x CAN bus with isolated 1.5KV (D-sub)
- Audio
 - 1 x Audio: Line-in, & Mic-in, Speaker-out or Line-out (D-sub)
- Expansion
 - 2 x PCIe Mini Card slots
- Storage

•

- 16 GB flash onboard
- 1 x mSATA

Power connector

■ 1 x DC for power input with isolated 1.5KV (M12, A-coded)

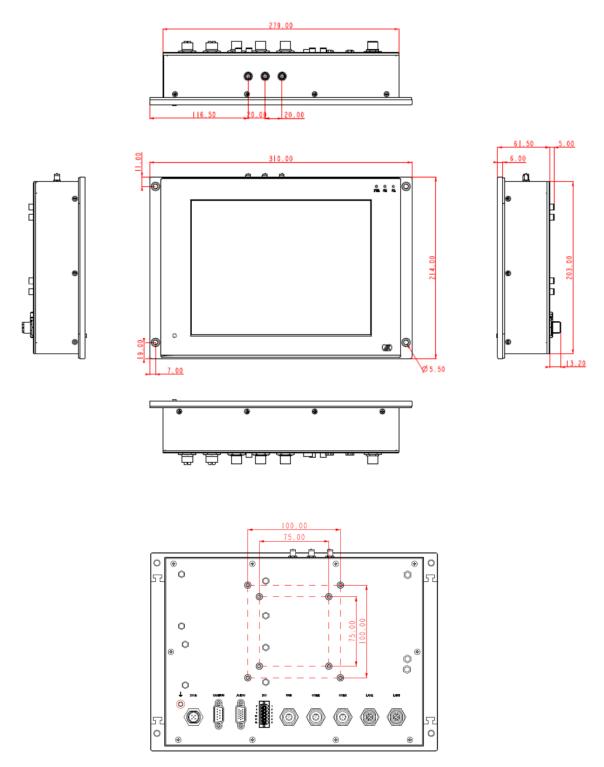
System Specification

- 10.4" SVGA(800 X 600)LCD
- 5 wired resistive Touch
- IP65, NEMA 4 rugged protection, aluminum front bezel, rest area of enclosure is IP40 rated
- Net Weight
 - 2.6 Kgs (5.72 lb)
- Dimension (Main Body Size)
 - 310 x 61.5 x 214 mm
- Operation Temperature
 - -40°C to 70°C
- Relative Humidity
 - 10% to 95% @ 40°C, Non-Condensing
- Power Input
 - 24V to 110VDC, 20ms interruption hold up (EN 50155 Class S3)

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

1.3 Dimensions and Outlines

The following diagrams show the dimensions and outlines of GOT710S-837.



1.4 I/O Outlets

Please refer to the following illustration for I/O locations of the GOT710S-837.



No	Function
1	DC for power input with isolated 1.5KV
2	CAN Bus with isolated 1.5KV
3	Audio (Line out, Line in, speaker out)
4	DIO (6 input/2 output with isolated 1.5KV)
5	USB 2.0 x 2(M12, A-coded)
6	COM 2 (RS-232/422/485 with isolated 1.5KV)
7	COM 1 (RS-232/422/485 with isolated 1.5KV)
8	LAN 2 (Gigabit LAN with isolated 1.5KV)
9	LAN 1 (Gigabit LAN with isolated 1.5KV)

1.5 Packing List

When you receive the GOT710S-837, the bundled package should contain the following items:

- GOT710S-837 unit x 1
- Phoenix Connector x 1

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

Section 2 Hardware and Installation

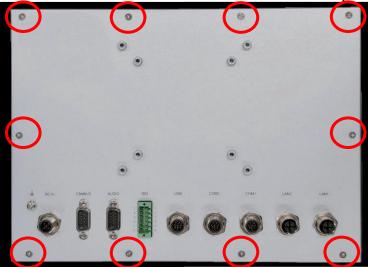
The GOT710S-837 provides rich I/O ports and flexible expansions for you to meet different demand. The chapter will show you how to install the hardware. It includes:

- Open Back Cover
- Serial Ports Interface
- USB Ports
- Ethernet
- DIO
- Audio
- CANBus Connector
- DC Power Connector
- Mini card Installation
- Hard keys on front bezel
- LED Indicators
- Auto-dimming

2.1 Open Back Cover

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

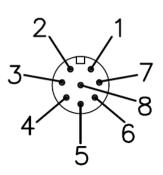
Step 1 Unscrew 10 screws on the back cover. Please refer the photo below.



2.2 Serial Ports Interface

This system supports RS-232/422/485 isolated 1.5KV on COM1~COM2 ports. The pin assignments are listed in table below. If you need to adjust these COM ports to work as RS-232/422/485, please refer to BIOS setting in section 3.5.

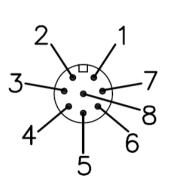
Pin	RS-232	RS-422	RS-485
1	NDCD	TX-	Data-
2	NRX	TX+	Data+
3	NTX	RX+	No use
4	NDTR	RX-	No use
5	NDSR	No use	No use
6	NRTS	No use	No use
7	NCTS	No use	No use
8	ISO1_GND	ISO1_GND	ISO1_GND



2.3 USB Ports

This system supports two USB ports. The pin assignments are listed in table below.

Pin	Definition
1	USB1_PWR
2	USB_DN1
3	USB_DP1
4	GND
5	USB2_PWR
6	USB_DN2
7	USB_DP2
8	GND



2.4 Ethernet

The GOT710S-837 is equipped with two high performance plug and play Ethernet interfaces with X-coded which are fully compliant with the IEEE 802.3 standard. Connection can be established by plugging one end of the Ethernet cable into this RJ-45 connector and the other end to a 1000/100/10-Base-T hub with isolated 1.5KV.

Pin	Definition
1	MDI 0+
2	MDI 0-
3	MDI 1+
4	MDI 1-
5	MDI 3+
6	MDI 3-
7	MDI 2-
8	MDI 2+



2.5 DIO

2.5.1 Digital I/O Specification

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

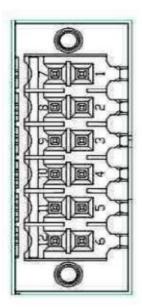
Digital Input:

Input channels: 6, sink/source 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	DIO
9	DI1
10	DI2
11	DI3
12	Isolation GND



2.5.2 Digital I/O Software Programming

- I2C to GPIO PCA9554PW GPIO Group0[5:0] is Input, Group0[7:6] is Output.
- I2C address: 0b0100100x.
- Registers:

Register 0: Input Group0 register.

Table 4. Register 0 - Input Port register bit description

Bit	Symbol	Access	Value	Description
7	17	read only	х	determined by externally applied logic level
6	16	read only	X	
5	15	read only	Х	
4	14	read only	х	
3	13	read only	х	
2	12	read only	х	
1	11	read only	Х	
0	10	read only	Х	

Register 2: Output Group0 register.

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

Bit	Symbol	Access	Value	Description
7	07	R	1*	reflects outgoing logic levels of pins defined a
6	O6	R	1*	outputs by Register 3
5	O5	R	1*	
4	04	R	1*	
3	O3	R	1*	
2	02	R	1*	
1	01	R	1*	
0	00	R	1*	

2.5.3 Digital Input Wiring

DRY contact

Logic level 0: close to ground

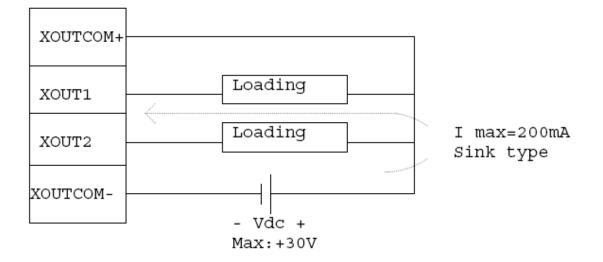
Logic level 1: open

EXT_POWE	R SW1
XIN1	
XIN2	SW2
XIN3	SW3
	SW4
XIN4	
XIN5	
XIN6	<u>`</u>
DIO_GND	

WET contact Logic level 1: +/-3VDC max. Logic level 0: +/- 10VDC min. to +/-30VDC max

	+ Vdc - Max:+30V	
EXT_POWE	R	
XIN1		SW1
		SW2
XIN2		SW3
XIN3		SW4
XIN4		SW5
XIN <mark>5</mark>		_
XIN6	<u>`</u>	SW6
DIO_GND		

2.5.4 Digital Output Wiring



2.6 Audio

This system supports one Audio (Line out, Line in, speaker out) with isolated 1.5KV. The pin assignments are listed in table below.

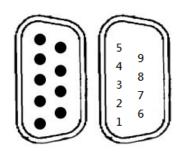
Pin	Definition
1	SPEK_OUTA+
2	SPEK_OUTA-
3	AUDIO_GND
4	AUDIO_OUT_L
5	AUDIO_OUT_R
6	NA
7	FRONT-JD
8	AUDIO_GND
9	AUDIO_LIN_IN_L
10	AUDIO_LIN_IN_R
11	BUZZER+
12	BUZZER-
13	MIC-JD
14	MIC_IN
15	AUDIO_GND

Note: Speaker-out and line-out are shared on the same connector but it's either one functionality, line-out is the highest priority, if pin#7 is connected and detected the signal of line-out, signal is switching to line-out.

2.7 CANBUS Connector

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



2.8 DC Power Connector

The system supports one DC for power input with isolated 1.5KV. The pin assignments are listed in table below.

Pin	Definition	
1	PWR_V+	
2	PWR_V+	
3	PWR_V-	
4	PWR_V-	
5	ACC	

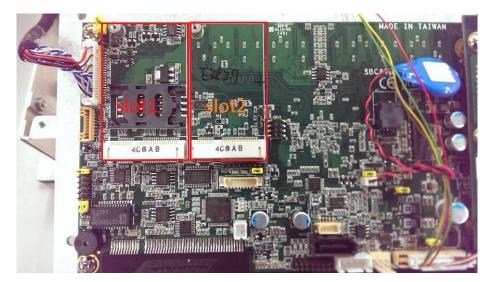


Note 1 : If the testing environment is not able to provide ACC, please short the V+ & ACC signal pin of the cable.

2.9 Mini Card Installation

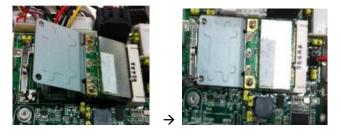
2.9.1 Wireless LAN Card Installation

The GOT710S-837 provides two Mini card slots for user to install wireless LAN cards. You can choose either slot 1 or slot 2 to install the wireless LAN card and refer to the following.

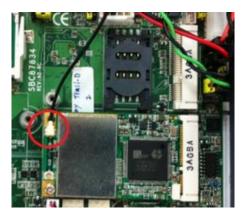


Step 1 Open the back cover and find out the mini-card slot on main board.

Step 2 Insert the wireless LAN card to the slot. Screw it firmly on the slot.

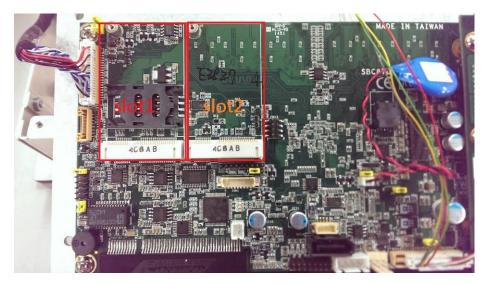


Step 3 There are two connectors on wireless LAN card. One is MAIN, and the other is auxiliary. Connect antenna cable to MAIN connector on wireless LAN card.



2.9.2 mSATA Card Installation

The GOT710S-837 provides one Mini card slot for user to install mSATA. Please choose the slot 2 when installing the mSATA card and refer to the following instructions and illustration:



Step 1 Open the back cover and find out the mini-card slot on main board.

Step 2 Insert the mSATA card to the slot 2. Screw it firmly on the slot.

2.10 Hard keys on front bezel (Optional)

Hard Keys on front bezel:

- UIC 612-01 compliant •
- Keys for pre-defined functions •
- Key backlighting: dimmable •

Front panel hotkeys define

SYMBOL	FUNCTION	KEY CODE ASCII
Ó	On / Off	alt / ctrl / A
Flag	Open dialog: Change Language	alt / ctrl / B
i	information	alt / ctrl / C
List	'fault overview' display mask	alt / ctrl / D
Tool	Display remedies for a fault	alt / ctrl / J
Blank		alt / ctrl / E
Blank		alt / ctrl / F
۰	Brightness control	alt / ctrl / G
0	Day / Night mode	alt / ctrl / H
⇔	Change display	alt / ctrl / I
С	Up to higher level of mask hierachy	Backspace
⊲	Cursor	Cursor left
⊳	Cursor	Cursor right
Δ	Cursor	Cursor up
∇	Cursor	Cursor down
E	Enter	Enter
0	0	0
1	1	1
2 ABC	2	2
3 DEF	3	3
4 GHI	4	4
5 JKL	5	5
6 MNO	6	6
7 PQRS	7	7
8 TUV	8	8
9 WXYZ	9	9
F1	Function key	F1
F2	Function key	F2
F3	Function key	F3
F4	Function key	F4
F5	Function key	F5
F6	Function key	F6

NOTE Keeping pressing one button after 0.8 seconds, the function will be triggered 4 times per seconds repeatedly.

2.11 LED Indicators

LED lights make sure that whether the MCU is working properly and facilitating to debug in the phrase of research and development. It is not necessarily the actual system mounting LED lights.

The following table summarizes the LED indication of the device:

Status	PWR (Green)	S2 (Yellow)	S1 (Red)
Power up	ON	ON	ON
Device working properly	ON	OFF	OFF
Over-temperature warning	ON	Blink	OFF
Key pressed	Flash	Х	Х

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%

Section 3 **AMI BIOS Setup Utility**

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

3.1 Starting

To enter the setup screens, follow the steps below:

- Turn on the computer and press <F2> or during the Power On Self Test (POST) to 1. enter BIOS setup, otherwise, POST will continue with its test routines.
- After you press the key, the main BIOS setup menu displays. You can access the 2. other setup screens from the main BIOS setup menu, such as the Advanced and Chipset menus.



NOTE If your computer cannot boot after making and saving system changes with BIOS setup, you can restore BIOS optimal defaults by setting CLRCMOS1 (see section 2.3.1).

If you wish to enter BIOS setup after POST, 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

Menu Bar	Description	
Main	To set up the system time/date information.	
Advanced	To set up the advanced BIOS features.	
H/W Monitor	To display current hardware status.	
Boot	To set up the default system device to locate and load the operating system.	
Security	To set up the security features.	
Exit	To exit the current screen or the BIOS setup utility.	

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

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 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.</arrow>
+– Plus/Minus	The Plus and Minus <arrow> keys allow you to change the field value of a particular setup item.</arrow>
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.</enter></enter>
F1	The <f1> key allows you to display the General Help screen.</f1>
F7	Discard changes.
F9	The <f9> key allows you to load optimal default values for all the settings.</f9>
F10	The <f10> key allows you to save any changes you have made and exit Setup. Press the <f10> key to save your changes.</f10></f10>
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.</esc></esc>

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.

Project Version Build Date and Time87837 D1.01 09/30/2021Set the Date. Use Tab to switch between Date elements.Memory Information Total Memory4096 MB (LPDDR3)Set the Date. Use Tab to switch between Date elements.TXE Information Sec RC Version00.05.00.00 01.01.00.1089*** Select Screen 11: Select Item Enter: Select Tem Enter: Select Tem <b< th=""><th>Aptio Setup Utility – Main Advanced Chipset Security</th><th>Copyright (C) 2013 American Boot Save & Exit</th><th>Megatrends, Inc.</th></b<>	Aptio Setup Utility – Main Advanced Chipset Security	Copyright (C) 2013 American Boot Save & Exit	Megatrends, Inc.
Total Memory4096 MB (LPDDR3)TXE Information Sec RC Version00.05.00.00 01.01.00.1089System Date System Time[Sat 02/15/2020] [21:20:08]Access LevelAdministrator#: Select Screen tl: Select Item Enter: Select 			
Sec RC Version 00.05.00.00 TXE FW Version 01.01.00.1089 System Date [Sat 02/15/2020] System Time [21:20:08] Access Level Administrator #: Select Screen 14: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit	-	4096 MB (LPDDR3)	
System Time [21:20:08] Access Level Administrator #: Select Screen \$\$1: Select Item Enter: Select \$\$7-: Change Opt. \$\$1: General Help \$\$2: Previous Values \$\$3: Optimized Defaults \$\$4: Save & Exit	Sec RC Version		
<pre>\$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$</pre>	-		
	Access Level	Administrator	<pre>↑↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit</pre>

BIOS Information

Display the auto-detected BIOS information.

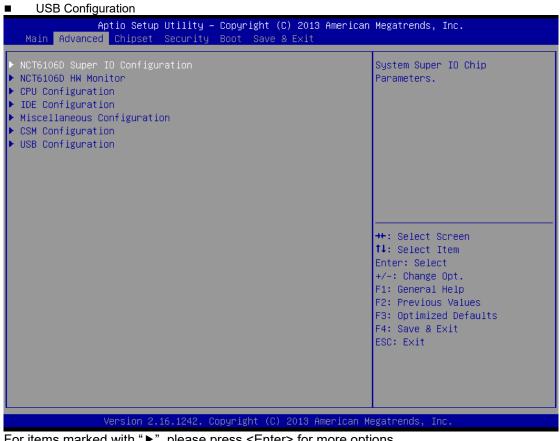
System Date/Time

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 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:

- NCT6106D Super IO Configuration
- NCT6106D H/W Monitor
- **CPU** Configuration
- **IDE** Configuration
- **Miscellaneous Configuration**
- **CSM** Configuration



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.

Aptio Setup Utility Advanced	– Copyright (C) 2013 Americar	n Megatrends, Inc.
NCT6106D Super ID Configuration		Set Parameters of Serial Port
Super IO Chip > Serial Port 1 Configuration > Serial Port 2 Configuration	NCT6106D	1 (COMA) ++: Select Screen 1: 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) 2013American №	Megatrends, Inc.

Serial Port 1-2 configuration

1. Serial port:

This option used to enable or disable the serial port.

2. Device Setting:

This item specifies the base I/O port address and Interrupt Request address of serial port. The port 1 Optimal setting is *3F8/IRQ4*. The port 2 Optimal setting is *2F8/IRQ3*

3. Serial type: This option used to select RS232/422/485 function.

Aptio Setup Utility - Advanced	Copyright (C) 2013 American	Megatrends, Inc.
Serial Port 1 Configuration		Enable or Disable Serial Port (COM)
Serial Port Device Settings	[Enabled] IO=3F8h; IRQ=4;	(con)
COM Port Type	[RS232]	
		→+: Select Screen ↑↓: Select Item
		Enter: Select +/−: Change Opt.
		F1: General Help F2: Previous Values F3: Optimized Defaults
		F4: Save & Exit ESC: Exit
	nuright (P) 2013 American M	

• NCT6106D H/W Monitor

This screen shows the Hardware Health Configuration.

Aptio Advanced	Setup Utility – Copy	right (C)	2013 American	Megatrends,	Inc.
Pc Health Status					
System temperature CPU temperature VCORE MEMORY +12V +5V +3.3V	: +: : +: : + : + : +:	39.0 C 37.0 C 0.888 V 1.332 V 11.968 V 5.096 V 3.264 V		++: Select S †4: Select I Enter: Select +/-: Change F1: General F2: Previous F3: Optimize F4: Save & E ESC: Exit	tem t Opt. Help Values d Defaults
Versi	on 2.16.1242. Copyri:	ght (C) 20	13 American Me	egatrends, Ir	ic.

• CPU Configuration

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

Aptio Setup Utility - Advanced	Copyright (C) 2013 American	Megatrends, Inc.
CPU Configuration		Socket specific CPU Information
▶ Socket O CPU Information		
CPU Speed 64-bit	1918 MHz Supported	<pre>++: Select Screen 1↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values</pre>
Version 2 16 1242 - C	opyright (C) 2013 American M	F3: Optimized Defaults F4: Save & Exit ESC: Exit

AMI BIOS Setup Utility

• IDE Configuration

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

Advance		Copyright (C) 2013 American	Megatrends, Inc.
IDE Configurat	tion		Select IDE / AHCI
SATA Mode Serial-ATA Por	rt o	[AHCI Mode] [Enabled]	
Serial—ATA Por	rt 1	[Enabled]	
SATA PortO 16GB NANDrive	(16.0GB)		
SATA Port1 AXIOMTEK Corp.	. (32.0GB)		
			<pre>++: Select Screen fl: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit</pre>
	Version 2.16.1242. Co	opyright (C) 2013 American M	egatrends, Inc.

• SATA Mode

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



• Miscellaneous Configuration

Aptio Setup Utility - Copyright (C) 2013 American Megatrends, Inc. Advanced Miscellaneous Configuration OS Selection OS Selection [Windows 8.X]	
OS Selection Windows 8.X Android Windows 7 ++: Select Screen 11: 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. 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 14: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit	

• USB Configuration

Display USB Device	Configuration			
Aptio Advanced	Setup Utility –	Copyright	(C) 2013 American	Megatrends, Inc.
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: 1 Drive, 2 Ke	yboards, 2 Hubs			are emulated as 'CDROM', drives with no media will be emulated according to a drive type.
Mass Storage Device	s:			
JetFlashTranscend 3	2GB 1100	[Auto]		
				↔: Select Screen †∔: Select Item
				Enter: Select
				+/−: Change Opt.
				F1: General Help
				F2: Previous Values
				F3: Optimized Defaults
				F4: Save & Exit ESC: Exit
				ESU: EXIL
Vens	ion 2 16 1242 Co	nuriøht (P) 2013 American Me	egatrends Inc
	1011 2.10.1242. 00	baringur (c	7 2010 miler realt rit	sparrenus, inc.

3.6 Chipset Menu

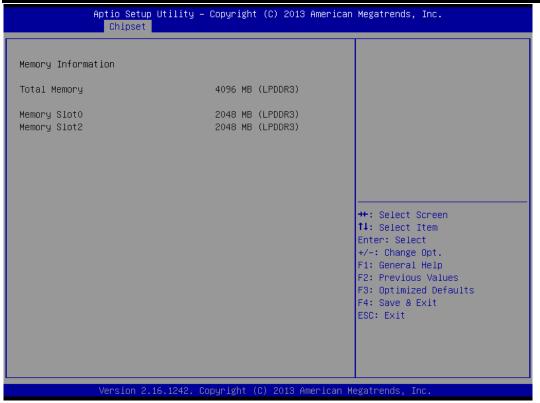
In this section, it will display the available devices on your system for you to configure the boot settings and the boot priority.



North Bridge

This screen shows the North Bridge memory information.

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South Bridge		
Aptio Setup Utility - Chipset	- Copyright (C) 2013 American	Megatrends, Inc.
▶ USB Configuration		USB Configuration Settings
		++: Select Screen tl: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
Version 2.16.1242. C	Copyright (C) 2013 American Mo	egatrends, Inc.
USB Configuration		
Only support USB2.0(EHCI). Aptio Setup Utility - Chipset	- Copyright (C) 2013 American	Megatrends, Inc.
USB Configuration		
USB 2.0(EHCI) Support	[Enabled]	<pre>++: Select Screen 14: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit</pre>
Version 2 16 1242 (Copyright (C) 2013 American Mo	egatrends. Inc.

3.7 Security Menu

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

Aptio Setup Utilit Main Advanced Chipset Securi	y – Copyright (C) 2013 American ty Boot Save & Exit	Megatrends, Inc.
Password Description		Set Administrator Password
If ONLY the Administrator's pass then this only limits access to only asked for when entering Set If ONLY the User's password is s is a power on password and must boot or enter Setup. In Setup th have Administrator rights. The password length must be in the following range: Minimum length	Setup and is up. et, then this be entered to e User will 3	
Maximum length	20	++: Select Screen ↑↓: Select Item
Administrator Password User Password		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 M	egatrends, Inc.

3.8 Boot Menu

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

Aptio Setup Utility – Main Advanced Chipset Security	Copyright (C) 2013 American Boot Save & Exit	Megatrends, Inc.
Boot Configuration Setup Prompt Timeout Bootup NumLock State	<mark>1</mark> [0n]	Number of seconds to wait for setup activation key. 65535(0xFFFF) means indefinite waiting.
Quiet Boot Fast Boot	[Disabled] [Disabled]	watting.
Boot Option Priorities Boot Option #1 Boot Option #2 Boot Option #3 Boot Option #4 Hard Drive BBS Priorities	[UEFI: Built-in EFI] [UEFI: JetFlashTrans] [Windows Boot Manage] [JetFlashTranscend 3]	<pre>++: Select Screen fl: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit</pre>
Version 2.16.1242. Co	pyright (C) 2013 American M	egatrends. Inc.

Setup Prompt Timeout

Set the Timeout for wait press key to enter Setup Menu

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 disable

Legacy Pxe OPROM

Use this item to enable or disable the Preboot Execution Environment. The default setting is disable.

Boot Option Priorities

Specifies the overall boot order from the available devices.

3.9 Exit Menu

rends, Inc.
system setup after saving nanges.
elect Screen elect Item : Select Change Opt.
eneral Help revious Values otimized Defaults
ave & Exit Exit
nds, Inc.

NOTE Load default before updating g TXE firmware and restart.