

BIOS Setup

The default settings offer the optimal performance for system stability in normal conditions. You should **always keep the default settings** to avoid possible system damage or failure booting unless you are familiar with BIOS.



Important

- *BIOS items are continuously update for better system performance. Therefore, the description may be slightly different from the latest BIOS and should be for reference only. You could also refer to the **HELP** information panel for BIOS item description.*
- *The pictures in this chapter are for reference only and may vary from the product you purchased.*
- *The BIOS items will vary with the processor.*

Entering BIOS Setup

Press **Delete** key, when the **Press DEL key to enter Setup Menu, F11 to enter Boot Menu** message appears on the screen during the boot process.

Function key

- F1:** General Help list
- F4:** Enter CPU Specifications menu
- F5:** Enter Memory-Z menu
- F6:** Load optimized defaults
- F10:** Save Change and Reset*
- F12:** Take a screenshot and save it to USB flash drive (FAT/ FAT32 format only).

* When you press F10, a confirmation window appears and it provides the modification information. Select between Yes or No to confirm your choice.

Resetting BIOS

You might need to restore the default BIOS setting to solve certain problems. There are several ways to reset BIOS:

- Go to BIOS and press **F6** to load optimized defaults.
- Short the **Clear CMOS** jumper on the motherboard.



Important

*Be sure the computer is off before clearing CMOS data. Please refer to the **Clear CMOS** jumper section for resetting BIOS.*

Updating BIOS

Updating BIOS with M-FLASH

Before updating:

Please download the latest BIOS file that matches your motherboard model from MSI website. And then save the BIOS file into the USB flash drive.

Updating BIOS:

1. Insert the USB flash drive that contains the update file into the computer.
2. Power on the system and then press **Del** key to enter the BIOS Setup during POST.
3. Go to **BIOS > M-FLASH > Select one file to update BIOS**, select a BIOS file to perform the BIOS update process.
4. After the flashing process is 100% completed, the system will reboot automatically.

Updating the BIOS with Live Update 6

Before updating:

Make sure the LAN driver is already installed and the internet connection is set properly.

Updating BIOS:

1. Install and launch MSI LIVE UPDATE 6.
2. Select **BIOS Update**.
3. Click on **Scan** button.
4. Click on **Download** icon to download and install the latest BIOS file.
5. Click **Next** and choose **In Windows mode**. And then click **Next** and **Start** to start updating BIOS.
6. After the flashing process is 100% completed, the system will restart automatically.

Updating BIOS with Flash BIOS Button

Before updating:

Please download the latest BIOS file that matches your motherboard model from MSI® website and rename the BIOS file to **MSI.ROM**. And then, save the **MSI.ROM** file to the root of USB flash drive.



Important

*Only the FAT32 format USB flash drive supports updating BIOS by **Flash BIOS Button**.*

1. Connect power supply to **CPU_PWR1** and **ATX_PWR1**. (No other components are necessary but power supply.)
2. Plug the USB flash drive that contains the MSI.ROM file into the **Flash BIOS** Port on rear I/O panel.
3. Press the **Flash BIOS Button** to flash BIOS, and the LED next to the button starts flashing.
4. After the flashing BIOS process is 100% completed, the LED would be off simultaneously.

System Status



► System Language [English]

Choose the BIOS default language.

► System Date

Sets the system date. Use tab key to switch between date elements.

The format is <day> <month> <date> <year>.

- <day> Day of the week, from Sun to Sat, determined by BIOS. Read-only.
- <month> The month from Jan. through Dec.
- <date> The date from 1 to 31 can be keyed by numeric function keys.
- <year> The year can be adjusted by users.

► System Time

Sets the system time. Use tab key to switch between time elements. The time format is <hour> <minute> <second>.

► SATA PortX/ M2_X

Shows the information of connected SATA/ M.2 device.

Important

If the connected SATA device is not displayed, turn off computer and re-check SATA cable and power cable connections of the device and motherboard.

► System Information

Shows detailed system information, including CPU type, BIOS version, and Memory (read only).

► DMI Information

Shows system information, desktop Board Information and chassis Information. (Read only).

Advanced



► PCI Subsystem Settings

Sets PCI, PCI express interface protocol and latency timer. Press **Enter** to enter the sub-menu.

► PCI_E1 - Max Link Speed [Auto]

Sets PCI_E1 slot speed (from CPU) for matching different installed devices.

► Chipset Gen Switch [Auto]

Sets PCI Express protocol of PCIe x16 slots (from PCH) for matching different installed devices.

[Auto] This item will be configured automatically by BIOS.

[Gen1] Enables PCIe Gen1 support only.

[Gen2] Enables PCIe Gen2 support only.

[Gen3] Enables PCIe Gen3 support only.

► Above 4G memory/ Crypto Currency mining [Disabled]

Enables or disables 64-bit capable devices to be decoded in above 4G address space. It is only available if the system supports 64-bit PCI decoding.

[Enabled] Allows you to utilize more than 4x GPUs.

[Disabled] Disables this function.

► PCI_E1 Lanes Configuration

PCIe lanes configuration is for MSI M.2 Xpander / MSI M.2 Xpander-Z / Other M.2 PCIe storage card. The options in this item will vary with the installed processor.

► ACPI Settings

Sets ACPI parameters of onboard power LED behaviors. Press **Enter** to enter the sub-menu.

► Power LED [Blinking]

Sets shining behaviors of the onboard Power LED.

[Dual Color] The power LED turns to another color to indicate the S3 state.

[Blinking] The power LED blinks to indicate the S3 state.

► Integrated Peripherals

Sets integrated peripherals' parameters, such as LAN, HDD, USB and audio. Press **Enter** to enter the sub-menu.

► Onboard LAN Controller [Enabled]

Enables or disables the onboard LAN controller.

► LAN Option ROM [Disabled]

Enables or disables the legacy network Boot Option ROM for detailed settings. This item will appear when **Onboard LAN Controller** is enabled.

[Enabled] Enables the onboard LAN Boot ROM.

[Disabled] Disables the onboard LAN Boot ROM.

► Network Stack [Disabled]

Sets UEFI network stack for optimizing IPv4 / IPv6 function. This item is available when Onboard LAN Controller is Enabled.

[Enabled] Enables UEFI network stack.

[Disabled] Disables UEFI network stack.

► Ipv4 PXE Support [Enabled]

When **Enabled**, the system UEFI network stack will support Ipv4 protocol. This item will appear when **Network Stack** is Enabled.

[Enabled] Enables the Ipv4 PXE boot support.

[Disabled] Disables the Ipv4 PXE boot support.

► Ipv6 PXE Support [Enabled]

When **Enabled**, the system UEFI network stack will support Ipv6 protocol. This item will appear when **Network Stack** is enabled.

[Enabled] Enables the Ipv6 PXE boot support.

[Disabled] Disables the Ipv6 PXE boot support.

► SATA Mode [AHCI Mode]

Sets the operation mode of the onboard SATA controller.

[AHCI Mode] Specify the AHCI mode for SATA storage devices. AHCI (Advanced Host Controller Interface) offers some advanced features to enhance the speed and performance of SATA storage device, such as Native Command Queuing (NCQ) and hot-plugging.

[RAID Mode] Enables RAID function for SATA storage devices.

► **SATAx Hot Plug [Disabled]**

Allows user to enable or disable the SATA hot plug support.

[Enabled] Enables hot plug support for the SATA ports.

[Disabled] Disables hot plug support for the SATA ports.

► **HD Audio Controller [Enabled]**

Enables or disables the onboard High Definition Audio controller.

► **Integrated Graphics Configuration (optional)**

Adjusts integrated graphics settings for optimum system. Press **Enter** to enter the sub-menu.

► **Initiate Graphic Adapter [PEG] (optional)**

Selects a graphics device as the primary boot device.

[IGD] Integrated Graphics Display.

[PEG] PCI-Express Graphics Device.

► **Integrated Graphics [Auto] (optional)**

If set to Force, BIOS will enable the integrated graphics controller.

► **UMA Frame Buffer Size [Auto] (optional)**

Selects a fixed amount of system memory allocated to the onboard graphics. This item will be available when **Integrated Graphics** is enabled.

► **USB Configuration**

Sets the onboard USB controller and device function. Press **Enter** to enter the sub-menu.

► **XHCI Hand-off [Enabled]**

Enables or disables XHCI hand-off support for the operating system without XHCI hand-off feature.

► **Legacy USB Support [Enabled]**

Sets Legacy USB function support.

[Auto] The system will automatically detect if any USB device is connected and enable the legacy USB support.

[Enabled] Enable the USB support under legacy mode.

[Disabled] The USB devices will be unavailable under legacy mode.

► **Super IO Configuration**

Sets system Super I/O chip parameters including LPT and COM ports. Press Enter to enter the sub-menu.

► **Serial (COM) Port 0 Configuration**

Sets detailed configuration of serial(COM) port 0. Press Enter to enter the sub-menu.

► **Serial Port [Enabled]**

Enables or disables serial port.

► **Serial (COM) Port0 Settings [Auto]**

Sets serial port 0. If set to Auto, BIOS will optimize the IRQ automatically or you can set it manually.

► **Parallel (LPT) Port Configuration**

Sets detailed configuration of parallel port (LPT/ LPTE). Press Enter to enter the sub-menu.

► **Parallel (LPT) Port [Enabled]**

Enables or disables parallel(LPT/ LPTE) port.

► **Parallel (LPT) Port Settings [Auto]**

Sets parallel port (LPT). If set to Auto, BIOS will optimize the IRQ automatically or you can set it manually.

► **Device Mode [STD Printer Mode]**

Selects an operating mode for parallel port.

| | |
|------------------------|--|
| [STD Printer Mode] | Printer port mode |
| [SPP] | Standard Parallel Port mode |
| [EPP-1.9 and SPP Mode] | Enhanced Parallel Port-1.9 mode + Standard Parallel Port mode. |

► **Hardware Monitor**

Sets the fan speeds. Press Enter to enter the sub-menu.

► **Power Management Setup**

Sets system Power Management of ErP and AC Power Loss behaviors. Press **Enter** to enter the sub-menu.

► **ErP Ready [Disabled]**

Enables or disables the system power consumption according to ErP regulation.

| | |
|------------|--|
| [Enabled] | Optimize the system power consumption according to ErP regulation. It will not support S4 & S5 wake up by USB, PCI and PCIe devices. |
| [Disabled] | Disables this function. |

► **Restore after AC Power Loss [Power Off]**

Sets the system behaviors while encountering the AC power loss.

| | |
|--------------|---|
| [Power Off] | Leaves the system in power off state after restoring AC power. |
| [Power On] | Boot up the system after restoring AC power. |
| [Last State] | Restores the system to the previous state (power on/ power off) before AC power loss. |

► **System Power Fault Protection [Disabled]**

Enables or disables the system to boot up when detecting abnormal voltage input.

| | |
|------------|---|
| [Enabled] | Protect the system from unexpected power operating and remain the shut down status. |
| [Disabled] | Disables this function. |

► Windows OS Configuration

Sets Windows detailed configuration and behaviors. Press **Enter** to enter the sub-menu.

► BIOS UEFI/CSM Mode [CSM]

Select CSM (Compatibility Support Module) or UEFI mode to meet the system requirement.

[CSM] For the non-UEFI driver add-on devices or non-UEFI mode OS.

[UEFI] For the UEFI driver add-on devices and UEFI mode OS.

► GOP Information

Shows the onboard Graphics Output Protocol (GOP) information. Press **Enter** to enter the sub-menu. This sub-menu will appear when **BIOS UEFI/CSM Mode** sets to **UEFI**.

► Secure Boot

Sets the Windows secure boot to prevent the unauthorized accessing. Press **Enter** to enter the sub-menu. This sub-menu will appear when **BIOS UEFI/CSM Mode** sets to **UEFI**.

► Wake Up Event Setup

Sets system wake up behaviors for different sleep modes. Press **Enter** to enter the sub-menu.

► Wake Up Event By [BIOS]

Selects the wake up event by BIOS or operating system.

[BIOS] Activates the following items, set wake up events of these items.

[OS] The wake up events will be defined by OS.

► Resume By RTC Alarm [Disabled]

Disables or enables the system wake up by RTC Alarm.

[Enabled] Enables the system to boot up on a scheduled time/ date.

[Disabled] Disables this function.

► Date (of month) Alarm/ Time (hh:mm:ss) Alarm

Sets RTC alarm date/ Time. If Resume By RTC Alarm is set to [Enabled], the system will automatically resume (boot up) on a specified date/hour/minute/second in these fields (using the + and - keys to select the date & time settings).

► Resume By PCI-E Device [Disabled]

Enables or disables the wake up function of installed PCI-E expansion cards, integrated LAN controllers or USB devices which are supported by third party integrated chips.

[Enabled] Enables the system to be awakened from the power saving modes when activity or input signal of PCIe device is detected.

[Disabled] Disables this function.

► **Resume by USB Device [Disabled]**

Disables or enables system wake up from S3/S4 by USB device.

[Enabled] Enables the system to be awakened from sleep state when activity of USB device is detected.

[Disabled] Disables this function.

► **Resume From S3/S4/S5 by PS/2 Mouse [Disabled]**

Enables or disables the system wake up by PS/2 mouse.

[Enabled] Enables the system to be awakened from S3/ S4/ S5 state when activity of PS/2 mouse is detected.

[Disabled] Disables this function.

► **Resume From S3/S4/S5 by PS/2 Keyboard [Disabled]**

Enables or disables the system wake up by PS/2 keyboard.

[Any Key] Enables the system to be awakened from S3/ S4/ S5 state when activity of any key on PS/2 keyboard is detected.

[Hot Key] Enables the system to be awakened from S3/ S4/ S5 state when activity of hot key on PS/2 keyboard is detected.

[Disabled] Disables this function.

► **Hot Key [Ctrl+Space]**

Selects a combination of keys as a hot key to wake the system. This item appears when you set the **Resume From S3/S4/S5 by PS/2 Keyboard** to **Hot Key**.

► **Realtek PCIe GBE Family Controller**

Shows driver information and configuration of the ethernet controller parameter.

OC



Important

- Overclocking your PC manually is only recommended for advanced users.
- Overclocking is not guaranteed, and if done improperly, it could void your warranty or severely damage your hardware.
- The BIOS items in OC menu will vary with the processor.

► OC Explore Mode [Normal]

Enables or disables to show the normal or expert version of OC settings.

[Normal] Provides the regular OC settings in BIOS setup.

[Expert] Provides the advanced OC settings for OC expert to configure in BIOS setup.

Note: We use * as the symbol for the OC settings of Expert mode.

► CPU Ratio [Auto]

Sets the CPU ratio that is used to determine CPU clock speed. This item can only be changed if the processor supports this function.

► Advanced CPU Configuration

Press **Enter** to enter the sub-menu. User can set the parameters about CPU power/ current. The system may become unstable or unbootable after changing the parameters. If it occurs, please clear the CMOS data and restore the default settings.

► **A-XMP [Disabled]**

Please enable A-XMP or select a profile of memory module for overclocking the memory. This item will be available when the installed processor, memory modules and motherboard support this function.

► **DRAM Frequency [Auto]**

Sets the DRAM frequency. Please note the overclocking behavior is not guaranteed.

► **Adjusted DRAM Frequency**

Shows the adjusted DRAM frequency. Read-only.

► **Memory Try It ! [Disabled]**

It can improve memory compatibility or performance by choosing optimized memory preset.

► **Advanced DRAM Configuration**

Press **Enter** to enter the sub-menu. User can set the memory timing for each/ all memory channel. The system may become unstable or unbootable after changing memory timing. If it occurs, please clear the CMOS data and restore the default settings. (Refer to the Clear CMOS jumper section to clear the CMOS data, and enter the BIOS to load the default settings.)

► **DigitALL Power**

Press **Enter** to enter the sub-menu. Controls the digital powers related to CPU PWM.

► **CPU Loadline Calibration Control [Auto]**

The CPU voltage will decrease proportionally according to CPU loading. Higher load-line calibration could get higher voltage and good overclocking performance, but increase the temperature of the CPU and VRM. If set to **Auto**, BIOS will configure this setting automatically.

► **CPU NB Loadline Calibration Control [Auto]**

The CPU-NB voltage will decrease proportionally according to CPU-NB loading. Higher load-line calibration could get higher voltage and good overclocking performance, but increase the temperature. If set to **Auto**, BIOS will configure this setting automatically.

► **CPU Over Voltage Protection [Auto]**

Sets the voltage limit for CPU over-voltage protection. If set to **Auto**, BIOS will configure this setting automatically. Higher voltage provides less protection and may damage the system.

► **CPU Under Voltage Protection [Auto]**

Sets the voltage limit for CPU under-voltage protection. If set to **Auto**, BIOS will configure this setting automatically. Higher voltage provides less protection and may damage the system.

► CPU Over Current Protection [Auto]

Sets the current limit for CPU over-current protection. If set to **Auto**, BIOS will configure this setting automatically.

[Auto] This setting will be configured automatically by BIOS.

[Enhanced] Extends the current range for over-current protection.

► CPU NB/SoC Over Voltage Protection [Auto]

Sets the voltage limit for CPU NB/ SoC over-voltage protection. If set to **Auto**, BIOS will configure this setting automatically. Higher voltage provides less protection and may damage the system.

► CPU NB/SoC Under Voltage Protection [Auto]

Sets the voltage limit for NB/ SoC under-voltage protection. If set to **Auto**, BIOS will configure this setting automatically. Higher voltage provides less protection and may damage the system.

► CPU NB/SoC Over Current Protection [Auto]

Sets the current limit for CPU NB/ SoC over-current protection. If set to **Auto**, BIOS will configure this setting automatically.

[Auto] This setting will be configured automatically by BIOS.

[Enhanced] Extends the current range for over-current protection.

► VR 12VIN OCP Expander [Auto]

Expands the limitation of VR Over Current Protection with 12V input voltage. The higher expanding value indicates less protection. Therefore, please adjust the current carefully if needed, or it may damage the CPU/ VR MOS. If set to "Auto", BIOS will configure this setting automatically.

► CPU Voltages control [Auto]

These options allows you to set the voltages related to CPU. If set to **Auto**, BIOS will set these voltages automatically or you can set it manually.

► DRAM Voltages control [Auto]

These options allows you to set the voltages related to memory. If set to **Auto**, BIOS will set these voltages automatically or you can set it manually.

► CPU Specifications

Press **Enter** to enter the sub-menu. This sub-menu displays the information of installed CPU. You can also access this information menu at any time by pressing [F4]. Read only.

► CPU Technology Support

Press **Enter** to enter the sub-menu. The sub-menu shows the key features of installed CPU. Read only.

► MEMORY-Z

Press **Enter** to enter the sub-menu. This sub-menu displays all the settings and timings of installed memory. You can also access this information menu at any time by pressing [F5].

► DIMMx Memory SPD

Press **Enter** to enter the sub-menu. The sub-menu displays the information of installed memory. Read only.

► CPU Features

Press **Enter** to enter the sub-menu.

► Global C-state Control [Enabled] (optional)

Enables/ disables IO based C-state generation and DF C-states.

► Simultaneous Multi-Threading [Enabled] (optional)

Enables/ disables the AMD Simultaneous Multi-Threading. This item appears when the installed CPU supports this technology.

► Opcache Control [Auto] (optional)

Enables/ disables Opcache. Opcache stores recent decode instruction to save the decoding time when the instruction is repeated. And it may increase the CPU performance and reduce the power consumption slightly.

► IOMMU Mode (optional)

Enables/disables the IOMMU (I/O Memory Management Unit) for I/O Virtualization.

► Spread Spectrum (optional)

This function reduces the EMI (Electromagnetic Interference) generated by modulating clock generator pulses.

[Enabled] Enables the spread spectrum function to reduce the EMI (Electromagnetic Interference) problem.

[Disabled] Enhances the overclocking ability of CPU Base clock.



Important

• If you do not have any EMI problem, leave the setting at [Disabled] for optimal system stability and performance. But if you are plagued by EMI, select the value of Spread Spectrum for EMI reduction.

• The greater the Spread Spectrum value is, the greater the EMI is reduced, and the system will become less stable. For the most suitable Spread Spectrum value, please consult your local EMI regulation.

• Remember to disable Spread Spectrum if you are overclocking because even a slight jitter can introduce a temporary boost in clock speed which may just cause your overclocked processor to lock up.

► **Relaxed EDC throttling [Auto] (optional)**

Relaxed EDC throttling reduces the amount of time the processor will throttle the cores.

[Auto] AMD's recommendation

[Enabled] Reduce the amount of time the processor will throttle.

[Disabled] Part-specific EDC throttling protection enabled.

► **AMD Cool'n'Quiet [Enabled]**

The Cool'n'Quiet technology can effectively and dynamically lower CPU speed and power consumption.

► **SVM Mode [Enabled]**

Enables/ disables the AMD SVM (Secure Virtual Machine) Mode.

► **BIOS PSP Support [Enabled] (optional)**

Enables/ disables the BIOS PSP support. It manages PSP sub-items including all C2P/P2C mailbox, Secure S3, fTPM support.

► **Power Supply Idle Control [Auto] (optional)**

It allows you to select the power-saving control mode for the CPU when all cores are in a non-C0 state. If set to **Auto**, BIOS will configure these settings.

► **CPU VDD_SoC Current Optimization [Auto] (optional)**

Sets the currents of CPU VDD and SoC. If set to **Auto**, BIOS will configure this setting automatically.

[Auto] This setting will be configured automatically by BIOS.

[Custom Setting] Allows you to set the currents manually.

M-FLASH

M-FLASH provides the way to update BIOS with a USB flash drive. Please download the latest BIOS file that matches your motherboard model from MSI website, save the BIOS file into your USB flash drive. And then follow the steps below to update BIOS.



► Select one file to update BIOS

Selects a BIOS file in the USB flash drive to update the BIOS. The system will reboot after updating.

Security



► Administrator Password

Sets administrator password for system security. User has full rights to change the BIOS items with administrator password. After setting the administrator password, the state of this item will show **Installed**.

► User Password

Sets User Password for system security. User has limited rights to change the BIOS items with user password. This item will be available when administrator password is set. After setting the user password, the state of this item will show **Installed**.

► Password Check [Setup]

Selects a condition that will request the password.

- [Setup] A password will be requested for entering the BIOS Setup.
- [Boot] A password will be requested for booting the system.

► Password Clear [Enabled]

Enables or disables the clear CMOS behavior to clear a set password.

- [Enabled] The password will be erased after clear CMOS.
- [Disabled] The password will always be kept.

Important

When selecting the Administrator / User Password items, a password box will appear on the screen. Type the password then press **Enter**. The password typed now will replace any previous set password from CMOS memory. You will be prompted to confirm the password. You may also press **Esc** key to abort the selection.

To clear a set password, press **Enter** when you are prompted to enter a new password. A message will confirm the password is being disabled. Once the password is disabled, you can enter the setup and OS without authorization.

► Trusted Computing

Sets TPM (Trusted Platform Module) function.

► Security Device Support [Disabled]

Enables or disables the TPM function to build the endorsement key for accessing the system.

► AMD fTPM switch [AMD CPU fTPM]

Selects TPM device. This item will appear when **Security Device Support** is enabled.

[AMD CPU fTPM] Select it for AMD Firmware TPM.

[AMD CPU fTPM Disabled] Select it for Discrete TPM.

► Device Select [Auto]

Sets the version of the TPM device. The version must be identical with the device. Sets to **Auto**, system will detect the TPM 2.0 or TPM 1.2 model automatically.

► Chassis Intrusion Configuration

Press **Enter** to enter the sub-menu.

► Chassis Intrusion [Disabled]

Enables or disables recording messages while the chassis is opened. This function is ready for the chassis equips a chassis intrusion switch.

[Enabled] Once the chassis is opened, the system will record and issue a warning message.

[Reset] Clear the warning message. After clearing the message, please return to **Enabled** or **Disabled**.

[Disabled] Disables this function.

Boot

The Boot Menu allows you to specify the priority of boot devices.



► Full Screen Logo Display [Enabled]

Enables or disables to show the full screen logo while system POST.

[Enabled] Shows the logo in full screen.

[Disabled] Shows the POST messages.

► Bootup NumLock State [On]

Select the keyboard NumLock state upon bootup.

► POST Beep [Disabled]

Enables or disables POST beep.

► Boot Mode Select [LEGACY+UEFI]

Sets the system boot mode from legacy or UEFI architecture depending on OS installation requirement. This item will become un-selectable and will be configured automatically by BIOS when **Windows 10 WHQL Support** is enabled.

[UEFI] Enables UEFI BIOS boot mode support only.

[LEGACY+UEFI] Enables both Legacy BIOS boot mode and UEFI BIOS boot mode.

► FIXED BOOT ORDER Priorities/ UEFI USB Key Drive BBS Priorities/ USB Key Drive BBS Priorities

Sets device priority for system boot.

► Boot Option Priorities

These items are used to prioritize the installed boot devices.

Save & Exit



► Discard Changes and Exit

Exit BIOS setup without saving any change.

► Save Changes and Reboot

Save all changes and reboot the system.

► Save Changes

Save current changes.

► Discard Changes

Discard all changes and restore to the previous values.

► Restore Defaults

Restore or load all default values.

► Boot Override

The installed boot-able devices will appear on this menu, you can select one of them to be the boot device.