



B550M Pro RS

Motherboard

Software/BIOS Setup Guide

Version 1.0

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Contents

Chapter 1 Introduction	1
Chapter 2 Software and Utilities Operation	2
2.1 ASRock Live Update & APP Shop	2
2.1.1 Installing ASRock Live Update & APP Shop	2
2.1.2 UI Overview	3
2.1.3 Apps	4
2.1.4 BIOS & Drivers	7
2.1.5 Setting	8
2.2 ASRock Motherboard Utility (A-Tuning)	9
2.2.1 Installing ASRock Motherboard Utility (A-Tuning)	9
2.2.2 Using ASRock Motherboard Utility (A-Tuning)	9
2.3 ASRock Polychrome SYNC	12
2.3.1 Connecting the LED Strip	12
2.3.2 Connecting the Addressable RGB LED Strip	13
2.3.3 Installing ASRock Polychrome SYNC Utility	14
Chapter 3 UEFI SETUP UTILITY	15
3.1 Introduction	15
3.1.1 Entering BIOS Setup	15
3.1.2 UEFI Menu Bar	16
3.1.3 Navigation Keys	17
4.2 Main Screen	18
4.3 OC Tweaker Screen	19

4.4	Advanced Screen	22
4.4.1	CPU Configuration	23
4.4.2	PCI Configuration	24
4.4.3	Onboard Devices Configuration	25
4.4.4	Storage Configuration	27
4.4.5	ACPI Configuration	28
4.4.6	USB Configuration	29
4.4.7	Trusted Computing	30
4.4.8	AMD PBS	32
4.4.9	AMD Overclocking	33
4.4.10	AMD CBS	34
4.5	Tools	35
4.6	Hardware Health Event Monitoring Screen	36
4.7	Security Screen	39
4.8	Boot Screen	40
4.9	Exit Screen	42

Chapter 1 Introduction

This user guide is a complete setup guide for B550M Pro RS motherboard. The screenshots in this manual are for reference only. Settings and options may vary due to the motherboard you purchased.

In this documentation, Chapter 1 gives an overview of the setup guide. Chapter 2 contains the operation guide of the software and utilities. Chapter 3 contains the configuration guide of the BIOS setup.

Software Setup Guide

- ASRock Live Update & APP Shop
- ASRock Motherboard Utility (A-Tuning)
- ASRock Polychrome SYNC

BIOS Setup Guide

- UEFI Setup Utility



Because the motherboard specifications and the software might be updated, the content of this documentation will be subject to change without notice. In case any modifications of this documentation occur, the updated version will be available on ASRock's website without further notice. If you require technical support related to this motherboard, please visit our website for specific information about the model you are using. ASRock website <http://www.asrock.com>.

Chapter 2 Software and Utilities Operation

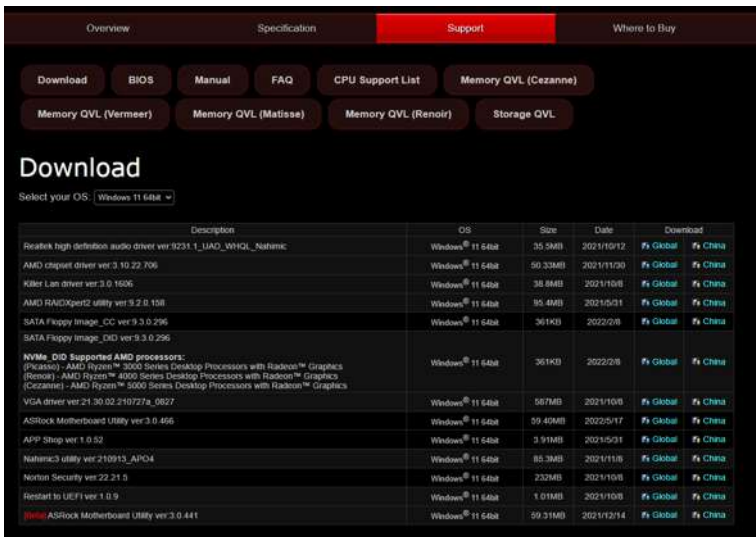
2.1 ASRock Live Update & APP Shop

The ASRock Live Update & APP Shop is an online store for purchasing and downloading software applications for your ASRock computer. You can quickly and easily install various apps and support utilities. With ASRock Live Update & APP Shop, you can optimize your system and keep your motherboard up to date simply with a few clicks.

2.1.1 Installing ASRock Live Update & APP Shop


Please download the ASRock Live Update & APP Shop utility from the ASRock's website: "https://www.asrock.com".

Go to the product page of your motherboard, select "Support" > "Download" to download the APP Shop.



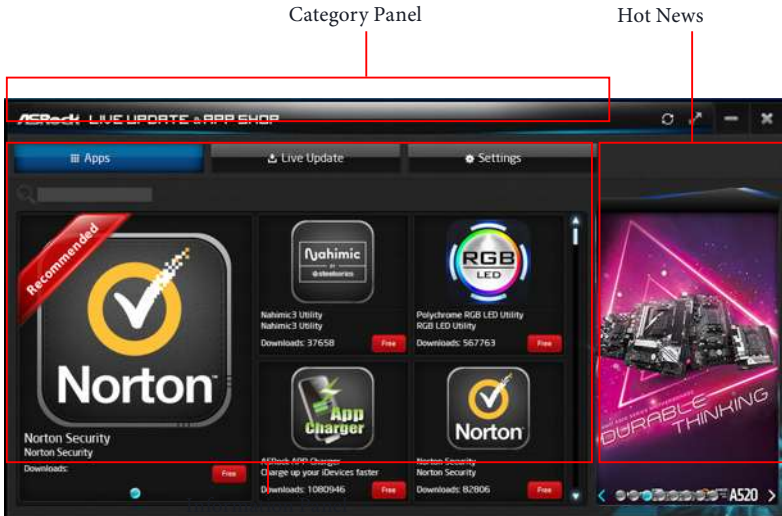
The screenshot shows the ASRock website's 'Support' page. At the top, there are navigation tabs: 'Overview', 'Specification', 'Support' (highlighted in red), and 'Where to Buy'. Below these are several buttons for different support categories: 'Download', 'BIOS', 'Manual', 'FAQ', 'CPU Support List', 'Memory QVL (Cezanne)', 'Memory QVL (Vermeer)', 'Memory QVL (Matisse)', 'Memory QVL (Renoir)', and 'Storage QVL'. The main heading is 'Download', with a dropdown menu for 'Select your OS' currently set to 'Windows 11 64bit'. Below this is a table of available downloads.

Description	OS	Size	Date	Download
Realtek high definition audio driver ver.9233.1_LIAO_WHQL_Nahmic	Windows® 11 64bit	35.5MB	2021/10/12	🌐 Global 🇨🇳 China
AMD chipset driver ver:3.10.22.706	Windows® 11 64bit	50.33MB	2021/11/30	🌐 Global 🇨🇳 China
Killer Lan driver ver.3.0.1606	Windows® 11 64bit	38.88MB	2021/11/08	🌐 Global 🇨🇳 China
AMD RAIDport2 utility ver.9.2.0.158	Windows® 11 64bit	35.4MB	2021/05/11	🌐 Global 🇨🇳 China
SATA Flppy Image_CC ver.9.3.0.296	Windows® 11 64bit	361KB	2022/2/8	🌐 Global 🇨🇳 China
NVMe_CID Supported AMD processors: (Precision) - AMD Ryzen™ 3000 Series Desktop Processors with Radeon™ Graphics (Renoir) - AMD Ryzen™ 4000 Series Desktop Processors with Radeon™ Graphics (Cezanne) - AMD Ryzen™ 5000 Series Desktop Processors with Radeon™ Graphics	Windows® 11 64bit	361KB	2022/2/8	🌐 Global 🇨🇳 China
VGA driver ver.21.30.02.210/27a_0827	Windows® 11 64bit	507MB	2021/11/08	🌐 Global 🇨🇳 China
ASRock Motherboard Utility ver.3.0.406	Windows® 11 64bit	59.40MB	2022/5/17	🌐 Global 🇨🇳 China
APP Shop ver.1.0.82	Windows® 11 64bit	3.91MB	2021/5/31	🌐 Global 🇨🇳 China
Nahmic utility ver.210913_APO4	Windows® 11 64bit	85.38MB	2021/11/08	🌐 Global 🇨🇳 China
Notion Security ver.22.21.0	Windows® 11 64bit	232MB	2021/11/08	🌐 Global 🇨🇳 China
Restart to UEFI ver.1.0.9	Windows® 11 64bit	1.01MB	2021/11/08	🌐 Global 🇨🇳 China
Note: ASRock Motherboard Utility ver.3.0.441	Windows® 11 64bit	59.31MB	2021/12/14	🌐 Global 🇨🇳 China

After installation, double-click  on your desktop to access ASRock Live Update & APP Shop utility.

*You need to be connected to the Internet to download apps from the ASRock Live Update & APP Shop.

2.1.2 UI Overview



Category Panel: The category panel contains several category tabs or buttons that when selected the information panel below displays the relative information.

Information Panel: The information panel in the center displays data about the currently selected category and allows users to perform job-related tasks.

Hot News: The hot news section displays the various latest news. Click on the image to visit the website of the selected news and know more.

2.1.3 Apps

When the "Apps" tab is selected, you will see all the available apps on screen for you to download.

Installing an App


Step 1

Find the app you want to install.



The most recommended app appears on the left side of the screen. The other various apps are shown on the right. Please scroll up and down to see more apps listed.

You can check the price of the app and whether you have already installed it or not.


 - The red icon displays the price or "Free" if the app is free of charge.

 - The green "Installed" icon means the app is installed on your computer.

Step 2

Click on the app icon to see more details about the selected app.


Step 3

If you want to install the app, click on the red icon  to start downloading.

**Step 4**


When installation completes, you can find the green "Installed" icon appears on the upper right corner.



To uninstall it, simply click on the trash can icon .

*The trash icon may not appear for certain apps.

Upgrading an App

You can only upgrade the apps you have already installed. When there is an available new version for your app, you will find the mark of "New Version"  appears below the installed app icon.



Step 1

Click on the app icon to see more details.

Step 2

Click on the yellow icon  to start upgrading.

2.1.4 BIOS & Drivers

Installing BIOS or Drivers

When the "BIOS & Drivers" tab is selected, you will see a list of recommended or critical updates for the BIOS or drivers. Please update them all soon.



Step 1

Please check the item information before update. Click on ⓘ to see more details.

Step 2

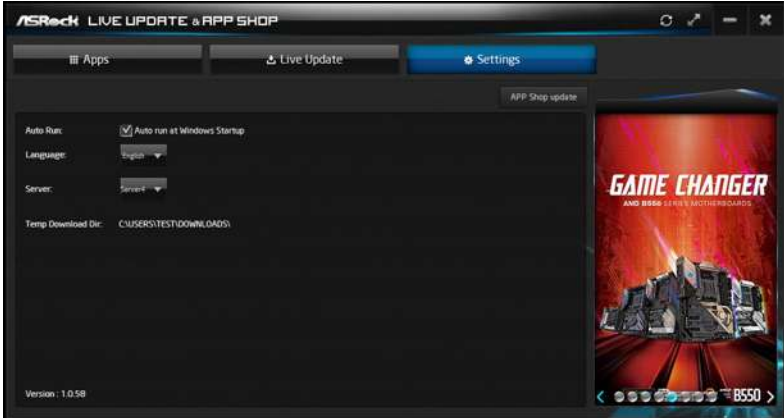
Click to select one or more items you want to update.

Step 3

Click Update to start the update process.

2.1.5 Setting

In the "Setting" page, you can change the language, select the server location, and determine if you want to automatically run the ASRock Live Update & APP Shop on Windows startup.




2.2 ASRock Motherboard Utility (A-Tuning)

ASRock Motherboard Utility (A-Tuning) is ASRock's multi purpose software suite with a new interface, more new features and improved utilities.

2.2.1 Installing ASRock Motherboard Utility (A-Tuning)

ASRock Motherboard Utility (A-Tuning) can be downloaded from ASRock Live Update & APP Shop.

You can also download the utility from the ASRock's website: "<https://www.asrock.com>". Go to the product page of your motherboard, select "Support" > "Download" to download "ASRock Motherboard Utility".

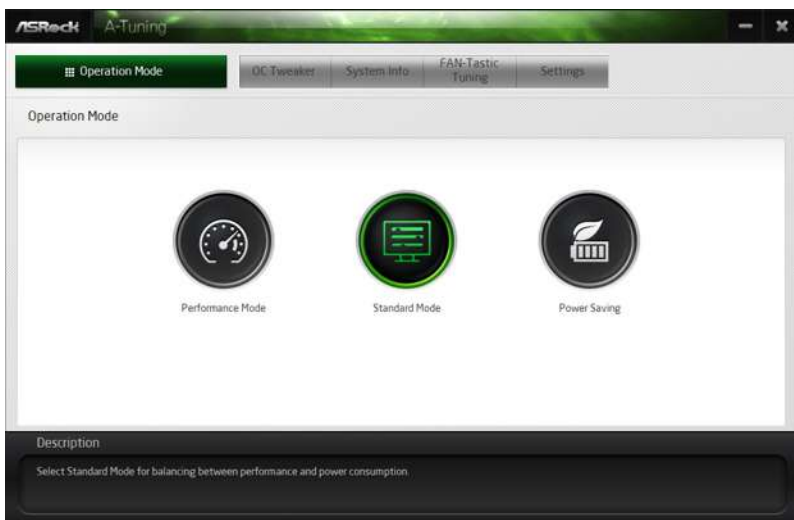
After the installation, you will find the icon "ASRock Motherboard Utility (A-Tuning)" on your desktop. Double-click the "ASRock Motherboard Utility (A-Tuning)" icon , ASRock Motherboard Utility (A-Tuning) main menu will pop up.

2.2.2 Using ASRock Motherboard Utility (A-Tuning)

There are five sections in ASRock Motherboard Utility (A-Tuning) main menu: Operation Mode, OC Tweaker, System Info, FAN-Tastic Tuning and Settings.

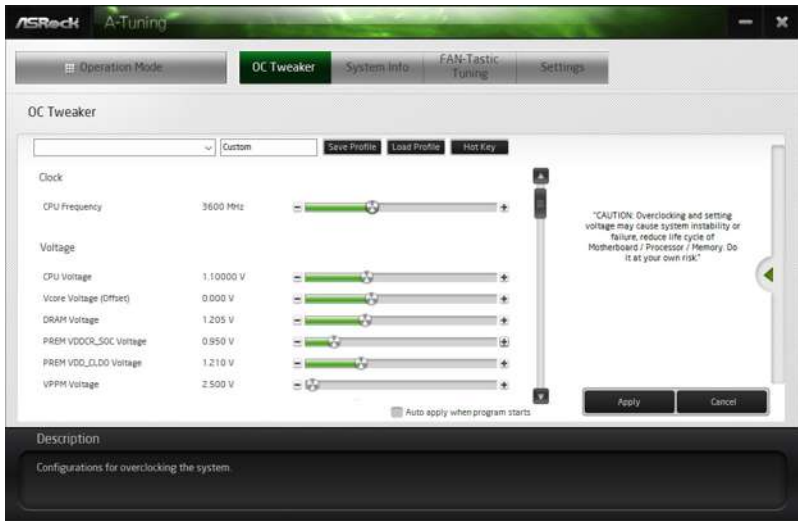
Operation Mode

Choose an operation mode for your computer.



OC Tweaker

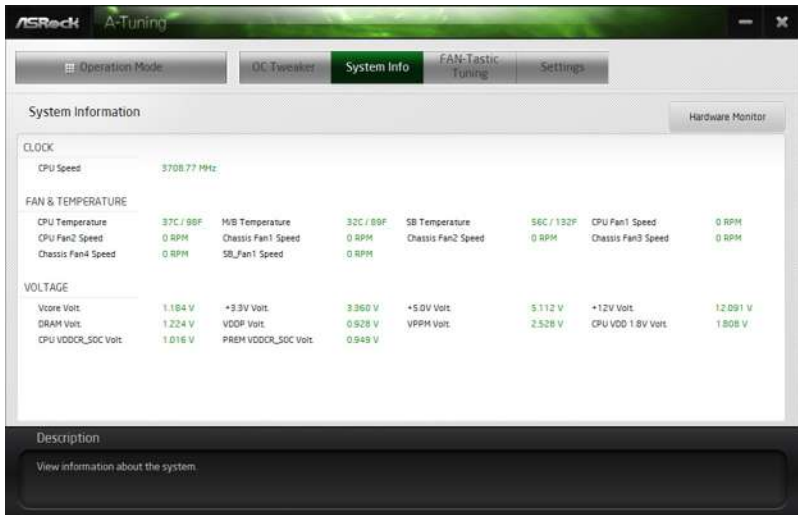
Configurations for overclocking the system.



System Info

View information about the system.

*The System Browser tab may not appear for certain models.



FAN-Tastic Tuning

Configure up to five different fan speeds using the graph. The fans will automatically shift to the next speed level when the assigned temperature is met.

FAN-Tastic Tuning

CPU FAN1

Start FAN Test

Fan Power	Fan Speed
100%	N/A RPM
90%	N/A RPM
80%	N/A RPM
70%	N/A RPM
60%	N/A RPM
50%	N/A RPM
40%	N/A RPM
30%	N/A RPM
20%	N/A RPM
10%	N/A RPM

Auto apply when program starts

Apply Cancel

Description

Configure different fan speeds for respective temperatures using the graph. The fans will automatically shift to the next speed level when the assigned temperature is met.

Settings

Configure ASRock ASRock Motherboard Utility (A-Tuning). Click to select "Auto run at Windows Startup" if you want ASRock Motherboard Utility (A-Tuning) to be launched when you start up the Windows operating system.

Settings

Auto run at Windows Startup

Version: 3.0.466

Description

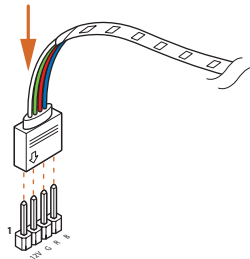
Configure ASRock A-Tuning.

2.3 ASRock Polychrome SYNC

ASRock Polychrome SYNC is a lighting control utility specifically designed for unique individuals with sophisticated tastes to build their own stylish colorful lighting system. Simply by connecting the LED strip, you can customize various lighting schemes and patterns, including Static, Breathing, Strobe, Cycling, Music, Wave and more.

2.3.1 Connecting the LED Strip

Connect your RGB LED strip to the **RGB LED Header** on the motherboard.



RGB LED Header



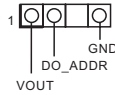
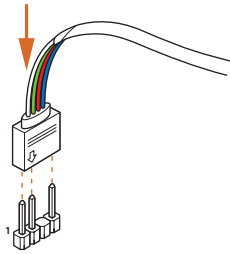
1. Never install the RGB LED cable in the wrong orientation; otherwise, the cable may be damaged.
2. Before installing or removing your RGB LED cable, please power off your system and unplug the power cord from the power supply. Failure to do so may cause damages to motherboard components.



1. Please note that the RGB LED strips do not come with the package.
2. The RGB LED header supports standard 5050 RGB LED strip (12V/G/R/B), with a maximum power rating of 3A (12V) and length within 2 meters.

2.3.2 Connecting the Addressable RGB LED Strip

Connect your Addressable RGB LED strip to the **Addressable LED Header** on the motherboard.



Addressable LED Header



1. Never install the RGB LED cable in the wrong orientation; otherwise, the cable may be damaged.
2. Before installing or removing your RGB LED cable, please power off your system and unplug the power cord from the power supply. Failure to do so may cause damages to motherboard components.

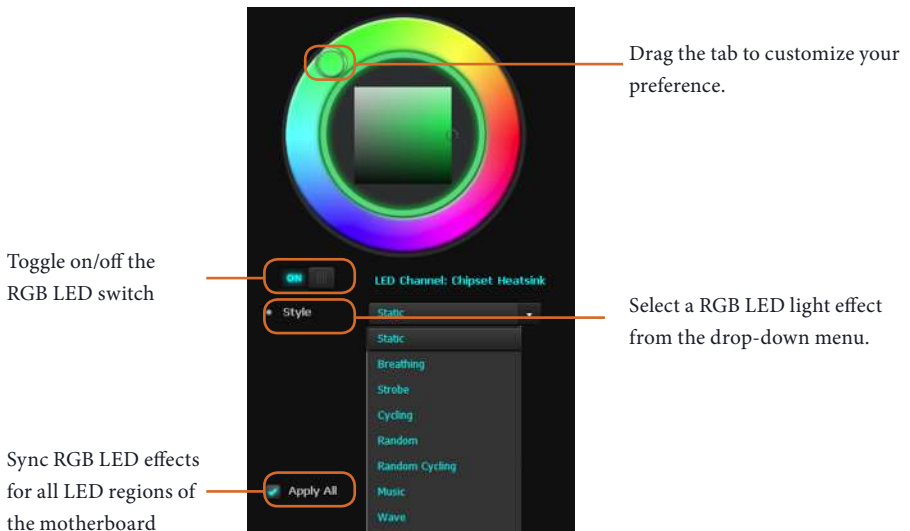


1. Please note that the RGB LED strips do not come with the package.
2. The RGB LED header supports WS2812B addressable RGB LED strip (5V/Data/GND), with a maximum power rating of 3A (5V) and length within 2 meters.

2.3.3 Installing ASRock Polychrome SYNC Utility

After connecting the required LED strips, download the ASRockPolychrome SYNC Utility from the ASRock Live Update & APP Shop. You can also download the utility from the ASRock's website: "<https://www.asrock.com>". Go to the product page of your motherboard, select "Support" > "Download" to download the ASRock Polychrome RGB.

Now you can adjust the RGB LED color through this utility and start coloring your PC style your way!



Chapter 3 UEFI SETUP UTILITY

3.1 Introduction

ASRock UEFI (Unified Extensible Firmware Interface) is a BIOS utility which offers tweak-friendly options in an advanced viewing interface. The UEFI system works with a USB mouse and offers users a faster, sleeker experience.

This BIOS utility can perform the Power-On Self-Test (POST) during system startup, record hardware parameters of the system, load operating system, and so on. The battery on the motherboard supplies the power needed to the CMOS when the system power is turned off, and the values configured in the UEFI utility are kept in the CMOS.

Please note that inadequate BIOS settings may cause system instability, malfunction or boot failure. We strongly recommend that you do not alter the UEFI default configurations or change the settings only with the assistance of a trained service person.

If the system becomes unstable or fails to boot after you change the setting, try to clear the CMOS values and reset the board to default values. See your motherboard manual for instructions.

3.1.1 Entering BIOS Setup

You may run the UEFI SETUP UTILITY by pressing <F2> or right after you power on the computer; otherwise, the Power-On-Self-Test (POST) will continue with its test routines. If you wish to enter the UEFI SETUP UTILITY after POST, restart the system by pressing <Ctl> + <Alt> + <Delete>, or by pressing the reset button on the system chassis. You may also restart by turning the system off and then back on.

This setup guide explains how to use the UEFI SETUP UTILITY to configure all the supported system. The screenshots in this manual are for reference only. UEFI Settings and options may vary owing to different BIOS release versions or CPU installed. Please refer to the actual BIOS version of the motherboard you purchased for detailed screens, settings and options.

3.1.2 UEFI Menu Bar

The top of the screen has a menu bar with the following selections:

Main	For setting system time/date information
OC Tweaker	For overclocking configurations
Advanced	For advanced system configurations
Tool	Useful tools
H/W Monitor	Displays current hardware status
Security	For security settings
Boot	For configuring boot settings and boot priority
Exit	Exit the current screen or the UEFI Setup Utility



Because the UEFI software is constantly being updated, the following UEFI setup screens and descriptions for reference purpose only, and may vary from the latest BIOS and do not exactly match what you see on your screen.



Please realize that there is a certain risk involved with overclocking, including adjusting the setting in the BIOS, applying Untied Overclocking Technology, or using third-party overclocking tools. Overclocking may affect your system's stability, or even cause damage to the components and devices of your system. It should be done at your own risk and expense. We are not responsible for possible damage caused by overclocking.

3.1.3 Navigation Keys

Use <←> key or <→> key to choose among the selections on the menu bar, and use <↑> key or <↓> key to move the cursor up or down to select items, then press <Enter> to get into the sub screen. You can also use the mouse to click your required item.

Please check the following table for the descriptions of each navigation key.

Navigation Key(s)	Description
+ / -	To change option for the selected items
<Tab>	Switch to next function
<PGUP>	Go to the previous page
<PGDN>	Go to the next page
<HOME>	Go to the top of the screen
<END>	Go to the bottom of the screen
<F1>	To display the General Help Screen
<F7>	Discard changes and exit the SETUP UTILITY
<F9>	Load optimal default values for all the settings
<F10>	Save changes and exit the SETUP UTILITY
<F12>	Print screen
<ESC>	Jump to the Exit Screen or exit the current screen

4.2 Main Screen

When you enter the UEFI SETUP UTILITY, the Main screen will appear and display the system overview.



4.3 OC Tweaker Screen

In the OC Tweaker screen, you can set up overclocking features.



Because the UEFI software is constantly being updated, the following UEFI setup screens and descriptions are for reference purpose only, and they may not exactly match what you see on your screen.

Overclock Mode(Bus Speed)

Select the overclock mode. Warning! When overclocking also the PCIe, PCI, SATA and USB busses will be overclocked which may cause instability or failure. Please install an operating system and the drivers required before overclocking, or else your HDD's may be undetectable. Overclocking is not supported if the monitor is connected via the onboard D-Bus/VGA connector.

CPU Frequency and Voltage Change

If this item is set to [Manual], the multiplier and voltage will be set based on user selection. Final result is depending on the CPU's capability.

SoC/Uncore OC Mode

AMD Overclocking Setup Forces CPU SoC/uncore components (e.g. Infinity Fabric, memory, and integrated graphics) to run at their maximum specified frequency at all times. This may improve performance at the expense of idle power savings.

SoC/Uncore OC Voltage(VID)

AMD Overclocking Setup Specifies the SoC/uncore voltage (VDD_SOC) to support memory and Infinity Fabric overclocking. VDD_SOC also determines the CPU voltage on processors with integrated graphics. 'SoC/Uncore OC Mode' needs to be enabled to force this voltage.

CLD0 VDDP Voltage Control

AMD Overclocking Setup VDDP is a voltage for the DDR4 bus signaling (PHY), and it is derived from your DRAM Voltage (VDDIO_Mem). As a result, VDDP voltage in mV can approach but not exceed your DRAM Voltage.

CLD0 VDDG CCD Voltage Control

AMD Overclocking Setup VDDG CCD represents voltage for the data portion of the Infinity Fabric. It is derived from the CPU SoC/Uncore Voltage (VDD_SOC). VDDG can approach but not exceed VDD_SOC.

CLD0 VDDG IOD Voltage Control

AMD Overclocking Setup VDDG IOD represents voltage for the data portion of the Infinity Fabric. It is derived from the CPU SoC/Uncore Voltage (VDD_SOC). VDDG can approach but not exceed VDD_SOC.

DRAM Information

DRAM Frequency

If [Auto] is selected, the motherboard will detect the memory module(s) inserted and assign the appropriate frequency automatically. Setting DRAM Frequency can adjust DRAM Timing.

DRAM Voltage

Configure the voltage for the DRAM Voltage.

Infinity Fabric Frequency and Dividers

AMD Overclocking Setup Set Infinity Fabric frequency (FCLK).

[Auto] $FCLK = MCLK$.

[Manual] FCLK must be less than or equal to MCLK for the best performance in most cases. Latency penalties are incurred if FCLK and MCLK are mismatched, but sufficiently high MCLK can negate or overcome this penalty.

DRAM Timing Configuration

External Voltage Settings and Load-line Calibration

CPU Vcore Voltage

Input voltage for the processor by the external voltage regulator.

CPU Load-Line Calibration

CPU Load-Line Calibration helps prevent CPU voltage droop when the system is under heavy loading.

VDDCR_SOC Voltage

Input voltage for the processor by the external voltage regulator.

VDDCR_SOC Load-Line Calibration

VDDCR_SOC Load-Line Calibration helps prevent VDDCR_SOC voltage droop when the system is under heavy loading.

VPPM

Configure the voltage for the VPPM.

CPU VDD 1.8V Voltage

Configure the voltage for the CPU VDD 1.8V Voltage. The default value is [Auto].

Chipset 1.05V Voltage

Configure the voltage for the Chipset 1.05V Voltage. The default value is [Auto].

Save User Default

Type a profile name and press enter to save your settings as user default.

Load User Default

Load previously saved user defaults.

Save User UEFI Setup Profile to Disk

It helps you to save current UEFI settings as an user profile to disk.

Load User UEFI Setup Profile from Disk

You can load previous saved profile from the disk.

4.4 Advanced Screen

In this section, you may set the configurations for the following items: CPU Configuration, PCI Configuration, Onboard Devices Configuration, Storage Configuration, ACPI Configuration, USB Configuration, Trusted Computing, AMD PBS, AMD Overclocking, and AMD CBS.



Setting wrong values in this section may cause the system to malfunction.

UEFI Configuration

Active Page on Entry

Select the default page when entering the UEFI setup utility.

Full HD UEFI

When [Auto] is selected, the resolution will be set to 1920 x 1080 if the monitor supports Full HD resolution. If the monitor does not support Full HD resolution, then the resolution will be set to 1024 x 768. When [Disable] is selected, the resolution will be set to 1024 x 768 directly.

4.4.1 CPU Configuration



PSS Support

Use this to enable or disable the generation of ACPI_PPC, _PSS, and _PCT objects.

NX Mode

Use this to enable or disable NX mode.

SVM Mode

When this is set to [Enabled], a VMM (Virtual Machine Architecture) can utilize the additional hardware capabilities provided by AMD-V. The default value is [Enabled]. Configuration options: [Enabled] and [Disabled].

SMT Mode

This item can be used to disable symmetric multithreading. To re-enable SMT, a power cycle is needed after selecting [Auto].

Warning: S3 is not supported on systems where SMT is disabled.

AMD fTPM Switch

Use this to enable or disable AMD CPU fTPM.

4.4.2 PCI Configuration



Above 4G Decoding

Globally enables or disables 64-bit capable devices to be decoded in Above 4G Address Space (only if the system supports 64-bit PCI Decoding).

Re-Size BAR Support

If system has Resizable BAR capable PCIe Devices, this option enables or disables Resizable BAR Support.

SR-IOV Support

If system has SR-IOV capable PCIe Devices, this option enables or disables Single Root IO Virtualization Support.

4.4.3 Onboard Devices Configuration



Turn On Onboard LED in S5

Turn on onboard LED in the ACPI S5 state.

Restore Onboard LED Default

Restore Onboard LED default value.

RGB LED On/Off

This option enables/disables the RGB LED.

UMA Frame buffer Size (Only for processor with integrated graphics)

This item allows you to set the size of the UMA frame buffer.

HD Audio Controller

Enable/disable HD Audio Support.

Front Panel

Enable/disable front panel HD audio.

Restore on AC/Power Loss

Select the power state after a power failure. If [Power Off] is selected, the power will remain off when the power recovers. If [Power On] is selected, the system will start to boot up when the power recovers.

Onboard LAN

Enable or disable the onboard network interface controller.

PS2 Y-Cable

Enable the PS2 Y-Cable or set this option to Auto.

4.4.4 Storage Configuration



SATA Mode

Select SATA type.

AHCI: Supports new features that improve performance.

RAID: Combine multiple disk drives into a logical unit.

SATA Hot Plug

Enable/disable the SATA Hot Plug function.

4.4.5 ACPI Configuration



Suspend to RAM

It is recommended to select auto for ACPI S3 power saving.

Deep Sleep

Configure deep sleep mode for power saving when the computer is shut down.

PS/2 Keyboard S4/S5 Wakeup Support

Allow the system to be waked up by a PS/2 Keyboard in S4/S5.

PCIe Devices Power On

Allow the system to be waked up by a PCIe device and enable wake on LAN.

RTC Alarm Power On

Allow the system to be waked up by the real time clock alarm. Set it to By OS to let it be handled by your operating system.

USB Power Delivery in Soft Off State (S5)

If this option is enabled, the USB port will provide power to your devices even when the system is in Power State S5.

4.4.6 USB Configuration



XHCI Hand-off

This is a workaround for OSes without XHCI hand-off support. The XHCI ownership change should be claimed by XHCI driver.

Legacy USB Support

Enables or disables Legacy OS Support. AUTO option disables legacy support if no USB devices are connected. DISABLE option will keep USB devices available only for EFI applications.

USB Mass Storage Driver Support

Enables or disables USB Mass Storage Driver Support.

4.4.7 Trusted Computing



Security Device Support

Enable or disable BIOS support for security device.

Active PCR banks

This item displays active PCR Banks.

Available PCR Banks

This item displays available PCR Banks.

SHA-1 PCR Bank

Allows you to enable or disable SHA-1 PCR Bank.

SHA256 PCR Bank

Allows you to enable or disable SHA256 PCR Bank.

Pending Operation

Allows you to schedule an Operation for the Security Device.

NOTE: Your computer will reboot during restart in order to change State of the Device.

Platform Hierarchy

Allows you to enable or disable Platform Hierarchy.

Storage Hierarchy

Allows you to enable or disable Storage Hierarchy.

Endorsement Hierarchy

Allows you to enable or disable Endorsement Hierarchy.

TPM 2.0 UEFI Spec Version

Select the TCG2 Spec Version Support.

[TCG_1_2] the Compatible mode for Win8/Win10.

[TCG_2] Support new TCG2 protocol and event format for Win10 or later.

Physical Presence Spec version

Allows you to select this item to tell OS to support PPI spec version 1.2 or 1.3. Please note that some HCK tests might not support version 1.3.

Configuration options: [1.2] [1.3]

TPM 2.0 InterfaceType

Select the Communication Interface to TPM 2.0 Device.

Device Select

Use this item to select the TPM device to be supported.

[TPM 1.2] Select this item to restrict support to TPM 1.2 devices.

[TPM 2.0] Select this item to restrict support to TPM 2.0 devices.

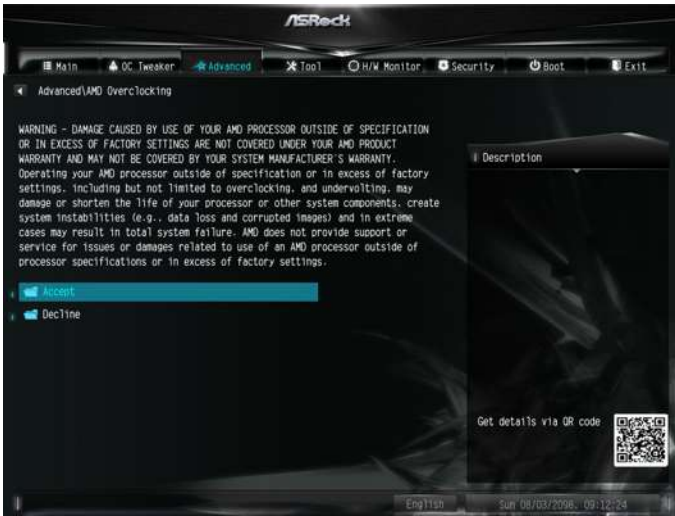
[Auto] Select this item to support both TPM 1.2 and 2.0 devices, with the default set to TPM 2.0 devices. If TPM 2.0 devices are not found, TPM 1.2 devices will be enumerated.

4.4.8 AMD PBS



The AMD PBS menu accesses AMD specific features.

4.4.9 AMD Overclocking



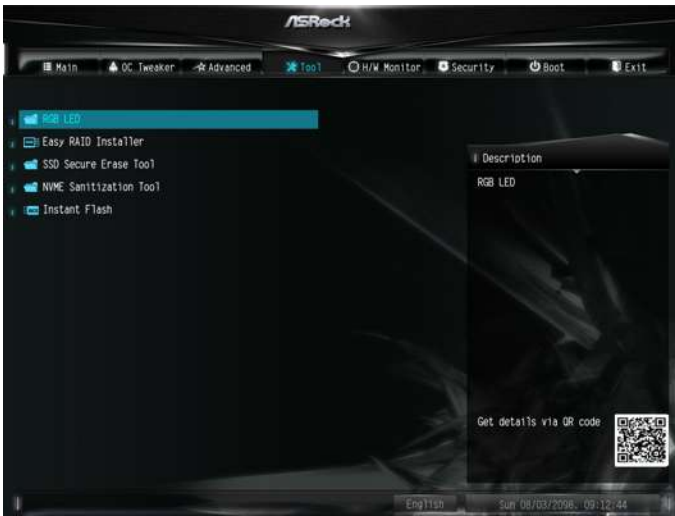
The AMD Overclocking menu accesses options for configuring CPU frequency and voltage.

4.4.10 AMD CBS



The AMD CBS menu accesses AMD specific features.

4.5 Tools



RGB LED

ASRock Polychrome SYNC allows you to adjust the RGB LED color to your liking.

Easy RAID Installer

Easy RAID Installer helps you to copy the RAID driver from the support CD to your USB storage device. After copying the drivers please change the SATA mode to RAID, then you can start installing the operating system in RAID mode.

SSD Secure Erase Tool

Use this tool to securely erase SSD.

NVME Sanitization Tool

After you sanitize SSD, all user data will be permanently destroyed on the SSD and cannot be recovered.

Instant Flash

Save UEFI files in your USB storage device and run Instant Flash to update your UEFI.

4.6 Hardware Health Event Monitoring Screen

This section allows you to monitor the status of the hardware on your system, including the parameters of the CPU temperature, motherboard temperature, fan speed and voltage.



CPU Fan1 Setting

Select a fan mode for CPU Fan 1, or choose Customize to set 5 CPU temperatures and assign a respective fan speed for each temperature.

Fan Configuration

CHA_FAN1/WP Switch

Select CHA_FAN1 or Water Pump mode.

Chassis Fan 1 Control Mode

Select PWM mode or DC mode for Chassis Fan 1 .

Chassis Fan 1 Setting

Select a fan mode for Chassis Fan 1, or choose Customize to set 5 CPU temperatures and assign a respective fan speed for each temperature.

Chassis Fan 1 Temp Source

Select a fan temperature source for Chassis Fan 1.

CHA_FAN2/WP Switch

Select CHA_FAN2 or Water Pump mode.

Chassis Fan 2 Control Mode

Select PWM mode or DC mode for Chassis Fan 2 .

Chassis Fan 2 Setting

Select a fan mode for Chassis Fan 2, or choose Customize to set 5 CPU temperatures and assign a respective fan speed for each temperature.

Chassis Fan 2 Temp Source

Select a fan temperature source for Chassis Fan 2.

CHA_FAN3/WP Switch

Select CHA_FAN3 or Water Pump mode.

Chassis Fan 3 Control Mode

Select PWM mode or DC mode for Chassis Fan 3 .

Chassis Fan 3 Setting

Select a fan mode for Chassis Fan 3, or choose Customize to set 5 CPU temperatures and assign a respective fan speed for each temperature.

Chassis Fan 3 Temp Source

Select a fan temperature source for Chassis Fan 3.

Fan-tastic

Allows you to select a fan mode for Fan, or choose [Customize] to set 5 CPU temperatures and assign a respective fan speed for each temperature.

Select a fan mode or customize the profile

The screenshot shows the ASRock Fan-tastic BIOS utility interface. At the top, there are four fan mode buttons: 'Silent', 'Standard', 'Performance', and 'Full Speed'. Below these are two temperature source buttons: 'Monitor CPU' and 'Monitor M/B'. On the left side, there is a list of fan settings: 'All Fans Setting', 'CPU Fan 1', 'Chassis Fan 1', 'Chassis Fan 2', and 'Chassis Fan 3'. A central graph displays a fan speed curve (0-100%) against temperature (0-100°C). At the bottom right, there are buttons for 'Back', 'Apply', and 'Exit'. The system tray at the very bottom shows 'English' and the date/time 'Sun 08/03/2008 : 09:13:45'.

Select Fan(s) to adjust

Select a fan temperature source

Save the setting

FanTuning

When selected, the BIOS will proceed to detect the lowest fan speeds for fans connected to the motherboard. This process will take a few minutes to complete.

Note: Please note CAM settings applied within the OS will overwrite settings made within the BIOS.

4.7 Security Screen

In this section you may set or change the supervisor/user password for the system. You may also clear the user password.



Supervisor Password

Set or change the password for the administrator account. Only the administrator has authority to change the settings in the UEFI Setup Utility. Leave it blank and press enter to remove the password.

User Password

Set or change the password for the user account. Users are unable to change the settings in the UEFI Setup Utility. Leave it blank and press enter to remove the password.

Secure Boot

Press [Enter] to configure the Secure Boot Settings. The feature protects the system from unauthorized access and malwares during POST.

4.8 Boot Screen

This section displays the available devices on your system for you to configure the boot settings and the boot priority.



Boot From Onboard LAN

Allow the system to be waked up by the onboard LAN.

Setup Prompt Timeout

Configure the number of seconds to wait for the setup hot key.

Fast Boot

Fast Boot speeds up your computer's boot time; however you won't be able to boot from an USB storage device. Ultra Fast mode is supported by UEFI aware OS or later versions, and a VBIOS that supports UEFI GOP is required if you are using an external graphics card. Please note that Ultra Fast mode boots so fast that the only way to enter this UEFI Setup Utility is to clear CMOS or run the Restart to UEFI utility in Windows.

Bootup Num-Lock

Allows you to select whether Num Lock should be turned on or off when the system boots up.

Full Screen Logo

[Enabled] Select this item to display the boot logo.

[Disabled] Select this item to show normal POST messages.

AddOn ROM Display

Enable AddOn ROM Display to see the AddOn ROM messages or configure the AddOn ROM if you've enabled Full Screen Logo. Disable for faster boot speed.

CSM (Compatibility Support Module)



CSM

Enable to launch the Compatibility Support Module. Please do not disable unless you're running a WHCK test.

Launch PXE OpROM Policy

Select UEFI only to run those that support UEFI option ROM only. Select Legacy only to run those that support legacy option ROM only. Select Do not launch to not execute both legacy and UEFI option ROM.

Launch Storage OpROM Policy

Select UEFI only to run those that support UEFI option ROM only. Select Legacy only to run those that support legacy option ROM only. Select Do not launch to not execute both legacy and UEFI option ROM.

4.9 Exit Screen



Save Changes and Exit

When you select this option the following message, “Save configuration changes and exit setup?” will pop out. Select [OK] to save changes and exit the UEFI SETUP UTILITY.

Discard Changes and Exit

When you select this option the following message, “Discard changes and exit setup?” will pop out. Select [OK] to exit the UEFI SETUP UTILITY without saving any changes.

Discard Changes

When you select this option the following message, “Discard changes?” will pop out. Select [OK] to discard all changes.

Load UEFI BIOS Defaults

Load UEFI BIOS Default values for all the setup questions. The F9 key can be used for this operation.