# NUC-8265U
# NUC-4305UE
# NUC-8145UE

## User Manual

Version 1.0
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# *Contents*

# Chapter 1: Introduction

Thank you for purchasing ASRock ***NUC-8265U / NUC-4305UE / NUC-8145UE*** motherboard, a reliable motherboard produced under ASRock's consistently stringent quality control. It delivers excellent performance with robust design conforming to ASRock's commitment to quality and endurance.

In this manual, chapter 1 and 2 contain introduction of the motherboard and step-by-step guide to the hardware installation. Chapter 3 and 4 contain the configuration guide to BIOS setup and information of the Support CD.

Because the motherboard specifications and the BIOS software might be updated, the content of this manual will be subject to change without notice. In case any modifications of this manual occur, the updated version will be available on ASRock website without further notice. You may find the latest VGA cards and CPU support lists on ASRock website as well. ASRock website http://www.asrock.com

If you require technical support related to this motherboard, please visit our website for specific information about the model you are using. www.asrock.com/support/index.asp

## 1.1 Package Contents

ASRock ***NUC-8265U / NUC-4305UE / NUC-8145UE*** Motherboard
(NUC 4.09" x 4.02" (104 x 102mm))

ASRock ***NUC-8265U / NUC-4305UE / NUC-8145UE*** Driver CD

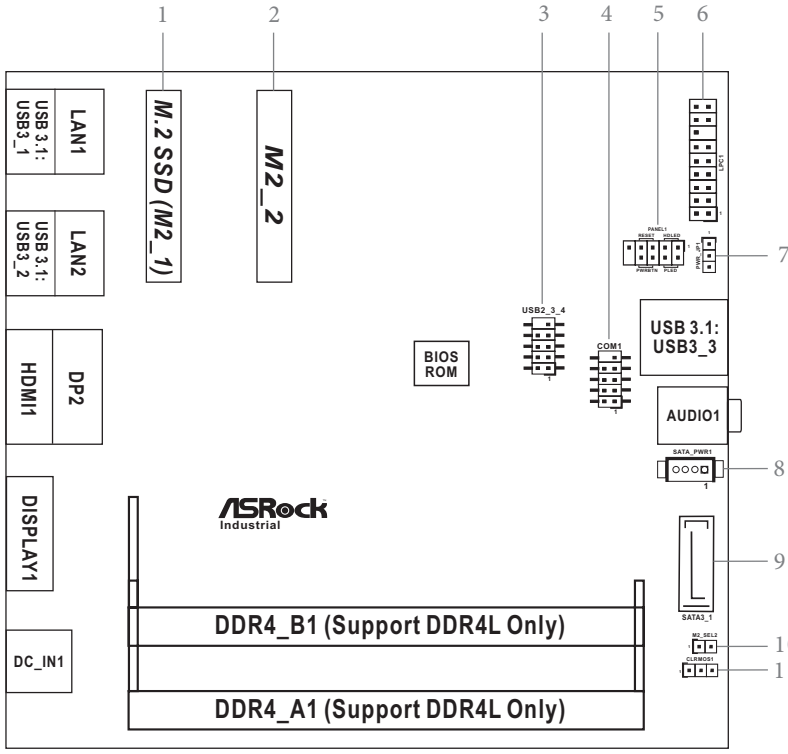
ASRock ***NUC-8265U / NUC-4305UE / NUC-8145UE*** Jumper setting instruction

## 1.2 Specifications

| | | |
|---|---|---|
| **Form Factor** | Dimensions | NUC 4.09" x 4.02" (104 x 102mm) |
| **Processor System** | CPU | Intel® 8th Gen (Whiskey lake-U) Core™ MCP Processors<br>I5-8265U QC, 1.6HGz, 15W (NUC-8265U)<br>Celeron 4305UE DC, 2.0GHz, 15W (NUC-4305UE)<br>I3-8145UE DC, 2.2GHz, 15W (NUC-8145UE) |
| | Chipset | SoC |
| **Expansion Slot** | PCIe | N/A |
| | Mini-PCIe | N/A |
| | mSATA | N/A |
| | M.2 | 1 x Key M (2242/2260/2280 by BRACKET) with PCIe x4 and SATA3 for SSD<br>1 x Key E (2230) with PCIe x1 and USB 2.0 for Wireless |
| **Memory** | Technology | Dual Channel DDR4 2400 MHz |
| | Max. | 32GB |
| | Socket | 2 x SO-DIMM |
| **Graphics** | Controller | N/A |
| | DVI | N/A |
| | LVDS | N/A |
| | HDMI | HDMI 1 : Supports max resolution up to 4Kx2K@30Hz |
| | DisplayPort | Supports max resolution up to 3840 x 2160@60Hz |
| | Multi Display | Triple Display |
| | eDP | N/A |
| **Ethernet** | Ethernet | 10/100/1000 Mbps |
| | Controller | 1 x Intel® I219V, 1 x Realtek RTL8111G |
| **Rear I/O** | VGA | N/A |
| | DVI | N/A |
| | HDMI | 1 |
| | DisplayPort | 2 |
| | Ethernet | 2 |
| | USB | 3 x USB 3.1 |
| | Audio | 1 (Mic-in, Line-out) |
| | Serial | N/A |
| | eSATA | N/A |
| | PS2 | N/A |

| | | |
|---|---|---|
| **Internal Connector** | USB | 2 x USB 2.0 |
| | LVDS/ inverter | N/A |
| | eDP | N/A |
| | VGA | N/A |
| | Serial | 1 x COM (RS-232/422/485) |
| | SATA | 1 x SATA3 ( 6.0Gb/s) |
| | Parallel | N/A |
| | GPIO | N/A |
| | SATA PWR Output | 1 |
| | Speaker Header | N/A |
| | TPM | N/A |
| **Watchdog Timer** | Output | N/A |
| | Interval | N/A |
| **Power Requirements** | Input PWR | 12V / 96W DC-In (DC Jack) |
| | Power On | ATX Supported<br>ATX: Press Button to PWR on after Power input ready |
| **Environment** | Operating Temp | 0ºC – 60ºC |
| | Storage Temp | -40ºC – 85°C |

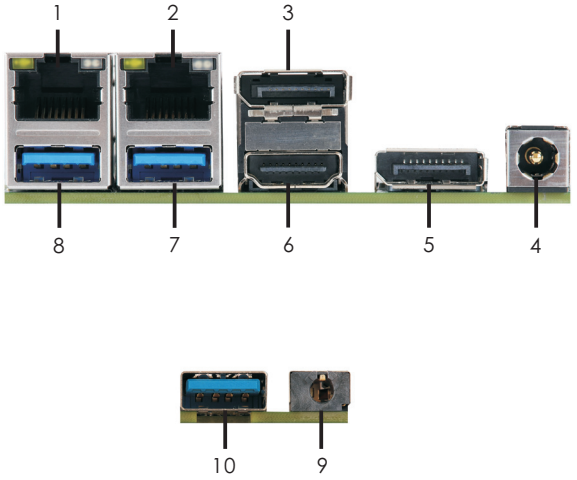
## 1.3 Motherboard Layout




1 : M.2 Key-M Socket (M2_1)
2 : M.2 Key-E Socket (M2_2)
3 : USB2.0 Connector (USB2_3_4)
4 : COM Port Header (RS232/422/485)
5 : System Panel Header (PANEL1)
6 : LPC Debug Header (LPC1)
7 : ATX/AT Mode Jumper (PWR_JP1)
8 : SATA Power Output Connector (SATA_PWR1)
9 : SATA3 Connector (SATA3_1)
10 : M.2 Select (M2_SEL1)
11 : Clear CMOS Headers (CLRMOS1)

Back Side :
Power Button (PWR_BTN1)
Fan Connector (FAN1)

## 1.4 I/O Panel




| | | | |
|---|---|---|---|
| 1 | LAN RJ-45 Port (LAN1)* | 6 | HDMI Port (HDMI1) |
| 2 | LAN RJ-45 Port (LAN2)* | 7 | USB 3.1 Port (USB3_2) |
| 3 | DisplayPort (DP2) | 8 | USB 3.1 Port (USB3_1) |
| 4 | DC-In Jack (DC_IN1) | 9 | Audio Jack (AUDIO1) |
| 5 | DisplayPort (DISPLAY1) | 10 | USB 3.1 Port (USB3_3) |

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

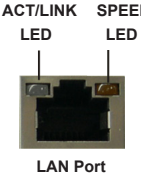
**LAN Port LED Indications**

**Activity/Link LED**

| Status | Description |
|---|---|
| Off | No Link |
| Blinking | Data Activity |
| On | Link |

**SPEED LED**

| Status | Description |
|---|---|
| Off | 10Mbps connection |
| Orange | 100Mbps connection |
| Green | 1Gbps connection |



# Chapter 2: Installation

Before you install the motherboard, study the configuration of your chassis to ensure that the motherboard fits into it.

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.

## 2.1 Screw Holes

Place screws into the holes to secure the motherboard to the chassis.

Do not over-tighten the screws! Doing so may damage the motherboard.

## 2.2 Pre-installation Precautions

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

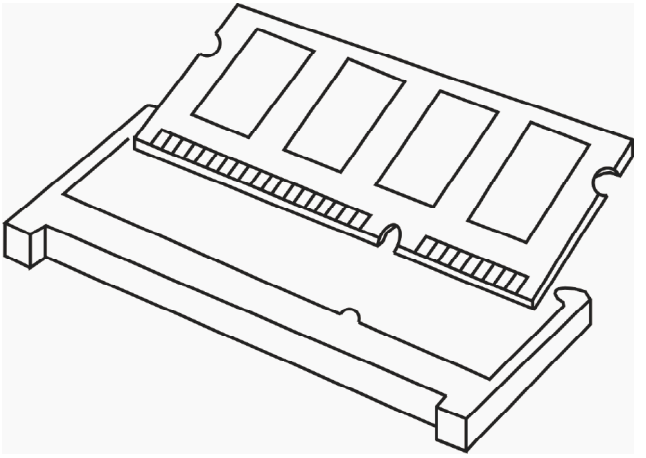
1. Unplug the power cord from the wall socket before touching any component.
2. To avoid damaging the motherboard components due to static electricity, NEVER place your motherboard directly on the carpet or the like. Also remember to use a grounded wrist strap or touch a safety grounded object before you handle components.
3. Hold components by the edges and do not touch the ICs.
4. Whenever you uninstall any component, place it on a grounded antistatic pad or in the bag that comes with the component.

Before you install or remove any component, ensure that the power is switched off or the power cord is detached from the power supply.
Failure to do so may cause severe damage to the motherboard, peripherals, and/or components.

## 2.3 Installation of Memory Modules (SO-DIMM)

***NUC-8265U / NUC-4305UE / NUC-8145UE*** provides two 204-pin DDR4 (Double Data Rate 4) SO-DIMM slots.

Step 1. Align a SO-DIMM on the slot such that the notch on the SO-DIMM matches the break on the slot.



1. The SO-DIMM only fits in one correct orientation. It will cause permanent damage to the motherboard and the SO-DIMM if you force the SO-DIMM into the slot at incorrect orientation.
2. Please do not intermix different voltage SO-DIMMs on this motherboard.

Step 2. Firmly insert the SO-DIMM into the slot until the retaining clips at both ends fully snap back in place and the SO-DIMM is properly seated.

## 2.4 Expansion Slots (M.2 Slots)

There are 2 M.2 slots on this motherboard.

**M.2 for SSD:** Key M (M2_1) (2242/2260/2280 by BRACKET) supports PCIe x4 and SATA3 for SSD.

**M.2 for Wi-Fi:** Key E (M2_2) (2230) supports PCIe x1 and USB 2.0 for Wireless.

**M.2 Key-M Socket (M2_1)**

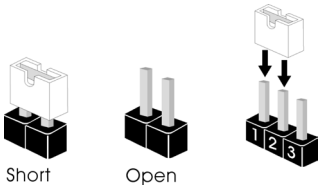
| Pin | Signal | Signal | Pin |
|---|---|---|---|
| 1 | GND | +3.3V | 2 |
| 3 | GND | +3.3V | 4 |
| 5 | PERn3 | NA | 6 |
| 7 | PERp3 | NA | 8 |
| 9 | GND | SATA_LED | 10 |
| 11 | PETn3 | +3.3V | 12 |
| 13 | PETp3 | +3.3V | 14 |
| 15 | GND | +3.3V | 16 |
| 17 | PERn2 | +3.3V | 18 |
| 19 | PERp2 | NA | 20 |
| 21 | GND | NA | 22 |
| 23 | PETn2 | NA | 24 |
| 25 | PETp2 | NA | 26 |
| 27 | GND | NA | 28 |
| 29 | PERn1 | NA | 30 |
| 31 | PERp1 | NA | 32 |
| 33 | GND | NA | 34 |
| 35 | PETn1 | NA | 36 |
| 37 | PETp1 | DEVSLP | 38 |
| 39 | GND | SMB_CLK | 40 |
| 41 | PERn0/ SATA-B+ | SMB_DATA | 42 |
| 43 | PERp0/ SATA-B- | NA | 44 |
| 45 | GND | NA | 46 |
| 47 | PETn0/ SATA-A- | NA | 48 |
| 49 | PETP0/ SATA-A+ | PERST# | 50 |
| 51 | GND | CLKREQ# | 52 |
| 53 | PEFCLKn | WAKE# | 54 |
| 55 | PEFCLKp | NA | 56 |
| 57 | GND | NA | 58 |
| | | | |
| 67 | NA | NA | 68 |
| 69 | PEDET | +3.3V | 70 |
| 71 | GND | +3.3V | 72 |
| 73 | GND | +3.3V | 74 |
| 75 | GND | | |

**M.2 Key-E Socket (M2_2)**

| Pin | Signal | Signal | Pin |
|---|---|---|---|
| 1 | GND | +3.3V | 2 |
| 3 | USB_D+ | +3.3V | 4 |
| 5 | USB_D- | NA | 6 |
| 7 | GND | NA | 8 |
| 9 | CNV_WGR_D1- | CNV_RF_RESET | 10 |
| 11 | CNV_WGR_D1+ | NA | 12 |
| 13 | GND | MODEM_CLKREQ | 14 |
| 15 | CNV_WGR_D0- | NA | 16 |
| 17 | CNV_WGR_D0+ | GND | 18 |
| 19 | GND | NA | 20 |
| 21 | CNV_WGR_CLK- | CNV_BRI_RSP | 22 |
| 23 | CNV_WGR_CLK+ | | |
| | | | |
| 33 | GND | CNV_BGI_DT | 32 |
| 35 | PETp | CNV_RGI_RSP | 34 |
| 37 | PETn | CNV_BRI_DT | 36 |
| 39 | GND | NA | 38 |
| 41 | PERp | NA | 40 |
| 43 | PERn | NA | 42 |
| 45 | GND | NA | 44 |
| 47 | PEFCLKp | NA | 46 |
| 49 | PEFCLKn | NA | 48 |
| 51 | GND | SUSCLK | 50 |
| 53 | CLKREQ# | PERST0# | 52 |
| 55 | WAKE# | W_DISABLE1# | 54 |
| 57 | GND | W_DISABLE2# | 56 |
| 59 | CNV_WT_D1- | SMB_DATA | 58 |
| 61 | CNV_WT_D1+ | SMB_CLK | 60 |
| 63 | GND | NA | 62 |
| 65 | CNV_WT_D0- | CLKIN_XTAL_LCP | 64 |
| 67 | CNV_WT_D0+ | NA | 66 |
| 69 | GND | NA | 68 |
| 71 | CNV_WT_CLK- | NA | 70 |
| 73 | CNV_WT_CLK+ | +3.3V | 72 |
| 75 | GND | +3.3V | 74 |

## 2.5 Jumpers Setup

The illustration shows how jumpers are setup. When the jumper cap is placed on pins, the jumper is “Short”. If no jumper cap is placed on pins, the jumper is “Open”. The illustration shows a 3-pin jumper whose pin1 and pin2 are “Short” when jumper cap is placed on these 2 pins.




Clear CMOS Jumper
(3-pin CLRMOS1)
(see p.8, No. 11)


Note: CLRMOS1 allows you to clear the data in CMOS. To clear and reset the system parameters to default setup, please turn off the computer and unplug the power cord from the power supply. After waiting for 15 seconds, use a jumper cap to short pin2 and pin3 on CLRMOS1 for 5 seconds. However, please do not clear the CMOS right after you update the BIOS. 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. Please be noted that the password, date, time, user default profile and MAC address will be cleared only if the CMOS battery is removed.

ATX/AT Mode Jumper
(3-pin PWR_JP1)
(see p.8, No. 7)


1-2: AT Mode
2-3: ATX Mode

M.2 Select
(2-pin M2_SEL1)
(see p.8, No. 10)


Open: M.2
Short: SATA3_1

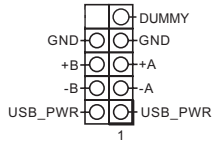
## 2.6 Onboard Headers and Connectors

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 of the motherboard!

SATA3 Connector
(SATA3_1: see p.8, No. 9)

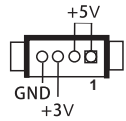
This Serial ATA3 (SATA3) connector supports SATA data cables for internal storage devices. The current SATA3 interface allows up to 6.0 Gb/s data transfer rate.

USB 2.0 Connector
(9-pin USB2_3_4)
(see p.8 No. 3)



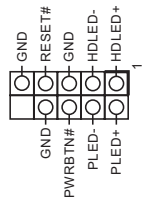

There is one USB 2.0 connector on this motherboard.

SATA Power Output Connector
(SATA_PWR1)
(see p.8, No. 8)




Please connect a SATA power cable to this connector.

System Panel Header
(9-pin PANEL1)
(see p.8 No. 5)




This header accommodates several system front panel functions.

Connect the power switch, reset switch 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 Switch):**
Connect to the power switch on the chassis front panel. You may configure the way to turn off your system using the power switch.

**RESET (Reset Switch):**
Connect to the reset switch on the chassis front panel. Press the reset switch 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 sleep state. The LED is off when the system is in S3/S4 sleep state or powered off (S5).

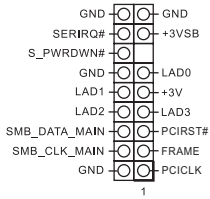
**HDLED (Hard Drive Activity LED):**
Connect to the hard drive activity LED on the chassis front panel. The LED is on when the hard drive is reading or writing data.

The front panel design may differ by chassis. A front panel module mainly consists of power switch, reset switch, 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 assign-ments are matched correctly.

## LPC Debug Header

(13-pin LPC1)

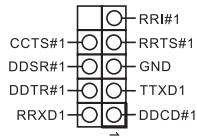
(see p.8, No. 6)




This connector supports a Trusted Platform Module (TPM) system, which can securely store keys, digital certificates, passwords, and data. A TPM system also helps enhance network security, protects digital identities, and ensures platform integrity.

## COM Port Header (RS232/422/485)

(9-pin COM1: see p.8, No. 4)




* This motherboard supports RS232/422/485 on COM1 port. Please refer to below table for the pin definition. In addition, COM1 port (RS232/422/485) can be adjusted in BIOS setup utility > Advanced Screen > Super IO Configuration. You may refer to page 24 for details.

**COM1 Port Pin Definition**

| PIN | RS232 | RS422 | RS485 |
|---|---|---|---|
| 1 | DCD, Data Carrier Detect | TX- | RTX- |
| 2 | RXD, Receive Data | TX+ | RTX+ |
| 3 | TXD, Transmit Data | RX+ | N/A |
| 4 | DTR, Data Terminal Ready | RX- | N/A |
| 5 | GND | GND | GND |
| 6 | DSR, Data Set Ready | N/A | N/A |
| 7 | RTS, Request To Send | N/A | N/A |
| 8 | CTS, Clear To Send | N/A | N/A |
| 9 | N/A | N/A | N/A |

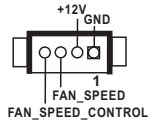
**Back Side:**

Power Button Header

(PWR_BTN1)

Fan Connector

(FAN1)



# Chapter 3: UEFI SETUP UTILITY

## 3.1 Introduction

This section explains how to use the UEFI SETUP UTILITY to configure your system. The UEFI chip on the motherboard stores the UEFI SETUP UTILITY. You may run the UEFI SETUP UTILITY when you start up the computer. Please press <F2> or <Del> during the Power-On-Self-Test (POST) to enter the UEFI SETUP UTILITY, otherwise, 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.

### 3.1.1 UEFI Menu Bar

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

| | |
|---|---|
| **Main** | To set up the system time/date information |
| **Advanced** | To set up the advanced UEFI features |
| **H/W Monitor** | To display current hardware status |
| **Security** | To set up the security features |
| **Boot** | To set up the default system device to locate and load the Operating System |
| **Exit** | To exit the current screen or the UEFI SETUP UTILITY |

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

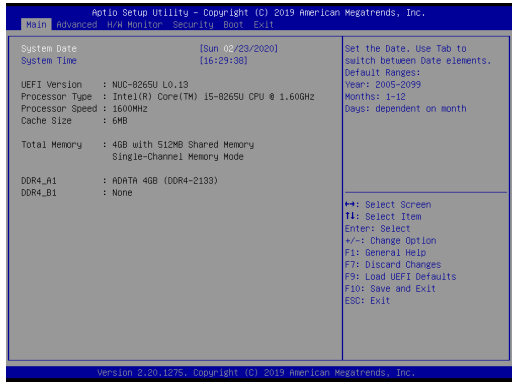
### 3.1.2 Navigation Keys

Please check the following table for the function description of each navigation key.

| Navigation Key(s) | Function Description |
|---|---|
| ← / → | Moves cursor left or right to select Screens |
| ↑ / ↓ | Moves cursor up or down to select items |
| + / - | To change option for the selected items |
| <Enter> | To bring up the selected screen |
| <F1> | To display the General Help Screen |
| <F7> | Discard changes |
| <F9> | To load optimal default values for all the settings |
| <F10> | To save changes and exit the UEFI SETUP UTILITY |
| <F12> | Print screen |
| <ESC> | To jump to the Exit Screen or exit the current screen |

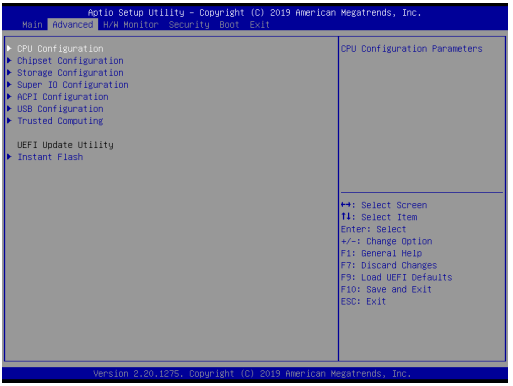
## 3.2 Main Screen

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



## 3.3 Advanced Screen

In this section, you may set the configurations for the following items: CPU Configuration, Chipset Configuration, Storage Configuration, Super IO Configuration, ACPI Configuration, USB Configuration and Trusted Computing.

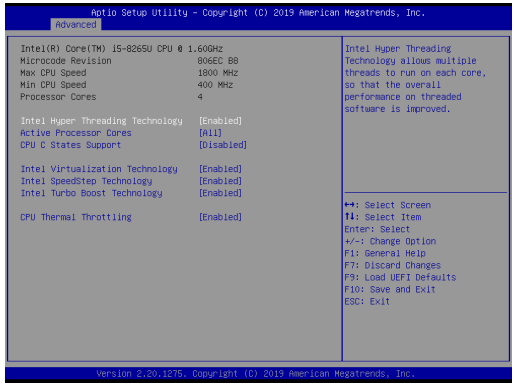



Setting wrong values in this section may cause the system to malfunction.

**Instant Flash**

Instant Flash is a UEFI flash utility embedded in Flash ROM. This convenient UEFI update tool allows you to update system UEFI without entering operating systems first like MS-DOS or Windows®. Just launch this tool and save the new UEFI file to your USB flash drive, floppy disk or hard drive, then you can update your UEFI only in a few clicks without preparing an additional floppy diskette or other complicated flash utility. Please be noted that the USB flash drive or hard drive must use FAT32/16/12 file system. If you execute Instant Flash utility, the utility will show the UEFI files and their respective information. Select the proper UEFI file to update your UEFI, and reboot your system after UEFI update process completes.

## 3.3.1 CPU Configuration




**Intel Hyper Threading Technology**

To enable this feature, a computer system with an Intel processor that supports Hyper-Threading technology and an operating system that includes optimization for this technology, such as Microsoft® Windows® 10 64-bit / 8.1 64-bit / 7 32-bit / 7 64-bit is required. Set to [Enabled] if using Microsoft® Windows® 10 64-bit / 8.1 64-bit / 7 32-bit / 7 64-bit or Linux kernel version 2.4.18 or higher. This option will be hidden if the installed CPU does not support Hyper-Threading technology.

**Active Processor Cores**

Select the number of cores to enable in each processor package.

**CPU C States Support**

Enable CPU C States Support for power saving. It is recommended to keep C3, C6 and C7 all enabled for better power saving.

**Intel Virtualization Technology**

When this option is set to [Enabled], a VMM (Virtual Machine Architecture) can utilize the additional hardware capabilities provided by Vanderpool Technology. This option will be hidden if the installed CPU does not support Intel Virtualization Technology.

**Intel SpeedStep Technology**

Intel SpeedStep technology is Intel's new power saving technology. Processors can switch between multiple frequencies and voltage points to enable power saving. The default value is [Enabled]. Configuration options: [Enabled] and [Disabled]. If you install Windows® 10 64-bit / 8.1 64-bit / 7 32-bit / 7 64-bit and want to enable this function, please set this item to [Enabled]. This item will be hidden if the current CPU does not support Intel SpeedStep technology.

Please note that enabling this function may reduce CPU voltage and lead to system stability or compatibility issues with some power supplies. Please set this item to [Disabled] if above issues occur.

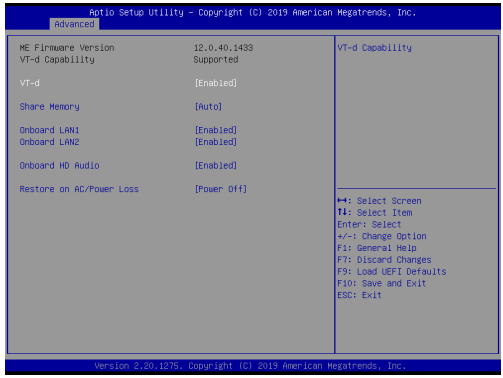
**Intel Turbo Boost Technology**

Use this item to enable or disable Intel Turbo Boost Mode Technology. Turbo Boost Mode allows processor cores to run faster than marked frequency in specific conditions. The default value is [Enabled].

**CPU Thermal Throttling**

You may select [Enabled] to enable CPU internal thermal control mechanism to keep the CPU from overheating.

## 3.3.2 Chipset Configuration




**VT-d**

Use this to enable or disable Intel® VT-d technology (Intel® Virtualization Technology for Directed I/O). The default value of this feature is [Disabled].

**Share Memory**

Configure the size of memory that is allocated to the integrated graphics processor when the system boots up.

**Onboard LAN1**

This allows you to enable or disable the Onboard LAN1 feature.

**Onboard LAN2**

This allows you to enable or disable the Onboard LAN2 feature.

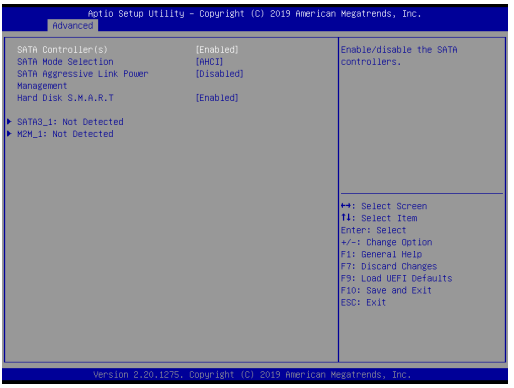
**Onboard HD Audio**

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

**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.

## 3.3.3 Storage Configuration




**SATA Controller(s)**

Use this item to enable or disable the SATA Controller feature.

**SATA Mode Selection**

Use this to select SATA mode. The default value is [AHCI Mode].

AHCI (Advanced Host Controller Interface) supports NCQ and other new features that will improve SATA disk performance but IDE mode does not have these advantages.

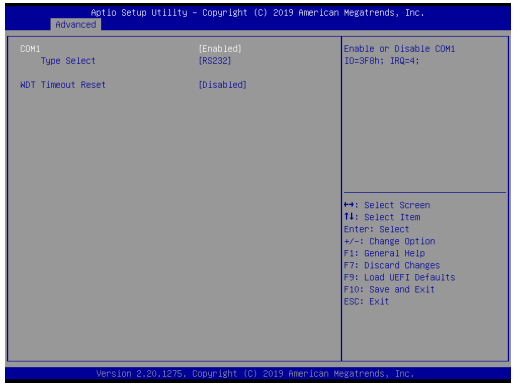
**SATA Aggressive Link Power Management**

Use this item to configure SATA Aggressive Link Power Management.

**Hard Disk S.M.A.R.T.**

Use this item to enable or disable the S.M.A.R.T. (Self-Monitoring, Analysis, and Reporting Technology) feature. Configuration options: [Disabled] and [Enabled].

### 3.3.4 Super IO Configuration




**COM1 Configuration**

Use this to set parameters of COM1.

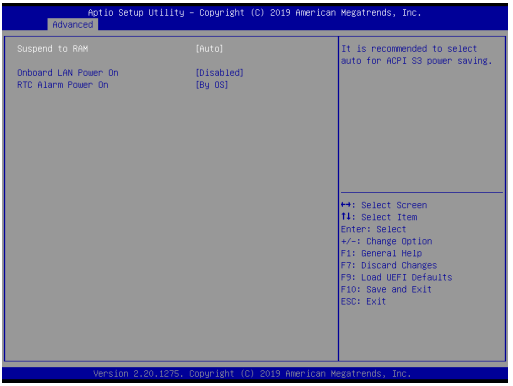
**Type Select**

Use this to select COM3 port type: [RS232], [RS422] or [RS485].

**WDT Timeout Reset**

Use this to set the Watch Dog Timer.

### 3.3.5 ACPI Configuration




**Suspend to RAM**

Use this item to select whether to auto-detect or disable the Suspend-to-RAM feature. Select [Auto] will enable this feature if the OS supports it.

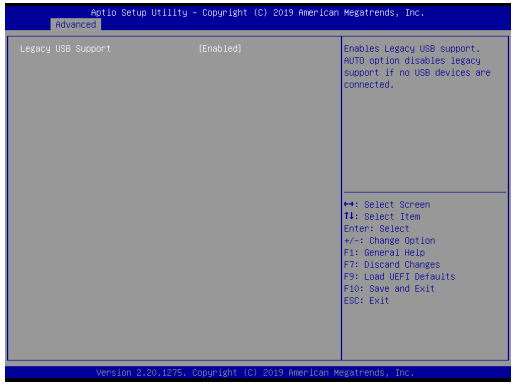
**Onboard LAN Power On**

Use this item to enable or disable onboard LAN to turn on the system from the power-soft-off mode.

**RTC Alarm Power On**

Use this item to enable or disable RTC (Real Time Clock) to power on the system.

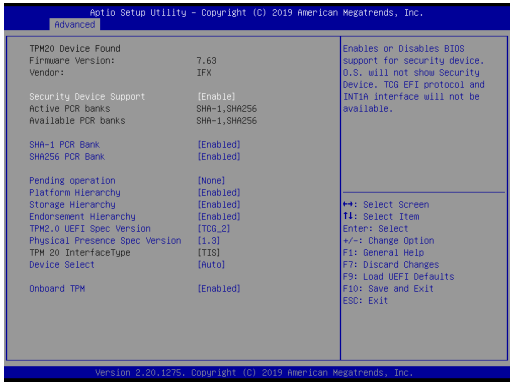
## 3.3.6 USB Configuration




**Legacy USB Support**

Enable or disable Legacy OS Support for USB 2.0 devices. If you encounter USB compatibility issues it is recommended to disable legacy USB support. Select UEFI Setup Only to support USB devices under the UEFI setup and Windows/Linux operating systems only.

## 3.3.7 Trusted Computing

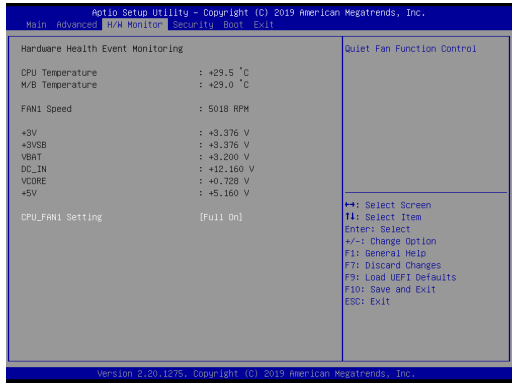



**Security Device Support**

Enable or disable BIOS support for security device.

## 3.4 Hardware Health Event Monitoring Screen

In this section, it allows you to monitor the status of the hardware on your system, including the parameters of the CPU temperature, motherboard temperature, CPU fan speed, chassis fan speed, and the critical voltage.

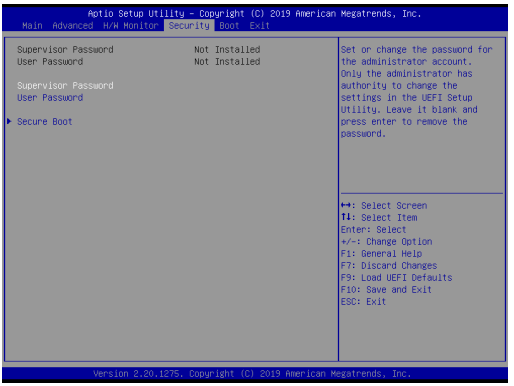



**CPU Fan 1 Setting**

This allows you to set CPU fan 1's speed. Configuration options: [Full On] and [Automatic Mode]. The default value is [Full On].

## 3.5 Security Screen

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




**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**

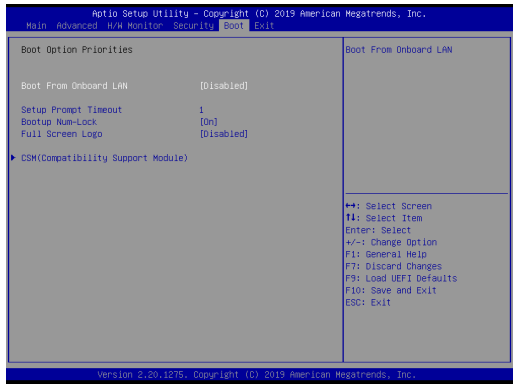
Set or change the password for the user account. Users are unable to change the settings in the UEFI Setup Utility. Leave it blank and press enter to remove the password.

**Secure Boot**

Enable to support Windows 8.1 / 8 Secure Boot.

## 3.6 Boot Screen

In this section, it will display the available devices on your system for you to configure the boot settings and the boot priority.




**Boot From Onboard LAN**

Use this item to enable or disable the Boot From Onboard LAN feature.

**Setup Prompt Timeout**

This shows the number of seconds to wait for setup activation key. 65535(0XFFFF) means indefinite waiting.

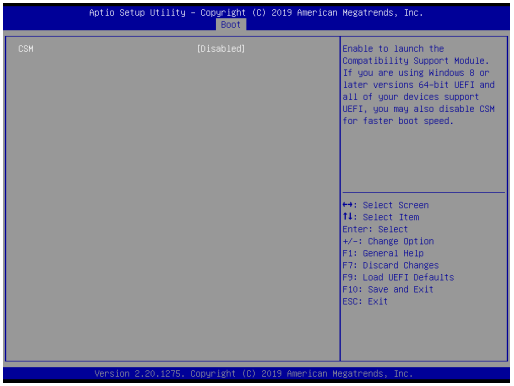
**Bootup Num-Lock**

If this item is set to [On], it will automatically activate the Numeric Lock function after boot-up.

**Full Screen Logo**

Use this item to enable or disable OEM Logo. The default value is [Enabled].

### CSM (Compatibility Support Module)




**CSM**

Enable to launch the Compatibility Support Module. Please do not disable unless you're running a WHCK test. If you are using Windows 8.1 64-bit and all of your devices support UEFI, you may also disable CSM for faster boot speed.

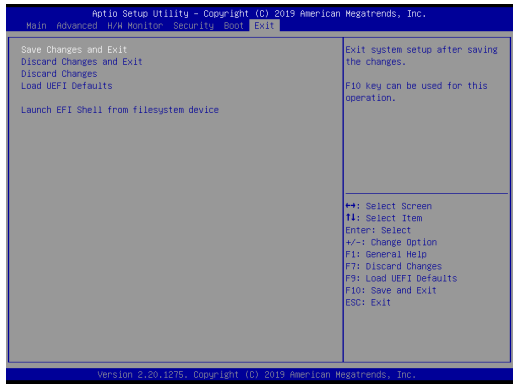
**Launch PXE OpROM Policy**

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 Video 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.

## 3.7 Exit Screen




**Save Changes and Exit**

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

**Discard Changes and Exit**

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

**Discard Changes**

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

**Load UEFI Defaults**

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

**Launch EFI Shell from filesystem device**

Attempts to Launch EFI Shell application (Shell64.efi) from one of the available filesystem devices.

# Chapter 4: Software Support

## 4.1 Install Operating System

This motherboard supports various Microsoft® Windows® operating systems: 10 64-bit / 8.1 64-bit / 7 32-bit / 7 64-bit. Because motherboard settings and hardware options vary, use the setup procedures in this chapter for general reference only. Refer your OS documentation for more information.

## 4.2 Support CD Information

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

### 4.2.1 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 did not appear automatically, locate and double click on the file "ASRSETUP.EXE" from the BIN folder in the Support CD to display the menus.

### 4.2.2 Drivers Menu

The Drivers Menu shows the available device's drivers if the system detects installed devices. Please install the necessary drivers to activate the devices.

### 4.2.3 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.

### 4.2.4 Contact Information

If you need to contact ASRock or want to know more about ASRock, you're welcome to visit ASRock's website at http://www.asrock.com; or you may contact your dealer for further information.