

# NUC BOX-1165G7 NUC BOX-1135G7 NUC BOX-1115G4 NUC BOX-6305E

User Manual

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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 <u>www.dtsc.ca.gov/hazardouswaste/</u> <u>perchlorate</u>"

## ASRock's Website: www.ASRock.com

**Replaceable batteries** 

#### CAUTION

## RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS

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## **Button Battery Safety Notice**

# 

- INGESTION HAZARD: This product contains a button cell or coin battery.
- DEATH or serious injury can occur if ingested.
- A swallowed button cell or coin battery can cause Internal Chemical Burns in as little as 2 hours.
- KEEP new and used batteries OUT OF REACH of CHILDREN
- Seek immediate medical attention if a battery is suspected to be swallowed or inserted inside any part of the body.



- Remove and immediately recycle or dispose of used batteries according to local regulations and keep away from children. Do NOT dispose of batteries in household trash or incinerate.
- Even used batteries may cause severe injury or death.
- Call a local poison control center for treatment information.
- Battery type: CR2032
- Battery voltage: 3.3V
- Non-rechargeable batteries are not to be recharged.
- Do not force discharge, recharge, disassemble, heat above (manufacturer's specified temperature rating) or incinerate. Doing so may result in injury due to venting, leakage or explosion resulting in chemical burns.
- This product contains an irreplaceable battery.
- This icon indicates that a swallowed button battery can cause serious injury or death. Please keep batteries out of sight or reach of children.

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# **Chapter 1 Introduction**



Because the hardware specifications might be updated, the content of this documentation will be subject to change without notice.

## 1.1 Package Contents

- 1 x NUC 1100 BOX Series
- 1 x 19V/90W Power Adapter
- 1 x VESA Mount Bracket
- 1 x Quick Installation Guide



If any items are missing or appear damaged, contact your authorized dealer.

# 1.2 Product Specifications

NUC 1100 BOX Series	Barebone
СРИ	NUC BOX-1165G7 (I7-1165G7, QC, Max Speed up to 4.7GHz) NUC BOX-1135G7 (I5-1135G7, QC, Max Speed up to 4.2GHz) NUC BOX-1115G4 (I3-1115G4, DC, Max Speed up to 4.1GHz) NUC BOX-6305E (Celeron 6305E, DC, 1.8GHz)
OS	N/A
Chipset	МСР
Memory	Supports Dual Channel DDR4 3200 MHz, 2 x 260-pin SO-DIMM, Max. 64GB (32 GB per DIMM)
HDD	M.2 slot Optional   2.5"HDD Supports 1 x 2.5" SATA HDD*/SSD
LAN	LAN1: Intel* I219V with 10/100/1000 Mbps LAN2: Intel* I225LM/I225V with 10/100/1000/2500 Mbps
WiFi	1 x Intel° Wi-Fi 6 AX200 module
Audio	Realtek ALC233, High Definition Audio
Front I/O	1 x USB 3.2 Gen2 (Type-A), 2 x USB 3.2 Gen2 (Type-C, Supports DP1.4 display output), 1 x Audio-out with MIC-In
Rear I/O	2 x USB 3.2 Gen2 (Type-A), 1 x HDMI, 1 x DP, 2 x LAN (1 x 1 Gigabit LAN, 1 x 2.5 Gigabit LAN), DC-IN, 1 x Kensington lock
Power Unit	19V/90W Adapter

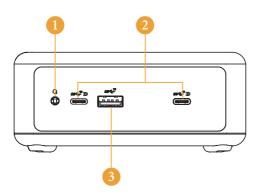
Dimension (L x W x H)	117.5 x 110.0 x 47.85mm(4.63" x 4.33" x 1.88")
VESA	Bracket included , supports 75 x 75 and 100 x 100 mm
Volume (Liters)	0.6L
Operating Temperature	0°C~40°C

\* For NUC 1100 BOX Series, it is not recommended to install 2.5" HDD. If you install the 2.5" HDD, please keep the NUC 1100 BOX Series in a vertical position to ensure better cooling performance.

# Chapter 2 Product Overview

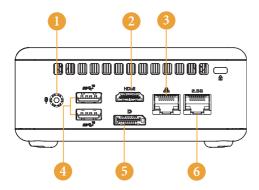
This chapter provides diagrams showing the location of important components of the NUC 1100 BOX Series.

## 2.1 Front View



No.	Description
1	Audio(Mic-in, Line-out)
2	2 x USB 3.2 Gen2 Ports (Type-C, supports DP1.2a display output)
3	USB 3.2 Gen2 (Type-A)

## 2.2 Rear View



No.	Description
1	DC-IN
2	HDMI
3	RJ-45 (1G)*
4	2 x USB 3.2 Gen2 Ports
5	DisplayPort
6	RJ-45 (2.5G)**

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

ACT/LINK LED



LAN Port

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

\* There are two LEDs on the 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/1Gbps connection
On	Link	Green	2.5Gbps connection

## 2.3 Inside View

(+

~	4 5	~
	3 SODDR4 SODDR4 COMPONENT AREA (PRIMARY SIDE)	
No.	Description	
1	SO-DIMM Slot	
2	SATA 3.0 Connector	_
3	Mini PCIe Slot	_
4	M.2 Slot	
5	Hard disk drive tray (compatible with 2.5" SATA HDD/SSD)	

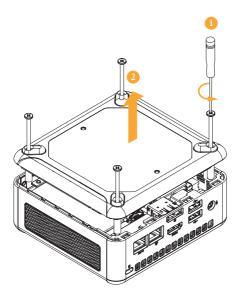
SO-DIMM memory, hard drive and mSATA SSD are not included with this system.

## Chapter 3 Hardware Installation

This chapter helps you install or remove important components.

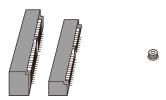
## 3.1 How to Remove the Bottom Case

- 1. Remove the four screws on the bottom case.
- 2. Then lift up and remove the bottom panel..

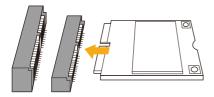


## 3.2 How to Install the WiFi Module

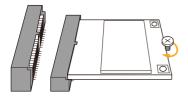
1. Locate the WiFi Module slot on the motherboard.



2. Carefully insert the WiFi Module into the slot.

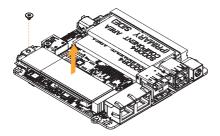


3. Tighten the screw to secure the WiFi Module to the motherboard.

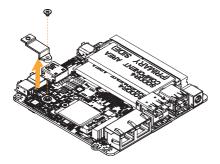


## 3.3 How to Remove the M.2 SSD and the Bracket

1. Release the screw and carefully remove the M.2 SSD.

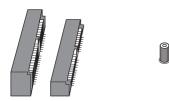


2. Release the screw and remove the bracket from the motherboard.

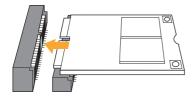


## 3.4 How to Install the M.2 SSD

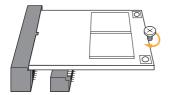
1. Locate the M.2 slot on the motherboard.



2. Carefully insert the M.2 SSD into the slot.

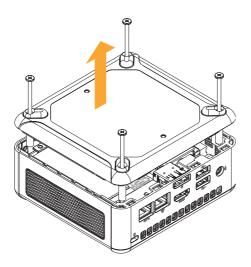


3. Tighten the screw to secure the M.2 SSD to the motherboard.

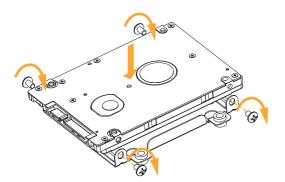


## 3.5 How to Install the 2.5-inch Hard Drive

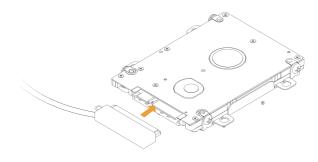
1. Remove the four screws on the bottom case. Then lift up and remove the bottom panel.



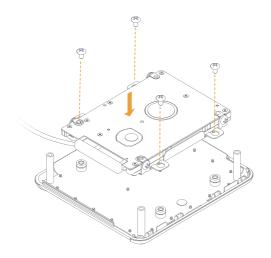
2. Attach the HDD to the hard drive mounting bracket and secure it using the four screws.



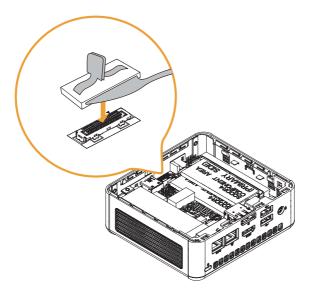
3. Connect the SATA Data and Power Cable to the HDD.



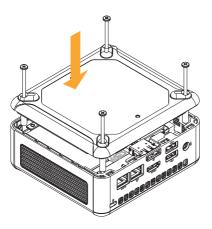
4. Connect the SATA Data and Power Cable to the HDD.



5. Connect the SATA Cable to the connector.



6. Then reinstall the bottom panel.

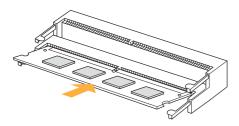


# 3.6 How to Install the Memory Modules (DDR4)

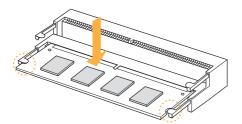
The NUC 1100 BOX Series requires DDR4 SO-DIMM.
For dual channel configuration, you always need to install identical (the same brand, speed, size and chip-type) DDR4 SO-DIMM pairs.

The SO-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. Carefully insert the SO-DIMM memory modules into the slot at a 30-degree angle.

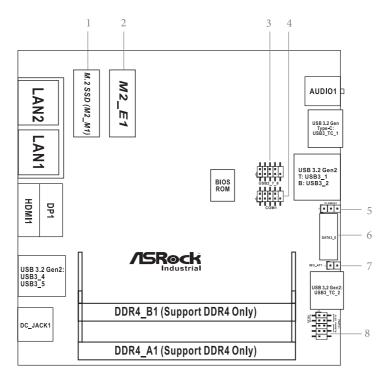


2. Push down until the modules snap into place.



## Chapter 4 Motherboard

## 4.1 Motherboard Layout



- 1 : M.2 Key-M Socket (M2\_M1)
- 2 : M.2 Key-E Socket (M2\_E1)
- 3 : USB2.0 Connector (USB2\_7\_8)
- 4 : COM Port Header (RS232)
- 5 : Clear CMOS Header (CLRCMOS1)
- 6 : SATA3 Port (SATA3\_0)
- 7 : SIO\_AT1
- 8 : System Panel Header (PANEL1)

Back Side : Power Button (PWR\_BTN1) Fan Connector (FAN1) Battery Connector (BAT1) ESPI Connector (ESPI)

## 4.2 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. Short Open

Clear CMOS Jumper (3-pin CLRCMOS1) (see p. 16, No. 5)



1-2: Auto Clear CMOS (Default)2-3: Clear CMOS

Note: CLRCMOS1 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 CLRCMOS1 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.

CLRCMOS1 allows you to clear the data in CMOS automatically when AC power on. 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.

SIO\_AT1 (2-pin SIO\_AT1) (see p.16, No. 7)

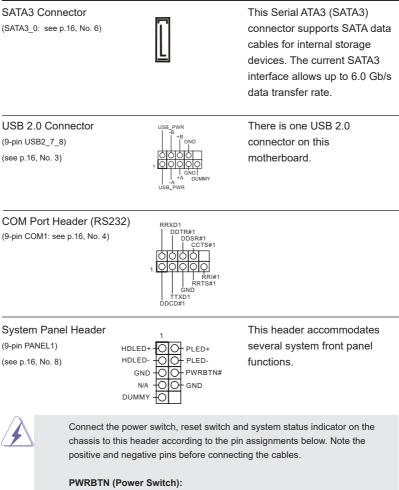


Open: ATX Mode (Default) Short: AT Mode

## 4.3 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!



Connect to the power switch on the chassis front panel. You may configure the way to turn off your system using the power switch.

#### 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 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.

#### Back Side:

Power Button Header (PWR\_BTN1)





Battery Connector (BAT1)

ESPI Connector (ESPI1)

## 4.4 Expansion Slots (M.2 Slots)

There are 2 M.2 slots on this motherboard.

# **M.2 for SSD:** 1 x M.2 (KEY M, 2242/2260/2280) with PCIe Gen4 x4 and SATA3 for SSD.

## \* M.2 Key M 2280(Supported by bracket)

M.2 for Wi-Fi: 1 x M.2 (Key E, 2230) with PCIe x1, USB 2.0 and CNVi for Wireless.

## M.2 Key-M Socket (M2\_M1)

## M.2 Key-E Socket (M2\_E1)

	W.2 Key-W So		
Pin	Signal Name	Signal Name	Pin
1	GND	+3.3V	2
3	GND	+3.3V	4
5	PERn3	NC	6
7	PERp3	NC	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		38
39	GND	NA	40
41	PERn0/SATA-B+	NA	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
59			60
61			62
63			64
65			66
67	NA	NA	68
69	PEDET	+3.3V	70
71	GND	+3.3V	72
73	GND	+3.3V	74
75	GND		

Pin	Simal Name	Signal Name	Pin
Pin 1	Signal Name GND	+3.3V	2 Pin
3	USB D+	+3.3V +3.3V	4
5	USB D-	NA NA	6
7	GND	NA	8
9	CNV WGR D1-	CNV RF RESET	10
11	CNV_WGR_D1+	NA NA	10
13	GND	MODEM CLKREO	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+	CITY_DIG_IGI	22
25	CIV_WOK_CLK+		
			<u> </u>
		CNV_BGI_DT	32
33	GND	CNV RGI RSP	34
35	PETp	CNV BRI DT	36
37	PETn	NA	38
39	GND		
41	PERp	NA	40
43	PERn	NA	44
45	GND	NA	46
47	PEFCLKp	NA	48
49	PEFCLKn	SUSCLK	50
51	GND	PERST0#	52
53	CLKREQ#	W DISABLE1#	54
55	WAKE#	W DISABLE2#	56
57	GND	NA	58
59	CNV WT D1-	NA	60
61	CNV WT D1+	NA	62
63	GND		64
65	CNV_WT_D0-	NA	66
67	CNV_WT_D0+	NA	68
69	GND	NA	70
71	CNV_WT_CLK-	+3.3V	72
73	CNV WT CLK+	+3.3V	74
75	GND		

# Chapter 5 UEFI Setup Utility

## 5.1 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.

## 5.1.1 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 < $\leftarrow$ > key or < $\rightarrow$ > 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</enter>		

mouse to click your required item.

## 5.1.2 Navigation Keys

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

Navigation Key(s)	Function Description
<b>←</b> / →	Moves cursor left or right to select Screens
↑/↓	Moves cursor up or down to select items
+ / -	To change option for the selected items
<enter></enter>	To bring up the selected screen
<f1></f1>	To display the General Help Screen
<f7></f7>	Discard changes
<f9></f9>	To load optimal default values for all the settings
<f10></f10>	To save changes and exit the UEFI SETUP UTILITY
<f12></f12>	Print screen
<esc></esc>	To jump to the Exit Screen or exit the current screen

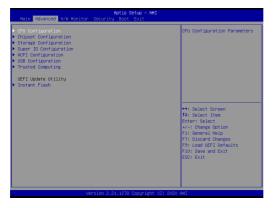
## 5.2 Main Screen

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

Hain Advanced	Aptio Setup – AMI H/H Manitor Security Boot Exit	
System Date System Time	[Mon 10/26/2020] [15:52:56]	Set the Time. Use Tab to switch between Time elements.
	806C1/60	
Total Memory : memory	868 with 512MB Shared Memory and 8MB GTT Single-Channel Memory Mode	++; Select Screen
		11: Select Item Enter: Select +/-: Change Option F7: Obscard Changes F7: Load UPI Defailts F10: Save and Exit ESC: Exit
	Version 2.21.1278 Copyright (C) 2020 /	IMI

## 5.3 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<sup>®</sup>. 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.

## 5.3.1 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<sup>®</sup> Windows<sup>®</sup> 10 64-bit / 8.1 64-bit / 7 32-bit / 7 64-bit is required. Set to [Enabled] if using Microsoft<sup>®</sup> Windows<sup>®</sup> 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<sup>®</sup> 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.

#### **CPU Operation Mode**

Use this item to select CPU Operating Mode, [Normal Mode] or [Performance Mode]. The default mode is [Normal Mode].

If working at [Normal Mode], M/B works with default Smart Fan setting and can provide you better cooler experience.

If [Performance Mode] is selected, CPU can provide optimal performance, but the CPU fan speed will work at full speed.

## 5.3.2 Chipset Configuration

Aptio Setup - AMI Advanced		
ME Firmware Version VT-d Capability	15.0.10.1414 Supported	VT-d Capability
Share Memory	[Auto]	
Onboard LAN1 Onboard LAN2	[Enabled] [Enabled]	
Onboard HD Audio Verb Table Select	[Enabled] [Combo Jack]	↔: Select Screen
Deep Sleep Restore on AC/Power Loss	(Disabled) IPower Off)	1: Select Item Enter: Select +/-: Change Option F3: General Help F7: Discard Changes F9: Loss UPFT Defaults F9: Save and Exit ESC: Exit

#### VT-d

Use this to enable or disable Intel<sup>®</sup> VT-d technology (Intel<sup>®</sup> 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.

#### Verb Table Select

The default value is [Combo Jack].

## Deep Sleep

Mobile platforms support Deep S4/S5 in DC only and desktop platforms support Deep S4/S5 in AC only. The default value is [Disabled].

#### **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.

## 5.3.3 Storage Configuration

Advanced	Aptio Setup - AMI	
SATA Controller(s) SATA Note Selection SATA Aggregative Link (Nover Management Hand Disk S.H.A.R.T • SATA2,0: Not Detected • MC_M1: Not Detected	(Enabled) (McII (Islabled) (Enabled)	Enable/disable the SATA controllers.
	ion 2 21 1270 Conuclivity (C) 2020	AUT.

## 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].

## 5.3.4 Super IO Configuration

Advanced	Aptio Setup - AMI	
		Enable or Disable CDM1 IO=3F8h; IRQ=4;
WDT Timeout Reset	[Disabled]	
		↔: Select Screen †↓: Select Item Enter: Select
		+/-: Change Option F1: General Help
		F7: Discard Changes F9: Load UEFI Defaults
		F10: Save and Exit ESC: Exit
	Version 2.21.1278 Copyright	

## **COM1** Configuration

Use this to set parameters of COM1.

## WDT Timeout Reset

Use this to set the Watch Dog Timer.

## 5.3.5 ACPI Configuration

Advanced	Aptio Setup - AMI	
Suspend to RAM	(Auto)	It is recommended to select
Onboard LAN Power On RTC Alarm Power On	(Disabled) (By OS)	auto for ACPIS3 power saving.
		↔: Select Screen 14: Select Item Enter: Select +/-: Change Option 11: General Help 7: Discard Changes F3: Load UET Defaults F3: Use UET Defaults F10: Save and Exit E3G: Exit

#### 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.

## 5.3.6 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.

## USB Power Control

Use this item to control USB power.

## 5.3.7 Trusted Computing



## Security Device Support

Enable or disable BIOS support for security device.

## 5.4 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.

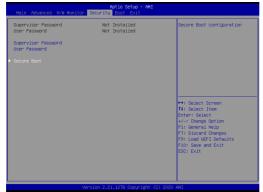
	Main Advanced H/W Monitor	Aptio Setup - AMI Security Boot Exit	
ſ	Hardware Health Event Monito	ring	Quiet Fan Function Control
	CPU Temperature M/B Temperature FAN1 Speed	: +58.5 °C : +32.5 °C : 1834 RPM	
	FANL SUPER -SV -SVSE VEAT +OC_IN -SV FANL Setting	- 1554 KPT :43,424 V :43,424 V :43,404 V :43,404 V :43,404 V :45,120 V (System Auto]	+: Select Screen H: Select Item Enter: Select +/-: Change Option r1: Serveral Meins r7: Discard Changes F0: Seve and Exit F0: Seve and Exit ESC: Exit
		ersion 2.21.1278 Copyright (C)	2020. MMT

## FAN1 Setting

This allows you to set FAN1's speed. Configuration options: [Full On] and [Automatic Mode]. The default value is [Full On].

## 5.5 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.

## 5.6 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.

Main Advanced H/W Monitor S	Aptio Setup - AMI Security Boot Exit	
Boot Option Priorities		Boot From Onboard LAN
Boot From Orboard LAN Setup Prompt Timeout Bootup Nun-Jock Full Screen Logo	(Disabled) 1 [On] [Enabled]	
		H: Select Screen II: Select Iren Erter: Select For Select F
Vers	ion 2.21.1278 Copyright (C)	2020 AMI

## **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].

## 5.7 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 6 Software Support

## 6.1 Install Operating System

This motherboard supports various Microsoft<sup>®</sup> Windows<sup>®</sup> operating systems: 10 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.