BIOS User Guide

Shuttle[®] Installation Guide

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Disclaimer

We shall not be liable for any incidental or consequential damages resulting from the performance or use of this product.

We make no representation or warranty regarding the contents of this manual. Information in this manual had been carefully checked for accuracy;however, no guarantee is given as to the correctness of the contents. For continuing product improvement, we reserve the right to revise the manual or make changes to the specifications of this product at any time without notice and obligation to any person or entity regarding such change. The information contained in this manual is provided for general use by customers.

This device complies to Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference.
- 2. This device must withstand any background interference including those that may cause undesired operation.

Trademarks

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Microsoft and Windows are registered trademarks of Microsoft Corporation.

General Notice

Other brand and product names used herein are for identification purposes only and may be trademarks of their respective owners.

Safety Information

Read the following precautions before setting up.

CAUTION

Incorrectly replacing the battery may damage this co-mputer. Replace only with the same or equivalent type recommended by the manufacturer. Disposal of used batteries according to the manufacturer's instructions.

Laser compliance statement

The optical disc drive in this server is a laser product. The drive's classification label is lacated on the drive.

CLASS 1 LASER PRODUCT

CAUTION : INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM.

Installation Notices

Do not place this device underneath heavy loads or in an unstable position.

Do not expose this device to high levels of direct sunlight, high-humidity or wet conditions.

Do not use or expose this device around magnetic fields as magnetic interference may affect the performance of the device.

Do not block the air vents to this device or impede the airflow in any way.

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Motherboard Driver DVD

The DVD contents attached in NC01U Series motherboard are subject to change without notice.

The Motherboard Driver DVD contains all the motherboard drivers necessary to optimize the performance of this Shuttle Xvision in a Windows[®] OS. Install these drivers after installing Microsoft[®] Windows[®].

Insert the attached DVD into your DVD-ROM drive. The DVD AutoRun screen should appear. If the AutoRun screen does not appear, double click on Autorun icon in My Computer to bring up Shuttle Mainboard Software Setup screen.

Navigation Bar Description :

- Auto Install Driver/Utility.
- Time User Manuals Motherboard Manual, Quick Guide.
- Chief Link To Shuttle Website Link to shuttle website homepage.
- This DVD Allows you to see contents of this DVD.



User Manuals

- Install Adobe Reader 9.5
- MotherBoard Manual
- 🖙 Quick Guide



Starting BIOS

AMIBIOS has been integrated into many motherboards for over a decade. In the past, people often referred to the AMIBIOS setup menu as BIOS, BIOS setup, or CMOS setup.

American Megatrends refers to this setup as BIOS. Specifically, it is the name of the AMIBIOS8 BIOS setup utility. This chapter describes the basic navigation of the BIOS setup screens.

Enter the BIOS

To enter the BIOS setup screens, follow the steps below:

- Step1. Power on the motherboard.
- Step2. Press the <Delete> key on your keyboard when you see the following text prompt: **Press DEL to run Setup.**
- Step3. After you press the <Delete> key, the main BIOS setup menu displays. You can access the other setup screens from the main BIOS setup menu, such as the Chipset and Power menus.
 - This manual describes the standard look of the BIOS setup screen. The motherboard manufacturer has the ability to change any and all of the settings described in this manual. This means that some of the options described in this manual do not exist in your motherboard's AMIBIOS.
 - In most cases, the <Delete> key is used to invoke the BIOS setup screen. There are a few cases that other keys are used, such as <F1>,<F2>, and so on.

BIOS Setup Menu

The main BIOS setup menu is the first screen that you can navigate. Each main BIOS setup menu option is described in this user's guide.

The Main BIOS setup menu screen has two main frames. The left frame displays all the options that can be configured. "Grayed-out" options cannot be configured. Options is blue can be.

The right frame displays the key legend. Above the key legend is an area reserved for a text message. When an option is selected in the left frame, it is highlighted in white.

Often a text message will accompany it.

AMIBIOS8 has default text messages built into it. The motherboard manufacture retains the option to include, leave out, or change any of these text messages. They can also add their own text messages. Because of this, many screen shots in this manual are different from your BIOS setup screen.

The BIOS setup/utility uses a key-based navigation system called hot keys. Most of the BIOS setup utility hot keys can be used at any time during the setup navigation process. These keys include <F1>, <F4>, <Enter>, <ESC>, <Arrow> keys, and so on.

There is a hot key legend located in the right frame on most BIOS setup screens.

Hot Key	Description
\rightarrow Left \leftarrow Right	The Left and Right <arrow> keys allow you to select a BIOS setup screen. For example: Main screen, Advanced screen, Chipset screen, and so on.</arrow>
↑ Up ↓ Down	The Up and Down <arrow> keys allow you to select an BIOS setup item or sub- screen.</arrow>
+- Plus/Minus	The Plus and Minus <arrow> keys allow you to change the field value of a particular setup item. For example: Date and Time.</arrow>
Tab	The <tab> key allows you to select BIOS setup fields.</tab>
F1	The <f1> key allows you to display the General Help screen. Press the <f1> key to open the General Help screen.</f1></f1>
F4	The <f4> key allows you to save any changes you have made and exit BIOS Setup. Press the <f4> key to save your changes. Press the <enter> key to save the configuration and exit. You can also use the <arrow> key to select Cancel and then press the <enter> key to abort this function and return to the previous screen.</enter></arrow></enter></f4></f4>
ESC	The <esc> key allows you to discard any changes you have made and exit the BIOS Setup. Press the <esc> key to exit the BIOS setup without saving your changes. Press the <enter> key to discard changes and exit. You can also use the <arrow> key to select Cancel and then press the <enter> key to abort this function and return to the previous screen.</enter></arrow></enter></esc></esc>
Enter	The <enter> key allows you to display or change the setup option listed for a particular setup item. The <enter> key can also allow you to display the setup sub-screens.</enter></enter>

The <F8> key on your keyboard is the Fail-Safe key. It is not displayed on the BIOS key legend by default. To set the Fail-Safe settings of the BIOS, press the <F8> key on your keyboard. It is located on the upper row of a standard 101 keyboard. The Fail-Safe settings allow the motherboard to boot up with the least amount of options set. This can lessen the probability of conflicting settings.

🖎 Main Setup

When you first enter the BIOS Setup Utility, you will enter the Main setup screen.

You can always return to the Main setup screen by selecting the Main tab. There are two Main Setup options. They are described in this section. The Main BIOS Setup screen is shown below.

Aptio Setup Utility – (Main Advanced Security Boot Exi	Copyright (C) 2015 American Megatrends, Inc. t
System Overview BIOS Version EC Version Build Date and Time Processor Speed	B.00.02 x64 0.10.59 06/12/2015 17:12:32 Intel(R) Core(TM) i5–5250U CPU @ 1.60GHz 1600 MHz
System Memory Total Memory ME FW Version ME Firmware SKU	8192 MB (LPDDR3) 10.0.38.1000 1.5MB
System Date System Time	[Thu 07/09/2015] [15:38:25]
Version 2.17.1249. Co	oyright (C) 2015 American Megatrends, Inc.

System Time/System Date

Use this option to change the system time and date. Highlight System Time or System Date using the <Arrow> keys. Enter new values through the keyboard. Press the <Tab> key or the <Arrow> keys to move between fields. The date must be entered in MM/DD/YY format. The time is entered in HH:MM:SS format.

The time is in 24-hour format. For example, 5:30 A.M. appears as 05:30:00, and 5:30 P.M. as 17:30:00.

🖎 Advanced

Select the Advanced tab from the BIOS setup screen to enter the Advanced BIOS Setup screen. You can select any of the items in the left frame of the screen, such as CPU Configuration, to go to the sub menu for that item.

You can display an Advanced BIOS Setup option by highlighting it using the <Arrow> keys. All Advanced BIOS Setup options are described in this section.

The Advanced BIOS Setup screen is shown below. The sub menus are described on the following pages.

Aptio Setup Utility – Copyright (C) 2015 American Megatrends, Inc. Main <mark>Advanced</mark> Security Boot Exit	
Advanced Settings WARNING:Setting wrong values in below sections may cause system function. • CPU Configuration • SATA Configuration • USB Configuration • OnBoard Device Configuration • Power Management Configuration • Hardware Health Configuration	CPU Configuration Settings ++: Select Screen fl: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
Version 2.17.1249. Copyright (C) 2015 American Megatrends	, Inc.

CPU Configuration

You can use this screen to select options for the CPU Configuration Settings. Use the up and down <Arrow> keys to select an item. Use the <Plus> and <Minus> keys to change the value of the selected option. A description of the selected item appears on the right side of the screen. The settings are described on the following pages. An example of the CPU Configuration screen is shown below.

Aptio Setup Utilit Advanced	y – Copyright (C) 2015 Americ	an Megatrends, Inc.
CPU Signature	306d4	▲ Enabled for Windows
Microcode Patch	18	XP and Linux (OS
Max CPU Speed	1600 MHz	optimized for
Min CPU Speed	500 MHz	Hyper-Threading
CPU Speed	2500 MHz	Technology) and
Processor Cores	2	Disabled for other OS
Intel HT Technology	Supported	(OS not optimized for
Intel VT–x Technology	Supported	Hyper-Threading
Intel SMX Technology	Not Supported	Technology). When
64-bit	Supported	Disabled only one
EIST Technology	Supported	thread per enabled
CPU C3 state	Supported	
CPU C6 state	Supported	
CPU C7 state	Supported	→+: Select Screen
		î↓: Select Item
L1 Data Cache	32 kB x 2	Enter: Select
L1 Code Cache	32 kB x 2	+/-: Change Opt.
L2 Cache	256 kB x 2	F1: General Help
L3 Cache	3 MB	F2: Previous Values
L4 Cache	Not Present	F3: Optimized Defaults
		F4: Save & Exit
Hyper-threading	[Enabled]	ESC: Exit
Active Processor Cores	[A11] [Sach Lad]	
Intel(R) V.T.	[Enabled]	
Adjacent Cache Line Prefetch	[Enabled]	V
Version 2.17.1249	. Copyright (C) 2015 American	Megatrends, Inc.

Hyper-threading

This item allows you to enable or disable Hyper-threading.

> The choice: Enabled , Disabled.

Active Processor Cores

This item allows you to determine how many cores to be enabled.

➤ The choice: All,1,2,3.

Intel (R) V. T.

When enable, a VMM can utilize the additional hardware capabilities provided by vanderpool Technology.

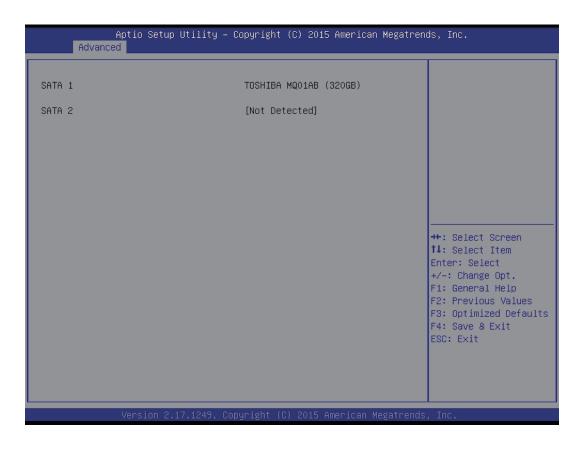
> The choice: Enabled , Disabled.

Adjacent Cache Line Prefetch

This item allows you to enable or disable Adjacent Cache Line Prefetch.

> The choice: Enabled , Disabled.

SATA Configuration



> USB Configuration

Aptio Setup Utility – C Advanced	opyright (C) 2015 American Megatren	ds, Inc.
USB 3.0 Controller USB Devices Enabled: 1 Drive, 1 Keyboard, 1 Mouse, 4	[Enabled] Hubs	Enabled/Disabled USB 3.0 controller.
USB Support	[Enabled]	
		<pre> ++: Select Screen 11: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit</pre>
Version 2.17.1249. Cop	yright (C) 2015 American Megatrends	, Inc.

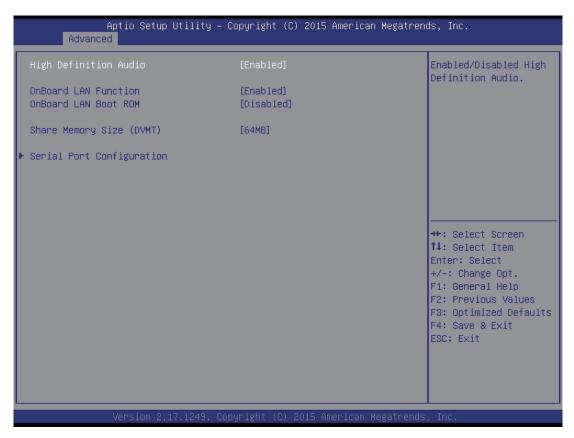
USB Support

This item allows you to enable or disable USB 3.0 controller.

➤ The choice: Enabled , Disabled.

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OnBoard Device Configuration



High Definition Audio

This item allows you to enable or disable system High Definition Audio.

> The choice: Enabled , Disabled.

OnBoard LAN Function

This item allows you to enable or disable LAN Function.

> The choice: Enabled , Disabled.

OnBoard LAN Boot ROM

This item allows you to enable or disable Onboard LAN BOOT ROM.

> The choice: Enabled , Disabled.

Share Memory Size (DVMT)

Allows you to select the size of system memory used by the internal graphics device.

> The choice: 64MB, 128MB, 256MB, 512MB.

Serial Port Configuration

Option are in its sub-menu.

Press<Enter>to enter the sub-menu of detailed options.

Serial Port 1

This item allows you to enable or disable Serial Port.

➤ The choice: Enabled, Disabled.

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Power Management Configuration

Aptio Setup Utilit Advanced	y – Copyright (C) 2015 Americ	can Megatrends, Inc.
Suspend Mode	[S3(STR)]	Select the highest ACPI sleep state the
Wake Up by USB (S3)	[Enabled]	system will enter when the SUSPEND
EuP Function	[Disabled]	button is pressed.
Power-On after Power-Fail Wake Up by LAN PowerOn by RTC Alarm RTC Alarm Date (Hours) RTC Alarm Date (Minutes) RTC Alarm Date (Seconds) RTC Alarm Everyday Sunday Monday Tuesday Wednesday Hhursday Friday Saturday	[Power Off] [Disabled] [Enabled] 0 0 [Disabled] [Disabled] [Disabled] [Disabled] [Disabled] [Disabled] [Disabled] [Disabled]	++: Select Screen 11: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
Version 2.17.1249	. Copyright (C) 2015 American	ו Megatrends, Inc.

Suspend Mode

Select the highest ACPI sleep state the system will enter when the SUSPEND button is pressed.

≻ The choice: S3(STR), S1(POS).

Wake Up By USB (S3)

This item allows you to enable or disable system wake up by USB (S3).

➤ The choice: Enabled , Disabled.

EuP Function

This item allows you to enable or disable system EuP function in S4/S5. ➤ The choice: Enabled , Disabled.

PowerOn after Power-Fail

This item allows you to set system power on automatically after AC power restored.

The choice: Power On, Former-Sts, Power Off, Power On by LAN, Power On by RTC.

Wake Up By Ring

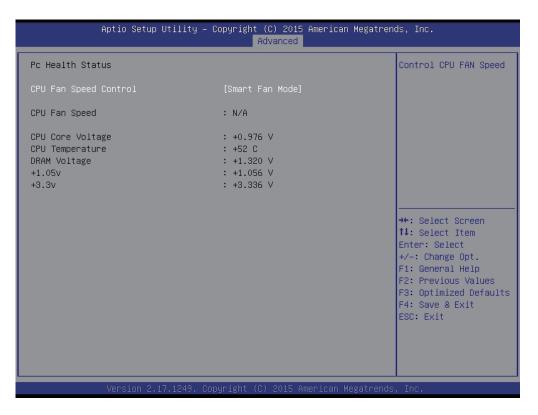
This item allows you to enable or disable system wake up by Ring. ➤ The choice: Enabled , Disabled.

PowerOn by RTC Alarm

When enabled, System will wake on the hr::min::sec specified.

> The choice: Enabled , Disabled.

Hardware Health Configuration



Aptio Setup Utility – Copyright (C) 2015 American Megatrends, Inc. Advanced		
PC Health Status CPU Fan Speed Control CPU Fan Speed CPU Core Voltage CPU Temperature DRAM Voltage +1.05v +3.3v	Advanced [Smart Fan Mode] : N/A : +0.976 V : +50 C : +1.320 V CPU Fan Speed Control Smart Fan Mode Ultra-Low Mode Low Mode	Control CPU FAN Speed
Vacio 2 17 124	Mid Mode Full Mode	<pre>++: Select Screen 11: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit</pre>

🖎 Boot

Select the Boot tab from the BIOS setup screen to enter the Boot BIOS Setup screen. You can select any of the items in the left frame of the screen, such as Boot Settings Configuration, to go to the sub menu for that item.

You can display an Boot BIOS Setup option by highlighting it using the <Arrow> keys. All Boot BIOS Setup options are described in this section.

The Boot BIOS Setup screen is shown below. The sub menus are described on the following pages.

Bootup NumLock State	[Off]	Select the keyboard NumLock state
Fast Boot	[Disabled]	NUMEDOK STATE
Boot mode select	[LEGACY]	
Boot Device Priorities		
Boot Option #1	[USB Key:Generic STORAGE DEV]	
Boot Option #2	[Hard Disk: TEAM TIM4Q49032G]	
Boot Option #3	[Network:IBA GE Slot 00C8 v1550]	
Boot Option #4	[USB Hard Disk]	
Boot Option #5	[USB_CD/DVD]	
Boot Option #6	[USB Floppy]	
Hard Disk Drive BBS Priorities		↔+: Select Screen
USB Key Drive BBS Priorities		î∔: Select Item
NETWORK Drive BBS Priorities		Enter: Select
		+/-: Change Opt.
		F1: General Help
		F2: Previous Values
		F3: Optimized Defaul
		F4: Save & Exit
		ESC: Exit

Bootup NumLock State

Select the keyboard NumLock state after system bootup. > The choice: On, Off.

Fast Boot

This item allows you to enable or disable Fast Boot.

The choice: Enabled , Disabled.

Boot mode select

Choice Boot to UEFI or LEGACY. → The choice: UEFI, LEGACY.

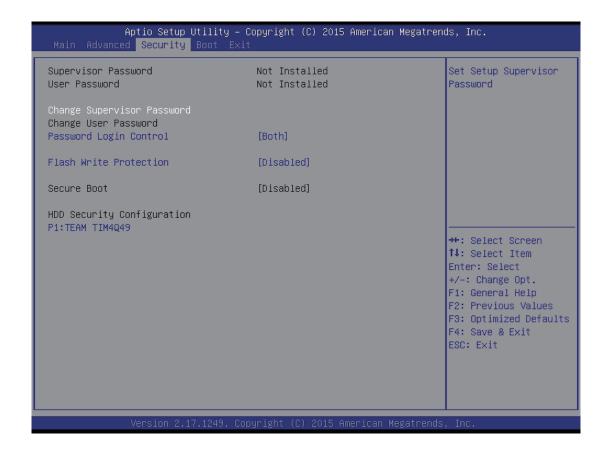
Boot Device Priority (Boot Option #1/2/3/....)

Specifies the boot sequence from the available devices. A device enclosed in parenthesis has been disabled in the corresponding type menu.

🖎 Security

Select the Security tab from the BIOS setup screen to enter the Security BIOS Setup screen. You can display an Security BIOS Setup option by highlighting it using the <Arrow> keys. All Security BIOS Setup options are described in this section.

The Security Setup screen is shown below. The sub menus are documented on the following pages.



Supervisor Password

Indicates whether a supervisor password has been set. If the password has been installed, Installed displays. If not, Not Installed displays.

User Password

Indicates whether a user password has been set. If the password has been installed, Installed displays. If not, Not Installed displays.

Change Supervisor Password

Select Change Supervisor Password from the Security Setup menu and press <Enter>.

Enter New Password:

Type the password and press <Enter>. The screen does not display the characters entered. Retype the password as prompted and press <Enter>. If the password confirmation is incorrect, an error message appears. The password is stored in NVRAM after BIOS completes.

Change User Password

Select Change User Password from the Security Setup menu and press <Enter>.

Enter New Password:

Type the password and press <Enter>. The screen does not display the characters entered. Retype the password as prompted and press <Enter>. If the password confirmation is incorrect, an error message appears. The password is stored in NVRAM after BIOS completes.

Password Login control

This item allows user to adjust Password Login control.

≻ The choice: Setup, Boot, Both.

Flash Write Protection

Choose [Enabled] to avoid virus destroy BIOS. If you want to flash BIOS, you must set it [Disabled].

> The choice: Enabled or Disabled.

Secure Boot

This item allows you to enable or disable Secure Boot.

> The choice: Enabled or Disabled.

🖎 Exit

Select the Exit tab from the BIOS setup screen to enter the Exit BIOS Setup screen.

You can display an Exit BIOS Setup option by highlighting it using the <Arrow> keys. All Exit BIOS Setup options are described in this section.

The Exit BIOS Setup screen is shown below.



Save Changes and Exit

When you have completed the system configuration changes, select this option to leave BIOS Setup and reboot the computer so the new system configuration parameters can take effect.

Select "Save Changes and Exit" from the Exit menu and press < Enter>.

Save Configuration Changes and Exit Now?

[Ok] [Cancel]

appears in the window. Select Ok to save changes and exit.

Exit Without Saving Changes

Exit system setup without saving any changes.

Load Defaults Settings

Load Optimal Default values for all the setup questions.