



IMB-1213

User Manual

Version 1.1

Updated September 4, 2020

Copyright©2020 ASRock INC. All rights reserved.

---

Version 1.1

Published September 4, 2020

Copyright©2020 ASRock INC. All rights reserved.

### Copyright Notice:

No part of this documentation may be reproduced, transcribed, transmitted, or translated in any language, in any form or by any means, except duplication of documentation by the purchaser for backup purpose, without written consent of ASRock Inc.

Products and corporate names appearing in this documentation may or may not be registered trademarks or copyrights of their respective companies, and are used only for identification or explanation and to the owners' benefit, without intent to infringe.

### Disclaimer:

Specifications and information contained in this documentation are furnished for informational use only and subject to change without notice, and should not be construed as a commitment by ASRock. ASRock assumes no responsibility for any errors or omissions that may appear in this documentation.

With respect to the contents of this documentation, ASRock does not provide warranty of any kind, either expressed or implied, including but not limited to the implied warranties or conditions of merchantability or fitness for a particular purpose.

In no event shall ASRock, its directors, officers, employees, or agents be liable for any indirect, special, incidental, or consequential damages (including damages for loss of profits, loss of business, loss of data, interruption of business and the like), even if ASRock has been advised of the possibility of such damages arising from any defect or error in the documentation or product.



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](http://www.dtsc.ca.gov/hazardouswaste/perchlorate)”

**ASRock Website:** <http://www.asrock.com>

---

**CAUTION:**

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

---

# Contents

|   |           |
|---|-----------|
| <b>1 Introduction .....</b>                       | <b>5</b>  |
| 1.1 Package Contents .....                        | 5         |
| 1.2 Specifications.....                           | 6         |
| 1.3 Motherboard Layout.....                       | 8         |
| 1.4 I/O Panel.....                                | 10        |
| <b>2 Installation .....</b>                       | <b>11</b> |
| 2.1 Screw Holes.....                              | 11        |
| 2.2 Pre-installation Precautions .....            | 11        |
| 2.3 Installation of Memory Modules (SO-DIMM)..... | 12        |
| 2.4 Expansion Slots .....                         | 13        |
| 2.5 Jumpers Setup.....                            | 14        |
| 2.6 Onboard Headers and Connectors.....           | 17        |
| <b>3 UEFI SETUP UTILITY.....</b>                  | <b>23</b> |
| 3.1 Introduction .....                            | 23        |
| 3.1.1 UEFI Menu Bar .....                         | 23        |
| 3.1.2 Navigation Keys .....                       | 24        |
| 3.2 Main Screen.....                              | 24        |
| 3.3 Advanced Screen.....                          | 25        |
| 3.3.1 CPU Configuration .....                     | 26        |
| 3.3.2 Chipset Configuration.....                  | 28        |
| 3.3.3 Storage Configuration .....                 | 30        |
| 3.3.4 Super IO Configuration .....                | 31        |
| 3.3.5 AMT Configuration .....                     | 32        |
| 3.3.6 ACPI Configuration.....                     | 34        |
| 3.3.7 USB Configuration .....                     | 35        |
| 3.3.8 Trusted Computing.....                      | 36        |
| 3.4 Hardware Health Event Monitoring Screen ..... | 37        |
| 3.5 Security Screen .....                         | 38        |
| 3.6 Boot Screen .....                             | 39        |
| 3.7 Exit Screen .....                             | 41        |
| <b>4 Software Support .....</b>                   | <b>42</b> |
| 4.1 Install Operating System.....                 | 42        |
| 4.2 Support CD Information .....                  | 42        |
| 4.2.1 Running Support CD.....                     | 42        |
| 4.2.2 Drivers Menu.....                           | 42        |
| 4.2.3 Utilities Menu.....                         | 42        |
| 4.2.4 Contact Information.....                    | 42        |

---

# Chapter 1: Introduction

Thank you for purchasing ASRock **IMB-1213** 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](http://www.asrock.com/support/index.asp)

## 1.1 Package Contents

ASRock **IMB-1213** Motherboard (Mini-ITX (6.7-in x 6.7-in))

ASRock **IMB-1213** Driver CD

ASRock **IMB-1213** Jumper setting instruction

1 x I/O Panel Shield

## 1.2 Specifications

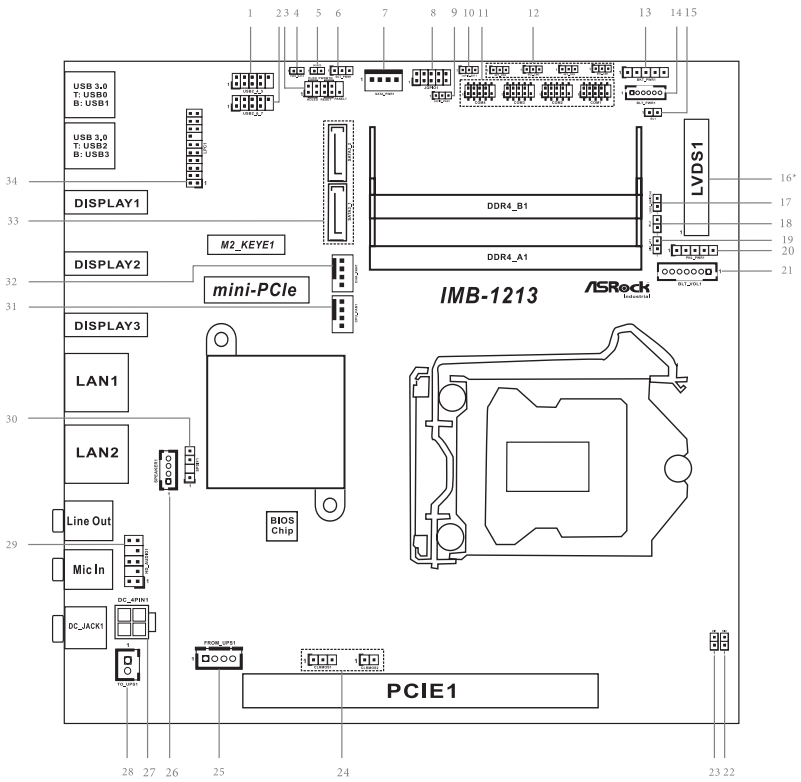
|                         |              |  |
|-------------------------|--------------|--|
| <b>Form Factor</b>      | Dimensions   | Mini-ITX (6.7-in x 6.7-in)   |
| <b>Processor System</b> | CPU          | Socket LGA 1151 for 9th/8th Intel® Core i7/i5/i3/<br>Celeron (Supports up to 65W)<br>* The Performance of CPUs over 65W will be limited due to power design. |
|                         | Chipset      | Intel® Q370  |
| <b>Expansion Slot</b>   | PCIe         | 1 x PCIe x16 (Support riser card)  |
|                         | Mini-PCIe    | 1 x Full/Half mini-PCIe with PCIe x1 and USB 2.0   |
|                         | mSATA        | N/A  |
|                         | M.2          | 1 x M.2 (Key E, 2230) with PCIe x1, CNVI and USB2.0 for Wireless<br>1 x M.2 (Key M, 2242/2260/2280) with PCIe x4 and SATA3 for SSD                           |
| <b>Memory</b>           | Technology   | Dual Channel DDR4 2400/2666MHz   |
|                         | Max.         | 64GB*<br>* Intel® Core i9/i7/i5 CPUs support up to 64GB (32GB per DIMM)<br>Intel® Core i3/Pentium®/Celeron® CPUs support up to 32GB (16GB per DIMM)          |
|                         | Socket       | 2 x SO-DIMM  |
| <b>Display</b>          | VGA          | N/A  |
|                         | DVI          | N/A  |
|                         | LVDS         | Dual Channel 24-bit, max resolution up to 1920x1200@60Hz   |
|                         | HDMI         | N/A  |
|                         | DisplayPort  | Max resolution up to 4096x2304@60Hz  |
|                         | MultiDisplay | Triple Display   |
|                         | eDP          | Max resolution up to 4096x2304@60Hz  |
| <b>Ethernet</b>         | Ethernet     | 10/100/1000 Mbps   |
|                         | Controller   | 1 x Intel® I210, 1 x Intel® I219LM   |

|                               |                    |   |
|-------------------------------|--------------------|---|
| <b>Rear I/O</b>               | VGA                | N/A   |
|                               | DVI                | N/A   |
|                               | HDMI               | N/A   |
|                               | DisplayPort        | 3   |
|                               | Ethernet           | 2   |
|                               | USB                | 4 x USB support USB3.1  |
|                               | Audio              | 2 (Mic-in, Line-out)  |
|                               | Serial             | N/A   |
|                               | PS2                | N/A   |
| <b>Internal Connector</b>     | USB                | 4 x USB 2.0   |
|                               | LVDS/<br>inverter  | 1 (shared with eDP use jumper switch)   |
|                               | eDP                | 1   |
|                               | VGA                | N/A   |
|                               | Serial             | 2 x COM (RS-232/422/485), 2 x COM(RS-232)   |
|                               | SATA               | 2 x SATA3 (6.0Gb/s)   |
|                               | GPIO               | 4 x GPI, 4 x GPO  |
|                               | SATA PWR<br>Output | 1   |
|                               | Speaker<br>Header  | 1   |
|                               | TPM                | 1 x Onboard TPM 2.0 IC  |
| <b>Watchdog<br/>Timer</b>     | Output             | From super I/O to drag RESETCON#  |
|                               | Interval           | 256 Segments, 0,1,2...255 Sec   |
| <b>Power<br/>Requirements</b> | Input PWR          | 12V/19~28V 4-pin DC-in  |
|                               | Power On           | AT/ATX Supported<br>AT: Directly PWR on as Power input ready<br>ATX: Press Button to PWR on after Power input ready |
| <b>Environment</b>            | Operating<br>Temp  | 0°C – 60°C  |
|                               | Storage<br>Temp    | -40°C – 85°C  |



If you use 12V adapter, please be note that the power consumption of 12V voltage should be under 180W.

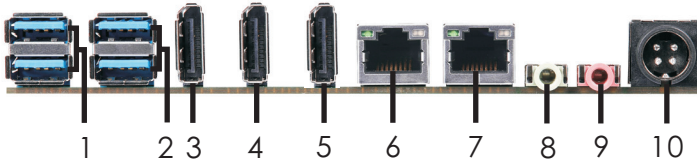
# 1.3 Motherboard Layout





- 
- 1 : USB2.0 Header (USB2\_4\_5)
  - 2 : USB2.0 Header (USB2\_6\_7)
  - 3 : System Panel Header
  - 4 : PWR\_BAT2
  - 5 : Buzzer
  - 6 : BLT\_PWM1
  - 7 : SATA Power Output Connector
  - 8 : Digital Input / Output Pin Header (JGPIO1)
  - 9 : Digital Input / Output Power Select (JGPIO\_PWR1)
  - 10 : Digital Input / Output Default Value Setting (JGPIO\_SET1)
  - 11 : COM Port Headers (COM1, 2, 3, 4)
  - 12 : COM Port PWR Setting Jumpers (SET\_CM1, 2, 3, 4)
  - 13 : Backlight Power Select (LCD\_BLT\_VCC) (BKT\_PWR1)
  - 14 : Backlight Power Connector (BLT\_PWR1)
  - 15 : BL1
  - 16\* : LVDS Panel Connector
    - \* eDP Connector (on the Backside of PCB)
  - 17 : LVDS Switch (LVDS\_SWITCH1)
  - 18 : BL2
  - 19 : ATX/AT Mode Jumper (SIO\_AT1)
  - 20 : Panel Power Select (LCD\_VCC) (PNL\_PWR1)
  - 21 : Backlight Volume Control (BLT\_VOL1)
  - 22 : Chassis Intrusion Header (CI2)
  - 23 : Chassis Intrusion Header (CI1)
  - 24 : Clear CMOS Headers (CLRMOS1, CLRMOS2)
  - 25 : 4-pin UPS Module Power Input Connector (Input +12V & +19V~+28V)
  - 26 : 3W Audio AMP Output Wafer
  - 27 : ATX Power Connector (Input +12V & +19V~+28V)
  - 28 : 2-pin UPS Module Power Input Connector
  - 29 : Front Panel Audio Header
  - 30 : SPDIF Header
  - 31 : CPU FAN Connector (+12V)
  - 32 : Chassis FAN Connector (+12V)
  - 33 : SATA3 Connectors (SATA3\_1, SATA3\_2)
  - 34 : LPC Header

## 1.4 I/O Panel

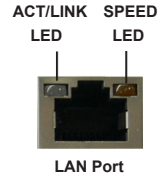


- |   |                          |    |                        |
|---|--------------------------|----|------------------------|
| 1 | USB 3.0 Ports (USB3_0_1) | 6  | LAN RJ-45 Port (LAN1)* |
| 2 | USB 3.0 Ports (USB3_2_3) | 7  | LAN RJ-45 Port (LAN2)* |
| 3 | DisplayPort (DP1)        | 8  | Line out (Lime)        |
| 4 | DisplayPort (DP2)        | 9  | Microphone (Pink)      |
| 5 | DisplayPort (DP3)        | 10 | DC Jack (DC_JACK1)**   |

\* 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 |               | SPEED LED |                    |
|-------------------|---------------|-----------|--------------------|
| Status            | Description   | Status    | Description        |
| Off               | No Link       | Off       | 10Mbps connection  |
| Blinking          | Data Activity | Yellow    | 100Mbps connection |
| On                | Link          | Green     | 1Gbps connection   |



\*\* Please refer to the table below for the DC jack pin definition.

|     |             |     |             |
|-----|-------------|-----|-------------|
|     |             |     |             |
| PIN | Signal Name | PIN | Signal Name |
| 1   | Power       | 2   | Power       |
| 3   | GND         | 4   | GND         |

---

## Chapter 2: Installation

This is a Mini-ITX form factor (6.7" x 6.7") motherboard. 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.



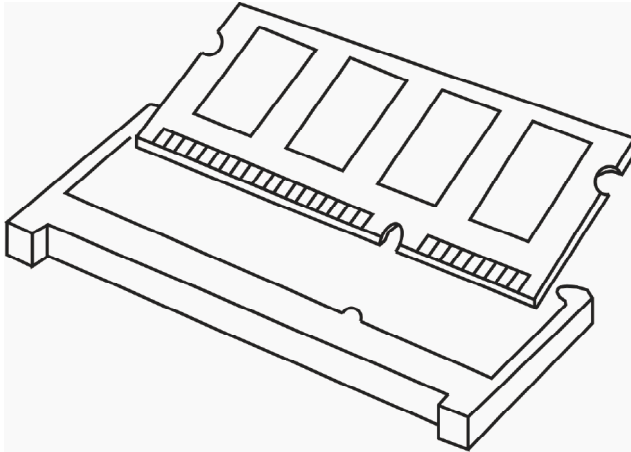
Before you install or remove any component, ensure that the power is switched off or the power cord is detached from the power supply. Failure to do so may cause severe damage to the motherboard, peripherals, and/or components.

---

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

**IMB-1213** provides two 260-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

There is 1 PCI Express slot, 1 mini-PCIe slot and 2 M.2 sockets on this motherboard.

**PCIe slot:** PCIe1 (PCIe x16 slot) is used for PCI Express x16 lane width cards.

**Mini-PCIe slot:**

MINI\_PCIE1 (mini-PCIe slot; half/full size) is used for PCI Express mini cards.

**M.2 sockets:** 1 x M.2 (Key E, 2230) with PCIe x1, CNVI and USB 2.0 for Wireless.

1 x M.2 (Key M, 2242/2260/2280) (on the Backside of PCB) with PCIe x4 and SATA3 for SSD.

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

| Pin | Signal      | Signal         | Pin |
|-----|-------------|----------------|-----|
| 1   | GND         | +3.3V          | 1   |
| 3   | USB_D+      | +3.3V          | 3   |
| 5   | USB_D-      | NA             | 5   |
| 7   | GND         | NA             | 7   |
| 9   | CNV_WB_D1-  | CNV_RP_RESET   | 9   |
| 11  | CNV_WB_D1+  | NA             | 11  |
| 13  | GND         | MODERN_CHARGE  | 13  |
| 15  | CNV_WB_D0-  | NA             | 15  |
| 17  | CNV_WB_D0+  | GND            | 17  |
| 19  | GND         | NA             | 19  |
| 21  | CNV_WB_CLK- | CNV_BRI_RSP    | 21  |
| 23  | CNV_WB_CLK+ |                | 23  |
| 25  |             |                | 25  |
| 27  |             |                | 27  |
| 29  |             |                | 29  |
| 31  |             |                | 31  |
| 33  | GND         | CNV_BIG_OT     | 33  |
| 35  | PETp        | CNV_RG_RSP     | 35  |
| 37  | PETb        | CNV_BRI_OT     | 37  |
| 39  | GND         | NA             | 39  |
| 41  | PERp        | NA             | 41  |
| 43  | PERb        | NA             | 43  |
| 45  | GND         | NA             | 45  |
| 47  | PEFLp       | NA             | 47  |
| 49  | PEFLb       | NA             | 49  |
| 51  | GND         | SUSCL          | 51  |
| 53  | CLKREQ      | PERSTOR        | 53  |
| 55  | WAKE#       | W_DISABLE#     | 55  |
| 57  | GND         | W_DISABLE#     | 57  |
| 59  | CNV_WT_D1-  | SMB_DATA       | 59  |
| 61  | CNV_WT_D1+  | SMB_CLK        | 61  |
| 63  | GND         | NA             | 63  |
| 65  | CNV_WT_D0-  | CLKIN_XTAL_LEP | 65  |
| 67  | CNV_WT_D0+  | NA             | 67  |
| 69  | GND         | NA             | 69  |
| 71  | CNV_WT_CLK- | NA             | 71  |
| 73  | CNV_WT_CLK+ | +3.3V          | 73  |
| 75  | GND         | +3.3V          | 75  |

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

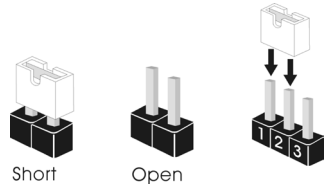
| Pin | Signal        | Signal   | Pin |
|-----|---------------|----------|-----|
| 1   | GND           | +3.3V    | 1   |
| 3   | GND           | +3.3V    | 3   |
| 5   | PERA3         | NA       | 5   |
| 7   | PERB3         | NA       | 7   |
| 9   | GND           | sata_LED | 9   |
| 11  | PETA3         | +3.3V    | 11  |
| 13  | PETB3         | +3.3V    | 13  |
| 15  | GND           | +3.3V    | 15  |
| 17  | PERA2         | +3.3V    | 17  |
| 19  | PERB2         | NA       | 19  |
| 21  | GND           | NA       | 21  |
| 23  | PETA2         | NA       | 23  |
| 25  | PETB2         | NA       | 25  |
| 27  | GND           | NA       | 27  |
| 29  | PERA1         | NA       | 29  |
| 31  | PERB1         | NA       | 31  |
| 33  | GND           | NA       | 33  |
| 35  | PETA1         | NA       | 35  |
| 37  | PETB1         | DRVCP    | 37  |
| 39  | GND           | SMB_CLK  | 39  |
| 41  | PERD/SATA-B+  | SMB_DATA | 41  |
| 43  | PERD/SATA-B-  | NA       | 43  |
| 45  | GND           | NA       | 45  |
| 47  | PETA0/SATA-A+ | NA       | 47  |
| 49  | PETB0/SATA-A- | PERST#   | 49  |
| 51  | GND           | CLKREQ#  | 51  |
| 53  | PERCLK        | WAKE#    | 53  |
| 55  | PERCLB        | NA       | 55  |
| 57  | GND           | NA       | 57  |
| 59  | NA            | NA       | 59  |
| 61  | PERET         | +3.3V    | 61  |
| 63  | GND           | +3.3V    | 63  |
| 65  | GND           | +3.3V    | 65  |
| 67  | GND           | +3.3V    | 67  |



## Installing an expansion card

- Step 1. Before installing the expansion card, please make sure that the power supply is switched off or the power cord is unplugged. Please read the documentation of the expansion card and make necessary hardware settings for the card before you start the installation.
- Step 2. Remove the system unit cover (if your motherboard is already installed in a chassis).
- Step 3. Remove the bracket facing the slot that you intend to use. Keep the screws for later use.
- Step 4. Align the card connector with the slot and press firmly until the card is completely seated on the slot.
- Step 5. Fasten the card to the chassis with screws.
- Step 6. Replace the system cover.


## 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.




| Jumper   | Setting   | Description                                   |
|--|---|---|
| Clear CMOS Jumpers<br>(3-pin CLRMOS1)<br>(see p.8, No. 24) | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p><b>1_2</b></p>  <p>Default</p> </div> <div style="text-align: center;"> <p><b>2_3</b></p>  <p>Clear CMOS</p> </div> </div> | CLRMOS1 :<br>1-2 : Normal<br>2-3 : Clear CMOS |

**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.

|                                      |   |   |
|--------------------------------------|---|---|
| (2-pin CLRMOS2)<br>(see p.8, No. 24) |  | CLRMOS2 :<br>Open : Normal<br>Short : Auto Clear CMOS (Power Off) |
|--------------------------------------|---|---|

|   |   |                         |
|---|---|-------------------------|
| Digital Input / Output Power Select<br>(3-pin JGPIO_PWR1)<br>(see p.8, No. 9) |  | 1-2 : +12V<br>2-3 : +5V |
|---|---|-------------------------|

|   |   |   |
|---|---|---|
| Digital Input / Output Default Value Setting<br>(3-pin JGPIO_SET1)<br>(see p.8, No. 10) |  | 1-2 : Pull-High (+3V)<br>2-3 : Pull-Low |
|---|---|---|

---

### Backlight Power Select (LCD\_BLT\_VCC)

(5-pin BKT\_PWR1)

(see p.8, No. 13)



1-2 : LCD\_BLT\_VCC : +5V

2-3 : LCD\_BLT\_VCC : +12V

4-5 : LCD\_BLT\_VCC : DC\_IN

---

### COM Port Pin9 PWR Setting Jumpers

(3-pin SET\_CM1, 2, 3, 4)

(see p.8, No. 12)



1-2 : +5V

2-3 : +12V

---

### BL1, BL2

(2-pin BL1)

(see p.8 No. 15)



Open : Protect LCD\_BLT\_VCC

Short : No Protect LCD\_BLT\_VCC

(2-pin BL2)

(see p.8 No. 18)



Open : Protect LCD\_VCC

Short : No Protect LCD\_VCC

---

### Panel Power Select (LCD\_VCC)

(5-pin PNL\_PWR1)

(see p.8, No. 20)



1-2 : LCD\_VCC : +3V

2-3 : LCD\_VCC : +5V

4-5 : LCD\_VCC : +12V

---

### PWR\_BAT2

(2-pin PWR\_BAT2)

(see p.8, No. 4)



Open : Normal

Close : Charge Battery

---

### BLT\_PWM1

(3-pin BLT\_PWM1)

(see p.8, No. 6)



1-2 : eDP

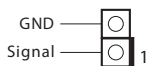
2-3 : LVDS

---

### Chassis Intrusion Headers

(2-pin CI1: see p.8, No. 23)

(2-pin CI2: see p.8, No. 22)



This motherboard supports

CASE OPEN detection feature that detects if the chassis cover has been removed. This feature requires a chassis with chassis intrusion detection design.

CI1 :

Close : Active Case Open

Open : Normal

CI2 :

Close : Normal

Open : Active Case Open

---

**ATX/AT Mode Jumper**

(2-pin SIO\_AT1)

(see p.8, No. 19)



1

Open : ATX Mode

Close : AT Mode

---

**LVDS Switch**

(2-pin LVDS\_SWITCH1)

(see p.8, No. 17)



1

Open : LVDS

Close : eDP

---



---

## 2.6 Onboard Headers and Connectors



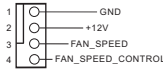
Onboard headers and connectors are NOT jumpers. Do NOT place jumper caps over these headers and connectors. Placing jumper caps over the headers and connectors will cause permanent damage of the motherboard!

---

### CPU Fan Connector

(4-pin CPU\_FAN1)

(see p.8 No. 31)



Please connect the CPU fan cable to the connector and match the black wire to the ground pin.



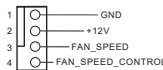
Though this motherboard provides 4-Pin CPU fan (Quiet Fan) support, the 3-Pin CPU fan still can work successfully even without the fan speed control function. If you plan to connect the 3-Pin CPU fan to the CPU fan connector on this motherboard, please connect it to Pin 1-3.

---

### Chassis Fan Connector

(4-pin CHA\_FAN1)

(see p.8 No. 32)



Please connect the chassis fan cable to the connector and match the black wire to the ground pin.



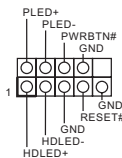
Though this motherboard provides 4-Pin chassis fan (Quiet Fan) support, the 3-Pin chassis fan still can work successfully even without the fan speed control function. If you plan to connect the 3-Pin chassis fan to the chassis fan connector on this motherboard, please connect it to Pin 1-3.

---

### System Panel Header

(9-pin PANEL1)

(see p.8, No. 3)



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/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 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 assignments are matched correctly.

**COM Port Headers**

(10-pin COM1, 2, 3, 4: see p.8, No. 11)



| PIN | Signal Name | PIN | Signal Name | PIN | Signal Name | PIN | Signal Name | PIN | Signal Name |
|-----|-------------|-----|-------------|-----|-------------|-----|-------------|-----|-------------|
| 2   | RRXD        | 4   | DDTR#       | 6   | DDSR#       | 8   | CCTS#       | 10  | NC          |
| 1   | DDCD#       | 3   | TTXD        | 5   | GND         | 7   | RRTS#       | 9   | PWR         |

\* This motherboard supports RS232/422/485 on COM3, 4 ports. Please refer to below table for the pin definition. In addition, COM3, 4 port (RS232/422/485) can be adjusted in BIOS setup utility > Advanced Screen > Super IO Configuration. You may refer to page 31 for details.

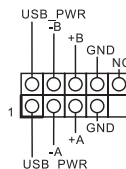
**COM3, 4 Ports Pin Definition**

| PIN | RS232 | RS422 | RS485 |
|-----|-------|-------|-------|
| 1   | DCD   | TX-   | RTX-  |
| 2   | RXD   | RX+   | N/A   |
| 3   | TXD   | TX+   | RTX+  |
| 4   | DTR   | RX-   | N/A   |
| 5   | GND   | GND   | GND   |
| 6   | DSR   | N/A   | N/A   |
| 7   | RTS   | N/A   | N/A   |
| 8   | CTS   | N/A   | N/A   |
| 9   | PWR   | PWR   | PWR   |

**USB 2.0 Headers**

(9-pin USB2\_4\_5: see p.8, No. 1)

(9-pin USB2\_6\_7: see p.8, No. 2)



There are two headers on this motherboard. Each USB 2.0 header can support two ports.

### SATA3 Connectors

(SATA3\_1~2: see p.8, No. 33)

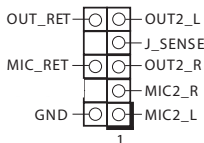


These two Serial ATA3 (SATA3) connectors support SATA data cables for internal storage devices. The current SATA3 interface allows up to 6.0 Gb/s data transfer rate.

### Front Panel Audio Header

(9-pin HD\_AUDIO1)

(see p.8 No. 29)



This is an interface for front panel audio cable that allows convenient connection and control of audio devices.



1. High Definition Audio supports Jack Sensing, but the panel wire on the chassis must support HDA to function correctly. Please follow the instruction in our manual and chassis manual to install your system.
2. If you use AC'97 audio panel, please install it to the front panel audio header as below:
  - A. Connect Mic\_IN (MIC) to MIC2\_L.
  - B. Connect Audio\_R (RIN) to OUT2\_R and Audio\_L (LIN) to OUT2\_L.
  - C. Connect Ground (GND) to Ground (GND).
  - D. MIC\_RET and OUT\_RET are for HD audio panel only. You don't need to connect them for AC'97 audio panel.
  - E. To activate the front mic.  
Go to the "FrontMic" Tab in the Realtek Control panel. Adjust "Recording Volume".

### 3W Audio AMP Output Wafer

(4-pin SPEAKER1)

(see p.8 No. 26)

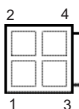


| PIN | Signal Name |
|-----|-------------|
| 4   | OUTRN       |
| 3   | OUTRP       |
| 2   | OUTLP       |
| 1   | OUTLN       |

### ATX Power Connector (Input +12V & +19V~+28V)

(4-pin DC\_4PIN1)

(see p.8 No. 27)



Please connect a DC power supply to this connector.  
1-2 : GND  
3-4 : DC Input

### 4-pin UPS Module Power Input Connector

(Input +12V & +19V~+28V)

(4-pin FROM\_UPS1)

(see p.8 No. 25)

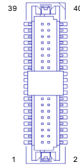


Please connect a UPS module to this connector.

## LVDS Connector

(40-pin LVDS1)

(see p.8 No. 16)



## \*eDP Connector (on the Backside of PCB)

(40-pin EDP1)



| PIN | Signal Name   |
|-----|---------------|
| 1   | NA            |
| 2   | GND           |
| 3   | eDP_TX#3_CON  |
| 4   | eDP_TX3_CON   |
| 5   | GND           |
| 6   | eDP_TX#2_CON  |
| 7   | eDP_TX2_CON   |
| 8   | GND           |
| 9   | eDP_TX#1_CON  |
| 10  | eDP_TX1_CON   |
| 11  | GND           |
| 12  | eDP_TX#0_CON  |
| 13  | eDP_TX0_CON   |
| 14  | GND           |
| 15  | eDP_AUX_CON   |
| 16  | eDP_AUX#_CON  |
| 17  | GND           |
| 18  | LCD_VCC       |
| 19  | LCD_VCC       |
| 20  | LCD_VCC       |
| 21  | LCD_VCC       |
| 22  | NA            |
| 23  | GND           |
| 24  | GND           |
| 25  | GND           |
| 26  | GND           |
| 27  | eDP_HPD_CON   |
| 28  | GND           |
| 29  | GND           |
| 30  | GND           |
| 31  | GND           |
| 32  | CON_LBKLT_EN  |
| 33  | CON_LBKLT_CTL |
| 34  | SMB_DATA      |
| 35  | SMB_CLK       |
| 36  | LCD_BLT_VCC   |
| 37  | LCD_BLT_VCC   |
| 38  | LCD_BLT_VCC   |
| 39  | LCD_BLT_VCC   |
| 40  | NA            |

| PIN | Signal Name   | PIN | Signal Name          |
|-----|---------------|-----|----------------------|
| 39  | LCD_BLT_VCC   | 40  | LCD_BLT_VCC          |
| 37  | CON_LBKLT_CTL | 38  | LCD_BLT_VCC          |
| 35  | GND           | 36  | CON_LBKLT_EN         |
| 33  | LVDS_B_CLK#   | 34  | LVDS_B_CLK           |
| 31  | LVDS_B_DATA3  | 32  | GND                  |
| 29  | DPLVDD_EN     | 30  | LVDS_B_DATA3#        |
| 27  | LVDS_B_DATA2# | 28  | LVDS_B_DATA2         |
| 25  | LVDS_B_DATA1  | 26  | GND                  |
| 23  | GND           | 24  | LVDS_B_DATA1#        |
| 21  | LVDS_B_DATA0# | 22  | LVDS_B_DATA0         |
| 19  | LVDS_A_CLK    | 20  | GND                  |
| 17  | GND           | 18  | LVDS_A_CLK#          |
| 15  | LVDS_A_DATA3# | 16  | LVDS_A_DATA3         |
| 13  | LVDS_A_DATA2  | 14  | GND                  |
| 11  | GND           | 12  | LVDS_A_DATA2#        |
| 9   | LVDS_A_DATA1# | 10  | LVDS_A_DATA1         |
| 7   | LVDS_A_DATA0  | 8   | PD (Panel Detection) |
| 5   | LDDC_DATA     | 6   | LVDS_A_DATA0#        |
| 3   | +3.3V         | 4   | LDDC_CLK             |
| 1   | LCD_VCC       | 2   | LCD_VCC              |

\* PD (Panel Detection): Connect this pin to LVDS Panel's Ground pin to detect Panel detection.

## Buzzer

(2-pin BUZZ2)

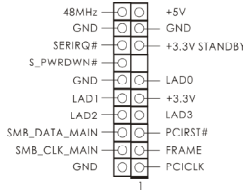
(see p.8 No. 5)



### LPC Header

(19-pin LPC1)

(see p.8, No. 34)



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.

### Backlight Power Connector

(6-pin BLT\_PWR1)

(see p.8 No. 14)



| PIN | Signal Name |
|-----|-------------|
| 1   | GND         |
| 2   | GND         |
| 3   | BL CTL      |
| 4   | BL EN       |
| 5   | LCD_BLT_VCC |
| 6   | LCD_BLT_VCC |

### Backlight Volume Control

(7-pin BLT\_VOL1)

(see p.8 No. 21)

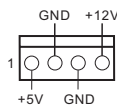


| PIN | Signal Name |
|-----|-------------|
| 1   | GPIO_VOL_UP |
| 2   | GPIO_VOL_DW |
| 3   | PWRDN       |
| 4   | LVDS1_BLP   |
| 5   | LVDS1_BLDW  |
| 6   | GND         |
| 7   | GND         |

### SATA Power Connector

(SATA\_PWR1)

(see p.8 No. 7)



Please connect a SATA power cable to this connector.

### SPDIF Header

(3-pin SPDIF1)

(see p.8, No. 30)



SPDIF header, providing SPDIF audio output to HDMI VGA card, allows the system to connect HDMI Digital TV/ projector/LCD devices. Please connect the SPDIF connector of HDMI VGA card to this header.

---

### UPS Module Power Input Connector

(2-pin TO\_UPS1)

(see p.8 No. 28)



Pin1 : GND

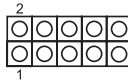
Pin2 : DC Input

---

### Digital Input / Output Pin Header

(10-pin JGPIO1)

(see p.8 No. 8)



| PIN | Signal Name | PIN | Signal Name | PIN | Signal Name | PIN | Signal Name | PIN | Signal Name |
|-----|-------------|-----|-------------|-----|-------------|-----|-------------|-----|-------------|
| 2   | SIO_GP20    | 4   | SIO_GP21    | 6   | SIO_GP22    | 8   | SIO_GP23    | 10  | GND         |
| 1   | SIO_GP24    | 3   | SIO_GP25    | 5   | SIO_GP26    | 7   | SIO_GP27    | 9   | JGPIO_PWR_  |

---

# 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:

|                    |   |
|--------------------|---|
| <b>Main</b>        | To set up the system time/date information                                  |
| <b>Advanced</b>    | To set up the advanced UEFI features  |
| <b>H/W Monitor</b> | To display current hardware status  |
| <b>Security</b>    | To set up the security features   |
| <b>Boot</b>        | To set up the default system device to locate and load the Operating System |
| <b>Exit</b>        | 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.

---

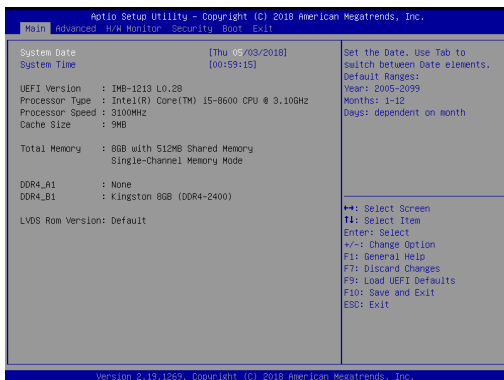
## 3.1.2 Navigation Keys

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.

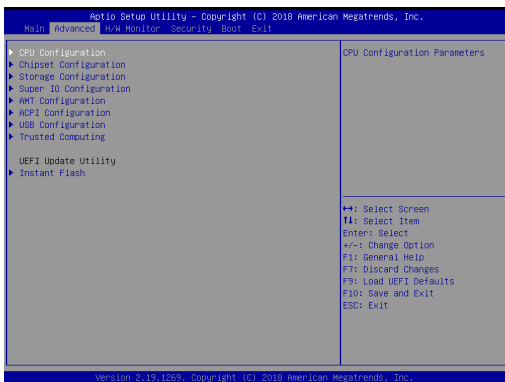




---

### 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, AMT 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

Intel Hyper Threading Technology allows multiple threads to run on each core, so that the overall performance on threaded software is improved.

#### 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® OS 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.

**Hardware Prefetcher**

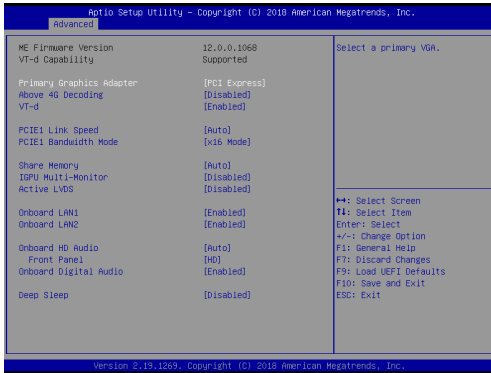
Use this item to turn on/off the MLC streamer prefetcher.

**Adjacent Cache Line Prefetch**

Use this item to turn on/off prefetching of adjacent cache lines.

---

## 3.3.2 Chipset Configuration



### Primary Graphics Adapter

This allows you to select [Onboard] or [PCI Express] as the boot graphic adapter priority. The default value is [PCI Express].

### Above 4G Decoding

Enable or disable 64bit capable Devices to be decoded in Above 4G Address Space (only if the system supports 64 bit PCI decoding).

### 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].

### PCIe1 Link Speed

Select the link speed for PCIe1.

### PCIe1 Bandwidth Mode

Select the bandwidth mode for PCIe1.

### Share Memory

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

### IGPU Multi-Monitor

Select disable to disable the integrated graphics when an external graphics card is installed. Select enable to keep the integrated graphics enabled at all times.

### Active LVDS

Use this to enable or disable the LVDS. The default value is [Disabled]. Set the item to [enable]. Then press <F10> to save the setting and restart the system. Now the default value of Active LVDS is changed to ENABLE (F9 load default is also set to ENABLE)

Change the setting from [Enable] to [Disable], and then press <F10> to save the setting and restart the system. Likewise, the default value of Active LVDS is changed to DISABLE (F9 load default is also set to DISABLE)

---

### Panel Type Selection

Use this to select panel type. This item appears when you enable Active LVDS.



The default values of Active LVDS and Panel Type Selection will be changed only when the users manually adjust them. They will keep at the default values no matter you clear CMOS, use Instant Flash or press <F9>.

### 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

Select [Auto], [Enabled] or [Disabled] for the onboard HD Audio feature. If you select [Auto], the onboard HD Audio will be disabled when PCI Sound Card is plugged.

### Front Panel

Select [HD] or [AC 97] for the onboard HD Audio Front Panel.

### Onboard Digital Audio

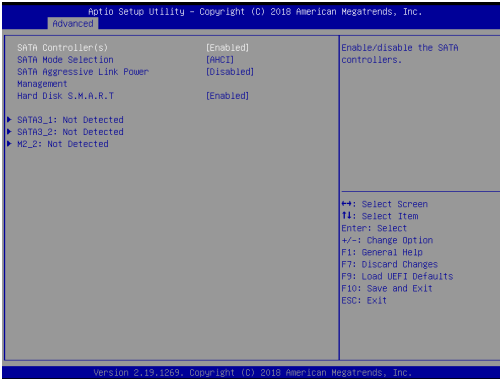
Enable or disable Onboard Digital Audio.

### 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].

---

### 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.

#### 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.

#### COM2 Configuration

Use this to set parameters of COM2.

#### COM3 Configuration

Use this to set parameters of COM3.

#### Type Select

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

#### COM4 Configuration

Use this to set parameters of COM4.

#### Type Select

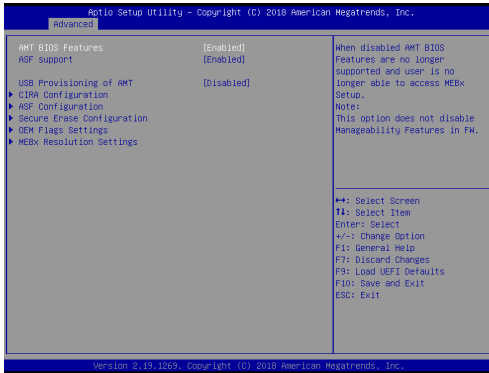
Use this to select COM3 port type: [RS232], [RS422] or [RS485].

#### WDT Timeout Reset

Use this to set the Watch Dog Timer.

---

### 3.3.5 AMT Configuration



#### AMT BIOS Features

Use this to enable or disable Intel(R) Active Management Technology BIOS Extension. The default is [Enabled].

#### ASF support

Use this to enable or disable Alert Specification Format. The default is [Enabled].

#### USB Provisioning of AMT

Use this to enable or disable AMT USB Provisioning. The default is [Disabled].

#### Secure Erase mode

Change Secure Erase module behavior: Simulated: Performs SE flow without erasing SSD. Real: Erase SSD.

#### Force Secure Erase

Use this to enable or disable Force Secure Erase on next boot. The default is [Disabled].

#### MEBx hotkey Pressed

Use this to enable or disable MEBx hotkey press. The default is [Disabled].

#### MEBx Selection Screen

Use this to enable or disable MEBx Selection Screen. The default is [Disabled].

#### Hide Un-configure ME Confirmation Prompt

Hide Un-Configure ME without password confirmation prompt. The default is [Disabled].

#### MEBx OEM Debug Menu Enable

Use this to enable or disable MEBx OEM Debug Menu. The default is [Disabled].

#### Un-Configure ME

Un-Configure ME without password. The default is [Disabled].

---



---

**WatchDog**

Use this to enable or disable AMT WatchDog Timer. The default is [Disabled].

**Activate Remote Assistance Process**

Trigger CIRA boot. The default is [Disabled].

**PET Progress**

User can enable or disable PET Events progress to receive PET events or not. The default is [Enabled].

**ASF Sensors Table**

Use this to enable or disable ASF Sensor Table. The default is [Disabled].

**Non-UI Mode Resolution**

Use this to set resolution for non-UI text mode.

**UI Mode Resolution**

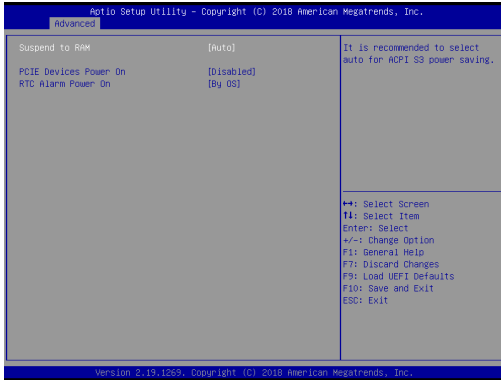
Use this to set resolution for UI text mode.

**Graphics Mode Resolution**

Use this to set resolution for graphics mode.

---

### 3.3.6 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.

#### PCIe Devices Power On

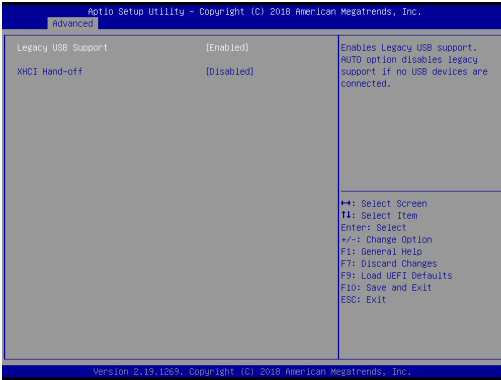
Use this item to enable or disable PCIe devices to turn on the system from the power-soft-off mode.

#### RTC Alarm Power On

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

---

### 3.3.7 USB Configuration



#### Legacy USB Support

Use this option to select legacy support for USB devices. There are two configuration options: [Enabled], and [UEFI Setup Only]. The default value is [Enabled]. Please refer to below descriptions for the details of these four options:

[Enabled] - Enables support for legacy USB.

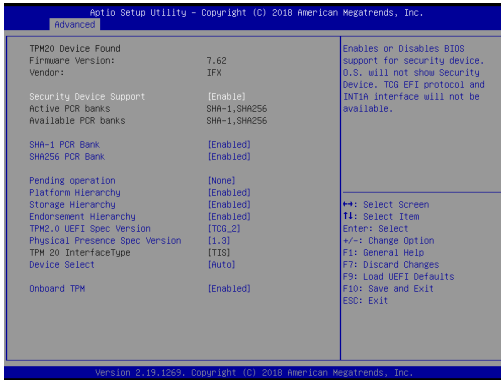
[UEFI Setup Only] - USB devices are allowed to use only under UEFI setup and Windows / Linux OS.

#### XHCI Hand-off

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

---

### 3.3.8 Trusted Computing



#### Security Device Support

Enable or disable BIOS support for security device.

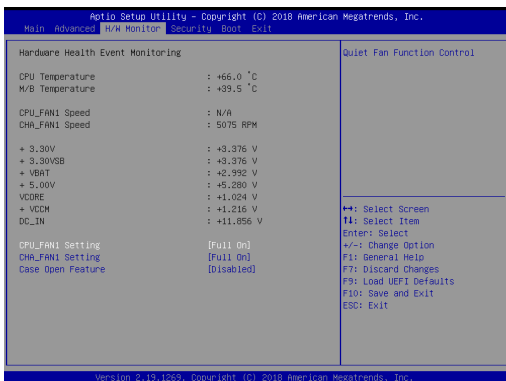
#### Onboard TPM

Use this to enable or disable onboard TPM. The default is [Enabled].

---

### 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\_FAN1 Setting

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

#### CHA\_FAN1 Setting

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

#### Case Open Feature

This allows you to enable or disable case open detection feature. The default is value [Disabled].

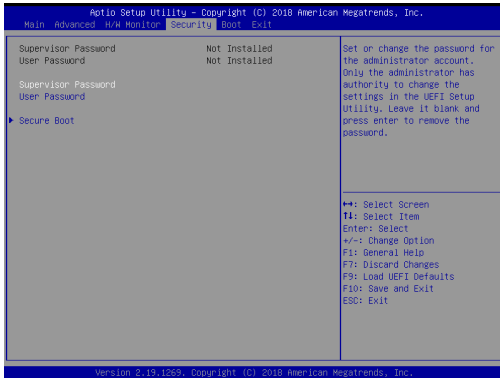
#### Clear Status

This option appears only when the case open has been detected. Use this option to keep or clear the record of previous chassis intrusion status.

---

## 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.

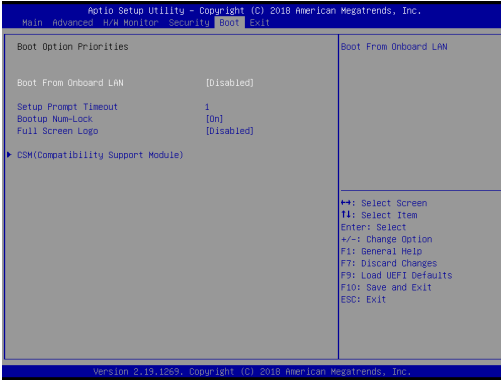
### Secure Boot

Use this item to enable or disable support for 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 [Disabled].

---

## CSM (Compatibility Support Module)



### CSM

Use this to enable or disable Compatibility Support Module. The default value is [Disabled].

### 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.



---

## 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. 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.