# **XPC BIOS User Guide**

For the : DH310V2 Series

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

# Copyright

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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 a Shuttle XPC.

# CAUTION

Incorrectly replacing the battery may damage this computer. Replace only with the same or equivalent as recommended by Shuttle. 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 : NVISIBLE 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, highhumidity 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 DH310V2 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:

- P Auto Install Driver/Utility.
- Tinstall Intel Rapid Storage Tech. Driver.
- Contract Con
- 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
- 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
→ 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 subscreens.</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.

Aptio Setup Main Advanced Security	∣Utility – Copyright (C) 2018 American ∣ Boot Exit	n Megatrends, Inc.
System Overview		Set the Date. Use Tab to switch between Date elements.
AMIBIOS		
Version: Build Date:	1.00 12/06/2018	
Intel ME version Version:	11.8.55.3510	
VCI 31011.	11.0.33.3310	
BIOS Firmware GUID	DA0C8020-4087-4F93-A7F0-FA1D461 499B8	
Processor Intel(R) Core(TM) i7–8700	T CPU @ 2.40GHz	
System Memory		↔: Select Screen
Total Memory:	16384 MB (DDR4)	Enter: Select
		+/–: Change Opt. F1: General Help
System Date	[Thu 12/06/2018]	F2: Previous Values
System Time	[16:24:26]	F3: Optimized Defaults F4: Save & Exit
		ESC: Exit
Version 2.	20.1271. Copyright (C) 2018 American M	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) 2018 American Main <mark>Advanced</mark> Security Boot Exit	Megatrends, Inc.
Advanced Settings WARNING:Setting wrong values in below sections may cause system malfunction. > TPM Configuration > Hardware Health Configuration > CPU Configuration > SATA Configuration > USB Configuration > OnBoard Device Configuration > Power Management Configuration	++: Select Screen 14: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
Version 2.20.1271. Copyright (C) 2018 American M	egatrends, Inc.

# > <u>TPM Configuration</u>

Aptio Setup Ut Advanced	ility – Copyright (C) 2018	American Megatrends, Inc.
Security Device Support	[Disable]	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 11: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save &amp; Exit ESC: Exit</pre>
Version 2.18.	1263. Copyright (C) 2018 Am	erican Megatrends, Inc.

Security Device Support

This item allows you to enable or disable TPM function.

# Hardware Health Configuration

Aptio Setup Uti Advanced	lity – Copyright (C) 2018 American	Megatrends, Inc.
FAN1 Speed Control	[Smart Fan Mode]	FAN Speed control select
Fan1 Speed	: +27 % : +44 % : 1002 RPM : +1.020 V : +1.224 V	
		<pre>++: Select Screen f1: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save &amp; Exit ESC: Exit</pre>
Version 2.20.1	271. Copyright (C) 2018 American M	egatrends, Inc.

#### FAN1 Speed Control

Fan Speed Control function.

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

# 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.

CPU Configuration		Enable/Disable Software Guard Extensions (SGX)
Type ID L1 Data Cache L1 Instruction Cache L2 Cache L3 Cache L4 Cache VMX SMX/TXT	Intel(R) Core(TM) 17-8700T CPU @ 2.40GHz 0x906EA 32 KB x 6 32 KB x 6 256 KB x 6 12 MB N/A Supported Supported	
SW Guard Extensions (SGX) Intel(R) V.T. Active Processor Cores Intel® HT Technology Intel(R) Speed Shift Technology C State Support EIST Turbo Mode		++: Select Screen 14: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit

#### SW Guard Extensions (SGX)

This item allows you to enable or disable Software Guard Extensions.

> The choice: Enabled , Disabled, Software Controlled.

#### Intel (R) V. T.

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

#### Intel® HT Technology

This item allows you to enable or disable Intel(R) HT Technology.

➤ The choice: Enabled , Disabled.

Intel(R) Speed Shift Technology

C State Support

This item allows you to enable or disable CPU C State. ➤ The choice: Enabled , Disabled.

<u>EIST</u>

Enable or disable Enhanced Intel SpeedStep<sup>®</sup> Technology.

➤ 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.

# SATA Configuration

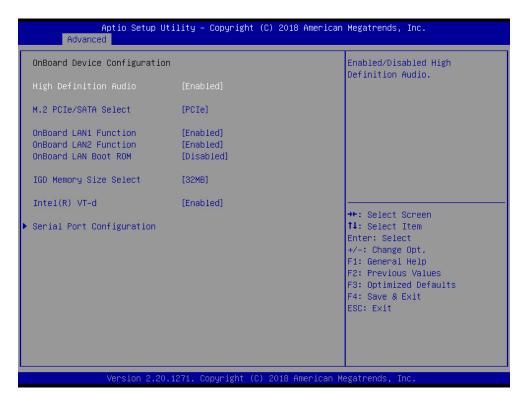
Aptio Setup Uti: Advanced	lity – Copyright (C) 2018 American	Megatrends, Inc.
OnBoard Device Configuration		Enabled/Disabled High Definition Audio.
High Definition Audio	[Enabled]	Definition Hudio.
M.2 PCIe/SATA Select	[PCIe]	
OnBoard LAN1 Function OnBoard LAN2 Function OnBoard LAN Boot ROM	[Enabled] [Enabled] [Disabled]	
IGD Memory Size Select	[32MB]	
Intel(R) VT−d ▶ Serial Port Configuration	[Enabled]	++: Select Screen †↓: Select Item
		Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
Version 2.20.12	271. Copyright (C) 2018 American Me	egatrends, Inc.

# USB Configuration

Aptio Setup Utility – Copyright (C) 2018 American Advanced	Megatrends, Inc.
USB Devices Enabled: 1 Drive, 1 Keyboard	++: Select Screen 14: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
Version 2.18.1263. Copyright (C) 2018 American M	egatrenus, inc.

English

# > OnBoard Device Configuration



#### High Definition Audio

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

➤ The choice: Enabled , Disabled.

M.2 PCIe/SATA Select

M.2 PCIe and SATA module selection.

➢ The choice: PCIe , SATA.

#### Onboard LAN1 Function

This item allows you to enable or disable LAN Function.

> The choice: Enabled , Disabled.

#### Onboard LAN2 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.

#### IGD Memory Size Select

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 Intel® 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

This item allows you to enable or disable Serial Port.

 $\succ$  The choice: Enabled, Disabled.

	Aptio Setup Uti Advanced	lity – Copyright (C) 2018 American	Megatrends, Inc.
Change	Port 1 Mode Settings	[Enabled] [RS232] [3F8h]	Enable or Disable Serial Port (COM)
Serial Change	Port 2 Settings	[Enabled] [2F8h]	
			++: Select Screen 11: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
	Version 2.20.1	271. Copyright (C) 2018 American M	egatrends, Inc.

English

# Power Management Configuration

Aptio Setup Ut. Advanced	ility – Copyright (C) 2018 American	Megatrends, Inc.
Power Management Configuratio	n	Enabled/Disabled system wake
Wake Up by USB (S3)	[Enabled]	up by USB ports event.
EuP Function	[Enabled]	
Power-On after Power-Fail Wake Up by LAN PowerOn by RTC Alarm	[Disabled]	
		<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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#### 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.

Wake Up By LAN

This item allows you to enable or disable system wake up by LAN.

> The choice: Enabled , Disabled.

PowerOn by RTC Alarm

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

### 🖎 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.

Aptio Setup U <sup>.</sup> Main Advanced Security B	:ility – Copyright (C) 2018 An Boot Exit	merican Megatrends, Inc.
Supervisor Password: User Password:	Not Installed Not Installed	Set Supervisor Password
Change Supervisor Password Change User Password Password Login control	[Setup]	
	[36(u)]	
Flash Write Protection	[Disabled]	
Secure Boot Control	[Disabled]	
		<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>
Version 2.20	1271. Copyright (C) 2018 Amer	rican Megatrends, Inc.

#### 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 Control

This item allows you to enable or disable Secure Boot.

# 🕭 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.

Boot Configuration Bootup Num–Lock Boot from USB device	[Enabled] [Enabled]	Select the keyboard NumLock state
Boot from Card-Reader	[Enabled]	
Boot Mode Select	[UEFI]	
Fast Boot Function	[Enabled]	
Boot Device Priority		
Boot Option #1	[Hard Disk]	
Boot Option #2	[CD/DVD]	
Boot Option #3	[USB Hard Disk] [USB CD/DVD]	→+: Select Screen 1↓: Select Item
Boot Option #4 Boot Option #5	[USB CD/DVD] [USB Key:UEFI: ADATA,	Enter: Select
boot option #3	Partition 1	+/-: Change Opt.
Boot Option #6	[USB Floppy]	F1: General Help
Boot Option #7	[USB Lan]	F2: Previous Values
Boot Option #8	[Network]	F3: Optimized Defaults
		F4: Save & Exit
· UEFI USB Key Drive BBS Priorities		ESC: Exit

#### Bootup Num-Lock

Select NumLock state after system bootup.The choice: Enabled , Disabled.

#### Boot from USB device

This item allows you to enable or disable boot from USB device.

#### Boot from Card-Reader

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

#### Boot Mode select

Choice Boot to UEFI or Legacy. ➤ The choice: UEFI, Legacy.

#### 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.

# 🖎 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.

产品中有害物质的名称及含量								
部件名称	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)		
主板	0	0	0	0	0	0		
机构外壳	0	0	0	0	0	0		
散热模组	0	0	0	0	0	0		
电源供应器	0	0	0	0	0	0		
硬盘	0	0	0	0	0	0		
铭牌	0	0	0	0	0	0		
包材	0	0	0	0	0	0		
线材	0	0	0	0	0	0		
本表格依据SJ/T 11364 的规定编制。								
"O":表示该有害物质在该部件所有均质材料中的含量均在 GB/T 26572								
规定的限量要求以下。								
"X":表示该有害物质至少在该部件的某一均质材料中的含量超出 GB/T 26572								
规定的限量要求。								