

# QDSP-0100

0.6-Liter Box PC with Intel® Atom™ D2550 Processor

## User's Guide



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# 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.

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### 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.

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### ■ 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.

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### ■ 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

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.

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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 QDSP-0100 has the following voltage ratings:

- Input: 100-240 VAC, 50-60 Hz
- Output: 40W, +19VDC / 2.1A 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.

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#### 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.

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## ■ 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

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 QDSP-0100 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 D2550 Processor which provides with excellent performance. System is supported with Intel® NM10 Express chipset, and DDR3 SO-DIMM up to 4GB. Featured are 1x eSATA, 1x 2.5" SATA HDD, 1x GbE, 4x USB 2.0, 1x VGA, 1x HDMI, and 1x DP.

### Checklist

- QDSP-0100
- Power Adapter
- Power Cord
- Driver CD
- Quick installation Guide
- VESA Mounting Kit (optional)
- Wireless LAN (optional)

### Features

- Intel® Atom D2550 Processor
- Intel® NM10 Express Chipset
- Support DDR3 800 / 1066 MHz SO-DIMM up to 4GB
- Support 1xVGA, 1xHDMI, 1xDP
- Support 1xGbE, 1xeSATA/USB Combo Connector, 4xUSB and Audio
- Support 1x 2.5" SATA HDD

## ■ Product Specifications

Construction	Aluminum
System Board	Intel® Cedarview-D Atom D2550 (1M Cache, 1.86 Ghz) Intel® NM10 Express Chipset
Memory	DDR3 800/1066 SO-DIMM up to 4GB
I/O Panel	<p>■Front I/O panel :</p> <ul style="list-style-type: none"> <li>1x Phone Jack for Line-Out</li> <li>1x Phone Jack for MIC-In</li> <li>1x Push button (w/LED) for power on/off</li> <li>1x WiFi LED</li> <li>1x HDD LED</li> <li>4x USB2.0</li> <li>1x eSATA/USB Combo connector</li> </ul> <p>■Rear I/O panel :</p> <ul style="list-style-type: none"> <li>1x DC JACK</li> <li>1x RJ-45, GbE port</li> <li>1x DP</li> <li>1x VGA</li> <li>1x HDMI</li> <li>1x 3G / WiFi antenna ( Optional )</li> <li>1x Clear CMOS</li> <li>1x Kensington Lock</li> </ul>
Storage	1x 2.5" SATA HDD
Expansion	3G or WiFi
Power Supply	Input: 100-240 VAC, 50-60 Hz Output: 40W, +19VDC/2.1A output
Cooling	System Fan
OS Support	Windows 7
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 35 x 111 mm (WxHxD)
Weight	440 g
Mounting	VESA mount, Desktop stand
Certifications	CE, FCC Class A

Table 1 QDSP-0100 product specifications

## ■ System tour

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

### ■ Front Panel

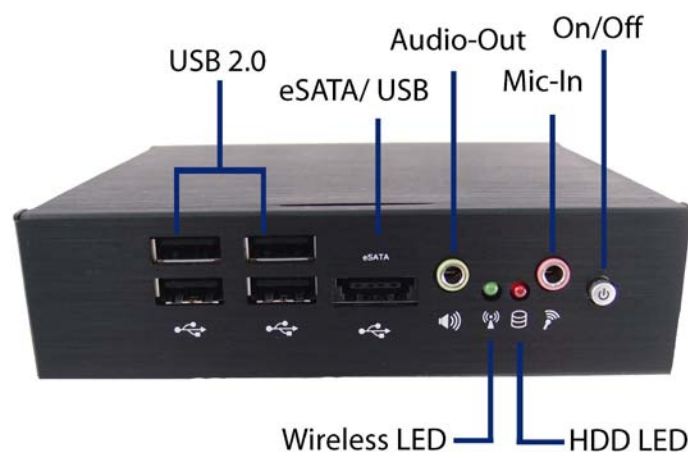


Figure 1 Front Panel

#### 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.

#### eSATA

The eSATA connector provides an external connectivity for mass storage devices.

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#### CAUTION



This connector do not support hot-swapping. Users should not connect or disconnect their eSATA devices from PC when the system is working.

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### **MIC-IN**

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

### **Headphone Jack**

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

### **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. .( with Power LED)

## ■ Rear Panel

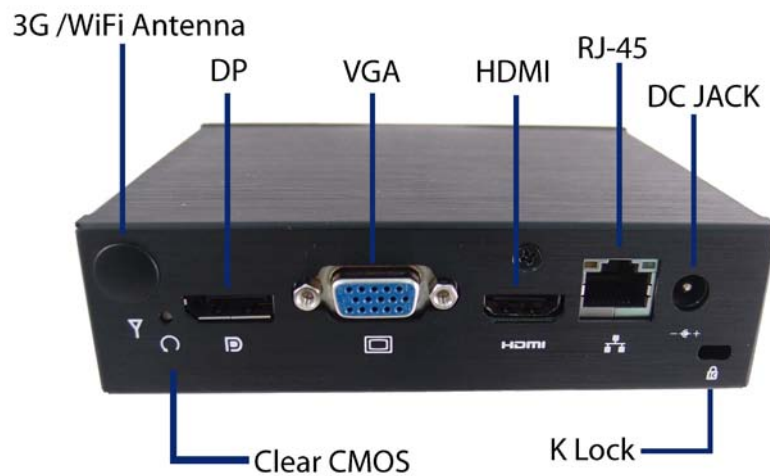


Figure 2 Rear Panel

### 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.

### Kensington Lock Slot

The slot is used for attaching a lock-and-cable apparatus. Locks are generally secured in place with a key or combination lock attached to a rubberized metal cable.

### DP

DP is a display interface used to connect a video source to a display device such as a computer monitor or a television set.

**HDMI**

HDMI connector for display output

**Wireless / 3G**

1x reserved holes for wireless/ 3G antenna connection.

**Clear CMOS**

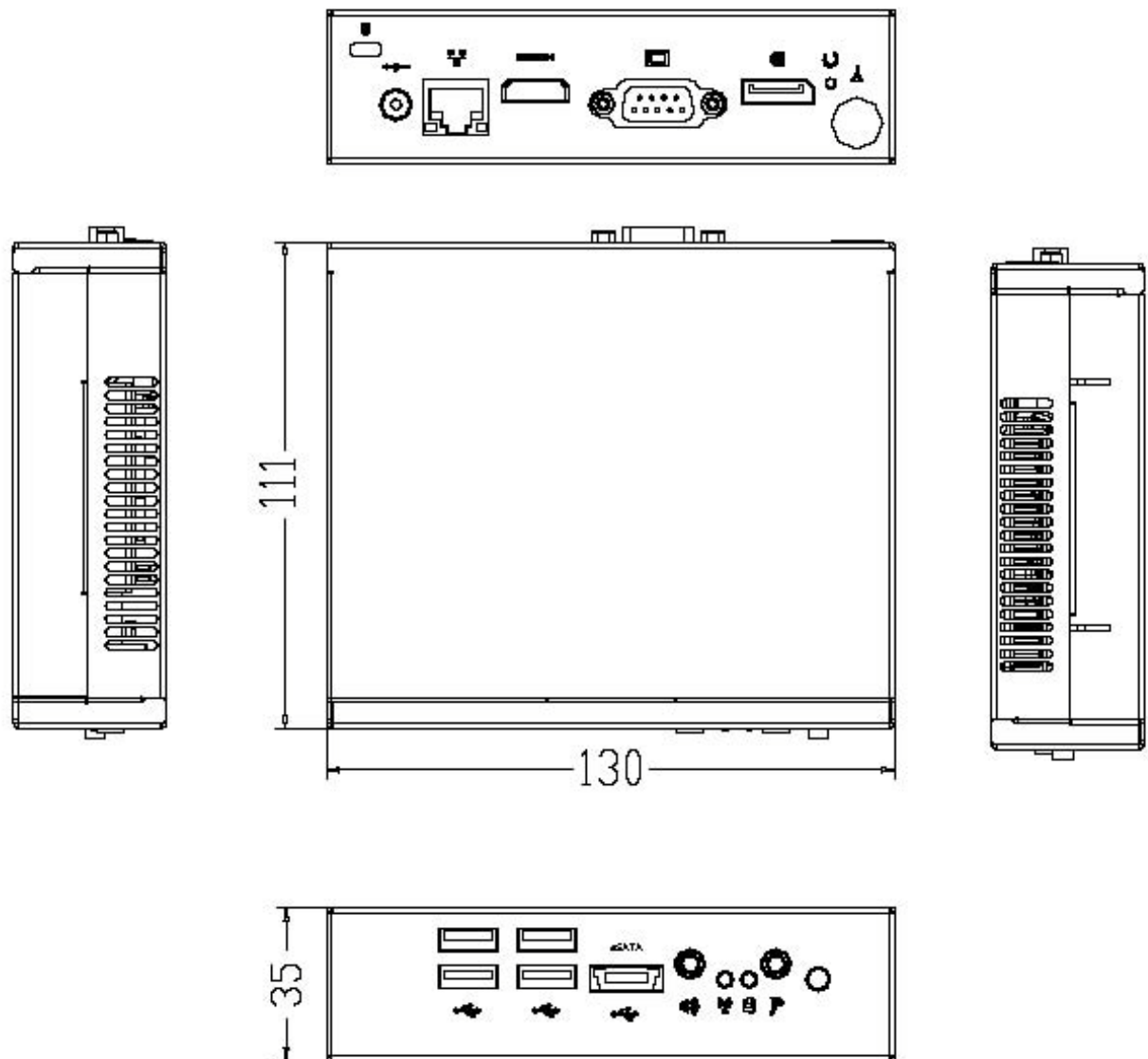
1x reset button for clear CMOS.

**VGA**

D-Sub 15 pin VGA connector for display output



## Mechanical Dimensions



130 x 35 x 111 mm (WxHxD)

### Figure 3 Mechanical Dimensions

## Chapter 2

# Getting Started

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

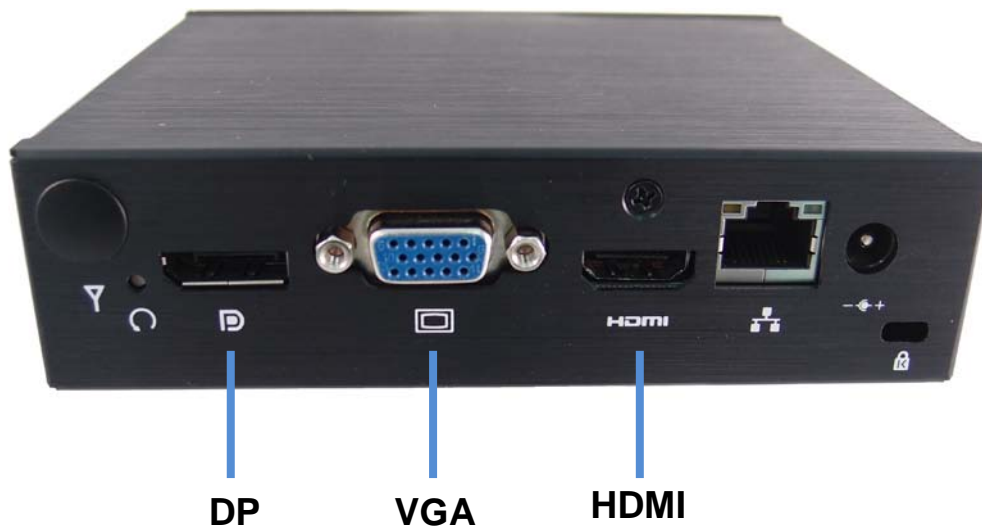


Figure 4 DP/ VGA/ HDMI

### ■ Connecting USB mouse & keyboard

Your QDSP-0100 does not come with a keyboard and mouse, but you can use any USB keyboard or mouse with your computer.

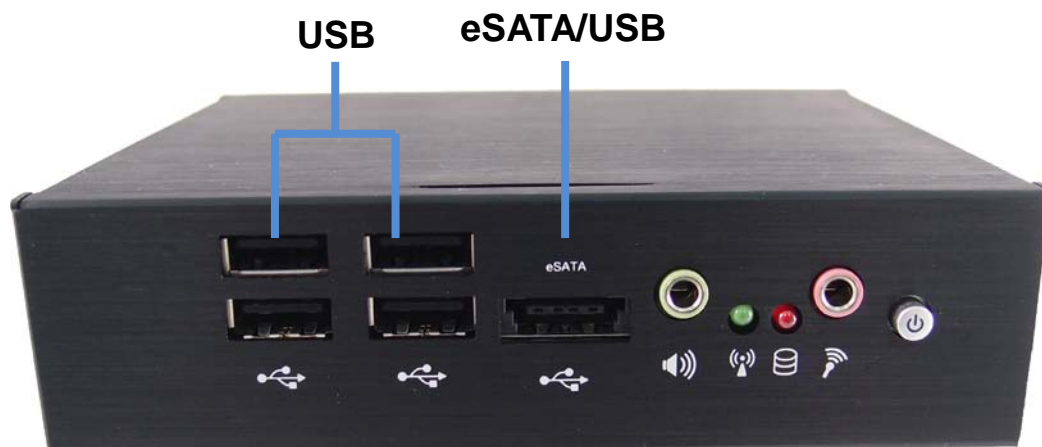


Figure 5 Connecting USB mouse & keyboard

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#### NOTE



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

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### ■ 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.



Figure 6 RJ45 connector

■ **Turning on the system**

1. Connect the power adapter cable to the DC jack (DC IN) of the QDSP-0100
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

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

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### NOTE



To fasten the metal shelf, your monitor must comply with VESA75 or VESA100 standard. The VESA mounting kit is optional.

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2. Place the QDSP-0100 on the VESA mounting bracket and make sure the bracket is hooked with the fins of the system housing.
3. Secure the screw with the VESA mounting bracket and make sure the QDSP-0100 is solidly secured to the display.

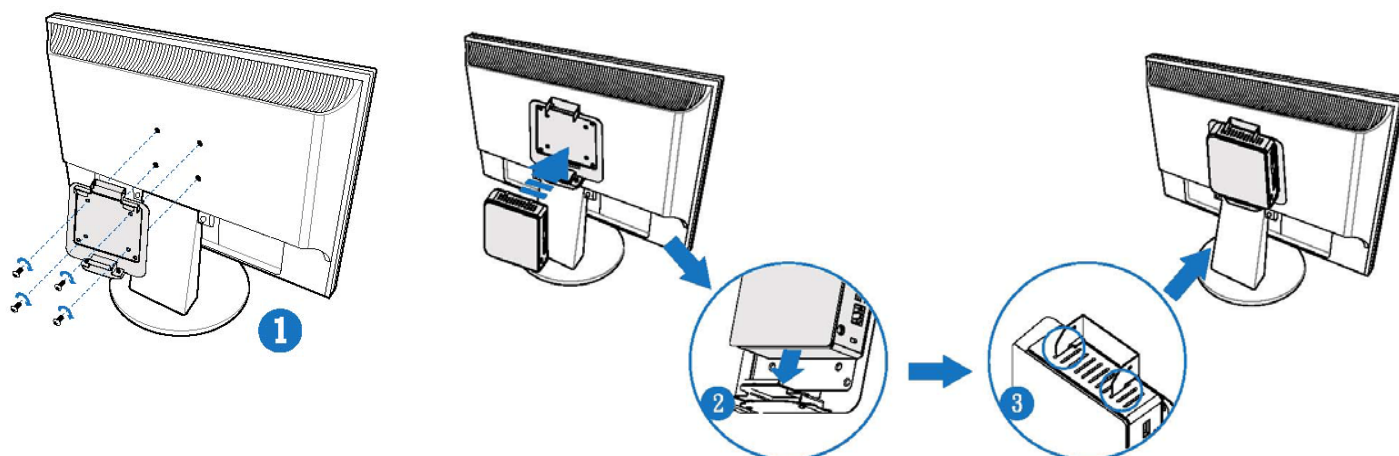


Figure 8 VESA mounting

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### NOTE



When mounting the unit on the wall with a display. The total weight of the unit and display won't exceed 7 Kg.

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## ■ Anti-theft protection with a Kensington Lock

The QDSP-0100 has a Kensington lock slot for the Kensington MicroSaver. With the Kensington MicroSaver, a sturdy steel cable, you can attach your QDSP-0100 to a stationary object and protect your PC from theft.



Figure 9 Use a Kensington lock

## 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			→ ← Select Screen ↑↓ Select Item Enter: Select +- Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4 Save & Exit ESC Exit	
Product Name		QDSP-0100		
BIOS Version		0.09		
BIOS Build Date		02/10/2012		
CPU Information				
Intel® Atom™ CPU D2550@ 1.86GHz				
Microcode Revision		10C		
Processor Cores		2		
Memory Information				
Total Size		1024 MB		
Frequency		1067 MHz (DDR3)		
System date		[Wed 03/07/2012]		
System time		[10:56:23]		
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## ■ Advanced Menu

Table 3 Advanced Menu

BIOS SETUP UTILITY		
Main	Advanced	Boot    Security    Server Mgmt    Save & Exit
Onboard LAN Controller	[Enabled]	<div></div> <div>→ ← Select Screen</div> <div>↑↓ Select Item</div> <div>Enter: Select</div> <div>+ - Change Opt.</div> <div>F1: General Help</div> <div>F2: Previous Values</div> <div>F3: Optimized Defaults</div> <div>F4 Save &amp; Exit</div> <div>ESC Exit</div>
Onboard LAN Boot	[Disabled]	
Audio Controller	[Enabled]	
> Display Configuration		
> Power Management Configuration		
> CPU Advanced Configuration		
> SATA Configuration		
> Trusted Computing		
> USB Configuration		
> H/W Monitor		
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### Onboard LAN Controller

Options: Disabled, Enabled

### Onboard LAN 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  Fixed Graphics Memory Size [128 MB]  IGFX – Boot Type [VBIOS Default]					→ ← Select Screen	
					↑↓ Select Item	
					Enter: Select	
					+- Change Opt.	
					F1: General Help	
					F2: Previous Values	
					F3: Optimized Defaults	
					F4 Save & Exit	
					ESC Exit	
					Version 2.14.1219. Copyright (C) 2011, American Megatrends, Inc.	

**Fixed Graphics Memory Size**

Options: 128MB, 256MB

**IGFX – Boot Type**

Options: VBIOS Default, CRT, DP, HDMI

Table 5 Advanced Menu –Power Management Configuration

BIOS SETUP UTILITY	
Main	<b>Advanced</b> Boot Security Server Mgmt Save & Exit
Power Management Configuration	
ACPI Sleep State	[S3 (Suspend to RAM)]
Restore AC Power Loss	[Power Off]
Resume By PCIE Device	[Disabled]
Resume By RTC Alarm	[Disabled]
EUP Power Saving Mode	[Disabled]
>Watchdog Timer Configuration	
→ ← Select Screen ↑↓ Select Item Enter: Select +- Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4 Save & Exit ESC Exit	
Version 2.14.1219. Copyright (C) 2011, American Megatrends, Inc.	

**ACPI Sleep State**

Options: Suspend Disabled, S1 (CPU Stop Clock), S3 (Suspend to RAM)

**Restore AC Power Loss**

Options: Power Off, Power On, Last State

**Resume By PCIE Device**

Options: Disabled, Enabled

**Resume By RTC Alarm**

Options: Disabled, Enabled

**EUP Power Saving Mode**

Options: Disabled, Enabled

**Watchdog Timer Configuration**■ **WDT Function**

Options: Disabled, Enabled

Table 6 Advanced Menu –CPU Advanced Configuration

BIOS SETUP UTILITY				
Main	Advanced	Boot	Security	Save & Exit
CPU Advanced Configuration				
Hyper-Treading		[Enabled]	→ ← Select Screen ↑↓ Select Item Enter: Select +- Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4 Save & Exit ESC Exit	
Execute Disable Bit		[Enabled]		
Limit CPUID Maximum		[Disabled]		
EIST		[Enabled]		
Version 2.14.1219. Copyright (C) 2011, American Megatrends, Inc.				

**Hyper-Treading**

Options: Disabled, Enabled

**Execute Disable Bit**

Options: Disabled, Enabled

**Limit CPUID Maximum**

Options: Disabled, Enabled

**EIST**

Options: Disabled, Enabled

Table 7 Advanced Menu –SATA Configuration

BIOS SETUP UTILITY				
Main	Advanced	Boot	Security	Save & Exit
SATA Configuration			<div>→ ← Select Screen</div> <div>↑↓ Select Item</div> <div>Enter: Select</div> <div>+ - Change Opt.</div> <div>F1: General Help</div> <div>F2: Previous Values</div> <div>F3: Optimized Defaults</div> <div>F4 Save &amp; Exit</div> <div>ESC Exit</div>	
Configure SATA as				
[ AHCI ]				
SATA Port 1	TOSHIBA MK8046 (80.0G)			
SATA Port 2	Not Present			
Version 2.14.1219. Copyright (C) 2011, American Megatrends, Inc.				

**Configure SATA as**

Options: IDE, AHCI

Table 8 Advanced Menu –Trusted Computing

BIOS SETUP UTILITY				
Main	Advanced	Boot	Security	Save & Exit
Configuration			→ ← Select Screen ↑↓ Select Item Enter: Select +- Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4 Save & Exit ESC Exit	
TPM Support		[Disable]		
Current Status Information				
Reset Required				
Version 2.14.1219. Copyright (C) 2011, American Megatrends, Inc.				

**TPM Support**

Options: Disable, Enable

Table 9 Advanced Menu –USB Configuration

BIOS SETUP UTILITY				
Main	Advanced	Boot	Security	Save & Exit
USB Configuration			.	
USB Devices:				
1 Drive, 1 Keyboard, 1 Mouse			→ ← Select Screen	
Legacy USB Support		[Enabled]	↑↓ Select Item	
EHCI Hand-off		[Disabled]	Enter: Select	
Mass Storage Devices:			+- Change Opt.	
San Disk		[Auto]	F1: General Help	
			F2: Previous Values	
			F3: Optimized Defaults	
			F4 Save & Exit	
			ESC Exit	
Version 2.14.1219. Copyright (C) 2011, American Megatrends, Inc.				

**Legacy USB Support**

Options: Disabled, Enabled, Auto

**EHCI hand-off**

Options: Disabled, Enabled

**Mass Storage Device**

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

Table 10 Advanced Menu –H/W Monitor

BIOS SETUP UTILITY				
Main	Advanced	Boot	Security	Save & Exit
PC Health Status			→ ← Select Screen ↑↓ Select Item Enter: Select +- Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4 Save & Exit ESC Exit	
CPU Warning Temperature		[Disabled]		
>CPU FAN Configuration				
CPU Temperature		: +55 C		
Memory Temperature		: +41 C		
System Temperature		: +42 C		
CPU FAN Speed		4065RPM		
+3.3V		: +3.328V		
+VCORE		: +1.056V		
+VGFX		: +1.008V		
+1.05V		: +1.048V		
+1.5V		: +1.505V		
+5VDUAL		: +5.086V		
+VIN		: +19.096V		
+3.3VSB		: +3.360V		
Version 2.14.1219. Copyright (C) 2011, American Megatrends, Inc.				

**CPU Warning Temperature**

Options: Disabled, 80 °C , 85 °C, 90 °C, 95 °C

**CPU FAN Configuration**■ **Fan Setting**

Options: Manual Mode, Auto Mode

■ **Auto Mode:**

1st Boundary Temperature	40
1st FAN speed	100

## ■ Boot Menu

Table 11 Boot Menu

BIOS SETUP UTILITY				
Main	Advanced	Boot	Security	Save & Exit
<div>Boot Configuration</div> <div>Full Screen LOGO Display [Disabled]</div> <div>Setup Prompt Timeout 1</div> <div>Bootup NumLock State [On]</div> <div>Boot Option Priorities</div> <div>Boot Option #1 [UEFI: SanDisk]</div> <div>Boot Option#2 [SATA PM: TOSHIBA...]</div> <div>Hard Drive BBS Priorities</div>			<div>→ ← Select Screen</div> <div>↑↓ Select Item</div> <div>Enter: Select</div> <div>+ - Change Opt.</div> <div>F1: General Help</div> <div>F2: Previous Values</div> <div>F3: Optimized Defaults</div> <div>F4 Save &amp; Exit</div> <div>ESC Exit</div>	
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### Full Screen LOGO Display

Options: Disabled, Enabled

### Bootup Numlock State

Options: On, Off

### Boot Option #1

Options: UEFI, SATA PM: Disabled

### Boot Option #2

Options: UEFI, SATA PM: Disabled

### Hard Drive BBS Priorities

#### ■ Boot Option #1

Options: UEFI, SATA PM: Disabled



## ■ Security Menu

Table 12 Security Menu

BIOS SETUP UTILITY	
Main	Advanced
Boot	Security
Save & Exit	
<p>Password Description</p> <p>If ONLY the Administrator's password is set, then this only limits access to Setup and is only asked for when entering Setup</p> <p>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</p> <p>The password length must be in the following range:</p> <p>Minimum Length      3</p> <p>Maximum length      20</p> <p>Administrator Password</p> <p>User Password</p>	<p>→ ← Select Screen</p> <p>↑↓ Select Item</p> <p>Enter: Select</p> <p>+ - Change Opt.</p> <p>F1: General Help</p> <p>F2: Previous Values</p> <p>F3: Optimized Defaults</p> <p>F4 Save &amp; Exit</p> <p>ESC Exit</p>
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## ■ Save & Exit Menu

Table 13 Save &amp; Exit Menu

BIOS SETUP UTILITY	
Main	Advanced
Boot	Security
Save & Exit	
<p>Save Changes and Reset</p> <p>Discard Changes and Reset</p> <p>Save Options</p> <p>Save Changes</p> <p>Discard Changes</p> <p>Restore Defaults</p>	<p>→ ← Select Screen</p> <p>↑↓ Select Item</p> <p>Enter: Select</p> <p>+ - Change Opt.</p> <p>F1: General Help</p> <p>F2: Previous Values</p> <p>F3: Optimized Defaults</p> <p>F4 Save &amp; Exit</p> <p>ESC Exit</p>
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### **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 QDSP-0100 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 QDSP-0100 from our website and install as instructed there. For other operating systems, please contact us.