

QBOX-1700

0.6-Liter Box PC with Intel® Atom™ Bay Trail Dual core E3825 Processor

User's Guide



Content

Content.....	2
Figures & Tables.....	3
Safety Instructions.....	4
Before You Begin	4
When Working Inside a Computer	5
Preventing Electrostatic Discharge	5
Instructions for Lithium Battery	6
Voltage Ratings.....	6
Preface.....	7
How to Use This Guide	7
Unpacking.....	7
Regulatory Compliance Statements.....	7
Maintaining Your Computer.....	8
Chapter 1 Introduction	11
Overview.....	11
Product Specifications	12
System tour.....	13
Mechanical Dimensions	15
Chapter 2 Getting Started	16
Setting up your PC.....	16
Mounting your PC to a monitor	20
Chapter 3 AMI BIOS Setup.....	21
Overview.....	21
Main Menu	22
Advanced Menu.....	23
Boot Menu	32
Security Menu.....	33
Save & Exit Menu	34
Chapter 4 Driver Installation	36

Figures & Tables

Figure 1 Front Panel	13
Figure 2 Rear Panel.....	14
Figure 3 Mechanical Dimensions	15
Figure 4 VGA/ HDMI	16
Figure 5 Connecting USB mouse & keyboard.....	17
Figure 6 RJ45 / RS-232 connector.....	18
Figure 7 Turning on the system	19
Figure 10 VESA mounting (1)	20
Figure 11 VESA mounting (2).....	20
Table 1 QBOX-1700 product specifications	12
Table 2 BIOS Main Menu	22
Table 3 Advanced Menu.....	23
Table 4 Advanced Menu – Display Configuration.....	24
Table 5 Advanced Menu – Super IO Configuration	25
Table 6 Advanced Menu – Super IO Configuration – Serial Port 1 Configuration	25
Table 7 Advanced Menu –CPU Chipset Configuration.....	26
Table 8 Advanced Menu –SATA Configuration.....	27
Table 9 Advanced Menu –USB Configuration	28
Table 10 Advanced Menu –TPM Configuration	29
Table 11 Advanced Menu –H/W Monitor	30
Table 12 Power Management Configuration	31
Table 13 Boot Menu	32
Table 14 Security Menu	33
Table 15 Save & Exit Menu	34

Safety Instructions

■ Before You Begin

Before handling the product, read the instructions and safety guidelines on the following pages to prevent damage to the product and to ensure your own personal safety. Refer to the “Advisories” section in the Preface for advisory conventions used in this user’s guide, including the distinction between Warnings, Cautions, Important Notes, and Notes.

- Always use caution when handling/operating a computer. Only qualified, experienced, authorized electronics service personnel should access the interior of a computer. The power supplies produce high voltages and energy hazards, which can cause bodily harm.
- Use extreme caution when installing or removing components. Refer to the installation instructions in this user’s guide for precautions and procedures. If you have any questions, please contact our Post-Sales Technical Support.
- Access can only be gained by service persons or by users who have been instructed about the reasons for the restrictions applied to the location and about any precautions that shall be taken; and access is through the use of a tool or lock and key, or other means of security, and is controlled by authority responsible for the location.

WARNING



High voltages are present inside the chassis when the unit’s power cord is plugged into an electrical outlet. Turn off system power, turn off the power supply, and then disconnect the power cord from its source before removing the chassis cover. Turning off the system power switch does not remove power to components.

■ When Working Inside a Computer

Before taking covers off a computer, perform the following steps:

1. Turn off the computer and any peripherals.
2. Disconnect the computer and peripherals from their power sources or subsystems to prevent electric shock or system board damage. This does not apply when hot swapping parts.
3. Follow the guidelines provided in “Preventing Electrostatic Discharge” on the following page.
4. Disconnect any telephone or telecommunications lines from the computer.

In addition, take note of these safety guidelines when appropriate:

- To help avoid possible damage to system boards, wait five seconds after turning off the computer before removing a component, removing a system board, or disconnecting a peripheral device from the computer.
- When you disconnect a cable, pull on its connector or on its strain-relief loop, not on the cable itself. Some cables have a connector with locking tabs. If you are disconnecting this type of cable, press in on the locking tabs before disconnecting the cable. As you pull connectors apart, keep them evenly aligned to avoid bending any connector pins. Also, before connecting a cable, make sure both connectors are correctly oriented and aligned.

CAUTION



Do not attempt to service the system yourself except as explained in this user's guide. Follow installation and troubleshooting instructions closely.

■ Preventing Electrostatic Discharge

Static electricity can harm system boards. Perform service at an ESD workstation and follow proper ESD procedure to reduce the risk of damage to components. We strongly encourage you to follow proper ESD procedure, which can include wrist straps and smocks, when servicing equipment.

You can also take the following steps to prevent damage from electrostatic discharge (ESD):

- When unpacking a static-sensitive component from its shipping carton, do not

Safety Instructions

remove the component's antistatic packing material until you are ready to install the component in a computer. Just before unwrapping the antistatic packaging, be sure you are at an ESD workstation or grounded. This will discharge any static electricity that may have built up in your body.

- When transporting a sensitive component, first place it in an antistatic container or packaging.
- Handle all sensitive components at an ESD workstation. If possible, use antistatic floor pads and workbench pads.
- Handle components and boards with care. Don't touch the components or contacts on a board. Hold a board by its edges or by its metal mounting bracket.
- Do not handle or store system boards near strong electrostatic, electromagnetic, magnetic, or radioactive fields.

■ Instructions for Lithium Battery



WARNING

Danger of explosion when battery is replaced with incorrect type. Only replace with the same or equivalent type recommended by the manufacturer.

Do not dispose of lithium batteries in domestic waste. Dispose of the battery according to the local regulations dealing with the disposal of these special materials (e.g. to the collecting points for disposal of batteries)

■ Voltage Ratings

The external power adaptor of the QBOX-1700 has the following voltage ratings:

- Input: 100-240 VAC, 50-60 Hz
- Output: 65W, +19VDC/3.42A output

Preface

■ How to Use This Guide

This guide is designed to be used as step-by-step instructions for installation, and as a reference for operation, troubleshooting, and upgrades.

■ Unpacking

When unpacking, follow these steps:

1. After opening the box, save it and the packing material for possible future shipment.
2. Remove all items from the box. If any items listed on the purchase order are missing, notify our customer service immediately.
3. Inspect the product for damage. If there is damage, notify our customer service immediately. Refer to “Warranty Policy” for the return procedure.

■ Regulatory Compliance Statements

This section provides the FCC compliance statement for Class B devices.

FCC Compliance Statement:

This equipment has been tested and found to comply with limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in residential installations. This equipment generates, uses, and can radiate radiofrequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television equipment reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the

receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by us could void the user's authority to operate the equipment.

NOTE



The assembler of a personal computer system may be required to test the system and/or make necessary modifications if a system is found to cause harmful interference or to be noncompliant with the appropriate standards for its intended use.

■ Maintaining Your Computer

Environmental Factors

■ Temperature

The ambient temperature within an enclosure may be greater than room ambient temperature. Installation in an enclosure should be such that the amount of air flow required for safe operation is not compromised.

Consideration should be given to the maximum rated ambient temperature. Overheating can cause a variety of problems, including premature aging and failure of chips or mechanical failure of devices.

If the system has been exposed to abnormally cold temperatures, allow a two-hour warm-up period to bring it up to normal operating temperature before turning it on. Failure to do so may cause damage to internal components, particularly the hard disk drive.

■ Humidity

High-humidity can cause moisture to enter and accumulate in the system. This moisture can cause corrosion of internal components and degrade such properties as electrical resistance and thermal conductivity. Extreme moisture buildup inside the system can result in electrical shorts, which can cause serious damage to the system.

Buildings in which climate is controlled usually maintain an acceptable level of humidity for system equipment. However, if a system is located in an unusually humid location, a dehumidifier can be used to maintain the humidity within an acceptable range. Refer to the "Specifications" section of this user's guide for

the operating and storage humidity specifications.

■ **Altitude**

Operating a system at a high altitude (low pressure) reduces the efficiency of the cooling fans to cool the system. This can cause electrical problems related to arcing and corona effects. This condition can also cause sealed components with internal pressure, such as electrolytic capacitors, to fail or perform at reduced efficiency.

Power Protection

The greatest threats to a system's supply of power are power loss, power spikes, and power surges caused by electrical storms, which interrupt system operation and/or damage system components. To protect your system, always properly ground power cables and one of the following devices.

■ **Surge Protector**

Surge protectors are available in a variety of types and usually provide a level of protection proportional with the cost of the device. Surge protectors prevent voltage spikes from entering a system through the AC power cord. Surge protectors, however, do not offer protection against brownouts, which occur when the voltage drops more than 20 percent below the normal AC line voltage level.

■ **Line Conditioner**

Line conditioners go beyond the overvoltage protection of surge protectors. Line conditioners keep a system's AC power source voltage at a fairly constant level and, therefore, can handle brownouts. Because of this added protection, line conditioners cost more than surge protectors. However, line conditioners cannot protect against a complete loss of power.

■ **Uninterruptible Power Supply**

Uninterruptible power supply (UPS) systems offer the most complete protection against variations on power because they use battery power to keep the server running when AC power is lost. The battery is charged by the AC power while it is available, so when AC power is lost, the battery can provide power to the system for a limited amount of time, depending on the UPS system.

UPS systems range in price from a few hundred dollars to several thousand dollars, with the more expensive units allowing you to run larger systems for a

Preface

longer period of time when AC power is lost. UPS systems that provide only 5 minutes of battery power let you conduct an orderly shutdown of the system, but are not intended to provide continued operation. Surge protectors should be used with all UPS systems, and the UPS system should be Underwriters Laboratories (UL) safety approved.

Chapter 1

Introduction

■ Overview

The QBOX-1700 is a Box PC with a volume of just 0.6-liter that is ideal for space critical applications. This embedded hardware platform is designed with Intel® Atom™ Bay Trail Dual core E3825 processor which provides with excellent performance.

System is supported with DDR3L SO-DIMM up to 4GB. Featured are 1x 2.5" SATA HDD, Micro SD, GbE, USB3.0, USB2.0, VGA, HDMI, and RS-232.

Checklist

- QBOX-1700
- Power Adapter
- Power Cord
- Driver CD
- Quick installation Guide
- VESA Mounting Kit (optional)
- Wireless LAN (optional)

Features

- Intel® Atom™ Bay Trail Dual core E3825 Processor
- Support 1x DDR3L SO-DIMM up to 4GB
- Support 1x VGA, 1x HDMI
- Support 1x GbE, 1x USB3.0, 2x USB 2.0 and Audio
- Support 1x 2.5" SATA HDD, 1x Micro SD
- Support 1x RS-232

■ Product Specifications

Construction	Aluminum extrusion
System Board	Intel® Atom™ BayTrail Dual Core E3825 Processor
Memory	1x DDR3L SO-DIMM up to 4GB
I/O Panel	<p>Front I/O panel :</p> <ul style="list-style-type: none"> 1x Phone Jack for Line-Out & MIC-In 1x Push button (w/LED) for power on/off 1x WiFi LED 1x HDD LED 2x USB 2.0 1x USB 3.0 1x Micro SD card cage 2x WiFi Antennas (Optional) <p>Rear I/O panel :</p> <ul style="list-style-type: none"> 1x DC JACK 1x RJ-45, GbE 1x RJ-45, RS-232 1x VGA 1x HDMI 1x Reset Button 1x External Power Button Support
Storage	1x 2.5" SATA HDD
Wifi	802.11b/g/n
OS Support	Windows 7 , Window 8, Linux
Power Supply	Input: 100-240 VAC, 50-60 Hz Output: 65W, +19VDC/3.42A output
Cooling	System Fan
Temperature / Humidity	Operating: 0°C to 50°C, 0%-90%, non-condensing Storage: -20°C to 80°C, 0%-90%, non-condensing
Dimensions	130 x 40 x 110 mm (WxHxD)
Weight	750 g
Mounting	VESA mount
Certifications	CE, FCC Class A

Table 1 QBOX-1700 product specifications

■ System tour

Refer to the diagrams below to identify the components of the system.

■ Front Panel

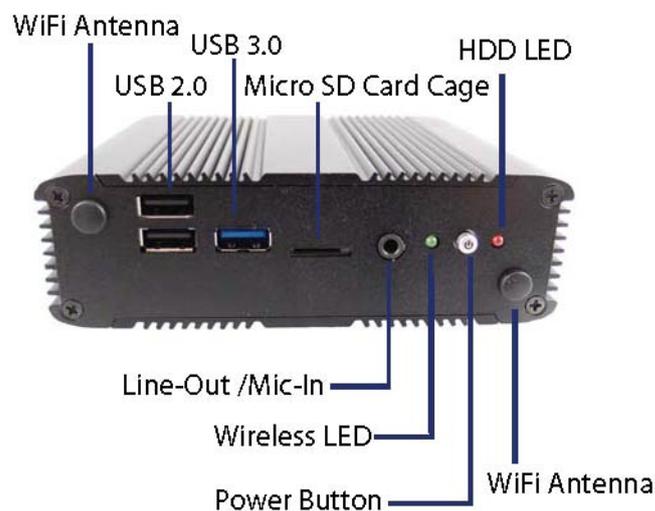


Figure 1 Front Panel

USB

The USB (Universal Serial Bus) port is compatible with USB devices such as keyboards, mouse devices, cameras, and hard disk drives. USB allows many devices to run simultaneously on a single computer, with some peripheral acting as additional plug-in sites or hubs.

Headphone Jack for MIC-IN / Line-out

The stereo headphone jack (3.5mm) is used to connect the system's audio out signal to amplified speakers or headphones.

The microphone jack is designed to connect the microphone used for video conferencing, voice narrations, or simple audio recordings.

WiFi LED

The WiFi LED will light when the WiFi is on.

HDD LED

The hard disk LED blinks when data is being written into or read from the HDD.

Power Switch

The power switch allows powering ON and OFF the system.

■ Rear Panel

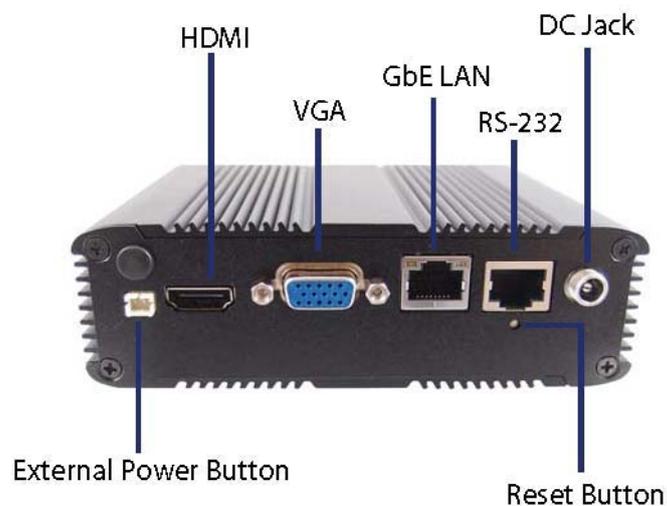


Figure 2 Rear Panel

Ethernet

The eight-pin RJ-45 LAN port supports a standard Ethernet cable for connection to a local network.

DC Jack

The supplied power adapter converts AC power to DC for use with this jack. Power supplied through this jack supplies power to the PC. To prevent damage to the PC, always use the supplied power adapter.

HDMI

HDMI connector for display output

External power switch

The external power switch allows powering ON and OFF the system.

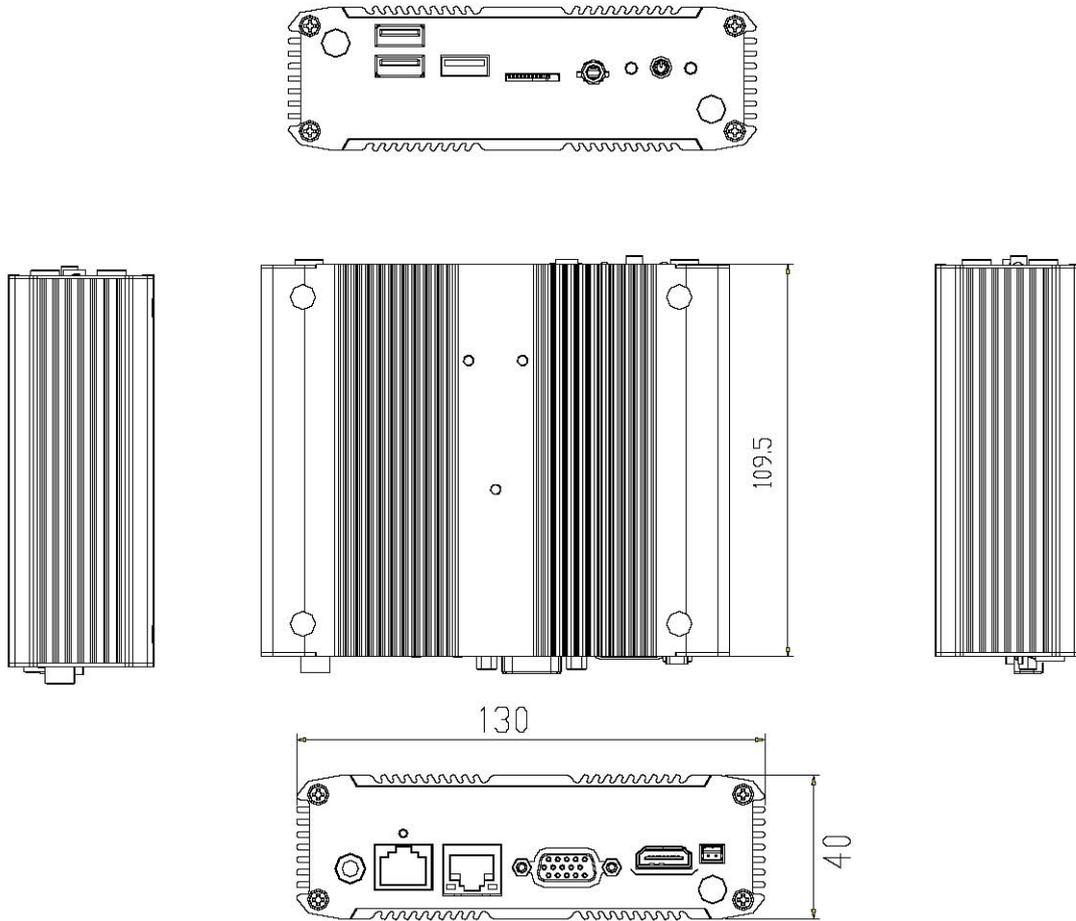
VGA

D-Sub 15 pin VGA connector for display output

Clear CMOS

1x reset button for clear CMOS.

Mechanical Dimensions



130 x40 x 110 mm (WxHxD)

Figure 3 Mechanical Dimensions

Chapter 2

Getting Started

- **Setting up your PC**
- **Connecting the monitor**
 - Connect the VGA/ HDMI cable from your display to the VGA/ HDMI port.

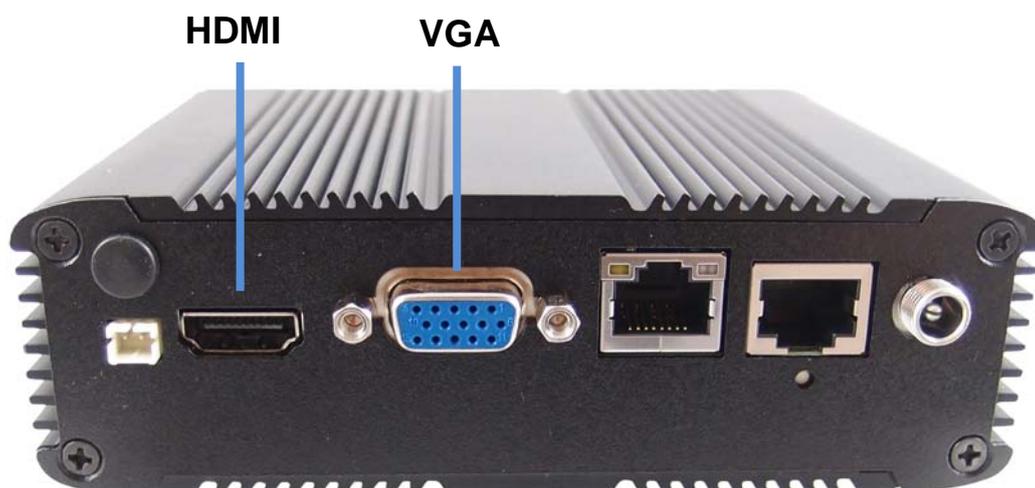


Figure 4 VGA/ HDMI

■ Connecting USB mouse & keyboard

Your QBOX-1700 does not come with a keyboard and mouse, but you can use any USB keyboard or mouse with your computer.

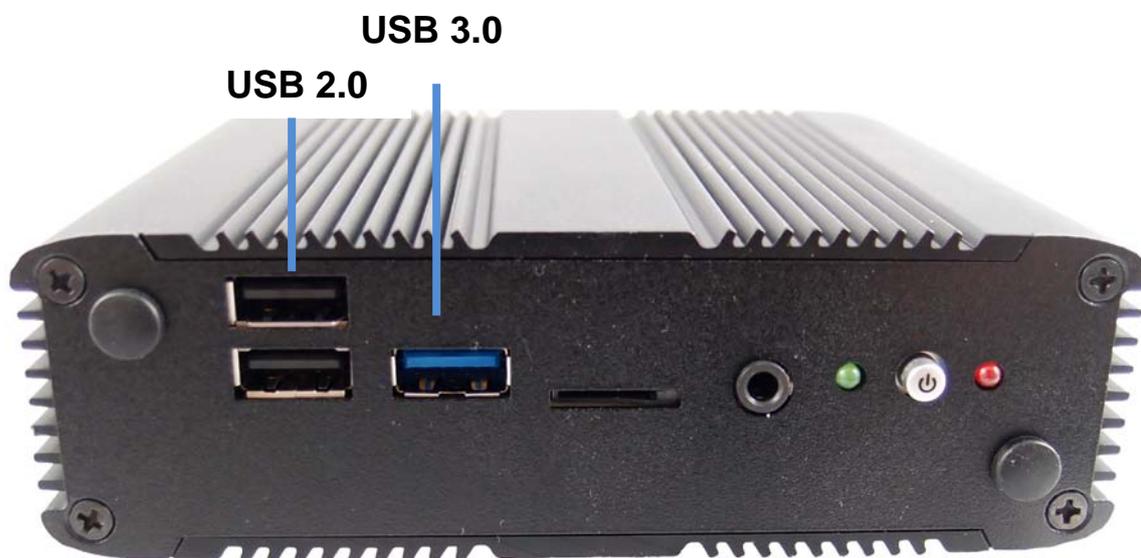


Figure 5 Connecting USB mouse & keyboard

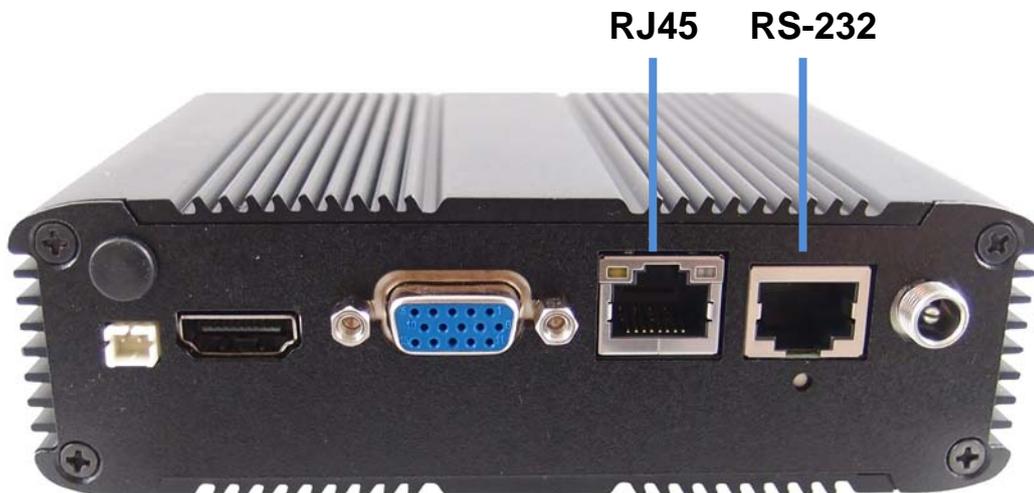
NOTE



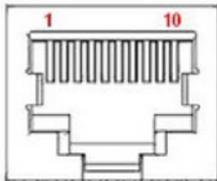
Using a third-party USB mouse or keyboard may require software drivers. Check the manufacturer's website for the latest software drivers.

■ Connecting to a network device

Connect one end of a network cable to the LAN port on the system rear panel and the other end to a hub or switch.



RS-232 Connector Pin Assignment



Pin	RS-232	RS-422	Half Duplex RS-485	Full Duplex RS-485
1	+5V	+5V	+5V	+5V
2	DCD	TX-	DATA-	TX-
3	DSR	N/A	N/A	N/A
4	RXD	TX+	DATA+	TX+
5	RTS	N/A	N/A	N/A
6	TXD	RX+	N/A	RX+
7	CTS	N/A	N/A	N/A
8	DTR	RX-	N/A	RX-
9	GND	GND	GND	GND
10	RI	N/A	N/A	N/A

Figure 6 RJ45 / RS-232 connector

■ **Turning on the system**

1. Connect the power adapter cable to the DC jack (DC IN) of the QBOX-1700
2. Connect the power cable to the power adapter
3. Connect the power cable to a power outlet
4. Press the power switch on the front panel to turn on the system

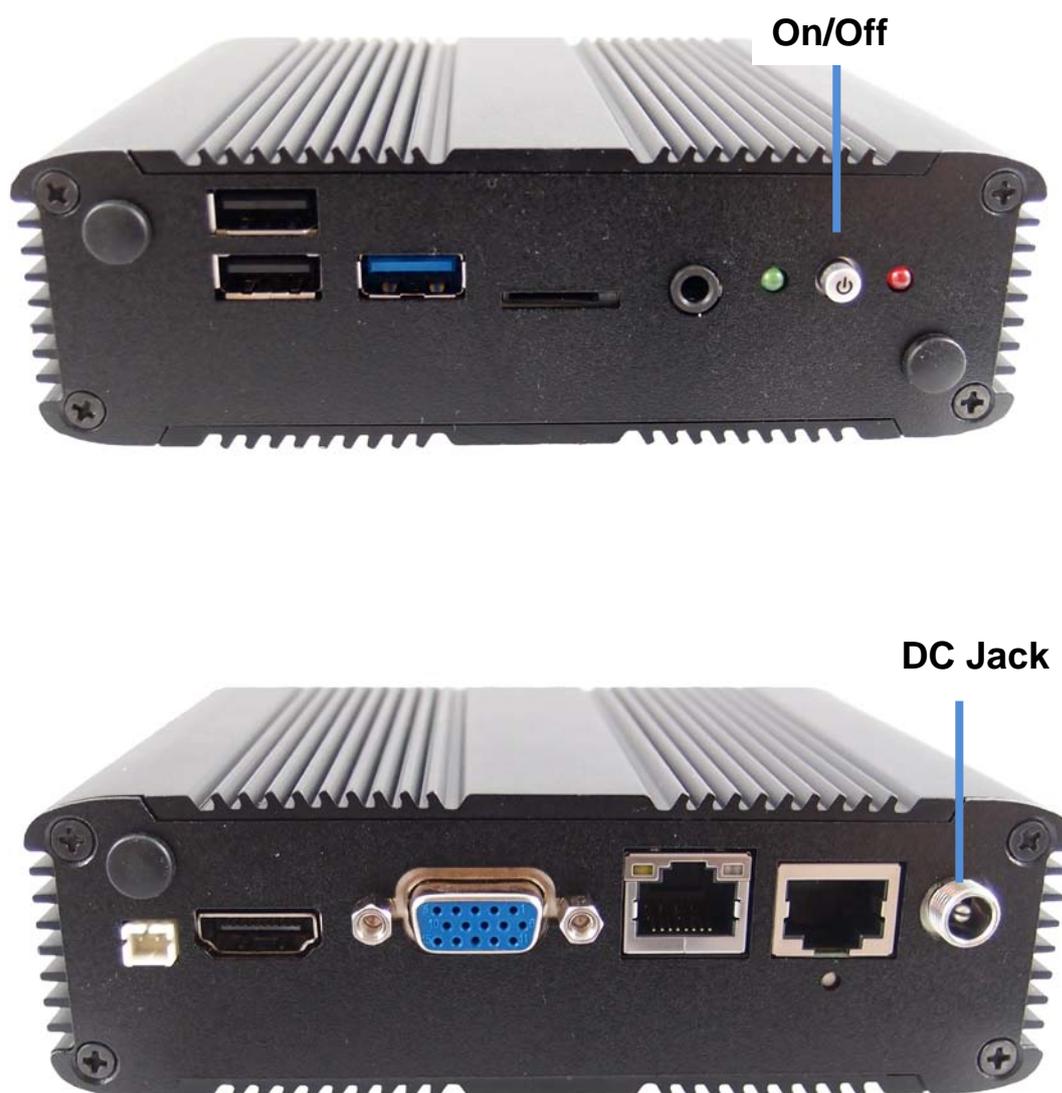


Figure 7 Turning on the system

■ Mounting your PC to a monitor

Secure the VESA mounting kit to your monitor with four screws.

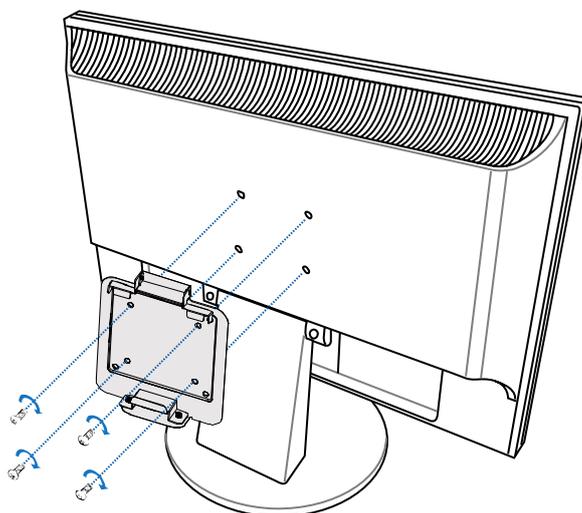


Figure 8 VESA mounting (1)

NOTE



To fasten the metal shelf, your monitor must comply with VESA75 or VESA100 standard.

Place the QBOX-1700 onto the monitor and secure it with the heat dissipating fins properly on VESA mount kit as shown below.

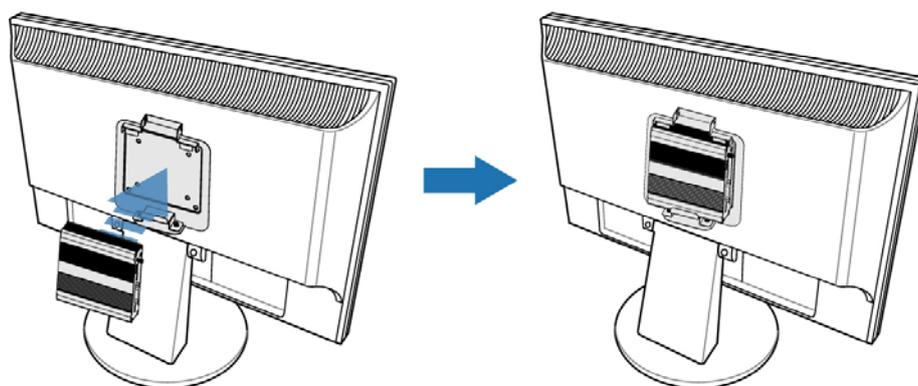


Figure 9 VESA mounting (2)

Chapter 3

AMI BIOS Setup

■ Overview

This chapter provides a description of the AMI BIOS. The BIOS setup menus and available selections may vary from those of your product. For specific information on the BIOS for your product, please contact us.



NOTE: The BIOS menus and selections for your product may vary from those in this chapter. For the BIOS manual specific to your product, please contact us.

AMI's ROM BIOS provides a built-in Setup program, which allows the user to modify the basic system configuration and hardware parameters. The modified data will be stored in a battery-backed CMOS, so that data will be retained even when the power is turned off. In general, the information saved in the CMOS RAM will not need to be changed unless there is a configuration change in the system, such as a hard drive replacement or when a device is added.

It is possible for the CMOS battery to fail, which will cause data loss in the CMOS only. If this happens you will need to reconfigure your BIOS settings.

■ Main Menu

The BIOS Setup is accessed by pressing the DEL key after the Power-On Self-Test (POST) memory test begins and before the operating system boot begins. Once you enter the BIOS Setup Utility, the Main Menu will appear on the screen. The Main Menu provides System Overview information and allows you to set the System Time and Date. Use the “<” and “>” cursor keys to navigate between menu screens.

Table 2 BIOS Main Menu

BIOS SETUP UTILITY				
M a i n	A d v a n c e d	B o o t	S e c u r i t y	S a v e & E x i t
Product Information				
Product Name		QBOX-1700		
BIOS Version		R0.03 (x64)		
BIOS Build Date		04/30/2014		
TXE FW Version		01.00.02.1067		→ ← Select Screen
CPU Information				↑↓ Select Item
Intel® ATOM(TM) CPU E3825 @1.33GHz				Enter: Select
Microcode Revision		31e		+ - Change Opt.
Processor Cores		2		F1: General Help
Memory Information				F2: Previous Values
Total Size		2048 MB (DDR3L)		F3: Optimized Defaults
Frequency		1066 MHz		F4 Save & Exit
System date		[Fri 05/02/2014]		ESC Exit
System time		[00:05:23]		
Access Level		Administrator		
Version 2.16.1242. Copyright (C) 2012 American Megatrends, Inc.				

■ Advanced Menu

Table 3 Advanced Menu

BIOS SETUP UTILITY		
Main	Advanced	Boot Security Server Mgmt Save & Exit
Onboard LAN 1 Controller	[Enabled]	→ ← Select Screen
Onboard LAN 1 Boot	[Disabled]	↑↓ Select Item
Audio Controller	[Enabled]	Enter: Select
> Display Configuration		+ - Change Opt.
> Super IO Configuration		F1: General Help
> CPU Chipset Configuration		F2: Previous Values
> SATA Configuration		F3: Optimized Defaults
> USB Configuration		F4 Save & Exit
> TPM Configuration		ESC Exit
> H/W Monitor		
Version 2.16.1242. Copyright (C) 2012 American Megatrends, Inc.		

Onboard LAN 1 Controller

Options: Disabled, Enabled

Onboard LAN 1 Boot

Options: Disabled, Enabled

Audio Controller

Options: Disabled, Enabled

Table 4 Advanced Menu – Display Configuration

BIOS SETUP UTILITY					
Main	Advanced	Boot	Security	Server Mgmt	Save & Exit
Display Configuration					→ ← Select Screen
Primary Display		[Auto]			↑↓ Select Item
UMA Frame Buffer Size		[256 MB]			Enter: Select
DVMT Pre-Allocated		[64 MB]			+ - Change Opt.
DVMT Total Gfx Mem		[256 MB]			F1: General Help
Primary IGFX Boot Display		[VBIOS Default]			F2: Previous Values
					F3: Optimized Defaults
					F4 Save & Exit
					ESC Exit
Version 2.16.1242. Copyright (C) 2012, American Megatrends, Inc.					

Primary Display

Options: Auto, IGD

Aperture Size

Options: 128MB, 256MB, 512MB

DVMT Pre-AllocatedOptions: 64 M, 96 M, 128MB, 160 M, 192 M, 224 M, 256MB, 288 M,
320 M , 352 M , 384 M , 416 M , 448 M , 480 M , 512M**DVMT Total Gfx Mem**

Options: 128MB, 256MB, MAX

IGFX-Boot Type

Options: VBIOS Default, CRT, HDMI

Table 5 Advanced Menu – Super IO Configuration

BIOS SETUP UTILITY	
Main	Advanced
Super IO Configuration	→ ← Select Screen
>Serial Port 1 Configuration	↑↓ 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) 2012, American Megatrends, Inc.	

Table 6 Advanced Menu – Super IO Configuration – Serial Port 1 Configuration

BIOS SETUP UTILITY	
Main	Advanced
Serial Port 1 Configuration	→←: Select Screen
Serial Port	↑↓: Select Item
Device Settings	Enter: Select
Change Settings	+/-: Change Opt.
Serial Port 1 Type	F1: General Help
	F2: Previous Values
	F3: Optimized Defaults
	F4: Save and Exit
	ESC: Exit
Version 2.16.1242. Copyright (C) 2012, American Megatrends, Inc.	

Serial Port

Options: Disabled, Enabled

Change Settings

Options: Auto,

IO=3F8h; IRQ=4;

IO=3F8h; IRQ=3, 4, 5, 6, 7, 9, 10, 11, 12;

IO=2F8h; IRQ=3, 4, 5, 6, 7, 9, 10, 11, 12;

IO=3E8h; IRQ=3, 4, 5, 6, 7, 9, 10, 11, 12;

IO=2E8h; IRQ=3, 4, 5, 6, 7, 9, 10, 11, 12;

Serial Port 1 Type

Options: RS232, RS422, RS485

Table 7 Advanced Menu –CPU Chipset Configuration

BIOS SETUP UTILITY				
Main	Advanced	Boot	Security	Save & Exit
CPU Advanced Configuration				→ ← Select Screen
EIST		[Enabled]		↑↓ Select Item
Limit CPUID Maximum		[Disabled]		Enter: Select
Execute Disable Bit		[Enabled]		+ - Change Opt.
Intel Virtualization Technology		[Disabled]		F1: General Help
				F2: Previous Values
				F3: Optimized Defaults
				F4 Save & Exit
				ESC Exit
Version 2.16.1242. Copyright (C) 2012 American Megatrends, Inc.				

EIST

Options: Disabled, Enabled

Limit CPUID Maximum

Options: Disabled, Enabled

Execute Disable Bit

Options: Disabled, Enabled

Intel Virtualization Technology

Options: Disabled, Enabled

Table 8 Advanced Menu –SATA Configuration

BIOS SETUP UTILITY				
Main	Advanced	Boot	Security	Save & Exit
SATA Controller(s)			→ ← Select Screen	
Serial-ATA(SATA)			↑↓ Select Item	
SATA Mode			Enter: Select	
Serial ATA Port 1			+- Change Opt.	
Port 1			F1: General Help	
			F2: Previous Values	
			F3: Optimized Defaults	
			F4 Save & Exit	
			ESC Exit	
Version 2.16.1242. Copyright (C) 2012, American Megatrends, Inc.				

SATA

Options: Disabled, Enabled

SATA Mode

Options: AHCI , IDE

Port 1

Options: Disabled, Enabled

Table 9 Advanced Menu –USB Configuration

BIOS SETUP UTILITY				
Main	Advanced	Boot	Security	Save & Exit
USB Configuration		→ ← Select Screen		
		↑↓ Select Item		
USB Devices:		Enter: Select		
1 Keyboard, 1 Mouse, 1 Hubs		+- Change Opt.		
Legacy USB Support		[Enabled]		
xHCI Legacy Support		[Enabled]		
xHCI Hand-off		[Enabled]		
EHCI Hand-off		[Disabled]		
USB Mass Storage Driver Support		[Enabled]		
Mass Storage Devices:				
Silicon-Power PMAP		[Auto]		
Version 2.16.1242. Copyright (C) 2012 American Megatrends, Inc.				

Legacy USB Support

Options: Disabled, Enabled, Auto

xHCI Legacy Support

Options: Disabled, Enabled

xHCI Hand-off

Options: Disabled, Enabled

EHCI Hand-off

Options: Disabled, Enabled

USB Mass Storage Driver Support

Options: Disabled, Enabled

Silicon-Power PMAP

Options: Auto, Floppy, Forced FDD, Hard Disk, CD-ROM

Table 10 Advanced Menu –TPM Configuration

BIOS SETUP UTILITY				
Main	Advanced	Boot	Security	Save & Exit
TPM Configuration				→ ← Select Screen
Security Device Support			[Disabled]	↑↓ Select Item
Current Status Information				Enter: Select
				+ - Change Opt.
				F1: General Help
				F2: Previous Values
				F3: Optimized Defaults
				F4 Save & Exit
				ESC Exit
Version 2.16.1242. Copyright (C) 2012 American Megatrends, Inc.				

Security Device Support

Options: Disabled, Enabled

Table 11 Advanced Menu –H/W Monitor

BIOS SETUP UTILITY				
Main	Advanced	Boot	Security	Save & Exit
PC Health Status Smart FAN Configuration CPU Temperature : +43 C System Temperature : +42 C CPU FAN Speed : N/A +VCORE : +0.729V +VIN : +12.268V 5V : +5.066V +VMEN : +1.349V				→ ← 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) 2012 American Megatrends, Inc.				

CPU FAN Configuration

FAN Setting **【Manual Mode】** (Options: Smart , Manual)

Manual Duty 255

Table 12 Power Management Configuration

BIOS SETUP UTILITY		
Main	Advanced	Boot Security Server Mgmt Save & Exit
Power Management Configuration		→ ← Select Screen
ACPI Sleep State	[S3 (Suspend to RAM)]	↑↓ Select Item
Restore AC Power Loss	[Power Off]	Enter: Select
Power Saving Mode	[Disabled]	+ - Change Opt.
Resume Event control		F1: General Help
Resume By PCIE Device	[Disabled]	F2: Previous Values
Resume By Ring Device	[Disabled]	F3: Optimized Defaults
Resume By RTC Alarm	[Enabled]	F4 Save & Exit
Date (days) Alarm	0	ESC Exit
Date (hh) Alarm	0	
Date (mm) Alarm	1	
Date (ss) Alarm	0	
>Watchdog Timer Configuration		
Version 2.16.1242. Copyright (C) 2012 American Megatrends, Inc.		

ACPI Sleep State

Options: Suspend Disabled, S3 (Suspend to RAM)

Restore AC Power Loss

Options: Power Off, Power On, Last State

Power Saving Mode

Options: Disabled, EUP Enabled

Resume By PCIE Device

Options: Disabled, Enabled

Resume By RTC Alarm

Options: Disabled, Enabled

Resume By Ring Device

Options: Disabled, Enabled

Watchdog Timer Configuration■ **WDT Function** **【Disabled】**

Options: Disabled, Enabled

■ Boot Menu

Table 13 Boot Menu

BIOS SETUP UTILITY				
Main	Advanced	Boot	Security	Save & Exit
Boot Configuration Full Screen LOGO Display [Disabled] Setup Prompt Timeout 1 Bootup NumLock State [On] Keyboard Detect Warning [Disabled] CSM Support [Enabled] Boot Option Filter [Legacy Only]			→ ← Select Screen ↑↓ Select Item Enter: Select +- Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4 Save & Exit ESC Exit	
Boot Option Priorities Boot Option # 1 [IBA GE Slot 00C8 v1410]				
Network Device BBS Priorities				
Version 2.16.1242. Copyright (C) 2012 American Megatrends, Inc.				

Full Screen LOGO Display

Options: Disabled, Enabled

Bootup Numlock State

Options: On, Off

Keyboard Detect Warning

Options: Disabled, Enabled

CSM Support

Options: Disabled, Enabled

Boot Option Filter

Options: UEFI and Legacy, Legacy only, UEFI only

Boot Option # 1

Options: Disabled, IBA GE Slot 00C8 v1410

Network Device BBS Priorities

Options: Disabled

■ Security Menu

Table 14 Security Menu

BIOS SETUP UTILITY				
Main	Advanced	Boot	Security	Save & Exit
Password Description If ONLY the Administrator's password is set, then this only limits access to Setup and is only asked for when entering Setup If ONLY the User's password is set, then this is a power on password and must be entered to boot or enter Setup. In Setup the User will have Administrator rights The password length must be in the following range: Minimum Length 3 Maximum length 20 Administrator Password User Password		→ ← 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) 2012, American Megatrends, Inc.				

■ Save & Exit Menu

Table 15 Save & Exit Menu

BIOS SETUP UTILITY				
Main	Advanced	Boot	Security	Save & Exit
Save Changes and Reset				→ ← Select Screen
Discard Changes and Reset				↑↓ Select Item
Save Options				Enter: Select
Save Changes				+ - Change Opt.
Discard Changes				F1: General Help
Restore Defaults				F2: Previous Values
				F3: Optimized Defaults
				F4 Save & Exit
				ESC Exit
Version 2.16.1242. Copyright (C) 2012, American Megatrends, Inc.				

Save Changes and Exit

Exit system setup after saving the changes. Once you are finished making your selections, choose this option from the Exit menu to ensure the values you selected are saved to the CMOS RAM. The CMOS RAM is sustained by an onboard backup battery and stays on even when the PC is turned off. When you select this option, a confirmation window appears. Select [Yes] to save changes and exit.

Discard Changes and Exit

Exit system setup without saving any changes. Select this option only if you do not want to save the changes that you made to the Setup program. If you made changes to fields other than system date, system time, and password, the BIOS asks for a confirmation before exiting.

Discard Changes

Discards changes done so far to any of the setup values. This option allows you to discard the selections you made and restore the previously saved values. After selecting this option, a confirmation appears. Select [Yes] to discard any changes and load the previously saved values.

Load Optimal Defaults

Load Optimal Default values for all the setup values. This option allows you to load optimal default values for each of the parameters on the Setup menus, which will provide the best performance settings for your system. The F9 key can be used for this operation.

Load Failsafe Defaults

Load Optimal Default values for all the setup values. This option allows you to load failsafe default values for each of the parameters on the Setup menus, which will provide the most stable performance settings. The F8 key can be used for this operation.

Chapter 4

Driver Installation

If your QBOX-1700 does not come with an operating system pre-installed, you will need to install an operating system and the necessary drivers to operate it. After you have finished assembling your system and connected the appropriate power source, power it up using the power supply and install the desired operating system. You can download the drivers for the QBOX-1700 from our website and install as instructed there. For other operating systems, please contact us.