GOT610-837

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

User's Manual

USER'S MANUAL



www.axiomtek.com

Disclaimers

This manual has been carefully checked and believed to contain accurate information. Axiomtek Co., Ltd. assumes no responsibility for any infringements of patents or rights of any third party, and any liability arising from such use.

Axiomtek does not warrant or assume any legal liability or responsibility for the accuracy, completeness or usefulness of any information in this document. Axiomtek does not make any commitment to update the information in this manual.

Axiomtek reserves the right to change or revise this document and/or product at any time without notice.

No part of this document may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of Axiomtek Co., Ltd.

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.

©Copyright 2020 Axiomtek Co., Ltd. All Rights Reserved May 2020, Version A3 Printed in Taiwan

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.

Trademark Acknowledgments

Axiomtek is a trademark of Axiomtek Co., Ltd.

Windows[®] is a trademark of Microsoft Corporation.

IBM, PC/AT, PS/2, VGA are trademarks of International Business Machines Corporation.

Intel[®] and Pentium[®] are trademarks of Intel Corporation.

AMI is trademark of American Megatrend Inc.

Other brand names and trademarks are the properties and registered brands of their respective owners.

Table of Contents

Discl	aimers		ii
Safet	y Precau	utions	iii
Cha	pter 1	Introduction	1
1.1	Genera	al Description	1
1.2	Specifi	cations	2
	1.2.1	Main CPU Board	2
	1.2.2	I/O System	2
	1.2.3	System Specifications	3
1.3	Dimens	sions	4
1.4	I/O Out	lets	5
1.5	Packing	g List	6
Cha	pter 2	Hardware and Installation	7
2.1	Open c	over	8
2.2	Vin 18-	60VDC	9
2.3	CANBu	IS	9
2.4	COM 1	I (Serial Port Connector)	10
2.5	USB 2.0	0	10
2.6	LAN		
2.7	DIO		12
	2.7.1	Digital I/O Specification	
	2.7.2	Digital I/O Software Programming	13
	2.7.3	Digital Input Wiring	14
	2.7.4	Digital Output Wiring	15
2.8	Mini ca	rd Installation	16
	2.8.1	WiFi/3G Module Installation	
2.0	2.8.2	mSATA Card Installation	
2.9	System		
2.10	Hard Ke		
	2.10.1	API Programming Library	
2 11	2.10.2		
2.11		uitalui S	20
2.12	Auto-di		20
Cha	pter 3	AMI BIOS Setup Utility	21
3.1	Starting	g	21

3.2	Menu Bar	22
3.3	Navigation Keys	22
3.4	Main Menu	23
3.5	Advanced Menu	24
3.6	Chipset Menu	31
3.7	Security Menu	33
3.8	Boot Menu	34
3.9	Exit Menu	35

4.1	Syste	m	37
4.2	Touch	Screen	37
4.3	Config	guration Center Software	40
	4.3.1	Started Install Configuration	40
	4.3.2	Configuration Center	

This page is intentionally left blank.

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[™] 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



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

- NOTE
- 2. The GOT610-837 has been designed particularly for operation in harsh environments; please choose a wide-temperature SSD.
- NOTE
- 3. It is recommended to use a wide-temperature SSD if the operation temperature is higher than 45 C.

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	Switch for power 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:

C	1 12 13 Top view	
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.



• Open back cover

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



2.2 Vin 18-60VDC

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

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

1 2 3 4

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		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	DIO
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.

Bit	Symbol	Access	Value	Description
7	17	read only	x	determined by externally applied logic leve
6	16	read only	X	
5	15	read only	Х	
4	14	read only	X	
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

Bit	Symbol	Access	Value	Description
7	07	R	1*	reflects outgoing logic levels of pins defined as
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*	

2.7.3 Digital Input Wiring

DRY contact

Logic level 0: close to ground

Logic level 1: open

EXT_POWE	R	SW1
XIN1		CWO
XIN2		SW2
XIN3		SW3
XIN4		SW4
XIN5	``	SW5
XIN6		SWO
DIO_GND		

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
	★CAN BUS 120 Ω terminal Enable	Short 1-2
JP1	CAN BUS 120 Ω terminal Disable	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.

網路 → 10.1.0.48 → public → Micah → GOT610	-837 → Driver → Lib	prary v1.2.1	▼ C 搜尋 Libr ク
		🗖 🖌 🖻	📋 🗙 🗸 🖃 🧼
名稱	修改日期	類型	大小
 GOT710_API_dll GOT710_API_V1_2 ☐ ReleaseNote 	2016/1/8 下午 03 2016/3/25 下午 0 2015/9/22 上午 1	應用程式擴充 Adobe Acrobat 文字文件	493 KB 131 KB 1 KB

- 1. GOT710_API.dll: AXIOMTEK API DLL file
- 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.





DotNetFX40

WindowsInstalle Co r3_1



Hardware and Installation

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.

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

The following table summarizes the LED indications of the device:

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 during the Power On Self Test (POST) to enter BIOS setup, otherwise POST will continue with its test routines.
- 2. After you press the 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

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.		

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

Use $\langle \leftarrow \rangle$ key or $\langle \rightarrow \rangle$ 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.

Navigation Keys 3.3

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.

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 \$ 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>	

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

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 – Main Advanced Chipset Security	Copyright (C) 2013 American Boot Save & Exit	Megatrends, Inc.
Project Version Build Date and Time	87837 XC006 04/20/2018	Set the Date. Use Tab to switch between Date elements.
Memory Information Total Memory	4096 MB (LPDDR3)	
TXE Information Sec RC Version TXE FW Version	00.05.00.00 01.01.00.1089	
System Date System Time	[Thu 06/06/2019] [14:48:19]	
Access Level	Administrator	<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. C	opyright (C) 2013 American M	egatrends. 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



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 A	merican Megatrends, Inc.
NCT6106D Super IO Configuration		Set Parameters of Serial Port
Super IO Chip ▶ Serial Port 1 Configuration	NCT6106D	
		<pre>++: Select Screen f1: 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 Ame	rican Megatrends, Inc.

NCT6106D H/W Monitor

This screen shows the hardware health configurations.

Aptio Setup Ut: Advanced	lity – Copyright (C) 2013 Ame.	erican Megatrends, Inc.
Pc Health Status		
System temperature CPU temperature VCORE MEMORY +12V +5V +3.3V	: +33.5 C : +35.0 C : +0.848 V : +1.332 V : +11.968 V : +5.096 V : +3.280 V	++: Select Screen 11: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
Version 2.16.1	.242. Copyright (C) 2013 Ameri	ican Megatrends, Inc.

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
Þ	Socket O CPU Information		
	CPU Speed 64-bit	1918 MHz Supported	<pre>++: Select Screen tl: 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	oyright (C) 2013 American Mu	egatrends, Inc.

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 Ut Advanced	ility – Copyright (C) 2013 Am∈	erican Megatrends, Inc.
IDE Configuration		Select IDE / AHCI
SATA Mode SATAO storage selection: Serial-ATA Port O	[AHCI Mode] [mSATA] [Enabled]	
Serial-ATA Port 1	[Enabled]	
SATA PortO 16GB NANDrive (16.0GB)		
SATA Port1 Not Present		
		<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 Ameri	ican Megatrends. Inc.

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

Advanced	Aptio Setup Utility – (Copyright (C) 2013 American	Megatrends, Inc.
Miscellaneous C OS Selection	Configuration	[Windows 8.X]	OS Selection ++: 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. Cop	oyright (C) 2013 American M	egatrends, Inc.

CSM Configuration

Enable is Legacy mode; Disable is UEFI mode.



USB Configuration

Display USB device configurations.

Aptio Setup Utility - Advanced	Copyright (C) 2013 American	Megatrends, Inc.
USB Configuration		Mass storage device emulation
USB Module Version	8.11.01	devices according to their media format. Optical drives
USB Devices: 1 Drive, 2 Keyboards, 1 Mouse,	4 Hubs	are emulated as 'CDROM', drives with no media will be emulated according to a drive type.
Mass Storage Devices:		
UFD 2.0 Silicon–Power4G PMAP		
		<pre>++: Select Screen tl: 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.

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.



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 - Chipset	Copyright	(C) 2013 American	Megatrends, Inc.
Memory Inform	nation			
Total Memory		4096 MB	(LPDDR3)	
Memory Slot0 Memory Slot2		2048 MB 2048 MB	(LPDDR3) (LPDDR3)	
				<pre>++: Select Screen t1: 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. C	opyright (C) 2013 American M	egatrends, Inc.

South Bridge

 > 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 	Aptio Setup Utility – Copyright (C) 2013 Ameri Chipset	ican Megatrends, Inc.
++: 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	USB Configuration Settings
		<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>

USB Configuration Only supports USB2.0 (EHCI).

	Aptio Setup Utility - Chipset	Copyright (C) 2013 American	Megatrends, Inc.
USB Configura	tion		
USB 2.0(EHCI)	Support	[Enabled]	
			the Salact Sensen
			<pre>th: Select Screen th: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults</pre>
			F4: Save & Exit ESC: Exit
	Version 2.16.1242. Co	pyright (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 L Main Advanced Chipset S	Htility – Copyright (C) 2013 American Security Boot Save & Exit	n Megatrends, Inc.
Password Description		Set Administrator Password
If ONLY the Administrator's then this only limits access only asked for when enterin If ONLY the User's password is a power on password and boot or enter Setup. In Set have Administrator rights. The password length must be in the following range: Minimum length	s password is set, as to Setup and is ng Setup. I is set, then this must be entered to sup the User will e 3	
Maximum length Administrator Password User Password	20	<pre>++: Select Screen 11: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit</pre>

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 Uti Main Advanced Chipset Sec	lity – Copyright (C) 2013 Americar urity <mark>Boot</mark> Save & Exit) Megatrends, Inc.
Boot Configuration Setup Prompt Timeout Bootup NumLock State Quiet Boot Fast Boot	1 [On] [Disabled] [Disabled]	Number of seconds to wait for setup activation key. 65535(0xFFFF) means indefinite waiting.
Boot Option Priorities Boot Option #1 Boot Option #2 Boot Option #3 Hard Drive BBS Priorities	[UEFI: UFD 2.0 Silic] [P0: 16GB NANDrive] [UEFI: Built-in EFI]	<pre>++: Select Screen 11: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit</pre>
Vension 2 16 1	242 Conuright (C) 2013 American M	legatrends Inc.

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

Aptio Setup Utility – Copyright (C) 2013 American Main Advanced Chipset Security Boot <mark>Save & Exit</mark>	Megatrends, Inc.
Save Changes and Exit Discard Changes and Reset Discard Changes and Reset Save Options Save Changes Discard Changes Restore Defaults Save as User Defaults Restore User Defaults	Exit system setup after saving the changes. ++: Select Screen fl: 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 M	egatrends, Inc.

NOTE Load default before updating g TXE firmware and restart.

This page is intentionally left blank.

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.



Calibrate Setting Edge Compensation About
Calibrate Setting Edge Compensation About
Calibrate Setting Edge Compensation About

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.

1	
	Touch the red square.



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.

					~
💽 🕞 - 🕌 🕨 Setup 🕨		▼ 4 9	Search Setup		٩
Organize 👻 Include in library 🔻	Share with 🔻 New folder		8==	- 🗔	0
★ Favorites Name ■ Desktop ● Doth ● Downloads ● Winc ● Recent Places ● Conf ● Documents ● Music ● Pictures ● Videos ● Local Disk (C:) ● Local Disk (C:) ● Removable Disk (E:) ● Network	vetFX40 dowsInstaller3_1 figuration_Center p	Date modified 8/29/2017 10:23 AM 8/29/2017 10:23 AM 8/28/2017 2:21 AM 8/28/2017 2:21 AM	Type File folder File folder Windows Installer Application	1,628 KB 418 KB	
4 items					

4.3.1 Started Install Configuration

Step 1 Double click"Setup.exe" and click "Next" to continue installing.

🖞 Configuration Center	
Welcome to the Configuration Center Setup Wizard	
The installer will guide you through the steps required to install Configuration Center on you computer.	AT
WARNING: This computer program is protected by copyright law and international treaties Unauthorized duplication or distribution of this program, or any portion of it, may result in se or criminal penalties, and will be prosecuted to the maximum extent possible under the law	vere civil
Cancel < Back	lext >

Step 2 Confirm installation and click "Next" to continue installing.



Step 3 Please wait when you see the following screen.

岁 Configuration Center	X
Installing Configuration Center	
Configuration Center is being installed.	
Please wait	
Cancel < Back	k <u>N</u> ext >

Step 4 When installation is completed, click"close" to exit.

1	Configuration Center
	Installation Complete
	Configuration Center has been successfully installed. Click "Close" to exit.
	Please use Windows Update to check for any critical updates to the .NET Framework.

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.

<	Configu System Info	uration Center ormation			_	×
	System Inform	ation	Network In	formation		
	Computer Name: OS Version: OS Architecture: Image Date: Tool Version: BIOS Version: BIOS Release Date: Motehrboard Firmwar Model Name: Version: Powerboard Firmwar Model Name: Version:	X32-PC Microsoft Windows 7 Ultimate x86 2017/08/17 17:20:36 1.0.0.0 5.6.5 American Megatrends Inc. 2016/11/14 16:00:00 re GOT610 1.0.0 e GOT610_AX98242 1.0.0	Adapter: Name: IP address: Gateway: Adapter: Name: IP address: Gateway:	Intel(R) 1210 Gigabit Network Connection #2 Local Area Connection 2 10.1.35.81 (DHCP) 10.1.35.254 Intel(R) 1210 Gigabit Network Connection Local Area Connection 0.0.0.0 (DHCP) 0.0.0.0		

 $- \times$

Ignition Key:

<

Configuration Center gnition Key
Ignition Off
Ignition Key Function If this feature is enabled, the following action will be invoked when the engine is turned off.
O No Action O Shutdown O Sleep O Hibernate O No Action
Timeout (Seconds): 120 10~600
Save

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)

 $- \times$

 $- \times$

Volume & Brightness:

Configuration Center

Volume and Brightness	Automatic Brightness Dimming
Volume	Enable automatic birghtness control
	O Day Mode In Night Mode
Brightness	
0 100	
	Save

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 © Execute program © Custom key	Default action
Execute program	
N/A Custom Key	Browse
Click "detect" button to start	X Detect

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 ")

×

 $- \times$

Battery:

<

Sates Bates Configuration Centes Bates

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)

Drivers and Installation

This page is intentionally left blank.