//SRock

SOM-P101

User Manual

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Chapter 1: Introduction

Thank you for purchasing ASRock **SOM-P101** 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 stepby-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 <u>http://www.asrock.com</u>

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 **SOM-P101** Motherboard (PICO-ITX (3.9-in x 2.8-in)) ASRock **SOM-P101** Driver CD ASRock **SOM-P101** Jumper Setting Instruction

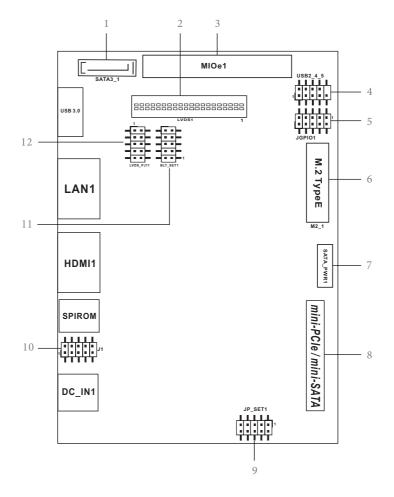
1.2 Specifications

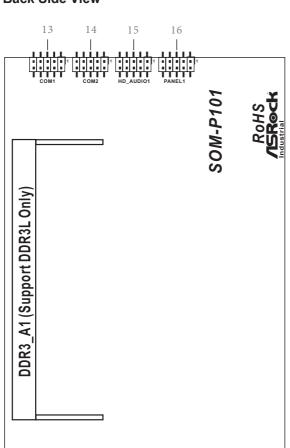
Form Factor	Dimensions	PICO-ITX (3.9-in x 2.8-in)					
	CPU	BGA1296 for Intel [®] Apollo Lake SoC					
Processor	Core Number	(By CPU, Max 4)					
System	Max Speed	(By CPU)					
Cystem	L2 Cache	(By CPU)					
	Chipset	(By CPU)					
	BIOS	UEFI					
	MIOe	HDMI or DP, 2 x USB3.0, 1 x USB2.0, 3 x PCIe x1, Line out, LPC bus, SMBus					
Expansion	Mini-PCle	1 (combo with mSATA, full size, Mini PCIe mode supports PCIe x1 and USB device)					
Slot	mSATA	1 (combo with Mini PCIe, full size, mSATA mode supports SATA and USB device)					
	M.2	1 x M.2 Slot (Key E), supports type 2230 for WiFi + BT Module					
	Technology	DDR3L 1333/1600/1867 MHz					
Memory	Max.	8GB					
	Socket	1 x SO-DIMM					
	Controller	Intel [®] HD Graphics 505					
	VRAM	Shared Memory					
	VGA	No					
	DVI	No					
Graphics	LVDS	Supports max resolution up to 1920x1200@60Hz					
	HDMI	Supports max resolution up to 4096x2160@30Hz					
	DisplayPort	No					
	Multi Display	Yes (Dual Display, LVDS + HDMI)					
	Interface	10/100/1000 Mbps					
Ethernet	Controller	1 x Intel [®] I210IT					
	Connector	1 x RJ45					
SATA	Max Data Transfer Rate	SATA3 (6.0Gb/s)					

	VGA	0					
	DVI	0					
	HDMI	1					
	DisplayPort	0					
Rear I/O	Ethernet	1					
	USB	1 x USB 3.0 compatible with USB 2.0					
	Audio	2 (Mic-in, Line-out)					
	Serial	0					
	PS/2	0					
	USB	2 x USB 2.0 (1 x 2.00 pitch header)					
	LVDS/	1/1					
	Inverter	1/1					
	eDP	0					
	VGA	0					
		2 x COM (COM1 supports RS-232/422/485,					
	Serial	COM2 supports RS232 only)					
	SATA	1					
Internal	mPCle	1 (combo with mSATA)					
Connector	Parallel	0					
	mSATA	1 (combo with mPCle)					
	IrDA	0					
	GPIO 8-bit	4 x GPI + 4 x GPO					
	SATA PWR	4					
	Output Con	1					
	Speaker	4					
	Header	1					
Watchdog	Output	Output from super I/O to drag RESETCON#					
Timer	Interval	256 Segments, 0,1,2255 Sec/Min					
	Input PWR	12V DC-in					
_		AT/ATX Supported					
Power		AT: Directly PWR on as power input ready					
Requirements	Power On	ATX: Press button to PWR on after power					
		input ready					
Environment	Temperature						

1.3 Motherboard Layout

Top Side View

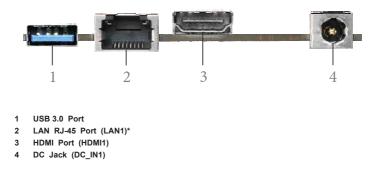




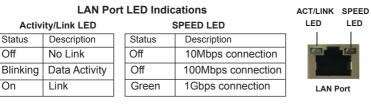
Back Side View

- 1 : SATA3 Connector (SATA3_1)
- 2 : LVDS Panel Connector
- 3 : MIOe1 Connector
- 4 : USB2.0 Connector (USB2_4_5)
- 5 : Digital Input / Output Pin Header (JGPIO1)
- 6 : M.2 TypeE with USB Connector
- 7 : SATA Power Output Connector
- 8 : mini-PCIe / mini-SATA Connector
- 9 : JP_SET1
- 10 : J1
- 11 : BLT_SET1
- 12 : LVDS_PJ1
- 13 : COM Port Header (RS232/422/485)
- 14 : COM Port Header (RS232)
- 15 : HD Audio Header
- 16 : System Panel Header

1.4 I/O Panel



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



Chapter 2: Installation

This is a PICO-ITX (3.9-in x 2.8-in) form factor 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.
- 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.

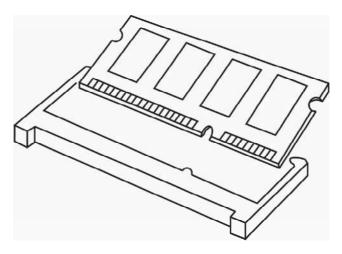


Before you install or remove any component, ensure that the power is switched off or the power cord is detached from the power supply. Failure to do so may cause severe damage to the motherboard, peripherals, and/or components.

2.3 Installation of Memory Module (SO-DIMM)

SOM-P101 provides one 204-pin DDR3 (Double Data Rate 3) SO-DIMM slot.

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



 \mathbf{A}

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.

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 and mini-PCle/mini-SATA Slots)

There is 1 M.2 slot and 1 mini-PCIe/mini-SATA slot on this motherboard.

M.2 slot:

M2_1 (Key-E M.2 slot) is used for type 2230 for WiFi + BT Module. mini-PCle/mini-SATA slot:

MINI_SATA1 (mini-PCIe/mini-SATA slot; full size) is used for PCI Express mini cards or mSATA cards.

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.

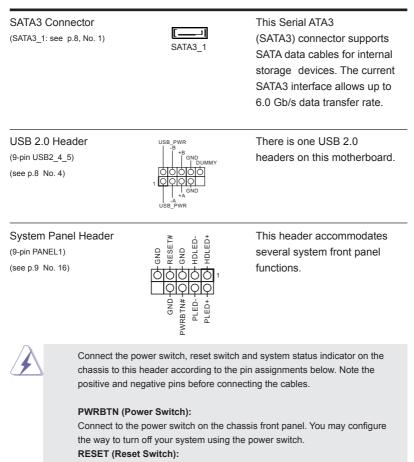
2.5 Onboard Headers and Connectors



1. 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!

2. Jumper Guide link: <u>http://asrock.pc.cdn.bitgravity.com/Manual/</u> Jumper/SOM-P101.pdf

Item 13 \sim 16: The pin definition of these headers depend on each M/B manufacturer, please double-check the pin definition before testing.



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.





COM Port Header (RS232) (9-pin COM2) (see p.9 No. 14)



COM Port Header (RS232/422/485) (9-pin COM1) (see p.9 No. 13)



	RS232	RS422	RS485
PIN-1	DCD#_1	TX-	DATA-
PIN-2	RXD_1	TX+	DATA+
PIN-3	TXD_1	RX+	Х
PIN-4	DTR#_1	RX-	Х

Front Panel Audio Header

(9-pin HD_AUDIO1)

(see p.9 No. 15)

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



- 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".

LVDS Connector

(40-pin LVDS1)

(see p.8 No. 2)

K_	д	h	n	n	h	H	H	h	 Ħ	h	H	'n	Ħ	H	М	Ц	
51	÷		ł	ł	ż	•	:	•	Ŀ	1	1	2	•	:	•	÷	Ъ
21			2	4	2	1	2		Ľ	1	2	1	1	1	1	1	,th
-	н	Н	н	Н		H	Н	Н		Н	Н	H	В	н	Н	н	

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

Digital Input/Output Pin Header

(10-pin JGPIO1)

(see p.8 No. 5)

1	9				1
	Ο	Ο	Ο	0	Ο
	Ο	Ο	Ο	0	Ο
	10			-	2

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

JP_SET1

(10-pin JP_SET1) (see p.9 No. 9)



PIN	Signal Name	PIN	Signal Name	PIN	Signal Name	PIN	Signal Name	PIN	Signal Name
9	JGPIO_VSET	7	JGPIO_ VSET	5	RTC RST#	3	RTCRST2#	1	AT/ATX mode
10	+3V	8	GND	6	GND	4	GND	2	SIO_PSIN#

J1

(10-pin J1) (see p.9 No. 10)



PIN	Signal Name	PIN	Signal Name	PIN	Signal Name	PIN	Signal Name	PIN	Signal Name
2	CASE OPEN#	4	GPIO_ TEST#	6	GND	8	MPCIE/ MSATA SEL	10	SOC SPKR
1	GND	3	MIPI_SDA	5	MIPI_SCL	7	GND	9	+5V

BLT_SET1

(10-pin BLT_SET1) (see p.9 No. 11)

10	_	_	9
10	Ο	Ο	9
	Ο	Ο	
	Ο	Ο	
	0	Ο	
2	0	Ο	1
2	00	00	1

PIN	Signal Name	PIN	Signal Name
10	GND	9	GND
8	Х	7	BLT_CTL
6	PWRDN	5	BLT_EN
4	BLUP	3	BLT VCC
2	BUDN	1	BLI_VCC

LVDS_	PJ	1
(10-pin L	VDS	_PJ1)
(see p.9	No.	12)

1	00000	0000	2
9	Õ	Õ	10

PIN	Signal Name	PIN	Signal Name
1	+3V	2	PI VDD
3	+5V	4	PLVDD
5	+5V	6	
7	+12V	8	BLTVCC
9	+12V	10	

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 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:

8		
To set up the system time/date information		
To set up the advanced UEFI features		
To display current hardware status		
To set up the security features		
To set up the default system device to locate and load the		
Operating System		
To exit the current screen or the UEFI SETUP UTILITY		
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 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></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

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 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.

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.

Enhanced Halt State (C1E)

Enable Enhanced Halt State (C1E) for lower power consumption.

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.

3.3.2 Chipset Configuration



DRAM Frequency

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

Share Memory

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

Active LFP

Select [Enabled] or [Disabled]. The default value is [Enabled].

Panel Type Selection

Use this to select panel type.

Primary IGFX Boot Display

Use this to select primary internal graphics boot display. The default value is [VBIOS Default].

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.

Onboard LAN 1

This allows you to enable or disable the Onboard LAN 1 feature.

PCIE1 Link Speed

Select the link speed for PCIE1.

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. Configuration options: [IDE Mode] and [AHCI 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 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

Aptio Setup L Advanced	Jtility – Copyright (C) 2017 Am	erican Megatrends, Inc.
Serial Porti Type Select Serial Port2	(Enabled) (RS232) (Enabled)	Enable or Disable COM1 IO=3F8h; IRQ=4;
WDT Timeout Reset	(Disabled)	
		++: Select Screen Fil select Item Enter: Select +/-: Change Option fil: General Helpes fil concert Phanges fil concert Phanges fil concert Phanges Fil concert Phanges Fil concert Phanges Fil concerts fil concerts f
Unaction 0.42	3,1263, Copyright (C) 2017 Amer	

Serial Port1

Use this to enable or disable COM1.

Type Select

Use this to set parameters of COM1. Select COM1 port type: [RS232], [RS422] or [RS485].

Serial Port2

Use this to set parameters of COM2.

WDT Timeout Reset

This allows users to enable/disable the Watch Dog Timer timeout to reset system. The default value is [Disabled].

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.

ACPI HPET Table

Use this item to enable or disable ACPI HPET Table. The default value is [Enabled]. Please set this option to [Enabled] if you plan to use this motherboard to submit Windows[®] certification.

PCIE Devices Power On

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

Ring-In Power On

Allow the system to be waked up by onboard COM port modem Ring-In signals.

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

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

[Enabled] - Enables support for legacy USB.

[Auto] - Enables legacy support if USB devices are connected.

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

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.

Aptio Setup Utility - Main Advanced H/H Moniton Secur	Copyright (C) 2017 American ity Boot Exit	Megatrends, Inc.
Hardware Health Event Monitoring		Enable or disable the feature of Case Open.
CPU Temperature M/B Temperature	: +41.0 °C : +38.0 °C	or case open.
VCORE + 3.30V + 5.00V + VIN Case Doen Feature	: +0.736 V : +3.328 V : +5.280 V : +12.008 V [Disabled]	
		++: Select Screen 11: Select Item Enter: Select +/-: Change Option F7: Olscard Changes F7: Loguren, Heip F7: Sucdu UFF Defaults F10: Save and Exit ESC: Exit
Version 2.18.1263. C	opyright (C) 2017 American M	legatrends, Inc.

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

Enable to support Windows Secure Boot.

Intel(R) Platform Trust Technology

Enable/disable Intel PTT in ME. Disable this option to use discrete TPM Module.

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.

Boot Beep

Select whether the Boot Beep should be turned on or off when the system boots up. Please note that a buzzer is needed.

Full Screen Logo

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

CSM (Compatibility Support Module)



CSM

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

Launch PXE OpROM Policy

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

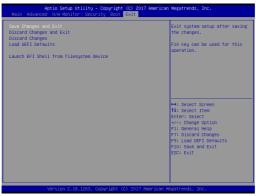
Launch Storage OpROM Policy

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

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 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 to 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 <u>http://www.asrock.com;</u> or you may contact your dealer for further information.