# BIOS Setup (AMD TRX50 Series)

2
3
4
6
8
9
13
21
22
25



The BIOS Setup menus and options described in this chapter may differ from the exact settings for your motherboard. The actual BIOS Setup menu options are dependent on the motherboard you have and the BIOS version.

## BIOS Setup

BIOS (Basic Input and Output System) records hardware parameters of the system in the CMOS on the motherboard. Its major functions include conducting the Power-On Self-Test (POST) during system startup, saving system parameters and loading operating system, etc. BIOS includes a BIOS Setup program that allows the user to modify basic system configuration settings or to activate certain system features.

When the power is turned off, the battery on the motherboard supplies the necessary power to the CMOS to keep the configuration values in the CMOS.

To access the BIOS Setup program, press the <Delete> key during the POST when the power is turned on.

To upgrade the BIOS, use either the GIGABYTE Q-Flash or Q-Flash Plus utility.

- Q-Flash allows the user to quickly and easily upgrade or back up BIOS without entering the operating system.
- Q-Flash Plus allows you to update the BIOS when your system is off (S5 shutdown state). Save the latest
  BIOS on a USB thumb drive and plug it into the dedicated port, and then you can now flash the BIOS
  automatically by simply pressing the Q-Flash Plus button.

For instructions on using the Q-Flash and Q-Flash Plus utilities, please navigate to the "Unique Features" page of GIGABYTE's website and search for "BIOS Update Utilities."



- Because BIOS flashing is potentially risky, if you do not encounter problems using the current version of BIOS, it is recommended that you not flash the BIOS. To flash the BIOS, do it with caution. Inadequate BIOS flashing may result in system malfunction.
- It is recommended that you not alter the default settings (unless you need to) to prevent system
  instability or other unexpected results. Inadequately altering the settings may result in system's
  failure to boot. If this occurs, try to clear the CMOS values and reset the board to default values.
- Refer to the introductions of the battery/clear CMOS jumper/battery in user's manual or refer to the "Load Optimized Defaults" section for how to clear the CMOS values.

## Startup Screen

The following startup Logo screen will appear when the computer boots. (The screen may vary from motherboards.)



#### Function Keys:

## <DEL>: BIOS SETUP\Q-FLASH

Press the <Delete> key to enter BIOS Setup or to access the Q-Flash utility in BIOS Setup.

#### <F12>: BOOT MENU

Boot Menu allows you to set the first boot device without entering BIOS Setup. In Boot Menu, use the up arrow key  $<\uparrow>$  or the down arrow key  $<\downarrow>$  to select the first boot device, then press <Enter> to accept. The system will boot from the device immediately.

Note: The setting in Boot Menu is effective for one time only. After system restart, the device boot order will still be based on BIOS Setup settings.

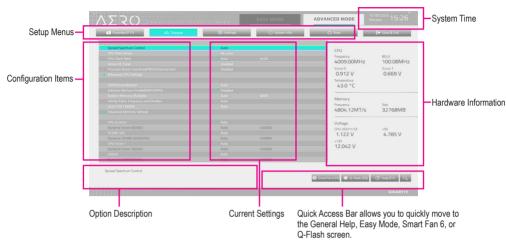
#### <END>: Q-FLASH

Press the <End> key to access the Q-Flash utility directly without having to enter BIOS Setup first.

## The Main Menu

#### Advanced Mode

The Advanced Mode provides detailed BIOS settings. You can press the arrow keys on your keyboard to move among the items and press <Enter> to accept or enter a sub-menu. Or you can use your mouse to select the item you want.



## Advanced Mode Function Keys

<←><→>	Move the selection bar to select a setup menu
<^><↓>	Move the selection bar to select an configuration item on a menu
<enter>/Double Click</enter>	Execute command or enter a menu
<+>/ <page up=""></page>	Increase the numeric value or make changes
<->/ <page down=""></page>	Decrease the numeric value or make changes
<f1></f1>	Show descriptions of the function keys
<f2></f2>	Switch to Easy Mode
<f3></f3>	Save the current BIOS settings to a profile
<f4></f4>	Load the BIOS settings from a profile created before
<f5></f5>	Restore the previous BIOS settings for the current submenus
<f6></f6>	Display the Smart Fan 6 screen
<f7></f7>	Load the Optimized BIOS default settings for the current submenus
<f8></f8>	Access the Q-Flash utility
<f10></f10>	Save all the changes and exit the BIOS Setup program
<f11></f11>	Switch to the Favorites submenu
<f12></f12>	Capture the current screen as an image and save it to your USB drive
<insert></insert>	Add or remove a favorite option
<ctrl>+<s></s></ctrl>	Display information on the installed memory
	Main Menu: Exit the BIOS Setup program
<esc></esc>	Submenus: Exit current submenu

## B. Easy Mode

Easy Mode allows users to quickly view their current system information or to make adjustments for optimum performance. In Easy Mode, you can use your mouse to move through configuration items or press <F2> to switch to the Advanced Mode screen.

ΔΣΖΟ			EASY MODE	ADVANCED MODE	Monday 15:26
		🗩 Load Defaults (F7)	- Save & Exit (F10)	<ul> <li>Favorites (F11)</li> </ul>	🔍 Search (Alt-F)
Information MB: TRXKD AERO D BOS VIE: F/b CPU; 70703 32-Cores RAM: 32CB AGESA VIE: ScormPaakP111.0.0a	L	PU Prequency 4011.20 MHz lemony Prequency 4813.44 MT/s & CPU_OPT N/A	CPU Temp. CPU Voore 0 43.0 °C 0.912 V System Temp. CPU Voore 1 30.0 °C 0.711 V Perchanals PCE PCE PCE	Boot Sequence	
DRAM Status           DDR5_A1         Kingston 16GB 4800MT/s           DDR5_B1         N/A           DDR5_C1         Kingston 16GB 4800MT/s           DDR5_D1         N/A	Cuick Access	imart Fan 6			ootable Davice Found
DDRS Auto Booster Auto Extreme Memory Profile/DMP/DS Devolved XMP/DDD High Bandwidth Support	Re-Size BAR Suppo	) Q-Fash rt Disabled		uto 💌 CSM Support	SPD Setup
				_	GIGABY

## Smart Fan 6

	Temperature		42.0	).c 📲	Fan Spi	red	26	526 <sub>RPM</sub> ®				
CPU_FAN CPU_OPT SYS_FAN1 SYS_FAN2 SYS_FAN3 SYS_FAN3 SYS_FAN4	PWM 1005					4			CPU_FAN Speed C Fan Control Use Te Temperature Interv CPU_FAN Control CPU_FAN Stop	mperature in val	nput	Normal CPU 1 Auto Disabled
SYS_FAN5_PUMP SYS_FAN6_PUMP SYS_FAN7_PUMP SYS_FAN8_PUMP	60		/	-					CPU_FAN Mode	il Warning		Slope
	40								<ul> <li>CPU</li> <li>System 2</li> </ul>		<ul> <li>System 1</li> <li>Chipset</li> </ul>	30.0 41.0
	20								POEX16_1 POEX16_2 POEX16_2 EC_TEMP2		VRM MOS EC_TEMP1	53
	Manual Control S	io iettings	40	3	60	5	80	Temperature 1000				
TUNEALL	PWM(b)	25	51	60	63	68	80	100	Load Fan Profile (F	a conce	Over 1997	Back

Use the <F6> function key to quickly switch to this screen. This screen allows you to configure fan speed related settings for each fan header or monitor your system/CPU temperature.

#### ☞ TUNE ALL

Allows you to apply the current settings to all fan headers.

#### ∽ Temperature

Displays the current temperature of the selected target area.

#### ☞ Fan Speed

Displays current fan/pump speeds.

#### ☞ Flow Rate

Displays the flow rate of your water cooling system. Press <Enter> on Fan Speed to switch to this function.

#### ☞ Fan Speed Control

Allows you to determine whether to enable the fan speed control function and adjust the fan speed.

- ➡ Silent Allows the fan to run at slow speeds.
- Manual Allows you to drag the curve nodes to adjust fan speed. Or you can use the EZ Tuning feature. After adjusting the node position, press Apply to automatically calculate the slope of the curve.
- ➡ Full Speed Allows the fan to run at full speeds.

#### ∽ Fan Control Use Temperature Input

Allows you to select the reference temperature for fan speed control.

#### Temperature Interval

Allows you to select the temperature interval for fan speed change.

#### ☞ FAN/PUMP Control Mode

- Auto Lets the BIOS automatically detect the type of fan installed and sets the optimal control mode.
- ▶ PWM PWM mode is recommended for a 4-pin fan/pump.

#### ☞ FAN/PUMP Stop

Enables or disables the fan/pump stop function. You can set the temperature limit using the temperature curve. The fan or pump stops operation when the temperature is lower than the limit.

## ☞ FAN/PUMP Mode

Allows you to set the operating mode for the fan.

- Slope Adjusts the fan speed linearly based on the temperature.
- Stair Adjusts the fan speed stepwise based on the temperature.

## ☞ FAN/PUMP Fail Warning

Allows the system to emit warning sound if the fan/pump is not connected or fails. Check the fan/pump condition or fan/pump connection when this occurs.

## ∽ Save Fan Profile (F3)

This function allows you to save the current settings to a profile. You can save the profile in the BIOS or select **Select File in HDD/FDD/USB** to save the profile to your storage device.

## ∽ Load Fan Profile (F4)

This function allows you to load a previously saved BIOS profile without the hassles of reconfiguring the BIOS settings. Or you can select **Select File in HDD/FDD/USB** to load a profile from your storage device.

## Favorites (F11)

🖬 Favorites (F11) 🔊 Ti	weaker (③ Settings	③ System Info.	() Boot	🕒 Save & Exit
Eavorites Press Insert Key To +/- Items Fre CPU Clock Ratio	m Other Labs (in Uniow) Auto	40.00		
			CPU Prequency 4007.88MHz Vcore 0 0.912 V Temperature 43.0 °C 	BCLK 100.15MH Vcore 1 0.669 V
			Voltage (PU VDD1153 1.122 V	52768MB 32768MB +5V 4.785 V
Adjusting CPU Clock ratio will affect the CPU c	lock frequency, temperature and voltage requiremer	nts.	12.024 V	@ Help (F1) C

Set your frequently used options as your favorites and use the <F11> key to quickly switch to the page where all of your favorite options are located. To add or remove a favorite option, go to its original page and press <Insert> on the option. The option is marked with a star sign if set as a "favorite."

## Tweaker

Favorites (F11)	🖎 Twesker	Settings	③ System info.	() Boot	🕩 Save & Exit
Spread Spectrum Control CPU Ratio Mode CPU Clock Ratio Active DC Tures Prescent Bonst Overdhrup/PIOI En Advanced CPU Settings DDFS Auto Booster Extrama Mannay Profile(XMD/EDS System Nemmay Multiple Infrity Faich Frequency and Dude UCLIK DVT MODE Advanced Menny Settings		Auto At cores Auto Disabled Disabled Disabled Auto Auto Auto Auto		CPU Preparroy 4009.00MHz Vore 0 9.912 V Trensentur 43.0 °C	BCLK 100.08MH Vore 1 0.669 V
		Auto Auto Auto Auto Auto Auto Auto Auto		Voltage (2014/001153 1.122 V 12/ 12/042 V	+5V 4.785 V



Whether the system will work stably with the overclock/overvoltage settings you made is dependent on your overall system configurations. Incorrectly doing overclock/overvoltage may result in damage to CPU, chipset, or memory and reduce the useful life of these components. This page is for advanced users only and we recommend you not to alter the default settings to prevent system instability or other unexpected results. (Inadequately altering the settings may result in system's failure to boot. If this occurs, clear the CMOS values and reset the board to default values.)

## ∽ Spread Spectrum Control

Enables or disables CPU/PCIe Spread Spectrum.

#### ∽ CPU Ratio Mode

Allows you to set the core ratio for all CPU cores or individual cores.

☞ CCD Ratio

Allows you to manually set the core ratio for the CPU CCD cores. This item is configurable only when CPU Ratio Mode is set to Per CCX.

## → CPU Clock Ratio

Allows you to alter the clock ratio for the installed CPU. The adjustable range is dependent on the CPU being installed. This item is configurable only when **CPU Ratio Mode** is set to **All cores**.

## ∽ Active OC Tuner

Enables or disables the Active OC Tuner feature.

## ∽ Precision Boost Overdrive(PBO) Enhancement

Offers five boost levels for three targeted 90/80/70 °C CPU temperature. One can choose the most suitable thermal limit/boost level combinations to reach higher CPU frequency. Note: Workable settings/results may vary by different CPUs' condition.

## Advanced CPU Settings

Favorites (F11)	🖎 Tweaker	Settings	<ol> <li>System Info.</li> </ol>	() Boot	🕩 Save & Exit
Core Performance Boot SVM Mode PS5 Support Global C-state Control Rower Supply die Control SVM Mode Precision Boott Overdhee		Auto Distabled Erutabled Auto Auto Auto		CPU Freasarcy 4008.088/MHz Vora 0 0.912 V Temperature 43.0 °C Memory Freasarcy 4807.48MT/s Vortage	BCLK 100.15MH Vore 1 0.672 V
Enable/Disable Turbo mode. Turbo mode opportunetically and	d automatically allows the process	or to run faster than it's marked	frequency if the processor is operatin	CPU VD01153 1.122 V +12V 12.024 V 2.024 V 2.024 V	+9V 4.807 V

#### ∽ Core Performance Boost

Allows you to determine whether to enable the Core Performance Boost (CPB) technology, a CPU performance-boost technology.

#### ∽ SVM Mode

Virtualization enhanced by Virtualization Technology will allow a platform to run multiple operating systems and applications in independent partitions. With virtualization, one computer system can function as multiple virtual systems.

#### ☞ PSS Support

Enables or disables the generation of ACPI\_PPC, \_PSS, and \_PCT objects.

#### ☞ Global C-state Control

Allows you to determine whether to let the CPU enter C states. When enabled, the CPU core frequency will be reduced during system halt state to decrease power consumption.

#### ∽ Power Supply Idle Control

Enables or disables Package C6 State.

- ➤ Typical Current Idle Disables this function.
- ► Low Current Idle Enables this function.

➤ Auto Lets the BIOS automatically configure this setting.

#### ∽ SMT Mode

Allows you to enable or disable the CPU Simultaneous Multi-Threading technology.

#### Precision Boost Overdrive

Allows you to determine whether to automatically increase CPU clock and working performance.

#### ∽ DDR5 Auto Booster

Enables or disables the DDR5 Dynamic Turbo Boost feature, which allows automatic switching between default frequency and boosted frequency. Auto lets the BIOS automatically configure this setting.

#### ∽ Extreme Memory Profile (XMP/EXPO)

Allows the BIOS to read the SPD data on XMP memory module(s) to enhance memory performance when enabled. This item is present only when you install a memory module that supports this feature.

## ∽ System Memory Multiplier

Allows you to set the system memory multiplier. Auto sets memory multiplier according to memory SPD data.

Infinity Fabric Frequency and Dividers Allows you to set the FCLK frequency.

## ☞ UCLK DIV1 MODE

Allows you to specify the UCLK DIV1 mode.

## Advanced Memory Settings

Memory Subtimings SPD Info SPD Setup Power Down Enable		CPU Frequency 4005.96MHz Voore 0 0.912 V Temperature 43.0 °C	BCLK 100.13MH Vcore 1 0.672 V
		Memory Frequency 4806.48MT/s	Size 32768MB
		Voltage CPU VDD1153 1.122 V +12V 12.042 V	+5V 4.785 V

## Memory Subtimings

## ▼ Standard Timing Control/Advanced Timing Control/CAD Bus Configuration

These sections provide memory timing settings. Note: Your system may become unstable or fail to boot after you make changes on the memory timings. If this occurs, please reset the board to default values by loading optimized defaults or clearing the CMOS values.

## SPD Info

Displays information on the installed memory.

## SPD Setup

Allows you to configure memory parameters for the installed memory.

## ∽ Power Down Enable

Enables or disables Power Down support.

## CPU Vcore 0/Dynamic Vcore 0(DVID)/VCORE SOC/Dynamic VCORE SOC(DVID)/ CPU Vcore 1/Dynamic Vcore 1(DVID)/VDDIO/Dynamic VDDIO(DVID)/CPU VDD11 S3 Voltage/DDR\_VDD Voltage/DDR\_VDDQ Voltage/DDR\_VDDP Voltage/ These items allow you to adjust the CPU Vcore and memory voltage. The displayed items values may

These items allow you to adjust the CPU Vcore and memory voltages. The displayed items values may vary depending on motherboard chipset and the CPU used.

## Advanced Voltage Settings

Allows you to adjust the VDDG/VDDP and other voltage settings.

## CPU/VRM Settings

This submenu allows you to configure Load-Line Calibration level.

## Settings

<ul> <li>Favorites (F11)</li> </ul>	Tweaker	Settings	<ol> <li>System info.</li> </ol>	() Boot	🕩 Save & Evit
Plattern Power © Plants Morgalewany AND Corestanding AND Corestanding PC Health				CPU Preserve 4007.16MHz User 6 0.909 V Terrestation 4810.27MT/5 Voltage CPU 001133 1.122 V 129 12.042 V	еськ 100.21МН: Vore 1 0.572 V 32768МВ +9% 4.785 V
Platform Power Settings				_	

#### Platform Power

<ul> <li>Favorites (F11)</li> </ul>	a Twesker	Settings	<ol> <li>System Info.</li> </ol>	() Boot	🕩 Save & Exit
K GBK CP Sun, OT Ny HOM-BTH Mover Loading Housen by Avam Sun of the Sun Housen by Avam Walk of the Sun Walk of the Sun Housen Sun Housen Sun Housen		Alvest of Disalid Instant-Off Auto Disalid 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		CRU Processor 40005 / 76MHz Varie & 0.912 V terresolution 4805 / 28MT/S Verbage Verbage Verbage 1.122 V 1.122 V 1.122 V 1.222 V 1.222 V	BCLK 100.13MH Vore 1 0.572 V 32768MB
Always Off = System stays off Always On = System is turned	tem after the power returns after upon power return on up power return set know awake state upon powe			🌸 Smart Fan 6 (F6) 🔳 Q-Flash (F8)	@ H40p (F1)

## ∽ AC BACK

Determines the state of the system after the return of power from an AC power loss.

- Hemory The system returns to its last known awake state upon the return of the AC power.
- Always On The system is turned on upon the return of the AC power.
- ► Always Off The system stays off upon the return of the AC power.

#### ☞ ErP

Determines whether to let the system consume least power in S5 (shutdown) state. Note: When this item is set to **Enabled**, the Resume by Alarm function becomes unavailable.

#### ∽ Soft-Off by PWR-BTTN

Configures the way to turn off the computer in MS-DOS mode using the power button.

- > Instant-Off Press the power button and then the system will be turned off instantly.
- Delay 4 Sec. Press and hold the power button for 4 seconds to turn off the system. If the power button is pressed for less than 4 seconds, the system will enter suspend mode.

#### ∽ Power Loading

Enables or disables dummy load. When the power supply is at low load, a self-protection will activate causing it to shutdown or fail. If this occurs, please set to **Enabled**. **Auto** lets the BIOS automatically configure this setting.

#### ☞ Resume by Alarm

Determines whether to power on the system at a desired time.

If enabled, set the date and time as following:

How Wake up day: Turn on the system at a specific time on each day or on a specific day in a month.

→ Wake up hour/minute/second: Set the time at which the system will be powered on automatically. Set the time at which the system will be powered on automatically.

Note: When using this function, avoid inadequate shutdown from the operating system or removal of the AC power, or the settings may not be effective.

#### ☞ Wake on LAN

Enables or disables the wake on LAN function.

#### IO Ports

			🕩 Save & Exit
In the Design Design Big Data, 1: a the Design Big Data, 1: a the Design Big Data, 1: a the Design PCRN, 1: a the Design PCRN, 1: a the Design PCRN, 1: a the Design PCRN, 1: a the Design Big Data (big Design Design 1: the Design 1: the Design Design 1: the Design 1: the Design 1: the Design Design 1: the Design	CC+154 Indiad Anto Anto Anto Protect Protect Protect Protect Protect	CPU Froame 4003:56MHz Vora 6 0:909 V Temperate 430:7C Wattage Votage Votage 12.024 V	BCLK 100.18MF Vcore 1 0.669 V 32768ME *5V 4.785 V

#### ☞ Initial Display Output

Specifies the first initiation of the monitor display from the installed PCI Express graphics card.

- ▶ PCle 1 Slot Sets the graphics card on the PCIEX16\_1 slot as the first display.
- ▶ PCle 2 Slot Sets the graphics card on the PCIEX16\_2 slot as the first display.

▶ PCle 3 Slot Sets the graphics card on the PCIEX16\_3 slot as the first display.

#### → HD Audio Controller

Enables or disables the onboard audio function.

If you wish to install a 3rd party add-in audio card instead of using the onboard audio, set this item to **Disabled**.

#### ∽ PCIEX16\_1 Bifurcation

Allows you to determine how the bandwidth of the PCIEX16\_1 slot is divided.

#### ∽ PCIEX16\_2 Bifurcation

Allows you to determine how the bandwidth of the PCIEX16\_2 slot is divided.

#### ∽ PCIEX16\_3 Bifurcation

Allows you to determine how the bandwidth of the PCIEX16\_3 slot is divided.

## ∽ Above 4G Decoding

Enables or disables 64-bit capable devices to be decoded in above 4 GB address space (only if your system supports 64-bit PCI decoding). Set to **Enabled** if more than one advanced graphics card are installed and their drivers are not able to be launched when entering the operating system (because of the limited 4 GB memory address space).

Re-Size BAR Support
 Enables or disables support for Resizable BAR.

## ☞ SR-IOV Support

Enables or disables support for Single Root IO Virtualization.

Onboard LAN1 Controller (Marvell® AQtion AQC113C 10GbE LAN Chip) Enables or disables the onboard LAN function. If you wish to install a 3rd party add-in network card instead of using the onboard LAN, set this item to Disabled.

#### Onboard LAN2 Controller (Realtek® 2.5GbE LAN Chip) Enables or disables the onboard LAN function. If you wish to install a 3rd party add-in network card instead of using the onboard LAN, set this item to Disabled

Gigabyte Utilities Downloader Configuration

## ∽ Gigabyte Utilities Downloader Configuration

Allows you to determine whether to automatically download and install GIGABYTE Control Center after entering the operating system. Before the installation, make sure the system is connected to the Internet.

## USB Type-C with Maple Ridge/USB4 Configuration

- USB Type-C with Maple Ridge/USB4 Support Enables or disables the USB4® USB Type-C<sup>®</sup> ports.
- USB Type-C with Maple Ridge/USB4 Boot Support Enabled allows for booting from bootable devices connected to the USB4® USB Type-C<sup>®</sup> ports.

## ← Security Level

Allows you select the security level for the USB4  $^{\circ}$  USB Type-C  $^{\circ}$  ports.

#### Memory Allocation per port (MB) Allows you to set the reserved memory for the USB4® USB Type-C® ports.

- Prefetch Memory Allocation per port (MB) Allows you to set the reserved prefetchable memory for the USB4® USB Type-C<sup>®</sup> ports.
- USB Configuration

## Contract Legacy USB Support

Allows USB keyboard/mouse to be used in MS-DOS.

#### ∽ XHCI Hand-off

Determines whether to enable XHCI Hand-off feature for an operating system without XHCI Hand-off support.

## ☞ USB Mass Storage Driver Support

Enables or disables support for USB storage devices.

## ☞ Port 60/64 Emulation

Enables or disables emulation of I/O ports 64h and 60h. This should be enabled for full legacy support for USB keyboards/mice in MS-DOS or in operating system that does not natively support USB devices.

## ☞ Mass Storage Devices

Displays a list of connected USB mass storage devices. This item appears only when a USB storage device is installed.

## NVMe Configuration

Displays information on your M.2 NVME PCIe SSD if installed.

## SATA Configuration

#### SATA Mode

Enables or disables RAID for the SATA controllers integrated in the Chipset or configures the SATA controllers to AHCI mode.

- ➡ RAID Enables RAID for the SATA controller.
- AHCI Configures the SATA controllers to AHCI mode. Advanced Host Controller Interface (AHCI) is an interface specification that allows the storage driver to enable advanced Serial ATA features such as Native Command Queuing and hot plug.

## ∽ NVMe RAID mode

Allows you to determine whether to use your M.2 NVMe PCIe SSDs to configure RAID.

- FCH SATA Port Enable (For A\_SATA0~3 Connectors) Enables or disables the integrated SATA controllers.
- FCH SATA Port Hot plug (For A\_SATA0~3 Connectors) Enables or disable the hot plug capability for each SATA port.
- Chipset SATA Port Enable (For SATA0~3 Connectors) Enables or disables the integrated SATA controllers.
- ∽ Chipset SATA Port Hot plug (For SATA0~3 Connectors) Enables or disable the hot plug capability for each SATA port.

## ☞ FCH/Chipset SATA Port

Displays the information of the connected SATA device(s).

## Network Stack Configuration

## Over the stack of the stack

Disables or enables booting from the network to install a GPT format OS, such as installing the OS from the Windows Deployment Services server.

## ☞ IPv4 PXE Support

Enables or disables IPv4 PXE Support. This item is configurable only when Network Stack is enabled.

## ☞ IPv4 HTTP Support

Enables or disables HTTP boot support for IPv4. This item is configurable only when  $\ensuremath{\textit{Network Stack}}$  is enabled.

## ☞ IPv6 PXE Support

Enables or disables IPv6 PXE Support. This item is configurable only when Network Stack is enabled.

## ☞ IPv6 HTTP Support

Enables or disables HTTP boot support for IPv6. This item is configurable only when **Network Stack** is enabled.

## ∽ PXE boot wait time

Allows you to configure how long to wait before you can press <Esc> to abort the PXE boot. This item is configurable only when **Network Stack** is enabled.

## ☞ Media detect count

Allows you to set the number of times to check the presence of media. This item is configurable only when **Network Stack** is enabled.

## Miscellaneous

<ul> <li>Favorites (F11)</li> </ul>	Twesker     Twesker	Settings	<ol> <li>System Info.</li> </ol>	() 800t	🕒 Save & Ext
HDI In Stratem Jown Child Strategy MD (2014) Add Life Strategy Reports, 1 Set Life Strate PCOPUS, 1 Set Life Strate PCOPUS, 2 Set Life Strate PCOPUS, 2 Set Life Strate PCOPUS, 2 Set Life Strategy Reports, 2 Set Life Strategy Report, 2 Set Life Strategy Re	8	China Sharina Sharina Anga Anga Anga Anga Davaled Davaled Anga Anga Anga		CPU Preserve 4007/46MHz Vorserve 43.0 °C Memory 43.0 °C Memory 4306.00MT/ Voltage Colvege 10 10 10 10 10 10 10 10 10 10 10 10 10 1	Vcore 1 0.669 V Size
EDs in System Power On Stat	e: On/Off			🛠 Smart Fan 6 (F6) 🔳 Q-Flash (F	

#### ∽ LEDs in System Power On State

Allows you to enable or disable motherboard LED lighting when the system is on.

#### ∽ RST\_SW (MULTIKEY) (Functionality of the RST\_SW Button)

- Set this button to HW Reset
- Use the button to reset your system. Use the button to turn on/off the motherboard LEDs.
- ► Set this button to Switch LED On/Off
  - Use the button to enter the BIOS Setup.
- Set this button to Enter BIOS Setup
   Set this button to Boot on Safe Mode
- Use the button to boot the system in safe mode.

## ∽ Onboard Button Light

Allows you to enable or disable the LED lighting of the motherboard Quick buttons when the system is on.

## ∽ PCIEX16\_1 Slot Link Speed

Allows you to set the operation mode of the PCIEX16\_1 slot to Gen 1, Gen 2, Gen 3, Gen 4, or Gen 5. Actual operation mode is subject to the hardware specification of each slot. **Auto** lets the BIOS automatically configure this setting.

## ∽ PCIEX16\_2 Slot Link Speed

Allows you to set the operation mode of the PCIEX16\_2 slot to Gen 1, Gen 1, Gen 2, Gen 3, or Gen 5. Actual operation mode is subject to the hardware specification of each slot. **Auto** lets the BIOS automatically configure this setting.

## ∽ PCIEX16\_3 Slot Link Speed

Allows you to set the operation mode of the PCIEX16\_3 slot to Gen 1, Gen 2, Gen 3, or Gen 4. Actual operation mode is subject to the hardware specification of each slot. **Auto** lets the BIOS automatically configure this setting.

## ☞ PCIe Slot Link Speed

Allows you to set the operation mode of the PCI Express slots and M.2 connectors. Actual operation mode is subject to the hardware specification of each slot. **Auto** lets the BIOS automatically configure this setting.

## ☞ PCIe ASPM Mode

Allows you to configure the ASPM mode for the device connected to the CPU/Chipset PCI Express bus.

#### → 3DMark01 Enhancement

Allows you to determine whether to enhance some legacy benchmark performance.

#### 🗢 IOMMU

Enables or disables AMD IOMMU support.

## ∽ TSME

Enables or disables TSME support.

## ∽ Trusted Platform Module

Enables or disables the TPM 2.0 function provided by the TPM module (optional) installed in the SPI\_TPM header on the motherboard or that integrated in the AMD CPU.

## Trusted Computing 2.0

Allows you to configure the Trusted Platform Module (TPM).

## AMD CBS

Favorites (F11)	CATIVITY STAT	Settings	<ol> <li>System info.</li> </ol>	() Boot	Save & Exit
- Torontes of Th		C. Strady	C) systematic	C tour	C. Sure of Cart
AMD CBS Revision Number CPU Common Options				CPU Frequency 4006.96MHz Vicere 0	BCLK 100.20MH Vcore 1
				0.909 V Temperature 43.0 °C	0.669 V
				Memory Frequency 4809.60MT/s	Size 32768MB
				Voltage CPU VDD1153 1.122 V +12V 12.060 V	*9√ 4.792 V
CPU Common Options				🛠 Smart Fanns (Fo) 🔳 Q-Flash (F8)	

This sub-menu provides AMD CBS-related configuration options.

## AMD Overclocking

ΔΣζΟ			EASY MODE	ADVANCED MODE	Monday 16:29
Favorites (F11)	@ Twester	Settings	<ol> <li>System info.</li> </ol>	() Boot	Save & Ext
<ul> <li>production in productions of the mean production in the second se</li></ul>				СРИ Риденся 408852MHz 90909 Тапована 42.0 °C Матолу Ризало 4805565MT/s 4805565MT/s 4805565MT/s 1.122 V • 172 1.22 V • 172 1.22 V	Vcore 1 0.669 V Size
				🛠 Smart Fan 6 (FG) 🔳 Q-Flash (FB	I 🛞 Help (F1) 🔍
	Back				GIGABYTE

This sub-menu provides AMD overclocking-related configuration options.

## PC Health

Imm ( and ( province)         Descent           Conciliant         VS         CPU         Improve
CPU MODT S1 1122 Y Tengendur 201 MODT S2 1102 Y 43.0 °C 41.0

## ∽ Reset Case Open Status

✤ Disabled Keeps or clears the record of previous chassis intrusion status.

Enabled Clears the record of previous chassis intrusion status and the Case Open field will show "No" at next boot.

## ∽ Case Open

Displays the detection status of the chassis intrusion detection device attached to the motherboard CI header. If the system chassis cover is removed, this field will show "Yes", otherwise it will show "No". To clear the chassis intrusion status record, set **Reset Case Open Status** to **Enabled**, save the settings to the CMOS, and then restart your system.

## CPU Vcore 0/CPU Vcore 1/CPU VDD18 S5/+3.3V/+5V/CPU VDD11 S3/+12V/CPU VCORE SOC

Displays the current system voltages.

## System Info.

Favorites (F11)	A Tweaker	Settings	<ol> <li>System info.</li> </ol>	() Boot	🕒 Save & Ext
Model Name BIOS Version BIOS Date BIOS ID AGESA Version System Language		TRX50 AERO D F15 10/20/2023 845TP001 StormPeakPI 1.1.0.0a English		CPU Frequency 4008.80MHz Vcore 0 0.912 V Temperature 43.0 °C	BCLK 100.15MH Vcore 1 0.669 V
				Memory Frequency 4807.48MT/s	Size 32768MB
				Voltage CPU VDD1153 1.122 V +12V	+5V 4.792 V
				12.060 V	

This section provides information on your motherboard model and BIOS version. You can also select the default language used by the BIOS and manually set the system time.

#### ∽ System Language

Selects the default language used by the BIOS.

#### ∽ System Date

Sets the system date. The date format is week (read-only), month, date, and year. Use <Enter> to switch between the Month, Date, and Year fields and use the <Page Up> or <Page Down> key to set the desired value.

#### ∽ System Time

Sets the system time. The time format is hour, minute, and second. For example, 1 p.m. is 13:00:00. Use <Enter> to switch between the Hour, Minute, and Second fields and use the <Page Up> or <Page Down> key to set the desired value.

#### ∽ Access Level

Displays the current access level depending on the type of password protection used. (If no password is set, the default will display as **Administrator**.) The Administrator level allows you to make changes to all BIOS settings; the User level only allows you to make changes to certain BIOS settings but not all.

#### Plug in Devices Info

Displays information on your PCI Express and M.2 devices if installed.

#### SPD Info

Displays information on the installed memory.

#### Q-Flash

Allows you to access the Q-Flash utility to update the BIOS or back up the current BIOS configuration.

## Boot

Favorites (F11)	Twesker     Twesker	Settings	③ System Info.	ල්) 800t	🕒 Save & Ext
Encol Guideo (Provider Bocurity Option Full Screen LOGO Show Fast Boot		On System Enabled Disabled		CPU Frequency 4007:88MHz Vcore 0 0.912 V Temperature 43.0 °C	BCLK 100.16MH Vore 1 0.672 V
				Memory Frequency 4807.82MT/s	Size 32768MB
				Voltage CPU VDD1153 1.122 V +12V 12.042 V	+5V 4.785 V
	te				

#### ☞ Boot Option Priorities

Specifies the overall boot order from the available devices. Removable storage devices that support GPT format will be prefixed with "UEFI:" string on the boot device list. To boot from an operating system that supports GPT partitioning, select the device prefixed with "UEFI:" string.

Or if you want to install an operating system that supports GPT partitioning such as Windows 11 64-bit, select the optical drive that contains the Windows 11 64-bit installation disk and is prefixed with "UEFI:" string.

#### ☞ Bootup NumLock State

Enables or disables Numlock feature on the numeric keypad of the keyboard after the POST.

#### ∽ Security Option

Specifies whether a password is required every time the system boots, or only when you enter BIOS Setup. After configuring this item, set the password(s) under the Administrator Password/User Password item.

Setup A password is only required for entering the BIOS Setup program.

System A password is required for booting the system and for entering the BIOS Setup program.

#### ☞ Full Screen LOGO Show

Allows you to determine whether to display the GIGABYTE Logo at system startup. **Disabled** skips the GIGABYTE Logo when the system starts up.

## Fast Boot

Enables or disables Fast Boot to shorten the OS boot process. Ultra Fast provides the fastest bootup speed.

## ∽ SATA Support

Last Boot SATA Devices Only Except for the previous boot drive, all SATA devices are disabled before the OS boot process completes.

✤ All SATA Devices All SATA devices are functional in the operating system and during the POST. This item is configurable only when Fast Boot is set to Enabled or Ultra Fast.

#### ∽ NVMe Support

Allows you to enable or disable NVMe device(s).

This item is configurable only when Fast Boot is set to Enabled or Ultra Fast.

## ☞ VGA Support

Allows you to select which type of operating system to boot.

- ► Auto Enables Legacy Option ROM only.
- ➡ EFI Driver Enables EFI option ROM.

This item is configurable only when Fast Boot is set to Enabled or Ultra Fast.

## ☞ USB Support

- Disabled
   All USB devices are disabled before the OS boot process completes.
- ➡ Full Initial All USB devices are functional in the operating system and during the POST.
- ✤ Partial Initial
  Part of the USB devices are disabled before the OS boot process completes.

This item is configurable only when Fast Boot is set to Enabled. This function is disabled when Fast Boot is set to Ultra Fast.

## ∽ NetWork Stack Driver Support

- Disabled Disables booting from the network.
- Enabled Enables booting from the network.

This item is configurable only when Fast Boot is set to Enabled or Ultra Fast.

## ☞ CSM Support

Enables or disables UEFI CSM (Compatibility Support Module) to support a legacy PC boot process.

Disables UEFI CSM and supports UEFI BIOS boot process only.

➡ Enabled Enables UEFI CSM.

## ∽ LAN PXE Boot Option ROM

Allows you to select whether to enable the legacy option ROM for the LAN controller. This item is configurable only when **CSM Support** is set to **Enabled**.

## ∽ Storage Boot Option Control

Allows you to select whether to enable the UEFI or legacy option ROM for the storage device controller.

- ➡ Disabled Disables Option ROM.
- ➡ UEFI Only Enables UEFI Option ROM only.
- Legacy Only Enables Legacy Option ROM only.

This item is configurable only when CSM Support is set to Enabled.

## ∽ Other PCI Device ROM Priority

Allows you to select whether to enable the UEFI or Legacy option ROM for the PCI device controller other than the LAN, storage device, and graphics controllers.

- ✤ Disabled Disables Option ROM.
- ➡ UEFI Only Enables UEFI Option ROM only.
- ➡ Legacy Only Enables Legacy Option ROM only.

This item is configurable only when **CSM Support** is set to **Enabled**.

## ∽ Administrator Password

Allows you to configure an administrator password. Press <Enter> on this item, type the password, and then press <Enter>. You will be requested to confirm the password. Type the password again and press <Enter>. You must enter the administrator password (or user password) at system startup and when entering BIOS Setup. Differing from the user password, the administrator password allows you to make changes to all BIOS settings.

## ☞ User Password

Allows you to configure a user password. Press <Enter> on this item, type the password, and then press <Enter>. You will be requested to confirm the password. Type the password again and press <Enter>. You must enter the administrator password (or user password) at system startup and when entering BIOS Setup. However, the user password only allows you to make changes to certain BIOS settings but not all. To cancel the password, press <Enter> on the password item and when requested for the password, enter the correct one first. When prompted for a new password, press <Enter> without entering any password. Press <Enter> again when prompted to confirm.

NOTE: Before setting the User Password, be sure to set the Administrator Password first.

## Secure Boot

Allows you to enable or disable Secure Boot and configure related settings. This item is configurable only when **CSM Support** is set to **Disabled**.

#### ∽ Preferred Operating Mode

Allows you to select whether to enter Easy mode or Advanced mode after entering BIOS Setup. Auto enters the BIOS mode where it was last time.

## Save & Exit

<ul> <li>Favorites (F11)</li> </ul>	@ Twester	Settings	<ol> <li>System info.</li> </ol>	😃 Boot	🕞 Save & Evit
Sive & Ext Setup Del Without Soving Load Oppingend Defaults Des Processo Save Profess Load Profes				CPU Preserve 40055.480/H2 Vore 0 0912 43.0 °C Memory 4806.280/H7/s Voltage Voltage Voltage 11.727 Voltage 12.024 V	BCLK 100.13MH Vote 1 0.669 V 32768MB
xit BIOS saving all changes	nade.			🛠 Smart Fan 6 (F6) 🔳 Q-Flash (F8)	

#### ∽ Save & Exit Setup

Press <Enter> on this item and select **Yes**. This saves the changes to the CMOS and exits the BIOS Setup program. Select **No** or press <Esc> to return to the BIOS Setup Main Menu.

#### ☞ Exit Without Saving

Press <Enter> on this item and select **Yes**. This exits the BIOS Setup without saving the changes made in BIOS Setup to the CMOS. Select **No** or press <Esc> to return to the BIOS Setup Main Menu.

#### ∽ Load Optimized Defaults

Press <Enter> on this item and select **Yes** to load the BIOS factory default settings. The BIOS defaults settings help the system to operate in optimum state. Always load the Optimized defaults after updating the BIOS or after clearing the CMOS values.

#### ☞ Boot Override

Allows you to select a device to boot immediately. Press <Enter> on the device you select and select Yes to confirm. Your system will restart automatically and boot from that device.

#### ∽ Save Profiles

This function allows you to save the current BIOS settings to a profile. You can create up to 8 profiles and save as Setup Profile 1~ Setup Profile 8. Press <Enter> to complete. Or you can select **Select File in HDD/FDD/USB** to save the profile to your storage device.

#### ∽ Load Profiles

If your system becomes unstable and you have loaded the BIOS default settings, you can use this function to load the BIOS settings from a profile created before, without the hassles of reconfiguring the BIOS settings. First select the profile you wish to load and then press <Enter> to complete. You can select **Select File in HDD/FDD/USB** to input the profile previously created from your storage device or load the profile automatically created by the BIOS, such as reverting the BIOS settings to the last settings that worked properly (last known good record).