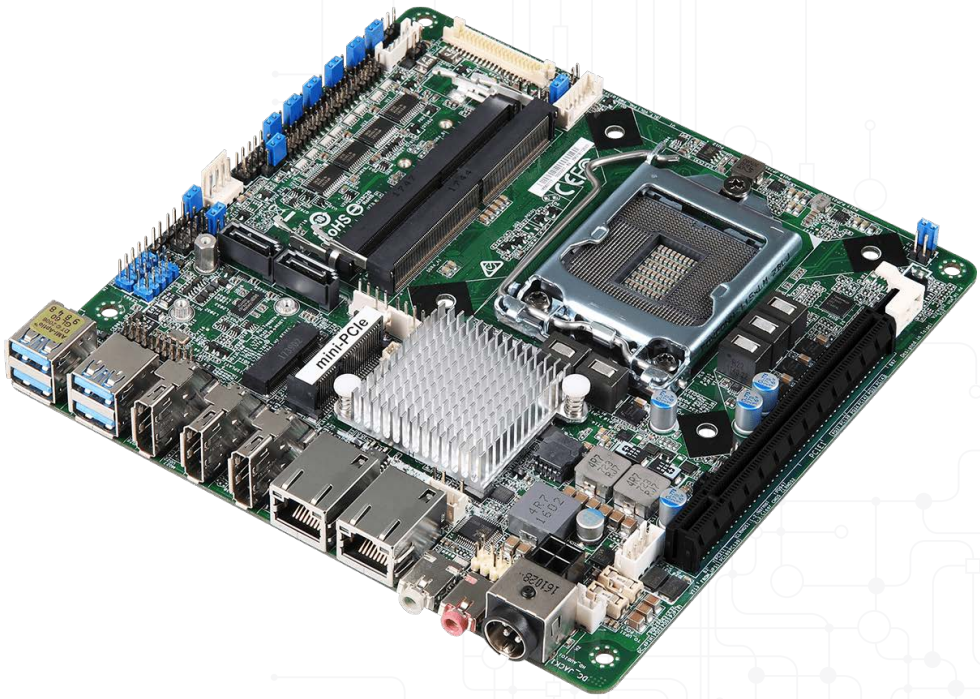
INS8365A



- Supports Intel® 9/8th Gen (Coffee lake-S) Core. Processors
- Supports Dual Channel DDR4 SODIMM 2400/2666, up to 64GB
- 3 x Displayport, 1 x eDP, 1 x Dual Channel 24-bit LVDS
- 4 x USB 3.0, 4 x USB 2.0, 2 x SATA, 4 x COM
- 1 x PCIe x16, 1 x mini-PCIe, 2 x M.2 Expansion Slot
- 2 x Intel Gigabit Ethernet
- 12V/19~28V DC-in
- TPM2.0 on board
- Extended operating temp. -20~+70°C

System	
Processor	LGA1151 for Intel® 9/8th Gen. Core™ i7 /i5 / i3 processors, TDP 65W max.)
PCH	Q370
Memory Type	2 x SO-DIMM up to DDR4 64GB
Watchdog	1-255 sec
TPM2.0	On board
M.2 Slot mini PCIe	1 x 2230 (PCIex1, USB 2.0) 1 x 2242/2260/2280 (PCIex4, SATA3) 1 x (PCIex1, USB 2.0)
Expansion Slot	1 x PCIex16
Display	
Chipset	Intel® HD Graphics Gen9 Engines with Low power 16 execution unit, supports DX11.3/12, OpenGL 4.3/4.4/4.5and OpenCL1.2/2.0/2.1
DisplayPort	Resolution up to 4096x2304@60Hz
eDP	Resolution up to 4096x2304@60Hz
LVDS	Dual Channel 24-bit, max resolution up to 1920x1200@60Hz
Ethernet	
Chipset	1 x Intel I210-AT, 1 x I219-LM GbE
Power Requirements	
Power Type	12V/19~28V DC-in
Audio	
Codec	Realtek ALC887

Rear I/O	
DisplayPort	3
Ethernet	2 x RJ45
USB	4 x USB 3.0
Audio	1 x Line-Out, 1 x MIC-In
DC-IN	1
Internal I/O	
SATA	2 x SATAIII (6Gb/s)
COM	2 x RS232, 2 x RS232/422/485
eDP	1
LVDS	1
USB	4 x USB2.0
GPIO	4 x GPI, 4 x GPO
Mechanical and Environment	
Form Factor	Mini-ITX
Power Type	12V/19~28V DC-in
Dimension	170mm x 170mm
Operating Temp.	-20 to 70°C
Storage Temp.	-40 to 85°C
Relative Humidity	10% to 90%, non-condensing

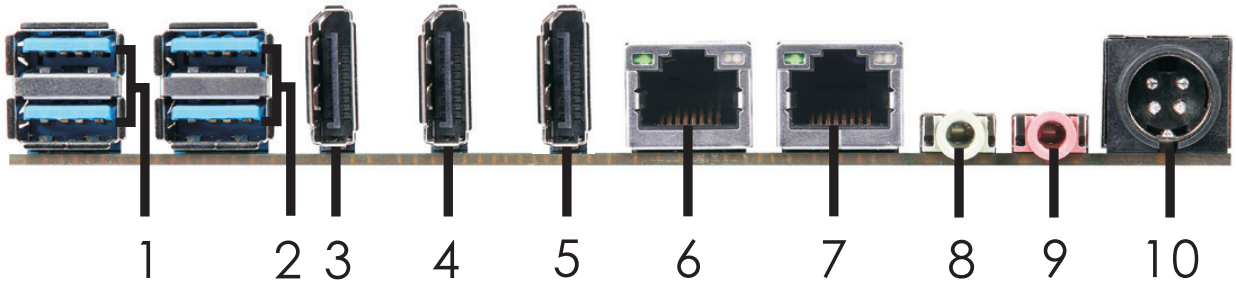
Ordering information

INS8365A

Intel® Coffee lake-S LGA1151 with Q370 chipset, 3 x DP/ 1 x eDP/ 1 x LVDS, PCIe X16, 2 M.2 Slot, 2 Gigabit LAN, 2 SATA, 4 COM, DC 12V/19~28V Input

Note: Specifications are subject to change without prior notice

1.1 I/O Panel



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

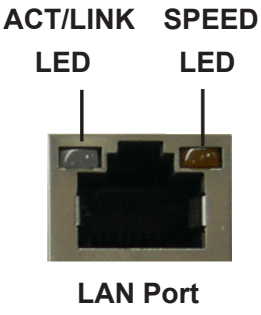
LAN Port LED Indications

Activity/Link LED

Status	Description
Off	No Link
Blinking	Activity
On	Link

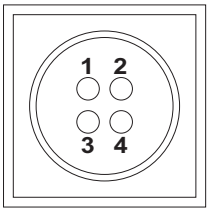
SPEED LED

Status	Description
Yellow	100Mbps conne
Green	1Gbps connection



LAN Port

** 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

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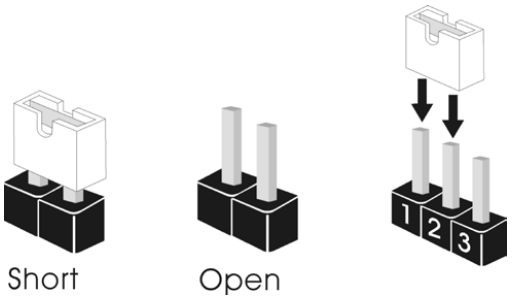
2.1 Jumpers Setup

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 (3-pin CLRMOS1) (see p.8, No. 24)	1_2 Default 2_3 Clear CMOS	CLRMOS1 : 1-2 : Normal 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) (see p.8, No. 24)	1	CLRMOS2 : Open : Normal Short : Auto Clear CMOS (Power Off)
Digital Input / Output Power Select (3-pin JGPIO_PWR1) (see p.8, No. 9)	1 2 3	1-2 : +12V 2-3 : +5V
Digital Input / Output Default Value Setting (3-pin JGPIO_SET1) (see p.8, No. 10)	1 2 3	1-2 : Pull-High (+3V) 2-3 : Pull-Low

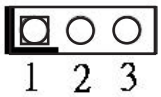
Backlight Power Select (LCD_BLT_VCC) (5-pin BKT_PWR1)

(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)

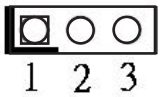
(see p.8, No. 4)

Open : Normal Close : Charge Battery

BLT_PWM1

(3-pin BLT_PWM1)

(see p.8, No. 6)

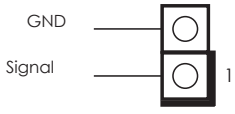


1-2 : eDP

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)

Open : ATX Mode Close : AT Mode

LVDS Switch
(2-pin LVDS_SWITCH1) (see p.8, No. 17)

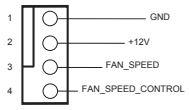
Open : LVDS

Close : eDP

2.2 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!

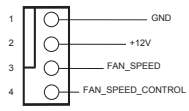
CPU Fan Connector (4-pin CPU_FAN1)
(see p.8 No. 31)



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.

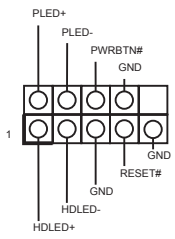
Chassis Fan Connector (4-pin CHA_FAN1)
(see p.8 No. 32)



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):

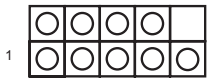
Connect to the power status indicator on the chassis front panel. The LED is on when the system is operating. The LED keeps blinking when the sys-tem is in S1/S3 sleep state. The LED is off when the system is in S4 sleep

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 assign-ments 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

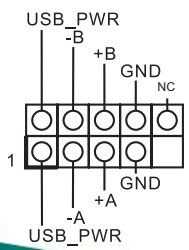
* This motherboard supports RS232/422/485 on COM3, 4 ports. Please refer to below table for the pin definition. In addition, COM3, 4 port (RS232/422/485) can be adjusted in BIOS setup utility > Advanced Screen > Super IO Configuration. You may refer to page 31 for details.

COM3, 4 Ports Pin De inition

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

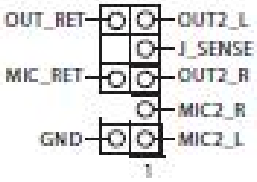
(SATA3_1~2: see p.8, No. 33)

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)

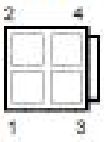
(see p.8 No. 26)

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)

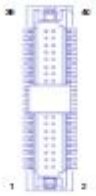
(see p.8 No. 25)

Please connect a UPS module to this connector.

LVDS Connector

(40-pin LVDS1)

(see p.8 No. 16)



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.

*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

Buzzer

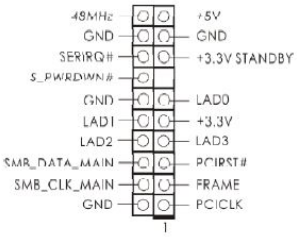
(2-pin BUZZ2)

(see p.8 No. 5)

LPC Header

(19-pin LPC1)

(see p.8, No. 34)

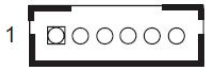


This connector supports a Trusted Platform Module (TPM) system, which can securely store keys, digital certificates, passwords, and data. A TPM system also helps enhance network security, protects digital identities, and ensures platform integrity.

Backlight Power Connector

(6-pin BLT_PWR1)

(see p.8 No. 14)

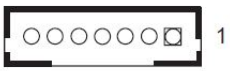


PIN	Signal Name
1	GND
2	GND
3	BL CTL
4	BL EN
5	LCD_BLT_VCC
6	LCD_BLT_VCC

Backlight Volume Control

(7-pin BLT_VOL1)

(see p.8 No. 21)

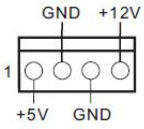


PIN	Signal Name
1	GPIO_VOL_UP
2	GPIO_VOL_DW
3	PWRDN
4	LVDS1 BLUP
5	LVDS1 BLDW
6	GND
7	GND

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)

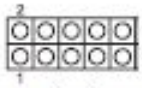
Pin1 : GND

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:

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

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

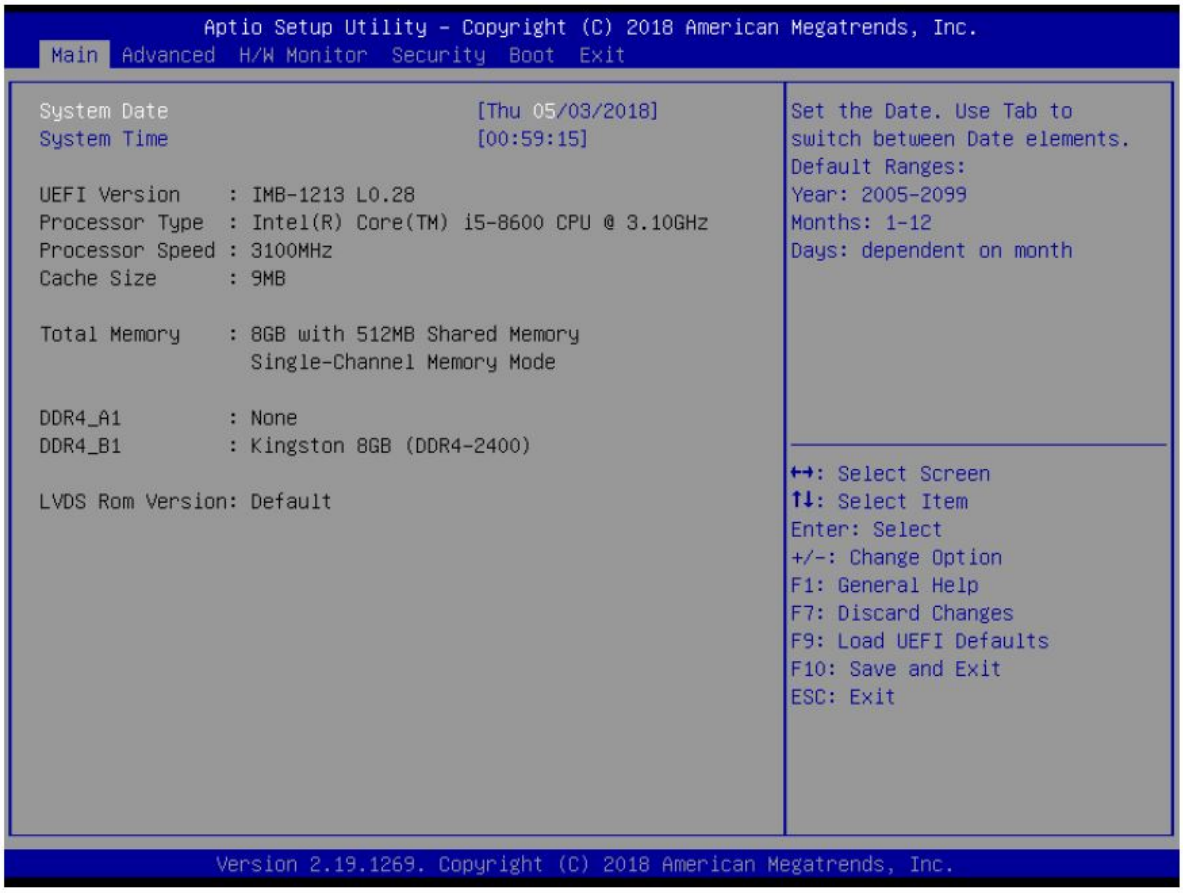
3.1.2 Navigation Keys

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

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

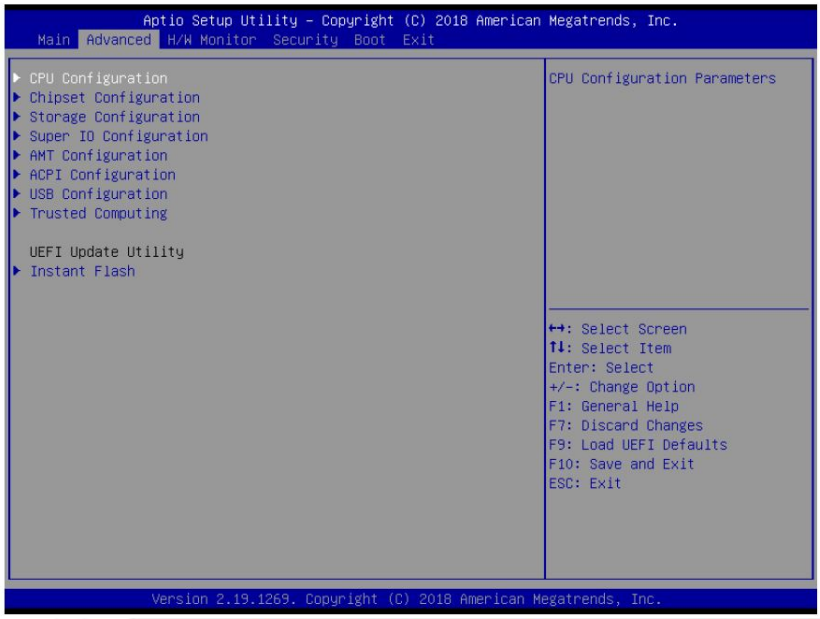
3.2 Main Screen

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



3.3 Advanced Screen

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

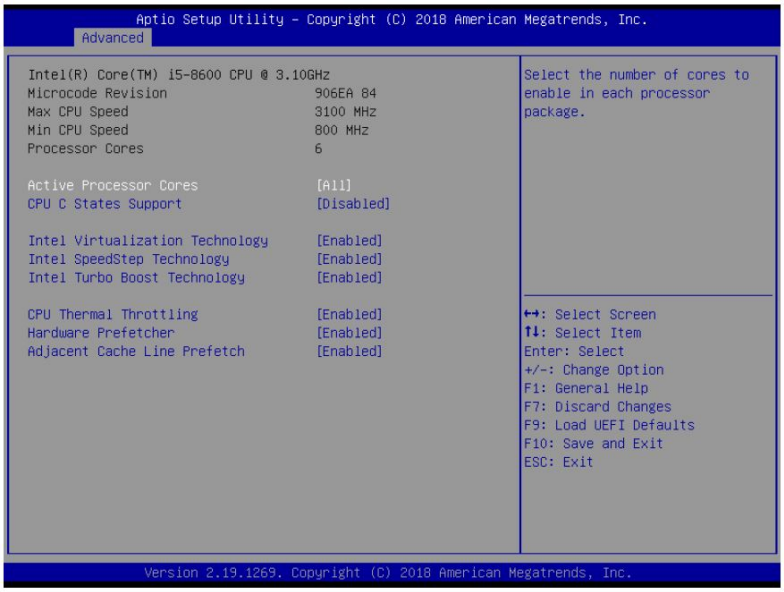


Setting wrong values in this section may cause the system to malfunction.

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.

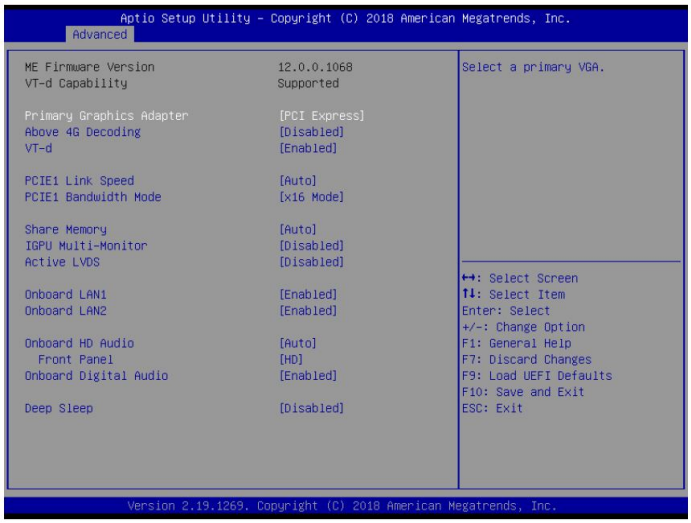
Hardware Prefetcher

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-Moniter

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.

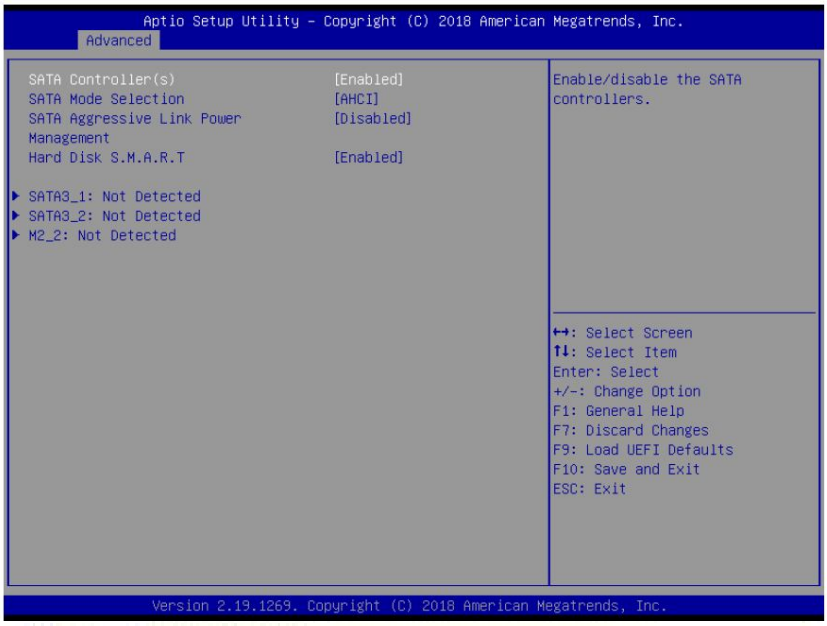
Onboard Digital Audio

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.

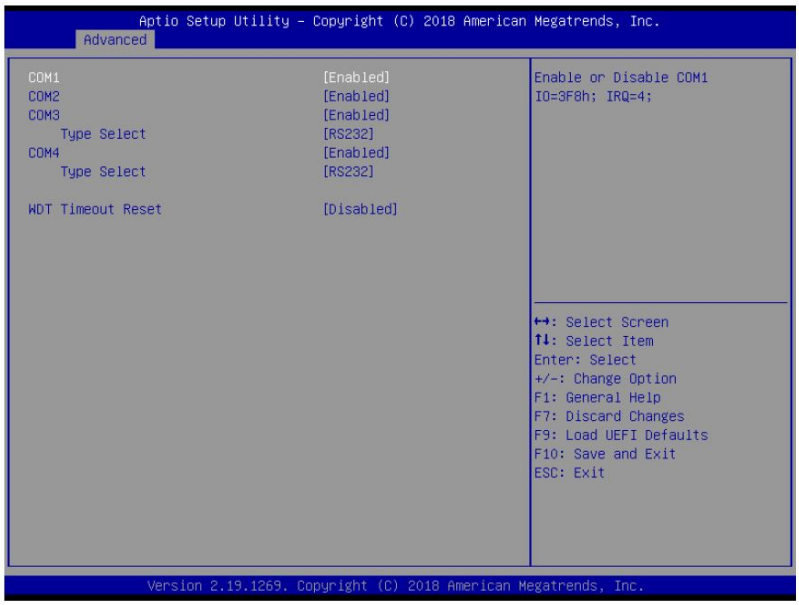
SATA Aggressive Link Power Management

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.

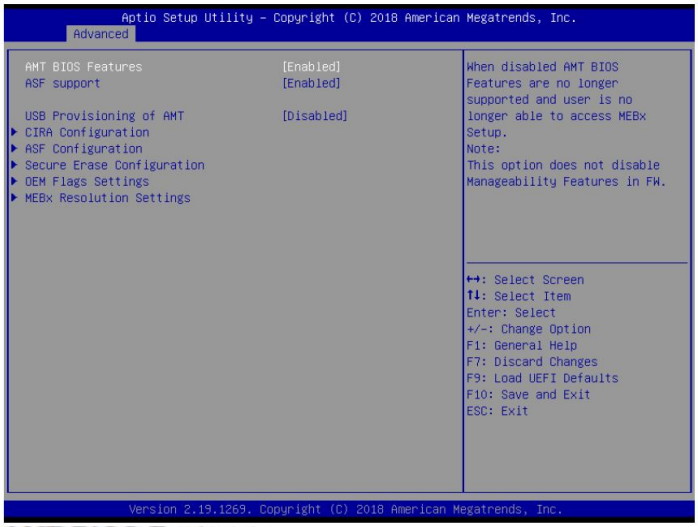
Type Select

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.

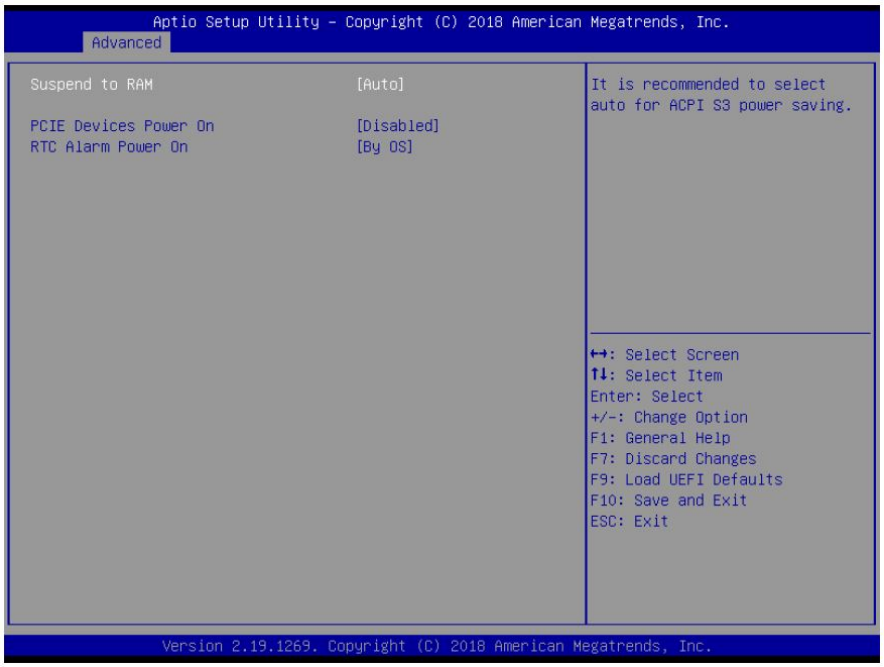
UI Mode Resolution

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.

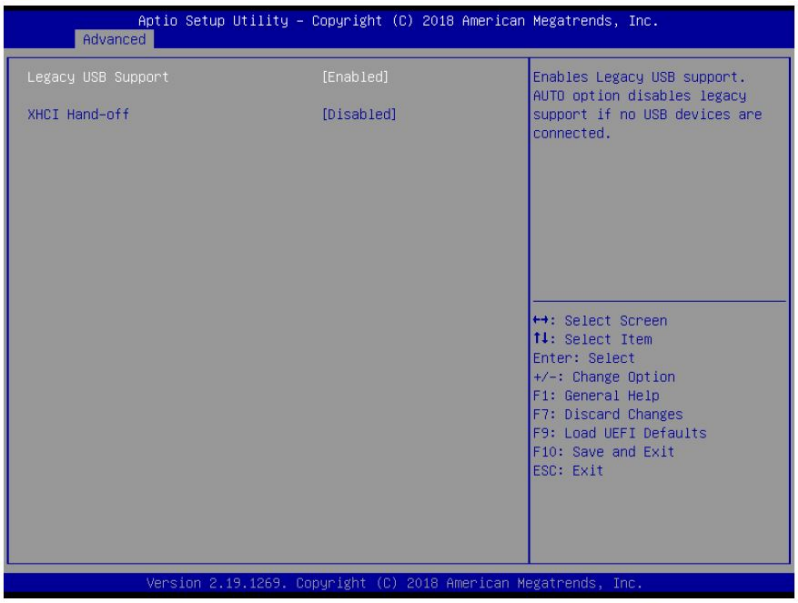
PCIE Devices Power On

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:

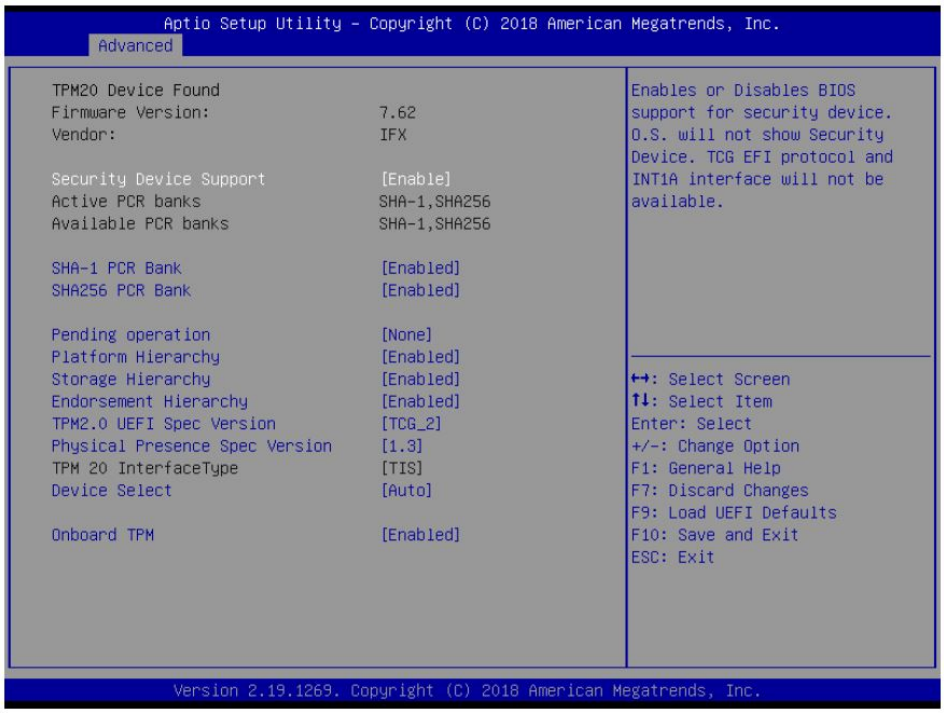
[Enabled] - Enables support for legacy USB.

[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

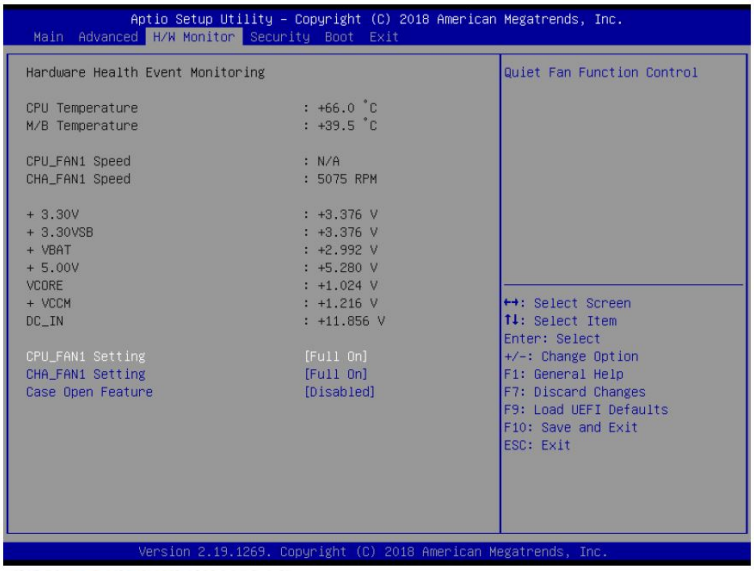
Enable or disable BIOS support for security device.

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

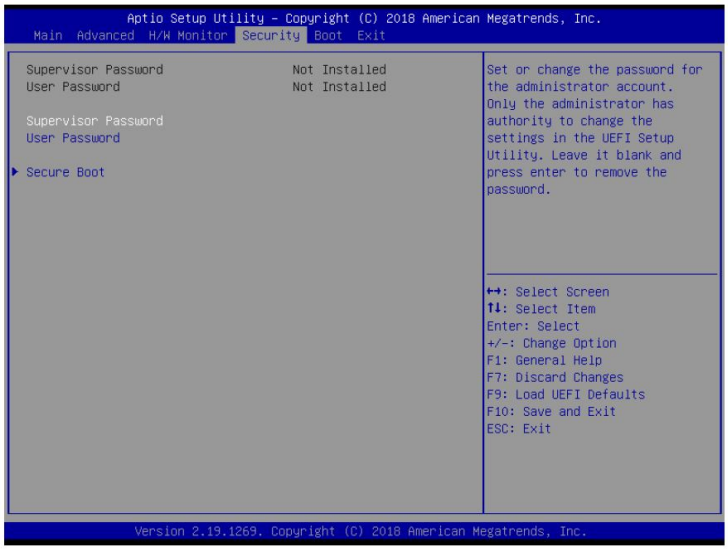
This allows you to enable or disable case open detection feature. The default is value [Disabled].

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

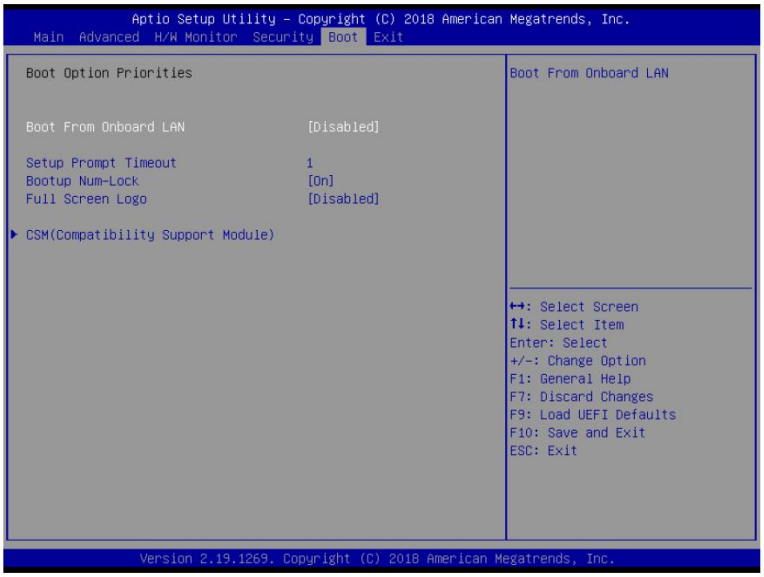
Set or change the password for the user account. Users are unable to change the settings in the UEFI Setup Utility. Leave it blank and press enter to remove the password.

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.

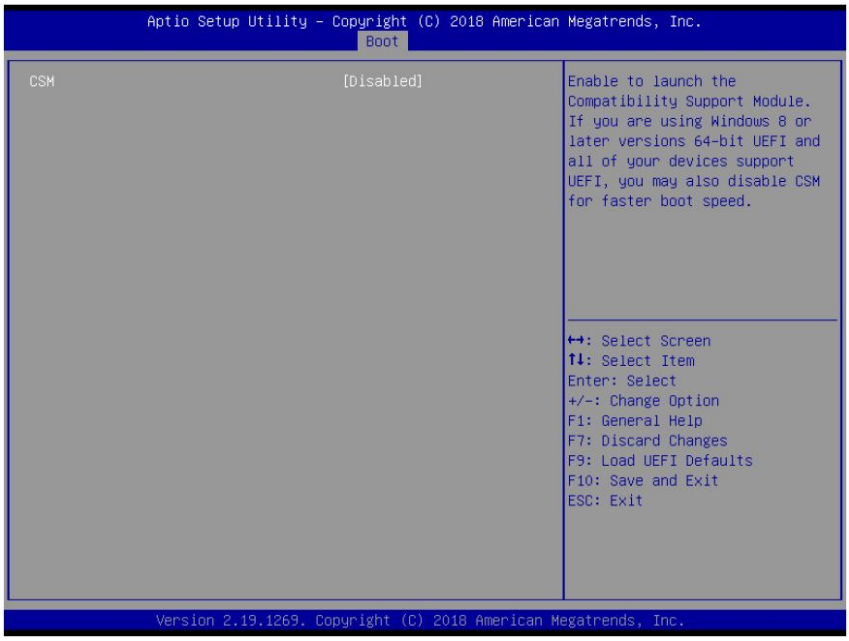
Bootup Num-Lock

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].

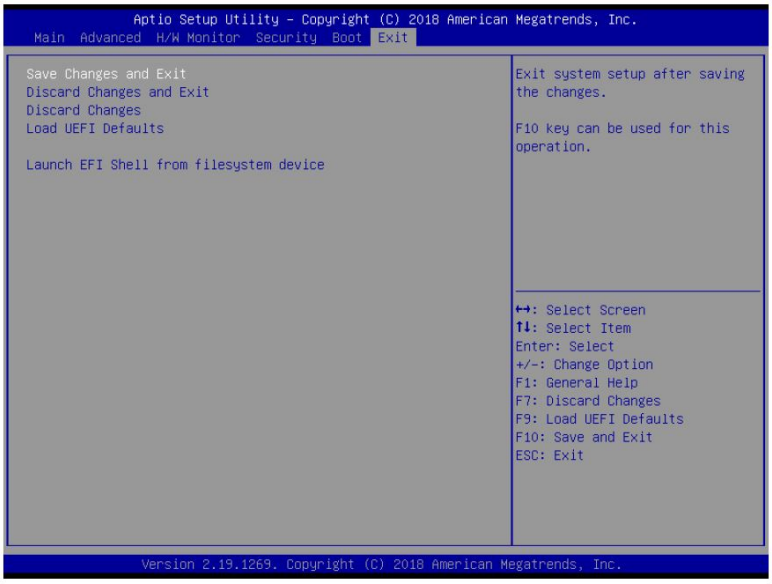
Launch PXE OpROM Policy

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.