

# QDSP-0200 Series

0.6-Liter Box PC with Intel<sup>®</sup> Bay Trail Dual Core / Quad Core 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.....	17
Chapter 2 Getting Started.....	18
Setting up your PC.....	18
Mounting your PC to a monitor.....	22
Anti-theft protection with a Kensington Lock.....	23
Chapter 3 AMI BIOS Setup.....	24
Overview.....	24
Main Menu.....	25
Advanced Menu.....	27
Power Menu.....	34
Security Menu.....	35
Boot Menu.....	36
Save & Exit Menu.....	37
Chapter 4 Driver Installation.....	39

## Figures & Tables

Figure 1 Front Panel .....	13
Figure 2 Rear Panel.....	15
Figure 3 Mechanical Dimensions.....	17
Figure 4 VGA / HDMI .....	18
Figure 5 Connecting USB mouse & keyboard.....	19
Figure 6 RJ45 connector.....	20
Figure 7 Turning on the system .....	21
Figure 8 VESA mounting.....	22
Figure 9 Use a Kensington lock.....	23
Table 1 QDSP-0200 Series product specifications .....	12
Table 2 BIOS Main Menu (QDSP-0200).....	25
Table 3 BIOS Main Menu (QDSP-0210).....	26
Table 4 BIOS Main Menu (QDSP-0211).....	26
Table 5 Advanced Menu .....	27
Table 6 Advanced Menu – Display Configuration.....	28
Table 7 Advanced Menu – Super IO Configuration.....	29
Table 8 Advanced Menu – Super IO Configuration – Serial Port 1 Configuration.....	29
Table 9 Advanced Menu – CPU Chipset Configuration.....	30
Table 10 Advanced Menu – SATA Configuration.....	31
Table 11 Advanced Menu – USB Configuration .....	32
Table 12 Advanced Menu – H/W Monitor .....	33
Table 13 Power Menu.....	34
Table 14 Security Menu .....	35
Table 15 Boot Menu .....	36
Table 16 Save & Exit Menu.....	37

# 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

## 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.

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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-0200 Series has the following voltage ratings:

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

# 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

## 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 QDSP-0200 Series 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® Bay Trail Atom™ Dual Core E3825 / Celeron® Quad Core J1900 Processor which provides excellent performance. The system is supported with 1x DDR3L SO-DIMM. Featured are 1x 2.5" SATAHDD / SSD, 1x GbE, 1x USB3.0, 2x USB2.0, 1x VGA, 1x HDMI, 1x RS-232/422/485 and 1x Micro SD card cage (QDSP-200 only).

### Checklist

- QDSP-0200 / QDSP-0210 / QDSP-0211
- Power Adapter
- Power Cord
- Driver CD
- Quick installation Guide
- VESA Mounting Kit (optional)
- Wireless LAN (optional)

### Features

- Intel® Atom™ E3825 (QDSP-200) / Celeron® J1900 (QDSP-210/211) Processor
- 1x DDR3L SO-DIMM
- 1x VGA, 1x HDMI
- 1x GbE, 1x USB3.0, 2x USB2.0, 1x RS232/422/485 and 1x / 2x Audio
- 1x 2.5" SATAHDD / SSD
- 1x mPCIe

## ■ Product Specifications

Construction	Aluminum
System Board	QDSP-200: Intel <sup>®</sup> Bay Trail Atom™ E3825 (1M Cache, 1.33 Ghz) QDSP-210/211: Intel <sup>®</sup> Bay Trail Celeron <sup>®</sup> J1900 (2M Cache, 2.42 Ghz)
Memory	1x DDR3L SO-DIMM
I/O Panel	<ul style="list-style-type: none"> <li>■Front I/O panel: <ul style="list-style-type: none"> <li>1x USB3.0</li> <li>2x USB2.0</li> <li>1x Line-Out / Min-In Combo (QDSP-200/210)</li> <li>1x Line-Out + 1x MIC-In (QDSP-211)</li> <li>1x Micro SD card cage (QDSP-200)</li> <li>1x Push button (w/LED) for power on/off</li> <li>1x WiFi LED</li> <li>1x HDD LED</li> </ul> </li> <li>■Rear I/O panel: <ul style="list-style-type: none"> <li>1x HDMI</li> <li>1x VGA</li> <li>1x RJ-45, GbE</li> <li>1x RJ-45, RS-232/422/485</li> <li>1x 3G / WiFi antenna (Optional)</li> <li>1x DC JACK</li> <li>1x Reset Button</li> <li>1x External Power Button Support</li> <li>1x Kensington Lock</li> </ul> </li> </ul>
Storage	1x 2.5" SATA HDD / SSD
Expansion	1x mPCIe (full size) 1x SIM card holder (optional)
Power Supply	Input: 100~240 VAC, 50~60 Hz Output: 40W, +19VDC/2.1A output
Cooling	System Fan
OS Support	Windows 7, Windows 8, Linux
Temperature / Humidity	Operating: 0°C ~ 50°C / 32°F ~ 122°F, 0% ~ 90%, non-condensing Storage: -20°C ~ 80°C / -4°F ~ 176°F, 0% ~ 90%, non-condensing
Dimensions	130 x 111 x 35 mm / 5.12" x 4.37" x 1.38" (W x D x H)
Weight	440 g / 0.97 lb
Mounting	VESA mount
Certifications	CE, FCC Class A

Table 1 QDSP-0200 Series product specifications

## ■ System tour

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

### ■ Front Panel

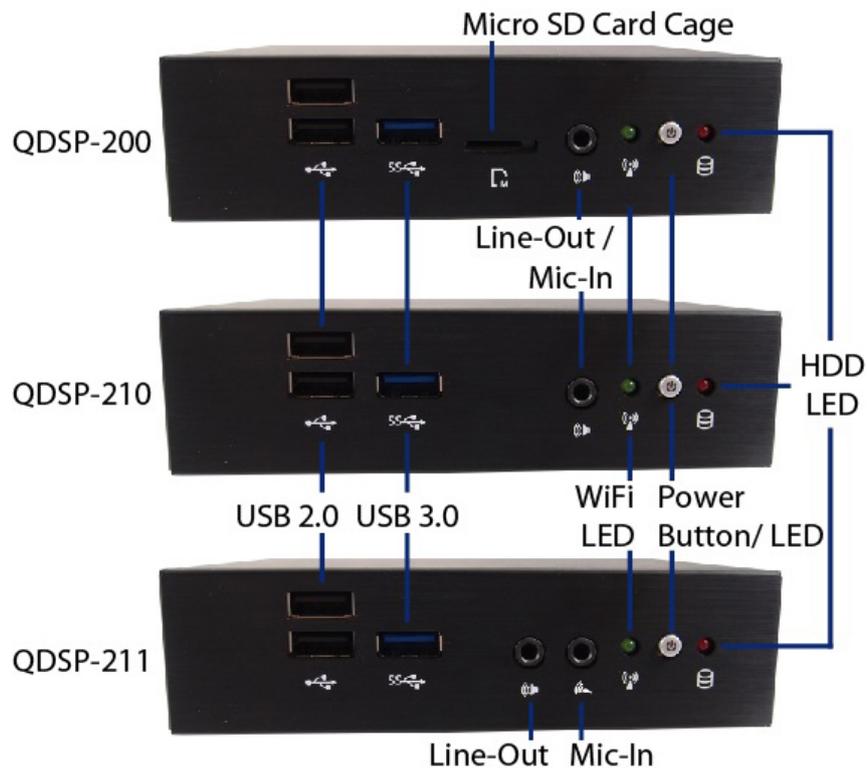


Figure 1 Front Panel

### 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.

### Micro SD Card Cage

The Micro SD Card Cage provides users with expandable memory space suitable for multimedia file retrieval, including images, animations and movie clips, as well as data logging applications.

### **MIC-IN**

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

### **LINE-OUT**

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 Button**

The power button allows powering ON and OFF the system. (with Power LED)

## ■ Rear Panel

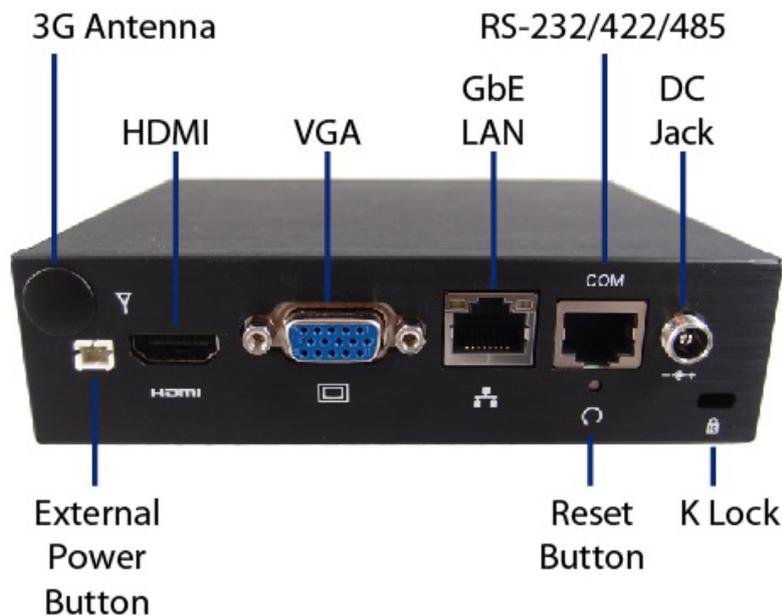


Figure 2 Rear Panel

### 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.

### HDMI

HDMI connector for display output

### VGA

D-Sub 15 pin VGA connector for display output

**COM**

RJ-45 Connector supports RS-232.

**Wireless / 3G**

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

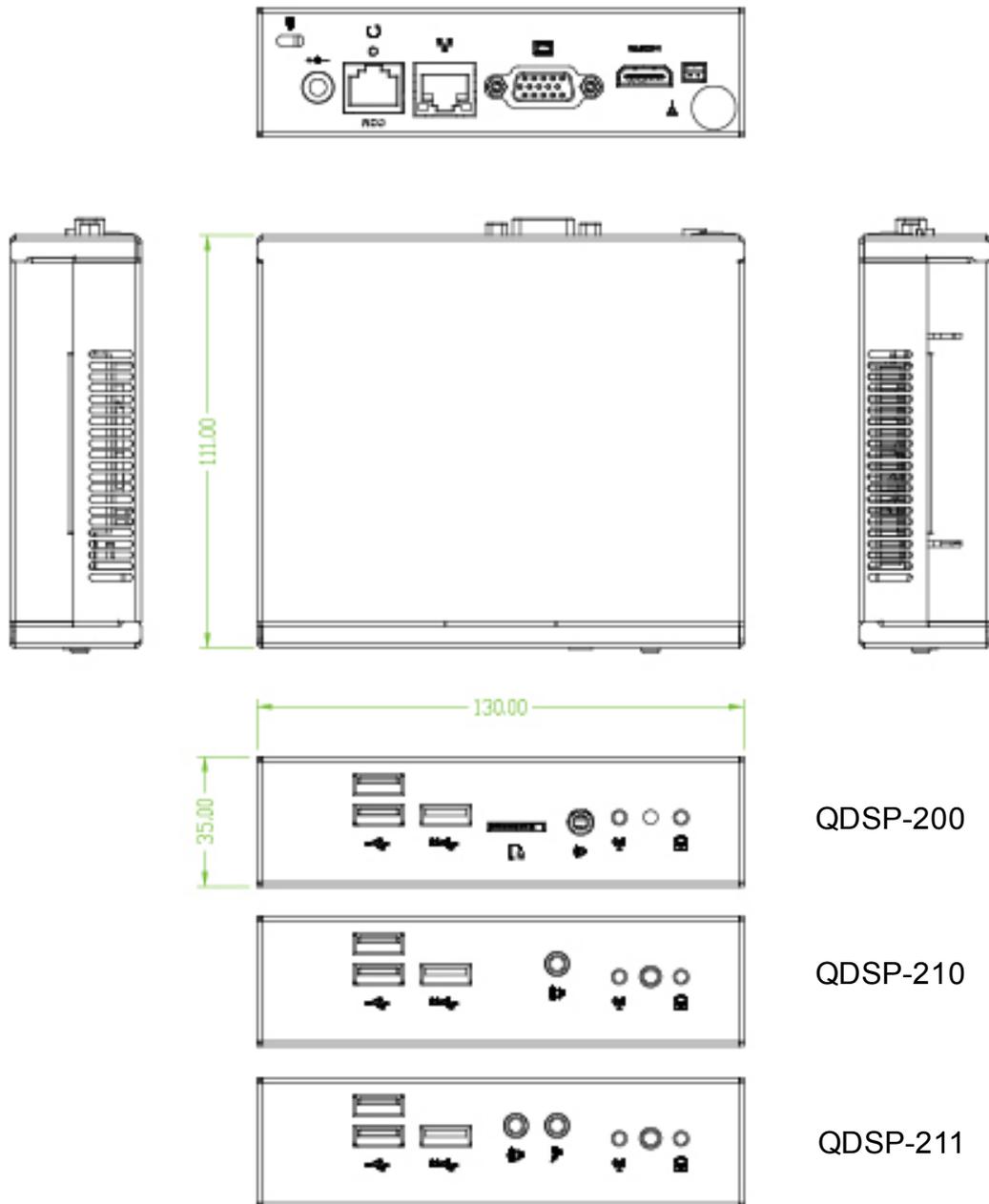
**Clear CMOS**

1x reset button for clear CMOS.

**External Power Button**

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

# 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 VGA / HDMI cable from your display to the VGA / HDMI port.**



Figure 4 VGA / HDMI

## ■ Connecting USB mouse & keyboard

Your QDSP-0200 Series does not come with a keyboard and mouse, but you can use any USB keyboard or mouse with your computer.

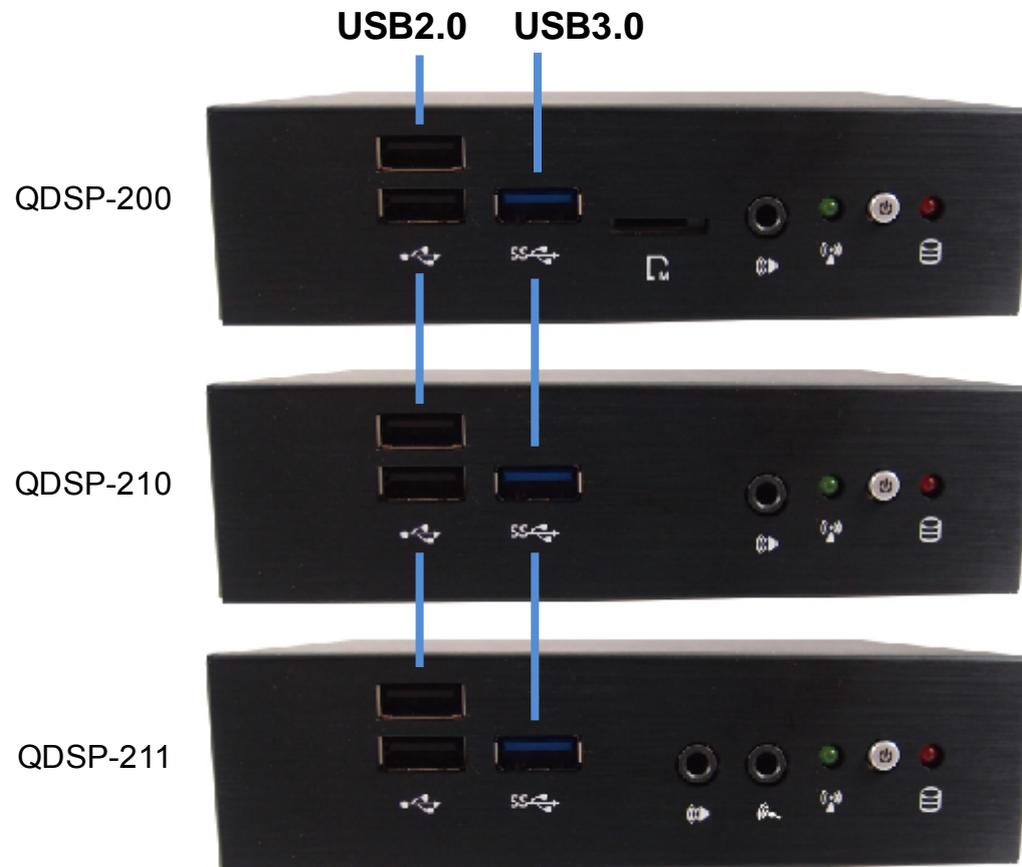


Figure 5 Connecting USB mouse & keyboard

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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.

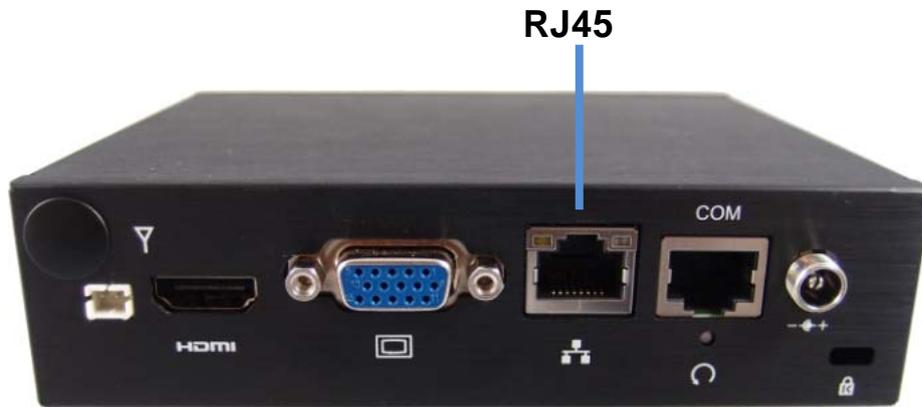


Figure 6 RJ45 connector

■ **Turning on the system**

1. Connect the power adapter cable to the DC jack (DC IN) of QDSP-0200 Series
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

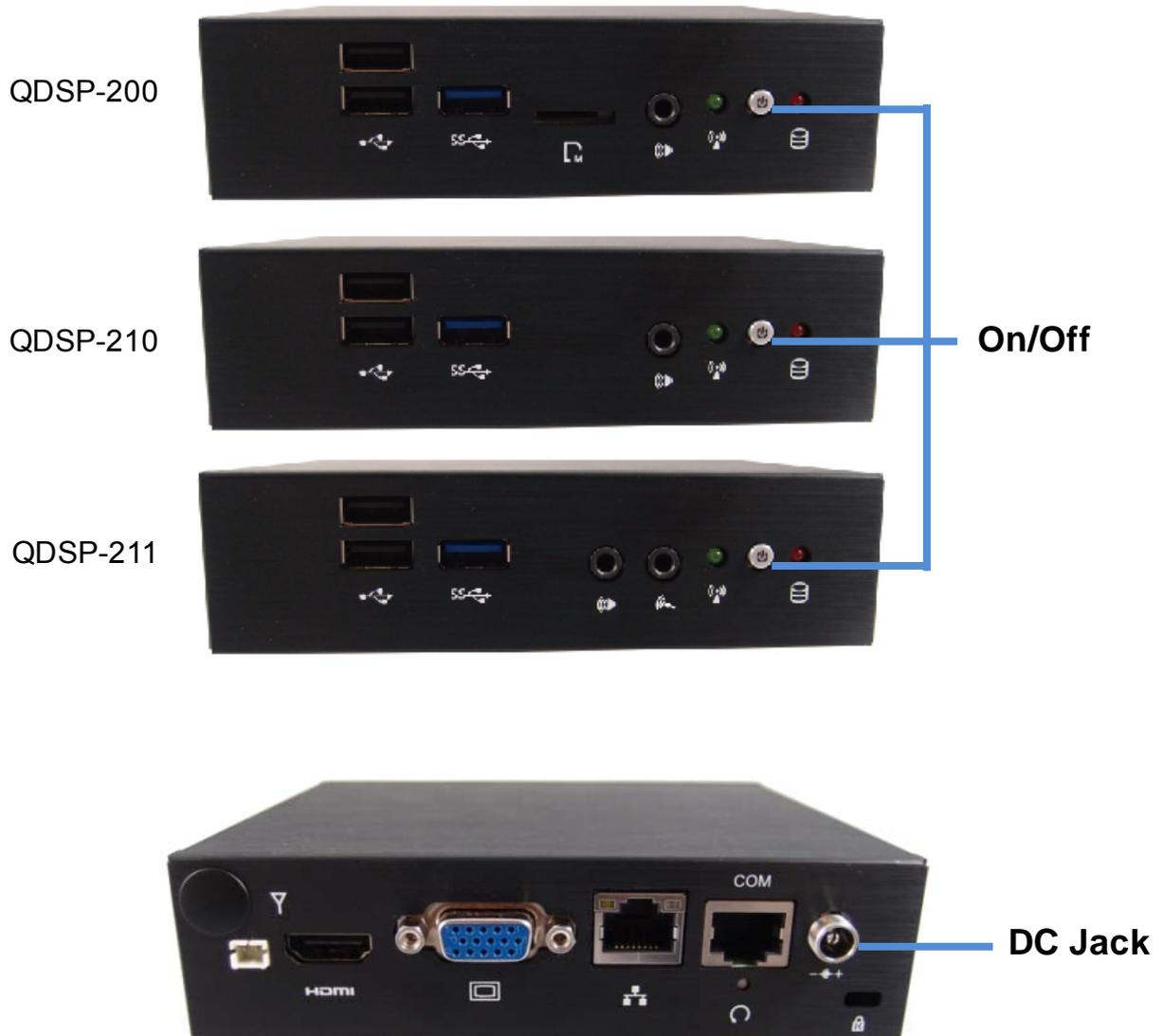


Figure 7 Turning on the system

## ■ Mounting your PC to a monitor

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

---

### 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-0200 Series 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-0200 Series is solidly secured to the display.

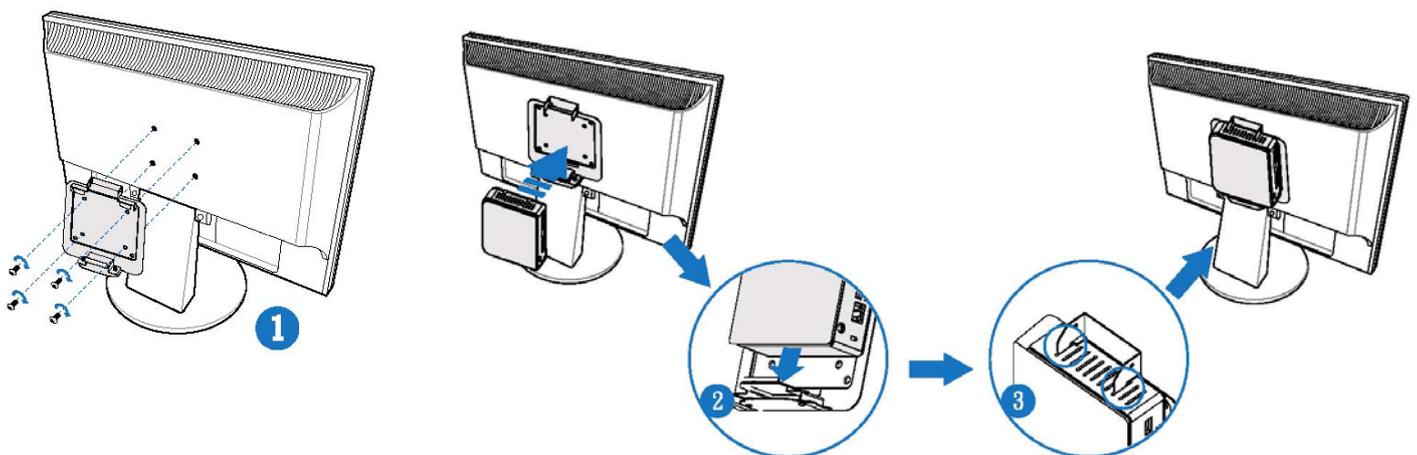


Figure 8 VESA mounting

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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-0200 Series has a Kensington lock slot for the Kensington MicroSaver. With the Kensington MicroSaver, a sturdy steel cable, you can attach your QDSP-0200 Series 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.

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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 (QDSP-0200)

BIOS SETUP UTILITY					
Main	Advanced	Power	Security	Boot	Save & Exit
Product Information					
Product Name			QDSP-0200		
BIOS Version			R0.01 (x64)		
BIOS Build Date			07/14/2015		
TXE FW Version			01.01.00.1089		
CPU Information					
Intel® Atom™ CPU E3825 @ 1.33GHz					
Microcode Revision			811		
Processor Cores			2		
Memory Information					
Total Size			2048 MB (DDR3L)		
Frequency			1067 MHz		
System date			[Fri 01/10/2014]		
System time			[16:48:14]		
Access Level			Administrator		
→ ← Select Screen ↑↓ Select Item Enter: Select +- Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4 Save & Exit ESC Exit					
Version 2.16.1242. Copyright (C) 2013, American Megatrends, Inc.					

Table 3 BIOS Main Menu (QDSP-0210)

BIOS SETUP UTILITY					
Main	Advanced	Power	Security	Boot	Save & Exit
Product Information					
Product Name			QDSP-0210		
BIOS Version			R0.01 (x64)		
BIOS Build Date			07/14/2015		
TXE FW Version			01.01.00.1089		
CPU Information					
Intel® Atom™ CPU E3825 @ 1.33GHz					
Microcode Revision			811		
Processor Cores			2		
Memory Information					
Total Size			2048 MB (DDR3L)		
Frequency			1067 MHz		
System date			[Fri 01/10/2014]		
System time			[16:48:14]		
Access Level			Administrator		
Version 2.16.1242. Copyright (C) 2013, American Megatrends, Inc.					

Table 4 BIOS Main Menu (QDSP-0211)

BIOS SETUP UTILITY					
Main	Advanced	Power	Security	Boot	Save & Exit
Product Information					
Product Name			QDSP-0211		
BIOS Version			R0.01 (x64)		
BIOS Build Date			07/14/2015		
TXE FW Version			01.01.00.1089		
CPU Information					
Intel® Celeron® CPU J1900 @ 1.99GHz					
Microcode Revision			811		
Processor Cores			4		
Memory Information					
Total Size			2048 MB (DDR3L)		
Frequency			1333 MHz		
System date			[Fri 01/10/2014]		
System time			[16:48:14]		
Access Level			Administrator		
Version 2.16.1242. Copyright (C) 2013, American Megatrends, Inc.					

## ■ Advanced Menu

Table 5 Advanced Menu

BIOS SETUP UTILITY					
Main	Advanced	Power	Security	Boot	Save & Exit
	Onboard LAN1 Controller		[Enabled]		
	Onboard LAN1 Boot		[Disabled]		
	Audio Controller		[Enabled]		
	> Display Configuration				
	> Super IO Configuration				
	> CPU Chipset Configuration				
	> SATA Configuration				
	> USB Configuration				
	> H/W Monitor				
					→ ← Select Screen
					↑↓ Select Item
					Enter: Select
					+ - Change Opt.
					F1: General Help
					F2: Previous Values
					F3: Optimized Defaults
					F4 Save & Exit
					ESC Exit
Version 2.16.1242. Copyright (C) 2013, American Megatrends, Inc.					

### Onboard LAN1 Controller

Options: Disabled, Enabled

### Onboard LAN1 Boot

Options: Disabled, Enabled

### Audio Controller

Options: Disabled, Enabled

Table 6 Advanced Menu – Display Configuration

BIOS SETUP UTILITY					
Main	Advanced	Power	Security	Boot	Save & Exit
Display Configuration				→ ← Select Screen	
Primary Display				[Auto]	
UWA Frame Buffer Size				[256MB]	
DVMT Pre-Allocated				[64M]	
DVMT Total Gfx Mem				[256MB]	
Primary IGFX Boot Display				[VBIOS Default]	
				↑↓ Select Item	
				Enter: Select	
				+- Change Opt.	
				F1: General Help	
				F2: Previous Values	
				F3: Optimized Defaults	
				F4 Save & Exit	
				ESC Exit	
Version 2.16.1242. Copyright (C) 2013, American Megatrends, Inc.					

**Primary Display**

Options: Auto, IGD

**UWA Frame Buffer Size**

Options: 128MB, 256MB, 512MB

**DVMT Pre-Allocated**

Options: 64M, 96M, 128M, 160M, 192M, 224M, 256M, 288M, 320M, 352M, 384M, 416M, 448M, 480M, 512M

**DVMT Total Gfx Mem**

Options: 128MB, 256MB, Max

**Primary IGFX Boot Display**

Options: VBIOS Default, CRT, HDMI

Table 7 Advanced Menu – Super IO Configuration

BIOS SETUP UTILITY					
Main	Advanced	Power	Security	Boot	Save & Exit
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) 2013, American Megatrends, Inc.					

Table 8 Advanced Menu – Super IO Configuration – Serial Port 1 Configuration

BIOS SETUP UTILITY					
Main	Advanced	Power	Security	Boot	Save & Exit
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 & Exit	
				ESC Exit	
Version 2.16.1242. Copyright (C) 2013, 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 9 Advanced Menu – CPU Chipset Configuration

BIOS SETUP UTILITY	
Main	Advanced
CPU Chipset Configuration  EIST [Enabled] Turbo Mode [Enabled] Limit CPUID Maximum [Disabled] Execute Disable Bit [Enabled] Intel Virtualization Technology [Disabled]	→ ← Select Screen ↑↓ Select Item Enter: Select +- Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4 Save & Exit ESC Exit
Version 2.16.1242. Copyright (C) 2013, American Megatrends, Inc.	

**EIST**

Options: Disabled, Enabled

**Turbo Mode**

Options: Disabled, Enabled

**Limit CPUID Maximum**

Options: Disabled, Enabled

**Execute Disable Bit**

Options: Disabled, Enabled

**Intel Virtualization Technology**

Options: Disabled, Enabled

Table 10 Advanced Menu – SATA Configuration

BIOS SETUP UTILITY					
Main	Advanced	Power	Security	Boot	Save & Exit
SATA Configuration				→ ← 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	
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**Serial-ATA (SATA)**

Options: Enabled, Disabled

**SATA Mode**

Options: IDE Mode, AHCI Mode

**Port 1**

Options: Enabled, Disabled

Table 11 Advanced Menu – USB Configuration

BIOS SETUP UTILITY					
Main	Advanced	Power	Security	Boot	Save & Exit
USB Configuration				→ ← Select Screen	
USB Devices:				↑↓ Select Item	
1 Keyboard, 1 Mouse, 1 Hub				Enter: Select	
LegacyUSB Support			[Enabled]	+- Change Opt.	
XHCI Legacy Support			[Enabled]	F1: General Help	
XHCI Hand-off			[Enabled]	F2: Previous Values	
EHCI Hand-off			[Disabled]	F3: Optimized Defaults	
USB Mass Storage Driver Support			[Enabled]	F4 Save & Exit	
XHCI Mode			[Smart Auto]	ESC Exit	
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**Legacy USB Support**

Options: Enabled, Disabled, Auto

**XHCI Legacy Support**

Options: Enabled, Disabled

**XHCI Hand-off**

Options: Enabled, Disabled

**EHCI Hand-off**

Options: Disabled, Enabled

**USB Mass Storage Driver Support**

Options: Disabled, Enabled

**XHCI Mode**

Options: Enabled, Smart Auto

Table 12 Advanced Menu – H/W Monitor

BIOS SETUP UTILITY					
Main	Advanced	Power	Security	Boot	Save & Exit
PC Health Status CPU Temperature : +34 C System Temperature : +33 C CPU FAN Speed : 2011 RPM +VCORE : +0.869 V +VIN : +12.268 V +5V : +5.066 V +VMEM : +1.357 V				→ ← Select Screen ↑↓ Select Item Enter: Select +- Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4 Save & Exit ESC Exit	
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## ■ Power Menu

Table 13 Power Menu

BIOS SETUP UTILITY					
Main	Advanced	Power	Security	Boot	Save & Exit
Power 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		[Disabled]		F4 Save & Exit	
> WatchDog Timer Configuration				ESC Exit	
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### 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 Ring Device

Options: Disabled, Enabled

### Resume By RTC Alarm

Options: Disabled, Enabled

### WatchDog Timer Configuration

#### ■ WDT Funtion

Options: Disabled, Enabled

## ■ Security Menu

Table 14 Security Menu

BIOS SETUP UTILITY					
Main	Advanced	Power	<b>Security</b>	Boot	Save & Exit
<p>Pass word 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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## ■ Boot Menu

Table 15 Boot Menu

BIOS SETUP UTILITY					
Main	Advanced	Power	Security	Boot	Save & Exit
Boot Configuration					
Full Screen LOGO Display		[Disabled]		→ ← Select Screen	
Setup Prompt Timeout		1		↑↓ Select Item	
Bootup NumLock State		[On]		Enter: Select	
Keyboard Detect Warning		[Enabled]		+- Change Opt.	
CSM Support		[Enabled]		F1: General Help	
Boot Option Filter		[Legacy only]		F2: Previous Values	
Boot Option Priorities				F3: Optimized Defaults	
				F4 Save & Exit	
				ESC Exit	
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### Full Screen LOGO Display

Options: Disabled, Enabled

### Bootup Numlock State

Options: On, Off

### Keyboard Detect Warning

Options: Enabled, Disabled

### CSM Support

Options: Enabled, Disabled

### Boot Option Filter

Options: UEFI and Legacy, Legacy only, UEFI only

## ■ Save & Exit Menu

Table 16 Save &amp; Exit Menu

BIOS SETUP UTILITY					
Main	Advanced	Power	Security	Boot	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	
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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-0200 Series 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-0200 Series from our website and install as instructed there. For other operating systems, please contact us.