# **XPC BIOS User Guide**

For the : DH670

# Shuttle<sup>®</sup> XPC Installation Guide

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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.

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## 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.

## 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 DH670 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<sup>®</sup> OS. Install these drivers after installing Microsoft<sup>®</sup> Windows<sup>®</sup>.

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
- Install Intel Rapid Storage Tech. Driver
- @ User Manuals Motherboard Manual, Quick Guide.
- C 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
- The Motherboard Manual
- 🖙 Quick Guide



# Appendix

## **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 AMIBIOS 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.

AMIBIOS 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
→ Left ← 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>

## 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.

Main Advanced Security B	Aptio Setup – AMI Noot Exit	
System Overview		Set the Time. Use Tab to switch between Time elements.
BIOS Version: Build Date:	1.00 11/12/2021	Switch Setween Time Clements.
EC Version:	0.01.22	
Intel ME Version:	16.0.0.1435	
BIOS Firmware GUID E157AFA5-E6C1-451E-BEC9-6810	:1847BEE6	
Processor 12th Gen Intel(R) Core(TM) :	5-12400	++: Select Screen ↑↓: Select Item
System Memory Total Memory:	4096 MB (DDR4)	Enter: Select +∕-: Change Opt. F1: General Help
System Date System Time	[Fri 11/12/2021] [11:44:36]	F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
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#### 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 – AMI Main Advanced Security Boot Exit	
Advanced Settings WARNING:Setting wrong values in below sections may cause system malfunction. TPM Configuration Power Management Configuration CPU Configuration SATA Configuration OnBoard Device Configuration Hardware Health Configuration	<pre>++: Select Screen 14: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save &amp; Exit ESC: Exit</pre>
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## > <u>TPM Configuration</u>

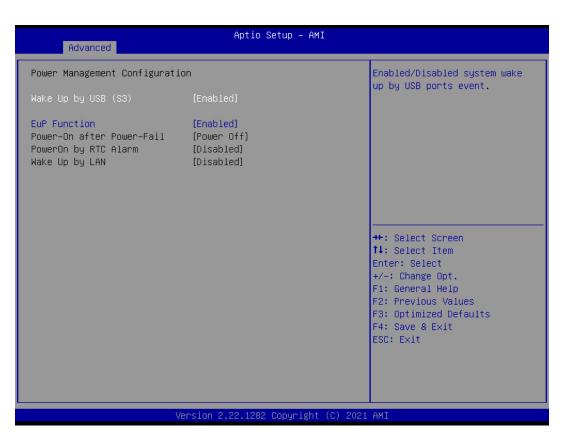
Advanced	Aptio Setup — AMI	
Security Device Support	[Enabled]	Enables or Disables BIOS support for security device. O.S. will not show Security Device. TCG EFI protocol and INT1A interface will not be available.
		<pre>++: Select Screen 14: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save &amp; Exit ESC: Exit</pre>
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### Security Device Support

This item allows user to enable/disable firmware TPM funciton.

➤ The choice: Enabled, Disabled.

## Power Management Configuration



## 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.

#### Power-On 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.

## PowerOn by RTC Alarm

When enabled, System will wake on the hr∷min::sec specified.➤ The choice: Enabled , Disabled.

### Wake Up by LAN

This item allows you to enable or disable system wake on by onboard LAN chip. ➤ The choice: Enabled , Disabled.

#### > <u>CPU Configuration</u>

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.

The CPU Configuration setup screen varies depending on the installed processor.

Advanced	Aptio Setup – AMI	
CPU Configuration		▲ Intel(R) Virtualization
ID	0×90672	Technology
Brand String	12th Gen Intel(R) Core(TM) i5–12400	
VMX	Supported	
SMX/TXT	Not Supported	
TXT Crash Code	0x0000000	
TXT SPAD	0x00000000000000	
Boot Guard Status	0x0000000	
Boot Guard ACM Policy Status	0x000000000000000	
Boot Guard SACM	0x000000100000000	
Information		→+: Select Screen
Frequency	2500 MHz	↑↓: Select Item
L1 Data Cache	48 KB × 6	Enter: Select
L1 Instruction Cache	32 KB × 6	+/-: Change Opt.
L2 Cache	1280 KB x 6	F1: General Help
L3 Cache	18 MB	F2: Previous Values
L4 Cache	NZA	F3: Optimized Defaults
		F4: Save & Exit
Intel(R) V.T.	[Enabled]	ESC: Exit
Active Cores	[A11]	
Intel(R) HT Technology	[Enabled]	
EIST	[Enabled]	
Intel(R) Speed Shift Technology	[Enabled]	
Turbo Mode	[Enabled]	
C State Support	[Enabled]	▼
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#### Intel(R) V. T.

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

> The choice: Enabled , Disabled.



## Active Processor Cores

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

➤ The choice: ALL,1.

### Intel(R) HT Technology

This item allows you to enable or disable Intel(R) HT Technology. ➤ The choice: Enabled , Disabled.

#### <u>EIST</u>

This item allows you to enable or disable Enhanced Intel SpeedStep<sup>®</sup> Technology.

> The choice: Enabled , Disabled.

#### Intel(R) Speed Shift Technology

This item allows you to enable or disable Intel(R) Speed Shift Technology(ISST).

> The choice: Enabled , Disabled.

### Turbo Mode

This item allows you to enable or disable Intel<sup>®</sup> Turbo Boost Technology.

> The choice: Enabled , Disabled.

The CPU Configuration setup screen varies depending on the installed processor.

#### C State Support

This item allows you to enable or disable CPU C State.

> The choice: Enabled , Disabled.

# > SATA Configuration

Advanced	Aptio Setup – AMI	
SATA Configuration		Determines how SATA
SATA Mode Selection	[AHCI]	controller(s) operate.
M.2 NVMe	[Not Detected]	
M.2 SATA1	[Not Detected] [Not Detected]	
		<pre>++: Select Screen fl: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save &amp; Exit ESC: Exit</pre>
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## SATA Mode

This item allows you to set the SATA Mode.

≻ The choice: AHCI or RAID.

## Onboard Device Configuration



#### **High Definition Audio**

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

> The choice: Enabled , Disabled.

#### **CNVi Function**

This item allows you to enable or disable CNVi interface function.

> The choice: Enabled , Disabled.

#### **Onboard LAN1/2 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.

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

> The choice: 32MB, 64MB, 128MB, 256MB, 512MB.

## Intel(R) VT-d

This item allows you to enable or disable VT-d.

> The choice: Enabled , Disabled.

#### Serial Port Configuration

Option are in its sub-menu.

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

#### Serial Port 1/2

This item allows you to enable or disable Serial Port.

> The choice: Enabled, Disabled.

#### Termination(120ohm)

This item allows you to enable or disable Termination(120ohm) function for RS422/485..

> The choice: Enabled, Disabled.

Serial Port 1       [Enabled]         Change Mode       [RS232]         Termination(1200hm)       [Disabled]         Change Settings       [3F8h]         Serial Port 2       [Enabled]         Change Settings       [2F8h]         **: Select Screen         11: Select Item         Enter: Select         +/-: Change Opt.         F1: General Help         F2: Previous Values         F3: Optimized Defaults         F4: Save & Exit         ESC: Exit	Advanced	Aptio Setup - AMI	
<pre>\$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$</pre>	Change Mode Termination(120ohm) Change Settings Serial Port 2	(RS232) [Disabled] [3F8h] [Enabled]	
			<pre>fl: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save &amp; Exit</pre>
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## > Hardware Health Configuration

Advanced	Aptio Setup — AMI	
System Temperature	[Smart Fan Mode] : 1637 RPM : +34 % : +34 % : +0.788 V : +1.230 V	FAN Speed control select
		<pre>++: Select Screen 11: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save &amp; Exit ESC: Exit</pre>
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## FAN1 Speed Control

This item allows you to set Fan1 Speed.

The choice: Smart Fan Mode, Ultra-Low Speed, Low Speed, Mid Speed, Full Speed. English

## 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: User Password:	Not Installed Not Installed	Set Supervisor Password
Change Supervisor Password Change User Password		
	[Setup]	
Flash Write Protection	[Disabled]	
Secure Boot Control	[Disabled]	
		<pre>++: Select Screen 1↓: Select Item</pre>
		Enter: Select
		+/-: Change Opt. F1: General Help
		F2: Previous Values
		F3: Optimized Defaults
		F4: Save & Exit ESC: Exit

#### 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: Boot, Setup, 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 Control

This item allows you to enable or disable Secure Boot.

> The choice: Enabled, Disabled.

## 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.

Main Advanced Security B	Aptio Setup – AMI pot Exit	
Boot Settings Configuration Bootup Num-Lock Boot from USB device Fast Boot Function	[Enabled] [Enabled] [Enabled]	Select the keyboard NumLock state.
Boot Device Priority Boot Option #1 Boot Option #2 Boot Option #3 Boot Option #4 Boot Option #5 Boot Option #6 • UEFI USB Key Drive BBS Prior	[Hard Disk] [USB Hard Disk] [USB CD/DVD] [USB Key:UEFI: ADATA, Partition 1] [USB Floppy] [Network] ities	<pre>++: Select Screen fl: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save &amp; Exit ESC: Exit</pre>
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#### Bootup Num-Lock

This item allows you to enable or disable keyboard Num-Lock state.The choice: Enabled, Disabled.

#### Boot from USB device

This item allows you to enable or disable boot from USB device. ➤ The choice: Enabled , Disabled.

## Fast Boot Function

This item allows you to enable or disable Fast Boot Function.

> The choice: Enabled , Disabled.

## 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.

English

## 🔊 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.

Aptio Setup – AMI Main Advanced Security Boot <mark>Exit</mark>	I
Save Changes and Exit Exit Without Saving Changes	Exit system setup after saving the changes.
Load Defaults Settings	
	++: 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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#### 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

Select "Exit without Saving Changes" from the Exit menu and press <Enter>. Select Ok to discard changes and Exit.

#### Load Defaults Settings

BIOS automatically sets all BIOS Setup options to a complete set of default settings when you Select this option. The Optimal settings are designed for maximum system performance, but may not work best for all computer applications. In particular, do not use the Optimal BIOS Setup options if your computer is experiencing system configuration problems.

Select Load Optimal Defaults from the Exit menu and press <Enter>.

Select Ok to load optimal defaults.

## 产品中有害物质的名称及含量

产品名称:DH670

部件名称 及 型号	有害物质					
	铅(Pb)	汞(Hg)	镉(Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
电路板组件	Х	0	0	0	0	0
风散模块	0	0	0	0	0	0
金属件	x	0	0	0	0	0
电源供应器	Х	0	0	0	0	0

\*:电路板组件包括印刷电路板及其构成的零部件,如电阻、电容、集成电路、连接器等

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