A300M-STX

User Manual

Version 1.0
Published December 2018

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

CALIFORNIA, USA ONLY

The Lithium battery adopted on this motherboard contains Perchlorate, a toxic substance controlled in Perchlorate Best Management Practices (BMP) regulations passed by the California Legislature. When you discard the Lithium battery in California, USA, please follow the related regulations in advance.
"Perchlorate Material-special handling may apply, see www.dtsc.ca.gov/hazardouswaste/perchlorate"

AUSTRALIA ONLY

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Chapter 1 Introduction

Thank you for purchasing A300M-STX motherboard. In this documentation, Chapter 1 and 2 contains the introduction of the motherboard and step-by-step installation guides. Chapter 3 contains the operation guide of the software and utilities. Chapter 4 contains the configuration guide of the BIOS setup.

Because the motherboard specifications and the BIOS software might be updated, the content of this documentation will be subject to change without notice.

1.1 Package Contents

- A300M-STX Motherboard (Mini-STX Form Factor)
- A300M-STX Quick Installation Guide
- A300M-STX Support CD
- 1 x I/O Panel Shield
- 2 x Serial ATA(SATA) Data with Power Cable (Optional)
- 2 x Screws for M.2 Sockets (M2*2) (Optional)
- 1 x Screw for WiFi Module (M2*2) (Optional)

1.2 Specifications

Platform	• Mini-STX Form Factor • Solid Capacitor design
CPU	• Supports AMD AM4 Socket CPUs (Picasso, Raven Ridge, Bristol Ridge, up to 65W) * Please refer to the "CPU Support List" on ASRock's website for more information. • Supports CPU up to 65W • 5 Power Phase design
Chipset	• AMD A300
Memory	• Dual Channel DDR4 Memory Technology • 2 x DDR4 SO-DIMM Slots • AMD Ryzen series CPUs (Raven Ridge) support DDR4 2933/2667/2400/2133 non-ECC, un-buffered memory* • AMD 7th Gen A-Series APUs support DDR4 2400/2133 non-ECC, un-buffered memory* * Please refer to page 19 for DDR4 SO-DIMM maximum frequency support. • Max. capacity of system memory: 64GB • 15µ Gold Contact in SO-DIMM Slots
Expansion Slot	• 1 x M.2 Socket (Key E), supports type 2230 WiFi/BT module
Graphics	• Integrated AMD Radeon™ Vega Series Graphics in Ryzen Series APU* • Integrated AMD Radeon™ R-Series Graphics in A-series APU* * Actual support may vary by CPU • DirectX 12, Pixel Shader 5.0 • Shared memory default 2GB. Max Shared memory supports up to 16GB. * The Max shared memory 16GB requires 32GB system memory installed.

	• Three graphics output options: D-Sub, DisplayPort 1.2 and HDMI • Supports Triple Monitor • Supports HDMI with max. resolution up to 4K x 2K (4096x2160) @ 60Hz • Supports D-Sub with max. resolution up to 1920x1200 @ 60Hz • Supports DisplayPort 1.2 with max. resolution up to 4K x 2K (4096x2304) @ 60Hz • Supports Auto Lip Sync, Deep Color (12bpc), xvYCC and HBR (High Bit Rate Audio) with HDMI Port (Compliant HDMI monitor is required) • Supports HDCP with HDMI and DisplayPort 1.2 Ports • Supports 4K Ultra HD (UHD) playback with HDMI and DisplayPort 1.2 Ports
Audio	• Realtek ALC233 Audio Codec • 1 x Headphone/Headset Jack • 1 x MIC-In • 1 x Audio Header
LAN	• PCIE x1 Gigabit LAN 10/100/1000 Mb/s • Realtek RTL8111H • Supports Wake-On-LAN • Supports Lightning/ESD Protection • Supports Energy Efficient Ethernet 802.3az • Supports PXE
Front Panel I/O	• 1 x Headphone/Headset Jack • 1 x USB 3.1 Gen1 Type-A Port (Supports ESD Protection (Full Spike Protection)) • 1 x USB 3.1 Gen1 Type-C Port (Supports ESD Protection (Full Spike Protection)) • 1 x Microphone Input Jack

Rear Panel I/O	• 1 x DC Jack (Compatible with the 19V power adapter)* * Please use 120W power adapter for 65W CPU and 90W power adapter for 35W CPU. • 1 x D-Sub Port • 1 x HDMI Port • 1 x DisplayPort 1.2 • 1 x USB 2.0 Port (Supports ESD Protection) • 1 x USB 3.1 Gen1 Port (Supports ESD Protection) • 1 x RJ-45 LAN Port with LED (ACT/LINK LED and SPEED LED)
Storage	• 2 x SATA3 6.0 Gb/s with Power Connectors, support RAID (RAID 0 and RAID 1), NCQ and AHCI • 1 x Ultra M.2 Socket (M2_1), supports type 2280 M.2 PCI Express module up to Gen3 x4 (32 Gb/s) • 1 x Ultra M.2 Socket (M2_2), supports type 2280 M.2 PCI Express module up to Gen3 x4 (32 Gb/s) (with A-Series APU and Raven Ridge) or Gen3 x2 (16 Gb/s) (with Athlon 2xxGE series)* * Supports NVMe SSD as boot disks
Connector	• 1 x Chassis Intrusion Header • 2 x CPU Fan Connectors (2 x 4-pin) • 1 x Front Panel Header • 1 x USB 2.0 Header (Supports 2 USB 2.0 ports) (Supports ESD Protection) • 1 x Audio Header • 1 x MONO Speaker Header
BIOS Feature	• AMI UEFI Legal BIOS with GUI support • Supports "Plug and Play" • ACPI 5.1 compliance wake up events • Supports jumperfree • SMBIOS 2.3 support • DRAM Voltage adjustment

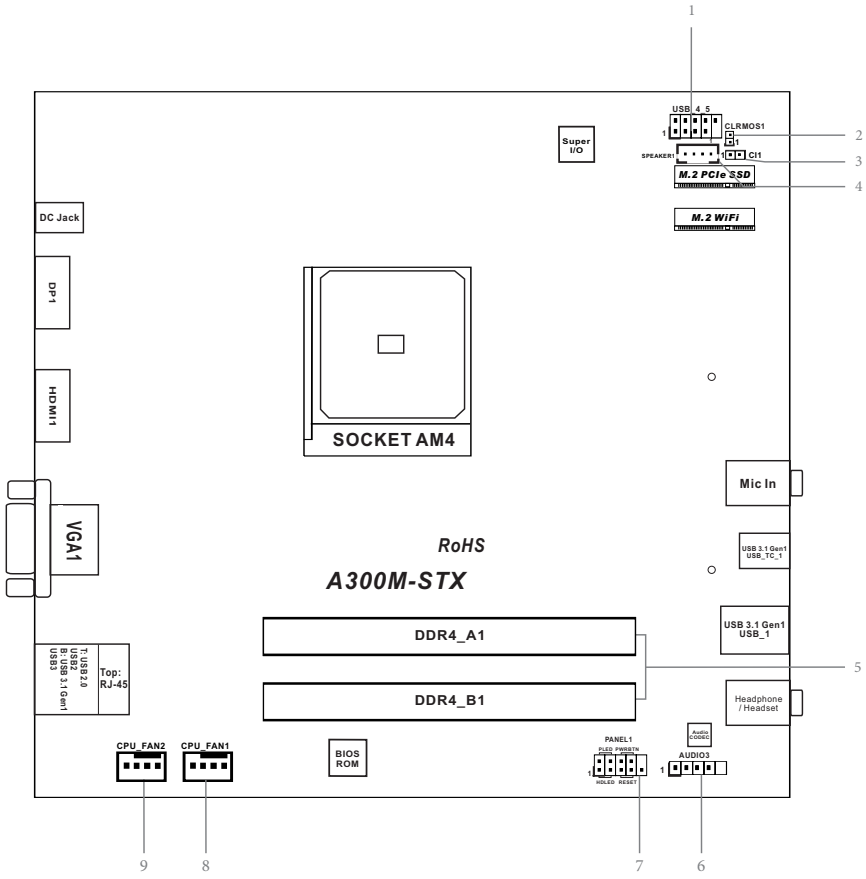
Hardware Monitor	• CPU Temperature Sensing • CPU Fan Tachometer • CPU Quiet Fan (Auto adjust chassis fan speed by CPU temperature) • CPU Fan Multi-Speed Control • CASE OPEN detection • Voltage monitoring: +12V, +5V, +3.3V, CPU Vcore
OS	• Microsoft® Windows® 10 64-bit
Certifications	• FCC, CE • ErP/EuP ready (ErP/EuP ready power supply is required)

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.

Mini-STX Chassis Support List

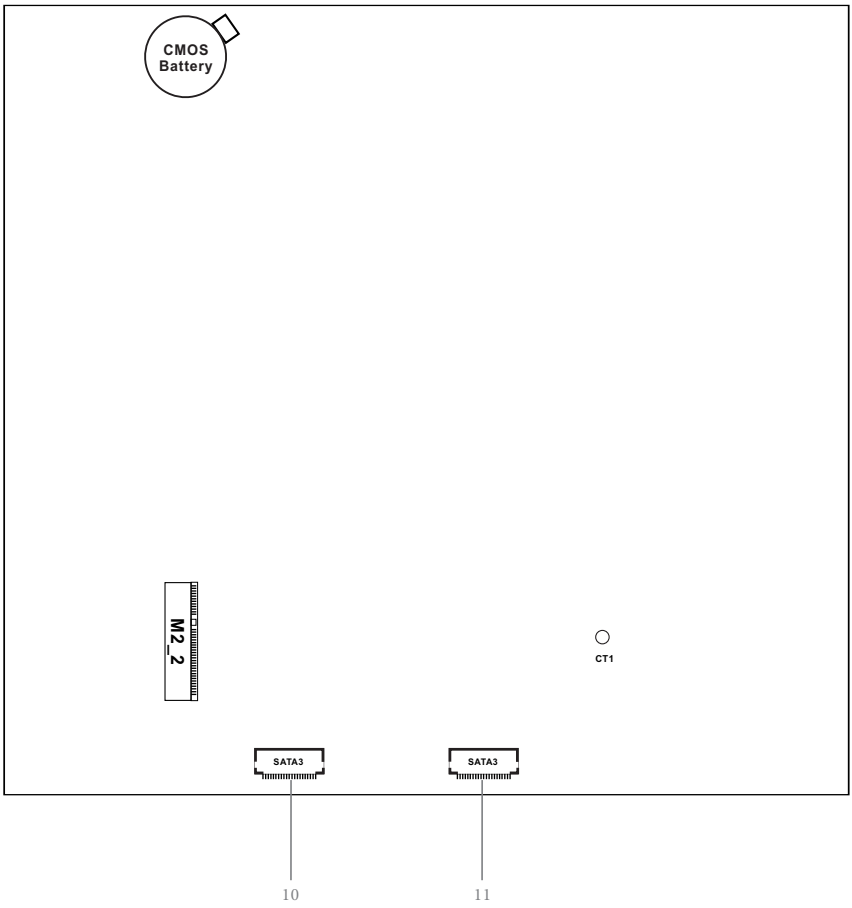
Vendor	Model
SilverStone Technology Inc.	VT01S
AKasa	A-STX04-A1B / A-STX04-M1B

1.3 Motherboard Layout



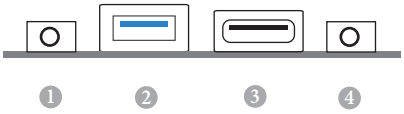
English

Back Side View



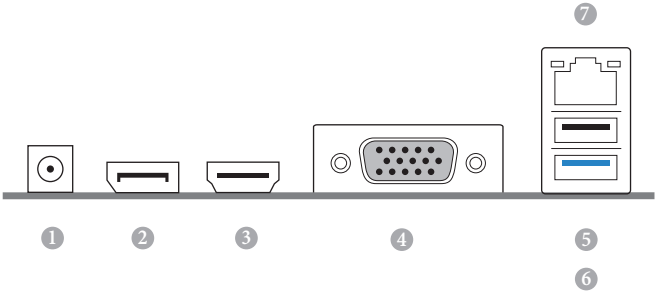
No.	Description
1	USB 2.0 Header (USB_4_5)
2	Clear CMOS Jumper (CLRCMOS1)
3	Chassis Intrusion Header (CI1)
4	MONO Speaker Header (SPEAKER1)
5	2 x 260-pin DDR4 SO-DIMM Slots (DDR4_A1, DDR4_B1)
6	Audio Header (AUDIO3)
7	System Panel Header (PANEL1)
8	CPU Fan Connector (CPU_FAN1)
9	CPU Fan Connector (CPU_FAN2)
10	SATA3 Connector (SATA2)
11	SATA3 Connector (SATA1)

1.4 Front Panel



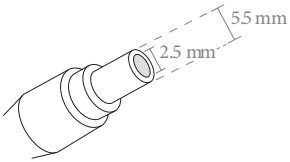
No.	Description	No.	Description
1	Headphone/Headset Jack (AUDIO1)	3	USB 3.1 Gen1 Type-C Port (USB_TC_1)
2	USB 3.1 Gen1 Type-A Port (USB_1)	4	Microphone Input (AUDIO2)

1.5 Rear Panel

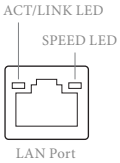


No.	Description	No.	Description
1	DC Jack*	4	D-Sub Port
	(Supports 19V DC Power Adapters)	5	USB 2.0 Port (USB_2)
2	Display Port	6	USB 3.1 Gen1 Port (USB_3)
3	HDMI Port	7	LAN RJ-45 Port**

**Specification for DC plug*



*** There are two LEDs on each LAN port. Please refer to the table below for the LAN port LED indications.*



Activity / Link LED		Speed LED	
Status	Description	Status	Description
Off	No Link	Off	10Mbps connection
Blinking	Data Activity	Orange	100Mbps connection
On	Link	Green	1Gbps connection

English

Chapter 2 Installation

This is a Mini-STX form factor motherboard. Before you install the motherboard, study the configuration of your chassis to ensure that the motherboard fits into it.

Pre-installation Precautions

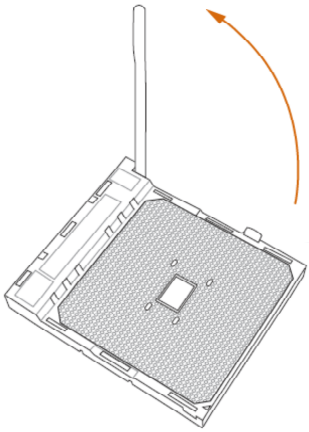
Take note of the following precautions before you install motherboard components or change any motherboard settings.

- Make sure to unplug the power cord before installing or removing the motherboard. Failure to do so may cause physical injuries to you and damages to motherboard components.
- In order to avoid damage from static electricity to the motherboard's components, NEVER place your motherboard directly on a carpet. Also remember to use a grounded wrist strap or touch a safety grounded object before you handle the components.
- Hold components by the edges and do not touch the ICs.
- Whenever you uninstall any components, place them on a grounded anti-static pad or in the bag that comes with the components.
- When placing screws to secure the motherboard to the chassis, please do not over-tighten the screws! Doing so may damage the motherboard.

2.1 Installing the CPU

Unplug all power cables before installing the CPU.

1



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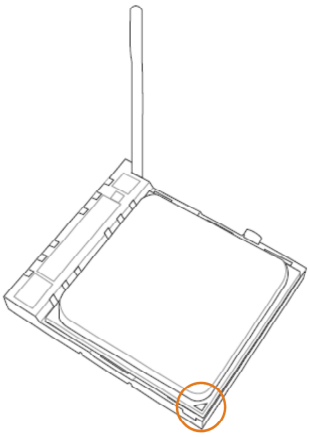

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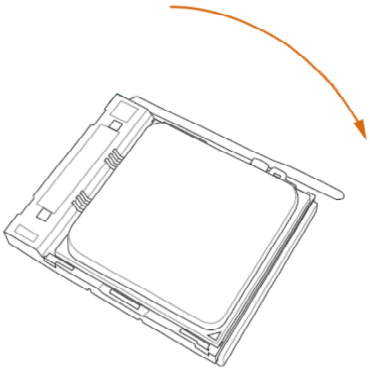


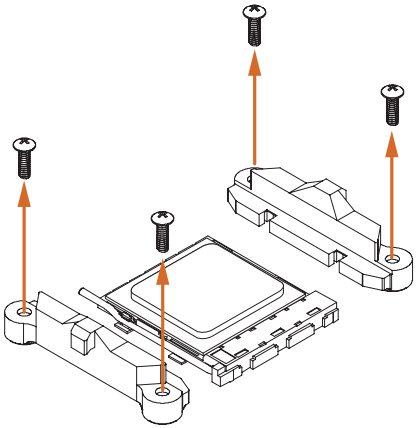
2.2 Installing the CPU Fan and Heatsink

After you install the CPU into this motherboard, it is necessary to install a larger heatsink and cooling fan to dissipate heat. You also need to spray thermal grease between the CPU and the heatsink to improve heat dissipation. Make sure that the CPU and the heatsink are securely fastened and in good contact with each other.

Please turn off the power or remove the power cord before changing a CPU or heatsink.

Installing the CPU Box Cooler -1

1



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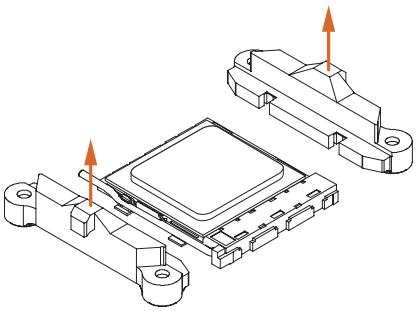

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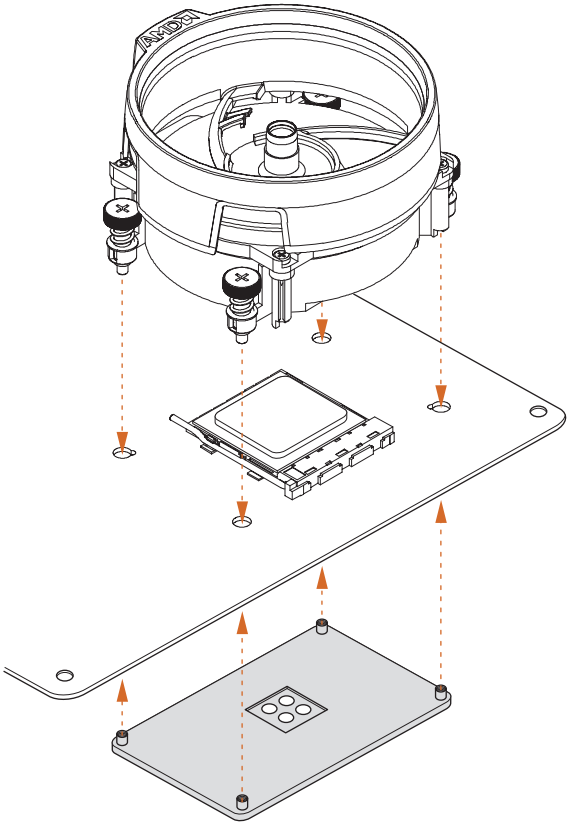

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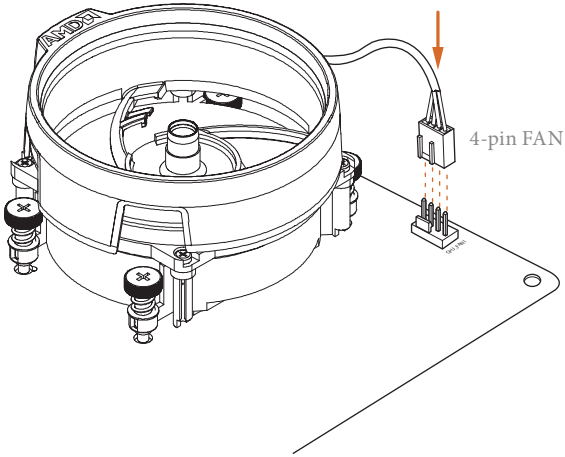
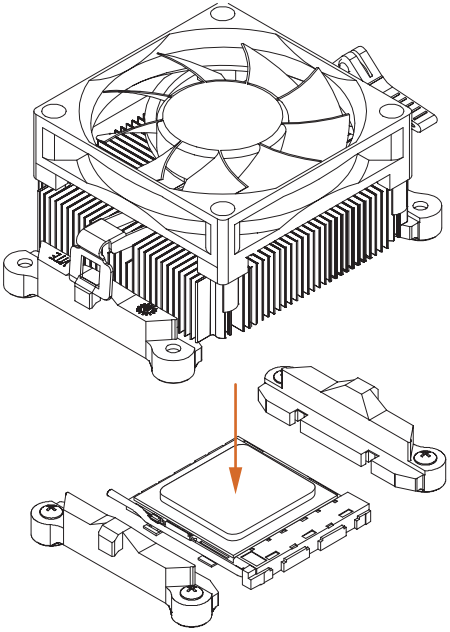
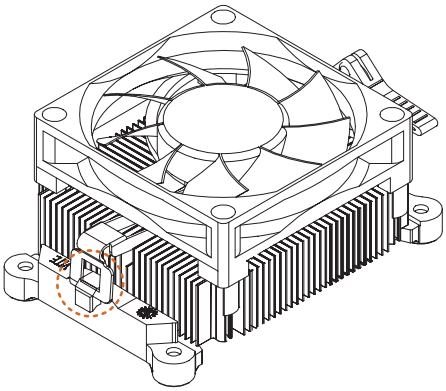


Installing the CPU Box Cooler -2

1



2



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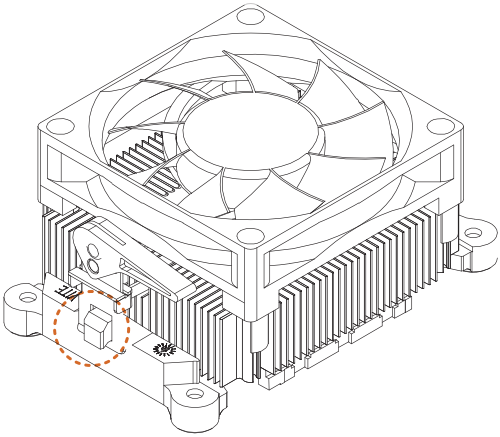

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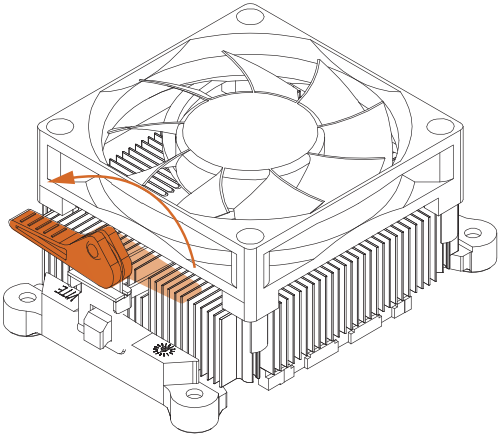

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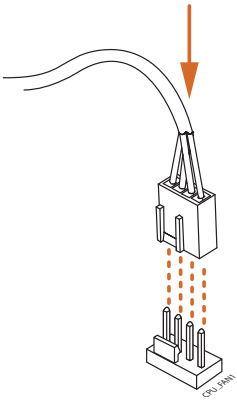


4-pin FAN cable

2.3 Installing Memory Modules (SO-DIMM)

This motherboard provides two 260-pin DDR4 (Double Data Rate 4) SO-DIMM slots.

It is not allowed to install a DDR, DDR2 or DDR3 memory module into a DDR4 slot; otherwise, this motherboard and SO-DIMM may be damaged.

DDR4 SO-DIMM Maximum Frequency Support

A-Series APUs:

SO-DIMM Memory Slot		Frequency (Mhz)
A1	B1	
-	SR	2400
SR	-	2400
-	DR	2400
DR	-	2400
SR	SR	2400
DR	DR	2400

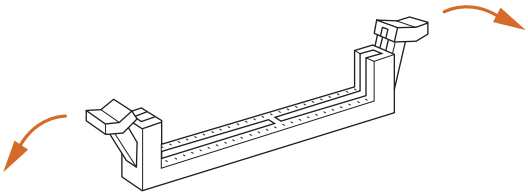
Ryzen Series CPUs (Raven Ridge):

SO-DIMM Memory Slot		Frequency (Mhz)
A1	B1	
-	SR	2933
SR	-	2933
-	DR	2667
DR	-	2667
SR	SR	2667
DR	DR	2400

SR: Single rank DIMM, 1Rx4 or 1Rx8 on DIMM module label
DR: Dual rank DIMM, 2Rx4 or 2Rx8 on DIMM module label

The DIMM only fits in one correct orientation. It will cause permanent damage to the motherboard and the DIMM if you force the DIMM into the slot at incorrect orientation.

1



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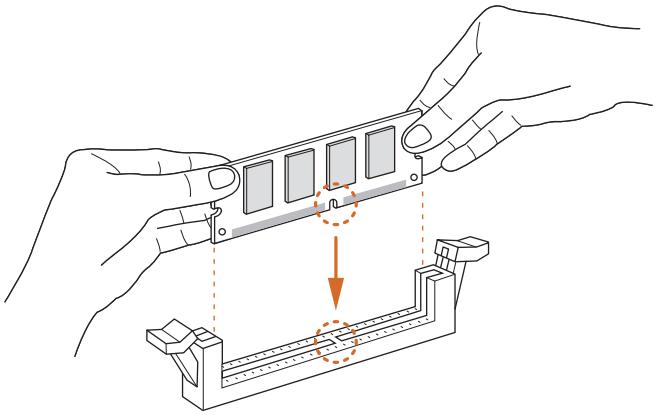
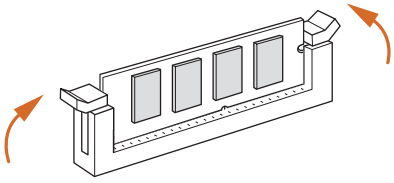
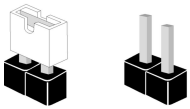


3



2.4 Jumpers Setup

The illustration shows how jumpers are setup. When the jumper cap is placed on the pins, the jumper is “Short”. If no jumper cap is placed on the pins, the jumper is “Open”.



Clear CMOS Jumper (CLRCMOS1) (see p.6, No. 2)	2-pin Jumper	Short: Clear CMOS Open: Default

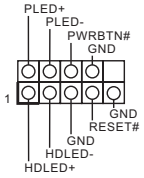
CLRCMOS1 allows you to clear the data in CMOS. The data in CMOS includes system setup information such as system password, date, time, and system setup parameters. To clear and reset the system parameters to default setup, please turn off the computer and unplug the power cord, then use a jumper cap to short the pins on CLRCMOS1 for 3 seconds. Please remember to remove the jumper cap after clearing the CMOS. If you need to clear the CMOS when you just finish updating the BIOS, you must boot up the system first, and then shut it down before you do the clear-CMOS action.

If you clear the CMOS, the case open may be detected. Please adjust the BIOS option “Clear Status” to clear the record of previous chassis intrusion status.

2.5 Onboard Headers and Connectors

Onboard headers and connectors are NOT jumpers. Do NOT place jumper caps over these headers and connectors. Placing jumper caps over the headers and connectors will cause permanent damage to the motherboard.

System Panel Header
(9-pin PANEL1)
(see p.6, No. 7)



Connect the power button, reset button and system status indicator on the chassis to this header according to the pin assignments below. Note the positive and negative pins before connecting the cables.

PWRBTN (Power Button):
Connect to the power button on the chassis front panel. You may configure the way to turn off your system using the power button.

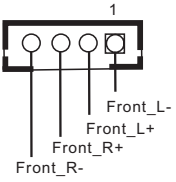
RESET (Reset Button):
Connect to the reset button on the chassis front panel. Press the reset button to restart the computer if the computer freezes and fails to perform a normal restart.

PLED (System Power LED):
Connect to the power status indicator on the chassis front panel. The LED is on when the system is operating. The LED keeps blinking when the system is in S1/S3 sleep state. The LED is off when the system is in S4 sleep state or powered off (S5).

HDLED (Hard Drive Activity LED):
Connect to the hard drive activity LED on the chassis front panel. The LED is on when the hard drive is reading or writing data.

The front panel design may differ by chassis. A front panel module mainly consists of power button, reset button, power LED, hard drive activity LED, speaker and etc. When connecting your chassis front panel module to this header, make sure the wire assignments and the pin assignments are matched correctly.

MONO Speaker Header
(4-pin SPEAKER1)
(see p.6, No. 4)



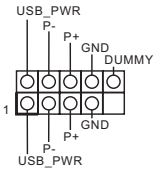
Please connect the chassis speaker to this header.

Serial ATA3 Connectors
(see p.7, No. 9 and 10)

PIN	Signal Name	PIN	Signal Name
1	GND	**11**	N/A
2	LVDS_TX+	**12**	5V
3	LVDS_TX-	**13**	5V
4	GND	**14**	5V
5	GND	**15**	5V
6	LVDS_RX-	**16**	5V
7	LVDS_RX+	**17**	N/A
8	GND	**18**	GND
9	GND	**19**	GND
10	GND	**20**	GND

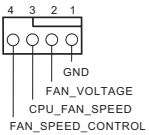
These two SATA3 connectors support SATA data cables for internal storage devices with up to 6.0 Gb/s data transfer rate.
*The SATA3 connectors support 2.5-inch hard drive (+5V) and do not support 3.5-inch hard drive (+12V)

USB 2.0 Header
(9-pin USB_4_5)
(see p.6, No. 1)

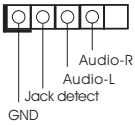


There is one header on this motherboard. This USB 2.0 header can support two ports.

CPU Fan Connectors
(4-pin CPU_FAN1)
(see p.6, No. 8)
(4-pin CPU_FAN2)
(see p.6, No. 9)



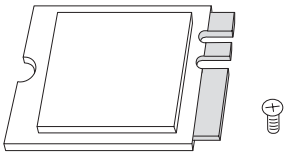
This motherboard provides two 4-Pin CPU fan (Quiet Fan) connectors. If you plan to connect a 3-Pin CPU fan, please connect it to Pin 1-3.

Chassis Intrusion Header (2-pin CI1) (see p.6, No. 3)		This motherboard supports CASE OPEN detection feature that detects if the chassis cove has been removed. This feature requires a chassis with chassis intrusion detection design.
Audio Header (5-pin AUDIO3) (see p.6, No. 6)		This Audio header allows you to connect the audio cable for headphone.

2.6 M.2 WiFi/BT Module Installation Guide

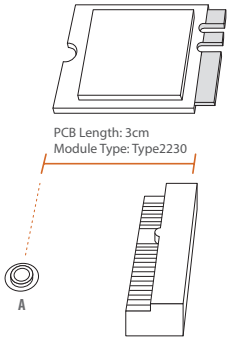
The M.2, also known as the Next Generation Form Factor (NGFF), is a small size and versatile card edge connector that aims to replace mPCIe and mSATA. The M.2 Socket (Key E) supports type 2230 WiFi/BT module.

Installing the WiFi/BT module



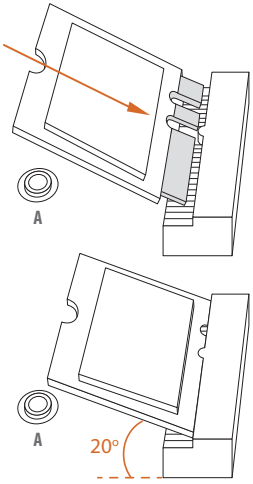
Step 1

Prepare a type 2230 WiFi/BT module and the screw.



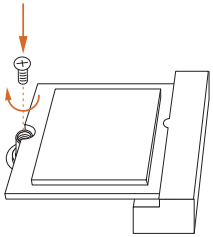
Step 2

Find the nut location to be used.



Step 3

Gently insert the WiFi/BT module into the M.2 slot. Please be aware that the module only fits in one orientation.



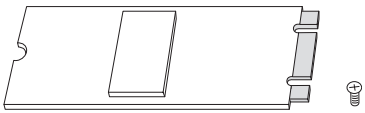
Step 4

Tighten the screw with a screwdriver to secure the module into place. Please do not overtighten the screw as this might damage the module.

2.7 M.2_SSD (NGFF) Module Installation Guide

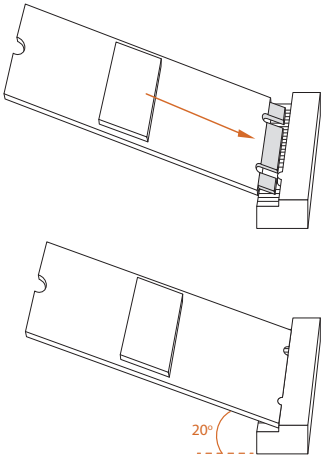
The M.2, also known as the Next Generation Form Factor (NGFF), is a small size and versatile card edge connector that aims to replace mPCIe and mSATA. The Ultra M.2 Socket (M2_1) supports type 2280 M.2 PCI Express module up to Gen3 x4 (32 Gb/s). The Ultra M.2 Socket (M2_2) supports type 2280 M.2 PCI Express module up to Gen3 x4 (32 Gb/s) (with A-Series APU and Raven Ridge) or Gen3 x2 (16 Gb/s) (with Athlon 2xxGE series).

Installing the M.2_SSD (NGFF) Module



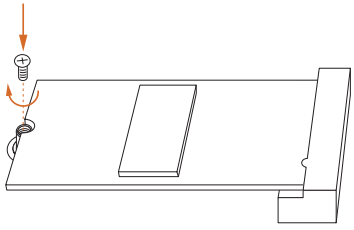
Step 1

Prepare a M.2_SSD (NGFF) module and the screw.



Step 2

Gently insert the M.2 (NGFF) SSD module into the M.2 slot. Please be aware that the M.2 (NGFF) SSD module only fits in one orientation.



Step 3

Tighten the screw with a screwdriver to secure the module into place. Please do not overtighten the screw as this might damage the module.

M.2_SSD (NGFF) Module Support List

Vendor	Interface	P/N
ADATA	PCIe	ADATA ASX7000NPC-512GT-C (XPG SX7000) (NVMe)
ADATA	PCIe	ADATA ASX8000NPC-512GM-C (XPG ASX8000) (NVMe)
Apacer	PCIe	Apacer Z280 AP240GZ280-240G (NVMe)
Intel	PCIe	Intel Optane Memory 32GB (MEMPEK1W032GA)(NVMe)
Intel	PCIe	Intel Optane Memory 16GB (MEMPEK1W016GA)(NVMe)
INTEL	PCIe	INTEL 600P-SSDPEKKW256G7-256GB (NVMe)
INTEL	PCIe	INTEL 600P-SSDPEKKW128G7-128GB (NVMe)
INTEL	PCIe	INTEL 6000P-SSDPEKKF256G7-256GB (NVMe)
INTEL	PCIe	INTEL 6000P-SSDPEKKF512G7-512GB (NVMe)
Kingston	PCIe	Kingston SHPM2280P2/240G
PATRIOT	PCIe	PATRIOT Hellfire M2 (240G) (NVMe)
PLEXTOR	PCIe	PLEXTOR PX-256M8PeG (NVMe)
PLEXTOR	PCIe	PLEXTOR PX-256M8SeGN (NVMe)
Samsung	PCIe	Samsung XP941-512G (MZHPU512HCGL)
Samsung	PCIe	Samsung 950Pro-512G (NVMe)
Samsung	PCIe	Samsung 950Pro-256G (NVMe)
Samsung	PCIe	Samsung MZ-VLW1280 (PM961) (NVMe)
Samsung	PCIe	Samsung MZ-VPW1280 (SM961) (NVMe)
TOSHIBA	PCIe	TOSHIBA XG3-128G (NVMe)
TOSHIBA	PCIe	TOSHIBA OCZ RD400-256G (NVMe)
WD	PCIe	WD WDS512G1X0C-00ENX0 (NVMe)
WD	PCIe	WD WDS256G1X0C-00ENX0 (NVMe)

For the latest updates of M.2_SSD (NFGG) module support list, please visit our website for details.

Chapter 3 Software and Utilities Operation

3.1 Installing Drivers

The Support CD that comes with the motherboard contains necessary drivers and useful utilities that enhance the motherboard's features.

Running The Support CD

To begin using the support CD, insert the CD into your CD-ROM drive. The CD automatically displays the Main Menu if "AUTORUN" is enabled in your computer. If the Main Menu does not appear automatically, locate and double click on the file "ASRSETUP.EXE" in the Support CD to display the menu.

Drivers Menu

The drivers compatible to your system will be auto-detected and listed on the support CD driver page. Please click **Install All** or follow the order from top to bottom to install those required drivers. Therefore, the drivers you install can work properly.

Utilities Menu

The Utilities Menu shows the application software that the motherboard supports. Click on a specific item then follow the installation wizard to install it.

Chapter 4 UEFI SETUP UTILITY

4.1 Introduction

This section explains how to use the UEFI SETUP UTILITY to configure your system. You may run the UEFI SETUP UTILITY by pressing <F2> or <Del> 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.

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.

4.1.1 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
Boot	For configuring boot settings and boot priority
Security	For security settings
Exit	Exit the current screen or the UEFI Setup Utility

4.1.2 Navigation Keys

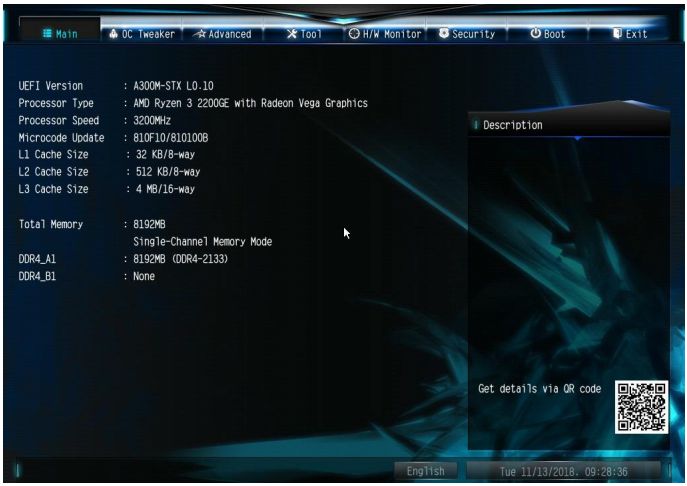
Use <←> key or <→> key to choose among the selections on the menu bar, and use < ↑ > key or < ↓ > key to move the cursor up or down to select items, then press <Enter> to get into the sub screen. You can also use the mouse to click your required item.

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

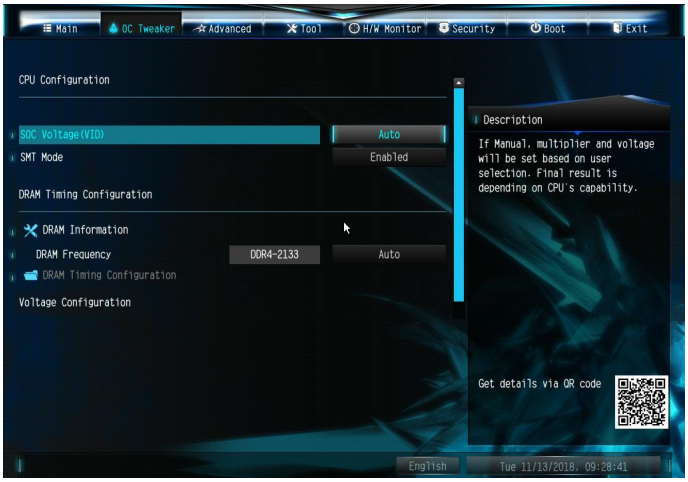
4.2 Main Screen

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.

CPU Configuration

SOC Voltage(VID)

Configure the voltage for the VID-requested SOC supply level.

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.

DRAM Timing Configuration

DRAM Information

Browse the serial presence defect (SPD) for DDR4 modules.

DRAM Frequency

If [Auto] is selected, the motherboard will detect the memory module(s) inserted and assign the appropriate frequency automatically.

Voltage Configuration

DRAM Voltage

Use this to select DRAM 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

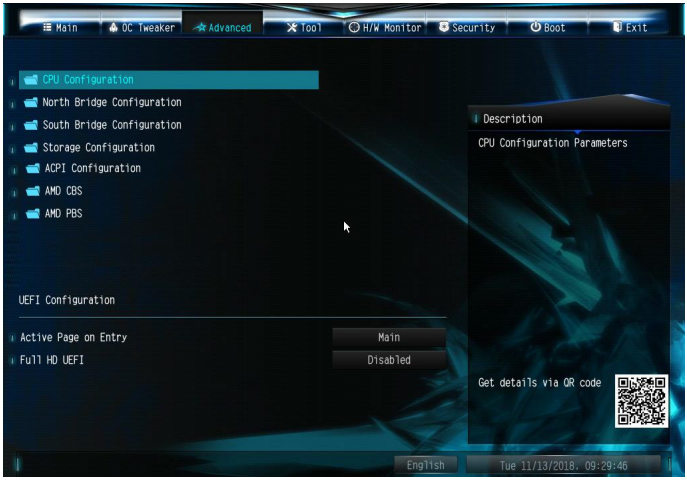
Save current UEFI settings as an user default profile to disk.

Load User UEFI Setup Profile to Disk

Load previously saved user defaults from the disk.

4.4 Advanced Screen

In this section, you may set the configurations for the following items: CPU Configuration, North Bridge Configuration, South Bridge Configuration, Storage-Configuration, ACPI Configuration, AMD CBS and AMD PBS.



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

UEFI Configuration

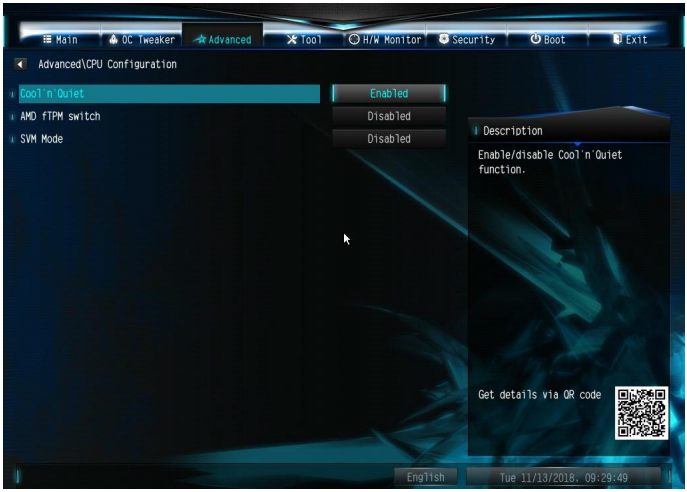
Active Page on Entry

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



Cool 'n' Quiet

Use this item to enable or disable AMD's Cool 'n' Quiet™ technology. The default value is [Enabled]. Configuration options: [Enabled] and [Disabled]. If you install Windows® OS and want to enable this function, please set this item to [Enabled]. Please note that enabling this function may reduce CPU voltage and memory frequency, and lead to system stability or compatibility issue with some memory modules or power supplies. Please set this item to [Disable] if above issue occurs.

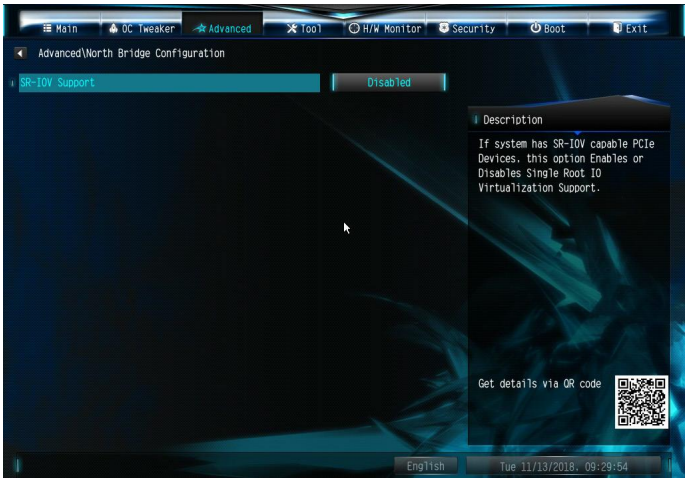
AMD fTPM Switch

Use this to enable or disable AMD CPU fTPM.

SVM Mode

When this option 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].

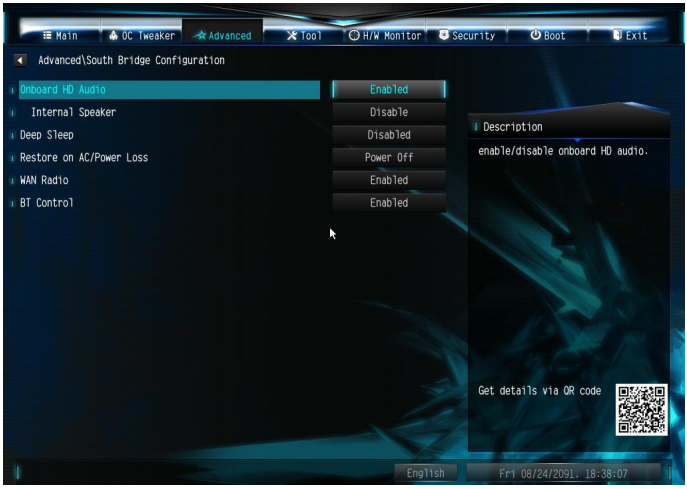
4.4.2 North Bridge Configuration



SR-IOV Support

Enable/disable the SR-IOV (Single Root IO Virtualization Support) if the system has SR-IOV capable PCIe devices.

4.4.3 South Bridge Configuration



Onboard HD Audio

Enable/disable onboard HD audio. Set to Auto to enable onboard HD audio and automatically disable it when a sound card is installed.

Internal Speaker

Select Internal Speaker.

Deep Sleep

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

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.

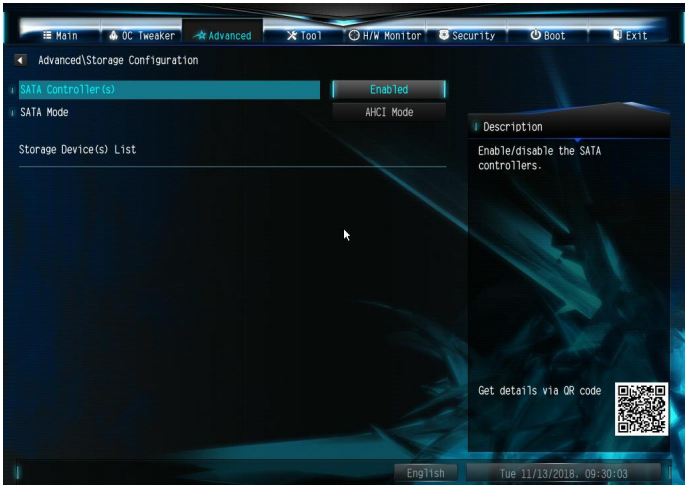
WAN Radio

Enable/disable the WiFi module's connectivity.

BT Control

Enable/disable the bluetooth's connectivity.

4.4.4 Storage Configuration



SATA Controller(s)

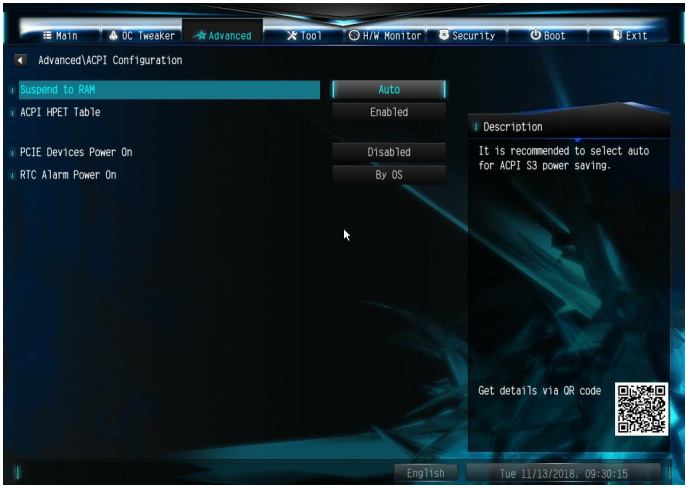
Enable/disable the SATA controllers.

SATA Mode

AHCI: Supports new features that improve performance.

RAID: Combine multiple disk drives into a logical unit.

4.4.5 ACPI Configuration



Suspend to RAM

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

ACPI HPET Table

Enable the High Precision Event Timer for better performance and to pass WHQL tests.

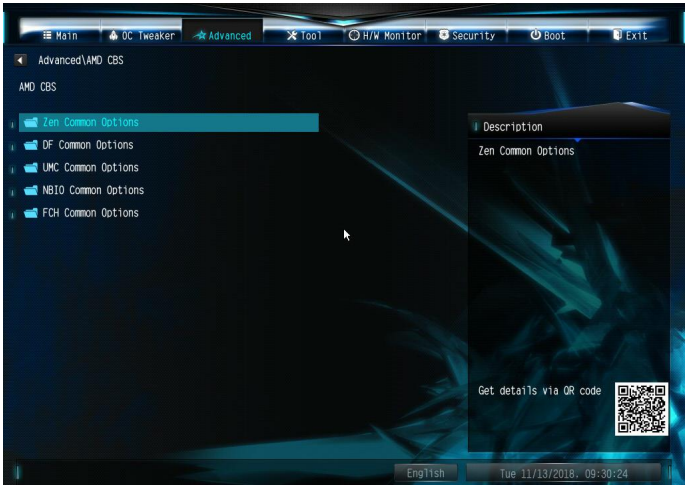
Onboard LAN Power On

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

RTC Alarm Power On

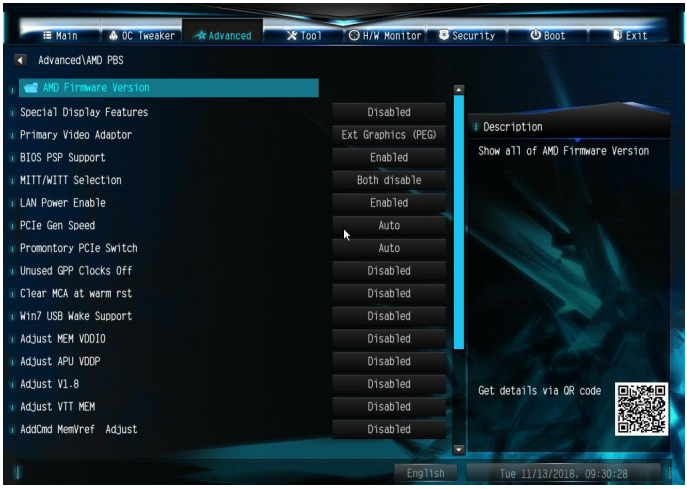
Allow the system to be waked up by the real time clock alarm. Set it to By OS to let it be handled by your operating system.

4.4.6 AMD CBS



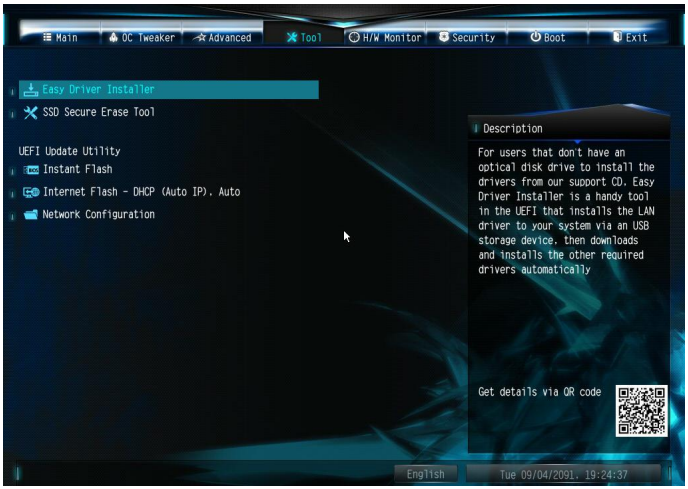
The AMD CBS menu accesses AMD specific features.

4.4.7 AMD PBS



The AMD PBS menu accesses AMD specific features.

4.5 Tools



Easy Driver Installer

For users that don't have an optical disk drive to install the drivers from our support CD, Easy Driver Installer is a handy tool in the UEFI that installs the LAN driver to your system via an USB storage device, then downloads and installs the other required drivers automatically.

SSD Secure Erase Tool

Use this tool to securely erase SSD.

Instant Flash

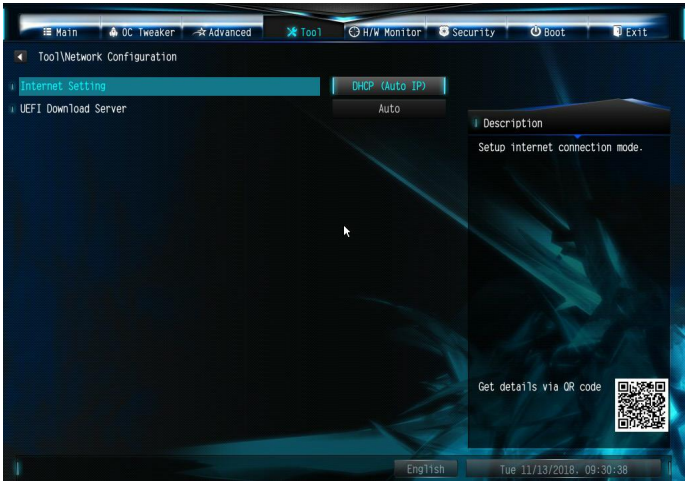
Save UEFI files in your USB storage device and run Instant Flash to update your UEFI.

Internet Flash - DHCP (Auto IP), Auto

Internet Flash downloads and updates the latest UEFI firmware version from our servers for you. Please setup network configuration before using Internet Flash.
*For BIOS backup and recovery purpose, it is recommended to plug in your USB pen drive before using this function.

Network Configuration

Use this to configure internet connection settings for Internet Flash.



Internet Setting

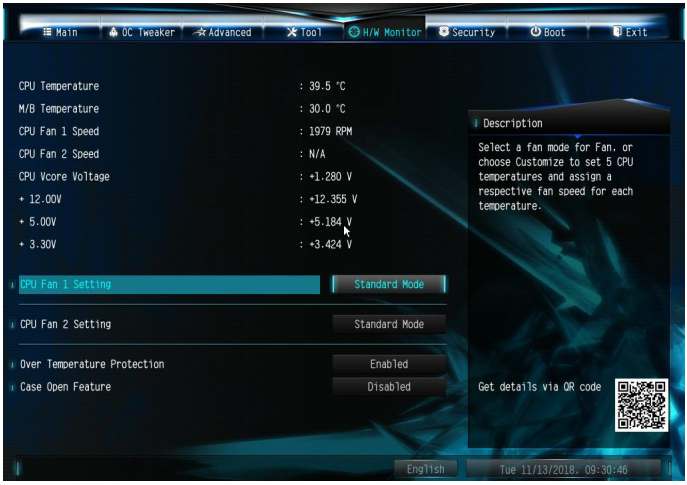
Enable or disable sound effects in the setup utility.

UEFI Download Server

Select a server to download the UEFI firmware.

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 Fan 1 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.

CPU Fan 2 Setting

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

Over Temperature Protection

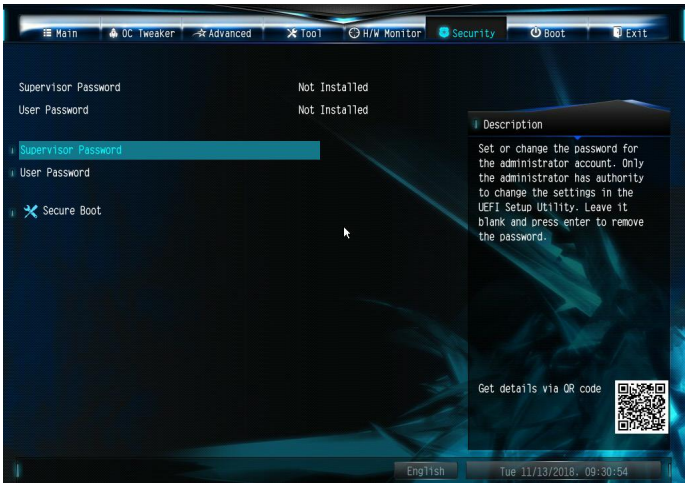
When Over Temperature Protection is enabled, the system automatically shuts down when the motherboard is overheated.

Case Open Feature

Enable or disable Case Open Feature to detect whether the chassis cover has been removed.

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

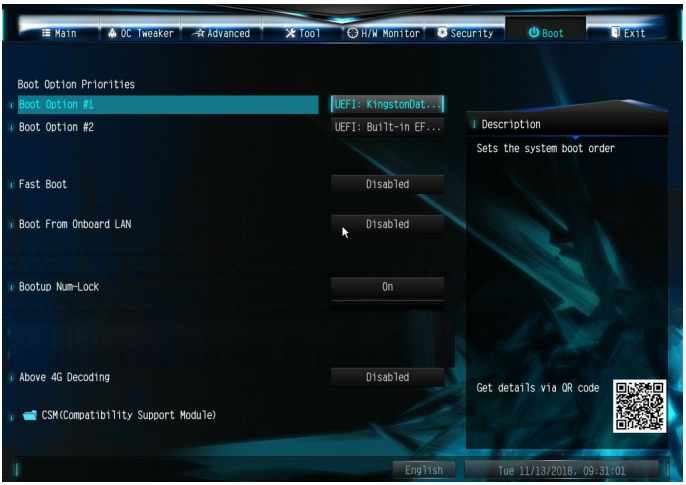
Set or change the password for the user account. Users are unable to change the settings in the UEFI Setup Utility. Leave it blank and press enter to remove the password.

Secure Boot

Enable to support Secure Boot.

4.8 Boot Screen

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



Fast Boot

Fast Boot minimizes your computer's boot time. In fast mode you may not boot from an USB storage device.

Boot From Onboard LAN

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

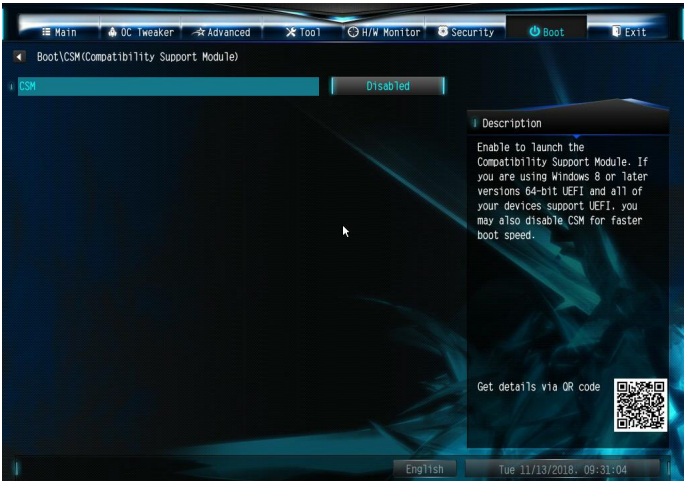
Bootup Num-Lock

Select whether Num Lock should be turned on or off when the system boots up.

Above 4G Decoding

Enable/disable the 64-bit capable devices to be decoded in above 4G address space.

CSM (Compatibility Support Module)



CSM

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

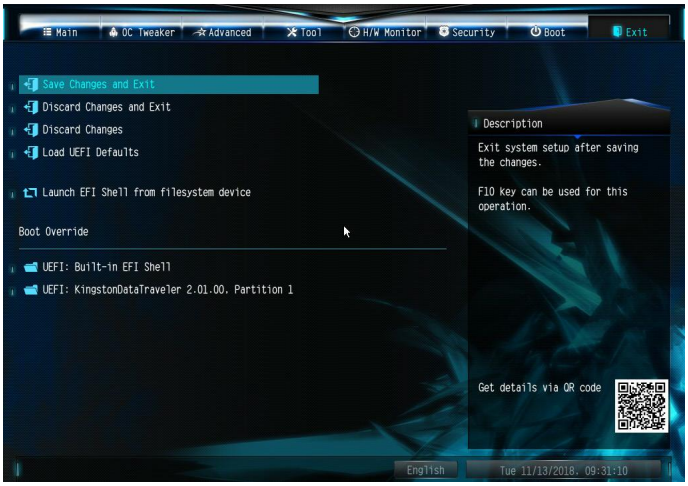
Launch PXE OpROM Policy

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 Defaults

Load UEFI default values for all options. The F9 key can be used for this operation.

Launch EFI Shell from filesystem device

Copy shellx64.efi to the root directory to launch EFI Shell.

DECLARATION OF CONFORMITY

Per FCC Part 2 Section 2.1077(a)

Product Name : Motherboard

Model Number : A300M-STX

Conforms to the following specifications:

☒ FCC Part 15, Subpart B, Unintentional Radiators

Supplementary Information:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

EU Declaration of Conformity

For the following equipment:

Motherboard

(Product Name)

A300M-STX

(Model Designation / Trade Name)

☒ **EMC —Directive 2014/30/EU (from April 20th, 2016)**

☐ EN 55022:2010/AC:2011 Class B
☒ EN 55024:2010/A1:2015
☒ EN 55032:2012+AC:2013 Class B
☒ EN 61000-3-3:2013
☒ EN 61000-3-2:2014

☐ **LVD —Directive 2014/35/EU (from April 20th, 2016)**

☐ EN 60950-1 : 2011+ A2: 2013
☐ EN 60950-1 : 2006/A12: 2011

☒ RoHS — Directive 2011/65/EU
☒ CE marking

CE (EU conformity marking)