

**PRIME H310T**  
**PRIME H310T/CSM**



# Motherboard

E14094  
First Edition  
April 2018

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# Safety information

## Electrical safety

- To prevent electrical shock hazard, disconnect the power cable from the electrical outlet before relocating the system.
- When adding or removing devices to or from the system, ensure that the power cables for the devices are unplugged before the signal cables are connected. If possible, disconnect all power cables from the existing system before you add a device.
- Before connecting or removing signal cables from the motherboard, ensure that all power cables are unplugged.
- Seek professional assistance before using an adapter or extension cord. These devices could interrupt the grounding circuit.
- Ensure that your power supply is set to the correct voltage in your area. If you are not sure about the voltage of the electrical outlet you are using, contact your local power company.
- If the power supply is broken, do not try to fix it by yourself. Contact a qualified service technician or your retailer.

## Operation safety

- Before installing the motherboard and adding components, carefully read all the manuals that came with the package.
- Before using the product, ensure all cables are correctly connected and the power cables are not damaged. If you detect any damage, contact your dealer immediately.
- To avoid short circuits, keep paper clips, screws, and staples away from connectors, slots, sockets and circuitry.
- Avoid dust, humidity, and temperature extremes. Do not place the product in any area where it may be exposed to moisture.
- Place the product on a stable surface.
- If you encounter technical problems with the product, contact a qualified service technician or your retailer.

## About this guide

This user guide contains the information you need when installing and configuring the motherboard.

## How this guide is organized

This guide contains the following parts:

- **Chapter 1: Product introduction**  
This chapter describes the features of the motherboard and the new technology it supports. It includes descriptions of the switches, jumpers, and connectors on the motherboard.
- **Chapter 2: BIOS information**  
This chapter discusses changing system settings through the BIOS Setup menus. Detailed descriptions for the BIOS parameters are also provided.

## Where to find more information

Refer to the following sources for additional information and for product and software updates.

### 1. ASUS websites

The ASUS website provides updated information on ASUS hardware and software products. Refer to the ASUS contact information.

### 2. Optional documentation

Your product package may include optional documentation, such as warranty flyers, that may have been added by your dealer. These documents are not part of the standard package.

## Conventions used in this guide

To ensure that you perform certain tasks properly, take note of the following symbols used throughout this manual.



**DANGER/WARNING:** Information to prevent injury to yourself when completing a task.



**CAUTION:** Information to prevent damage to the components when completing a task



**IMPORTANT:** Instructions that you **MUST** follow to complete a task.



**NOTE:** Tips and additional information to help you complete a task.

## Typography

**Bold text**

Indicates a menu or an item to select.

*Italics*

Used to emphasize a word or a phrase.

<Key>

Keys enclosed in the less-than and greater-than sign means that you must press the enclosed key.

Example: <Enter> means that you must press the Enter or Return key.

<Key1> + <Key2> + <Key3>

If you must press two or more keys simultaneously, the key names are linked with a plus sign (+).

## Package contents

Check your motherboard package for the following items.

<b>Motherboard</b>	ASUS PRIME H310T motherboard
<b>Cables</b>	2 x Serial ATA 6.0 Gb/s cables 1 x SATA power cable
<b>Accessories</b>	1 x I/O Shield 1 x Thin Mini ITX I/O Shield 2 x M.2 screw packages
<b>Application DVD</b>	Support DVD
<b>Documentation</b>	User Guide



If any of the above items is damaged or missing, contact your retailer.

## PRIME H310T specifications summary

<b>CPU</b>	LGA1151 socket for 8th Generation Intel® Core™, i7 / i5 / i3 / Pentium®, and Celeron® Processors Supports Intel® 14nm CPU Supports Intel® Turbo Boost Technology 2.0* * Intel® Turbo Boost Technology 2.0 support depends on the CPU types. ** Refer to <a href="http://www.asus.com">www.asus.com</a> for Intel® CPU support list.
<b>Chipset</b>	Intel® H310 Chipset
<b>Memory</b>	2 x SO-DIMMs, maximum. 32GB DDR4 2666*/2400/2133MHz, Non-ECC, un-buffered memory modules Dual-channel memory architecture Supports Intel® Extreme Memory Profile (XMP) * Hyper DIMM support is subject to the physical characteristics of individual CPUs. ** DDR4 2666MHz and higher memory modules will run at max. 2666MHz on Intel® 8th Gen. 6-core or higher processors. *** Refer to <a href="http://www.asus.com">www.asus.com</a> for the latest Memory QVL (Qualified Vendors List).
<b>Graphics</b>	Integrated graphics processor Multi-VGA output support: DP/HDMI/LVDS ports - Supports HDMI with maximum resolution of 4096 x 2160 @ 24Hz - Supports LVDS with max. resolution of 1920 x 1200 @ 60Hz - Supports DisplayPort with max. resolution of 4096 x 2304 @ 60 Hz Maximum shared memory of 1024 MB Supports up to 2 displays simultaneously
<b>Expansion slot</b>	1 x M.2 Socket 1 with E key, type 2230 for WIFI/BT device or PCIe, CNVi/USB mode
<b>Storage</b>	Intel® H310 Chipset - 1 x M.2 Socket 3 with M key, type 2260/2280 storage devices support (both SATA & PCIe mode) - 2 x Serial ATA 6.0 Gb/s connectors (gray)
<b>LAN</b>	Realtek® 8111H Gigabit LAN controller

(continued on the next page)

# PRIME H310T specifications summary

<b>USB</b>	<p>Intel® H310 Chipset</p> <ul style="list-style-type: none"> <li>- 4 x USB 3.1 Gen1 ports (2 ports at mid-board, 2 ports at back-panel)</li> <li>- 4 x USB 2.0 ports (2 ports at mid-board, 2 ports at back-panel)</li> </ul> <p>GL852G USB Hub</p> <ul style="list-style-type: none"> <li>- 3 x USB 2.0 ports (3 ports at mid-board)</li> </ul>
<b>Audio</b>	<p>8 Channels Realtek ALC887-VD2 High Definition Audio CODEC</p> <ul style="list-style-type: none"> <li>- Supports Jack-Detection, Multi-recording, Audio Re-tasking</li> </ul>
<b>ASUS unique features</b>	<p><b>Bespoke Motherboard Design &amp; Commercial Focused Features</b></p> <ul style="list-style-type: none"> <li>- ASUS Smart Recovering BIOS: Automatically recover BIOS update once crash happen</li> <li>- ASUS Event Log: Record activities of system and provides information in BIOS</li> <li>- ASUS Commercial BIOS kit: Speed up BIOS update solution by partial BIOS design</li> <li>- Anti-Moisture: Against moisture and corrosion — prolonging the life of your motherboard</li> <li>- 24/7 Reliability: Tested under temperature up to 45°C and humidity up to 80% to ensure handle diverse environment</li> <li>- Overcurrent Protection: Short circuit prevention, protects your system</li> </ul> <p><b>Easy Assembly Design</b></p> <ul style="list-style-type: none"> <li>- Fixed-position &amp; Color-coded Connectors: Enable easy identification and cable-matching, speeding up the production line</li> <li>- Box Headers: USB 3.1 Gen 1 headers are box style, enabling fast connector installation and preventing pin damage</li> </ul> <p><b>Digi+VRM</b></p>
<b>Back Panel I/O ports</b>	<p>1 x DC Power Connector (Support 12V &amp; 19V)</p> <p>1 x HDMI port</p> <p>1 x DisplayPort port</p> <p>1 x LAN (RJ-45) port</p> <p>2 x USB 3.1 Gen 1 ports</p> <p>2 x USB 2.0 ports</p> <p>2 x Audio jacks</p>
<b>Internal I/O connectors</b>	<p>1 x USB 3.1 Gen 1 connector supports additional 2 USB 3.1 Gen 1 ports (19-pin)</p> <p>2 x USB 2.0 2-port connectors support additional 4 USB 2.0 ports</p> <p>1 x USB 2.0 1-port connector support additional 1 USB 2.0 ports</p> <p>2 x SATA 6.0Gb/s connectors</p> <p>1 x LVDS header</p> <p>1 x M.2 Socket 3 for M Key, type 2260/2280 storage devices support (SATA mode &amp; PCIE mode)</p> <p>1 x M.2 Socket 1 with E key, type 2230 for WIFI/BT device or PCIE, CNVI/USB mode</p> <p>1 x CPU Fan connector</p> <p>2 x Chassis Fan connector</p> <p>1 x Chassis Intrusion header</p> <p>1 x Front panel audio connector (AAFP)</p> <p>1 x System panel connector</p>

(continued on the next page)

# PRIME H310T specifications summary

<b>Internal I/O connectors</b>	<p>1 x COM header            1 x Clear CMOS jumper (2-pin)            1 x TPM header            1 x SATA power connector            1 x Speaker connector</p> <p><b>Connectors for AIO System</b></p> <p>1 x 2-pin internal DC power connector            1 x Stereo speaker connector            1 x DMIC header</p> <p><b>Connectors for Flat Panel Display</b></p> <p>1 x Backlight inverter voltage selection header            1 x FPD brightness header            1 x Panel voltage selection header            1 x Panel off header</p>
<b>BIOS features</b>	128 Mb Flash ROM, UEFI AMI BIOS, PnP, DMI 2.0, WfM 2.0, SM BIOS 3.0, ACPI 6.0, Multi-language BIOS, ASUS EZ Flash 3, Last Modified Log, ErP Ready, ASUS Self-Recovering BIOS, ASUS Event log, ASUS Commercial Kit
<b>Manageability</b>	WfM 2.0, DMI 2.0, WOL by PME
<b>Support DVD</b>	<p>Drivers</p> <p>ASUS utilities</p> <p>ASUS Commercial BIOS Kits</p> <p>ASUS Watchdog timer</p> <p>Anti-virus software (OEM version)</p>
<b>Operating System Support</b>	Windows® 10 (64-bit)
<b>Form factor</b>	Thin Mini-ITX Form Factor, 6.7" x 6.7" (17.0cm x 17.0cm)




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Specifications are subject to change without notice.

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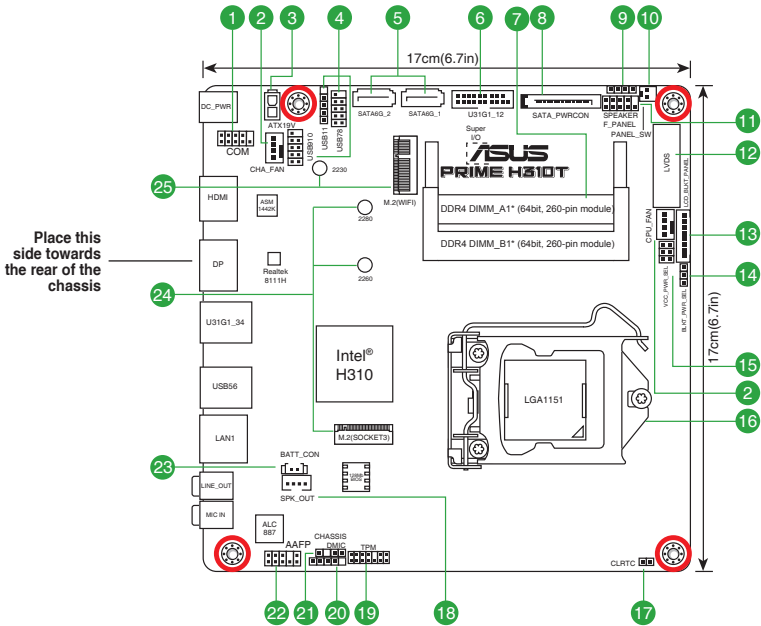
# Product introduction

# 1

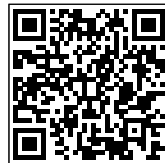
## Motherboard overview



- Unplug the power cord from the wall socket before touching any component.
- Before handling components, use a grounded wrist strap or touch a safely grounded object or a metal object, such as the power supply case, to avoid damaging them due to static electricity.
- Before you install or remove any component, ensure that the ATX power supply 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, or components.



Scan the QR code to get the detailed pin definitions.



**1 Serial port connector (10-1 pin COM)**

Connect the serial port module cable to this connector, then install the module to a slot opening at the back of the system chassis.

**2 CPU and chassis fan connectors (4-pin CPU\_FAN, 4-pin CHA\_FAN1/2)**

Connect the fan cables to the fan connectors on the motherboard, ensuring that the black wire of each cable matches the ground pin of the connector.



Do not forget to connect the fan cables to the fan connectors. Insufficient air flow inside the system may damage the motherboard components. These are not jumpers! Do not place jumper caps on the fan connectors! The CPU\_FAN connector supports a CPU fan of maximum 0.5A (12 W) fan power.

**3 Internal DC power connector (2-pin ATX19V/12V)**

This connector is for an ATX power supply. The plug from the power supply is designed to fit this connector in only one orientation. Find the proper orientation and push down firmly until the connector completely fits.



This connector supports 12V and 19V by models. Refer to the specification sheet of the model for details.

**4 USB 2.0 connectors (10-1 pin USB78, USB914)**

Connect the USB module cable to these connectors, then install the module to a slot opening at the back of the system chassis. These USB connectors comply with USB 2.0 specifications and support up to 480Mbps connection speed.

**5 Serial ATA 6.0Gb/s connectors (SATA6G\_1/2)**

These connectors connect to Serial ATA 6.0 Gb/s hard disk drives via Serial ATA 6.0 Gb/s signal cables.

**6 USB 3.1 Gen 1 connector (20- 1pin U31G1\_12)**

Connect a USB 3.1 Gen 1 module to this connector for additional USB 3.1 Gen 1 front or rear panel ports. This connector complies with USB 3.1 Gen 1 specifications and provides faster data transfer speeds of up to 5 Gbps, faster charging time for USB-chargeable devices, optimized power efficiency, and backward compatibility with USB 2.0.

**7 DDR4 DIMM slots**

Install 2 GB, 4 GB, 8 GB, and 16 GB non-ECC un-buffered DDR4 DIMMs into these DIMM sockets.

**8 SATA power connector (15-pin SATA\_PWRCON)**

This connector is for the SATA power cable. The power cable plug is designed to fit this connector in only one orientation. Find the proper orientation and push down firmly until the connector completely fit. To provide power to your SATA device, connect the SATA power cable to this connector.

**9 Speaker connector (4-pin SPEAKER)**

This 4-pin connector is for the chassis-mounted system warning speaker. The speaker allows you to hear system beeps and warnings.

### 10 LCD panel monitor switch header (2-pin PANEL\_SW)

This 2-pin header is for connecting a monitor switch that can turn off the LCD panel display backlight.

### 11 System panel connector (10-1 pin F\_PANEL)

This connector supports several chassis-mounted functions.

### 12 LVDS connector

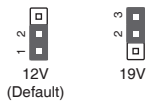
This connector is for an LCD monitor that supports Low-voltage Differential Signaling (LVDS) interface.

### 13 Flat panel display brightness connector (8-pin LCD\_BLK\_PANEL)

This connector is for the LCD panel backlight and brightness controls. It enables the LCD panel backlight, provides backlight control signals, and provides brightness control signals for the brightness button on the front panel.

### 14 Display panel backlight power selector (3-pin BLKT\_PWR\_SEL)

BLKT\_PWR\_SEL



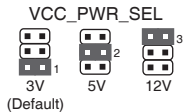
Pins	Setting
1-2 (Default)	12V
2-3	ATX PWR



The value of ATX\_PWR depends on the output of adapter Voltage (12V or 19V).

### 15 Display panel VCC power selector (VCC\_PWR\_SEL)

VCC\_PWR\_SEL



Pins	Setting
1 (Default)	3V
2	5V
3	12V

### 16 Intel® LGA1151 CPU socket

Install Intel® LGA1151 CPU into this surface mount LGA1151 socket, which is designed for 8<sup>th</sup> Generation Intel® Core™ i7 / i5 / i3, Pentium®, and Celeron® processors.



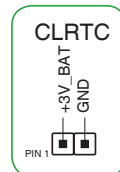
For more details, refer to **Central Processing Unit (CPU)**.

### 17 Clear RTC RAM (2-pin CLRRTC)

This header allows you to clear the CMOS RTC RAM data of the system setup information such as date, time, and system passwords.

**To erase the RTC RAM:**

1. Turn OFF the computer and unplug the power cord.
2. Use a metal object such as a screwdriver to short the two pins.
3. Plug the power cord and turn ON the computer.



4. Hold down the <Del> key during the boot process and enter BIOS setup to re-enter data.



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If the steps above do not help, remove the onboard battery and short the two pins again to clear the CMOS RTC RAM data. After clearing the CMOS, reinstall the battery.

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#### **18 Internal stereo speaker header (4-pin SPK\_OUT)**

The internal mono speaker header allows connection to an internal, low-power speaker for basic system sound capability. The subsystem is capable of driving a speaker load of 4 Ohms at 3 Watts (rms).

#### **19 TPM connector (14-1 pin TPM)**

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.

#### **20 DMIC connector (5-1-pin DMIC)**

The DMIC connector is for connecting the digital microphone module used in All-in-One chassis.

#### **21 Chassis intrusion header (4-1 pin CHASSIS)**

This header is for a chassis-mounted intrusion detection sensor or switch. Connect one end of the chassis intrusion sensor or switch cable to this header. The chassis intrusion sensor or switch sends a high-level signal to this header when a chassis component is removed or replaced. The signal is then generated as a chassis intrusion event.

By default, the pin labeled “Chassis Signal” and “Ground” are shorted with a jumper cap. Remove the jumper caps only when you intend to use the chassis intrusion detection feature.

#### **22 Front panel audio connector (10-1 pin AAFP)**

This connector is for a chassis-mounted front panel audio I/O module that supports HD Audio audio standard. Connect one end of the front panel audio I/O module cable to this connector.

#### **23 RTC Battery header (2-pin BATT\_CON)**

This connector is for the lithium CMOS battery.

#### **24 M.2 socket M key**

This socket allows you to install an M.2 (NGFF) SSD module. Use the bundled screw 13020-0181000 to secure your M.2 device.



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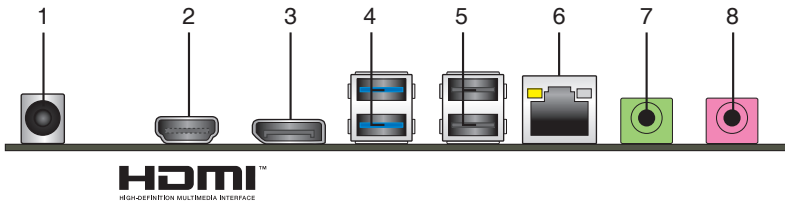
This socket supports M Key and 2260/2280 storage devices.

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#### **25 M.2 socket, E key**

This socket allows you to install an E key and type 2230 Wi-Fi/BT or PCIE, CNVi/USB mode devices.

## Rear panel connectors



1. **DC power connector.** Insert the power adapter into this port.



- It can support both 19V and 12V DC input.
- The power adapter is purchased separately.



- Use the appropriate DC power adapter for the following scenarios:
  - Use a 90W adapter when a 35W CPU is installed on the system.
  - Use a 120W adapter when using your system with an LVDS panel.
  - Use a high-rated adapter (above 90W) when a high-rated CPU (45W or higher CPU) is installed on the system.

2. **HDMI port.** This port is for a High-Definition Multimedia Interface (HDMI) connector, and is HDCP compliant allowing playback of HD DVD, Blu-Ray, and other protected content.
3. **DisplayPort.** This port is for DisplayPort-compatible devices.
4. **USB 3.1 Gen 1 ports.** These 9-pin Universal Serial Bus (USB) ports are for USB 3.1 Gen 1 / 2.0 devices.



- USB 3.1 Gen 1 devices can only be used for data storage.
- We strongly recommend that you connect USB 3.1 Gen 1 devices to USB 3.1 Gen 1 ports for faster and better performance from your USB 3.1 Gen 1 devices.
- Due to the design of the Intel® 100 series chipset, all USB devices connected to the USB 2.0 and USB 3.1 Gen 1 ports are controlled by the xHCI controller. Some legacy USB devices must update their firmware for better compatibility.


5. **USB 2.0 / 1.1 ports.** These 4-pin Universal Serial Bus (USB) ports are for USB 2.0/1.1 devices.

6. **LAN (RJ-45) port.** This port allows Gigabit connection to a Local Area Network (LAN) through a network hub.

**LAN port LED indications**

Activity/Link LED		Speed LED	
Status	Description	Status	Description
Off	No link	OFF	10Mbps connection
Orange	Linked	ORANGE	100Mbps connection
Orange (Blinking)	Data activity	GREEN	1Gbps connection
Orange (Blinking then steady)	Ready to wake up from S5 mode		

Activity Link LED    Speed LED



LAN port

7. **Line Out port (lime).** This port connects to a headphone or a speaker.

8. **Microphone port (pink).** This port connects to a microphone.




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Refer to the audio configuration table for the function of the audio ports in 2.1, 4.1, 5.1, or 7.1-channel configuration.

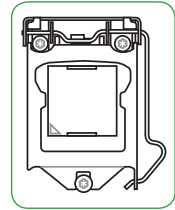
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**Audio 2.1, 4.1, 5.1 or 7.1-channel configuration**

Port	Headset 2.1-channel	4.1-channel	5.1-channel	7.1-channel
Line Out (Rear panel)	Front Speaker Out	Front Speaker Out	Front Speaker Out	Front Speaker Out
MIC(Rear panel)	MIC	Rear Speaker Out	Rear Speaker Out	Rear Speaker Out
Headphone (Front panel)	Headphone	Headphone	Center/Subwoofer Speaker Out	Center/Subwoofer Speaker Out
MIC (Front panel)	MIC	MIC	MIC	Side Speaker Out

## Central Processing Unit (CPU)

This motherboard comes with a surface mount LGA1151 socket designed for 8<sup>th</sup> Generation Intel® Core™ i7 / i5 / i3, Pentium®, and Celeron® processors.

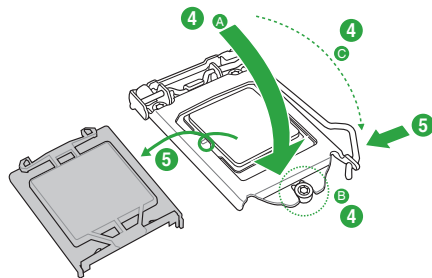
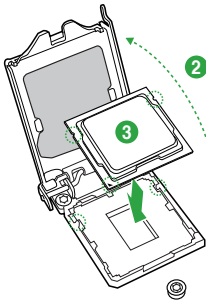
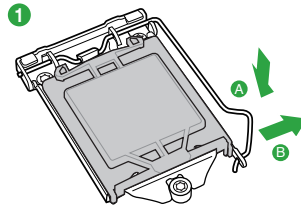
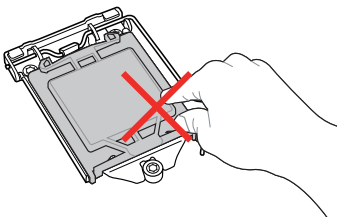


Unplug all power cables before installing the CPU.



- Ensure that you install the correct CPU designed for the LGA1151 socket only. DO NOT install a CPU designed for LGA1150, LGA1155 and LGA1156 sockets on the LGA1151 socket.
- Upon purchase of the motherboard, ensure that the PnP cap is on the socket and the socket contacts are not bent. Contact your retailer immediately if the PnP cap is missing, or if you see any damage to the PnP cap/socket contacts/motherboard components.
- Keep the cap after installing the motherboard. ASUS will process Return Merchandise Authorization (RMA) requests only if the motherboard comes with the cap on the LGA1151 socket.
- The product warranty does not cover damage to the socket contacts resulting from incorrect CPU installation/removal, or misplacement/loss/incorrect removal of the PnP cap.

## Installing the CPU



Apply the Thermal Interface Material to the CPU heatsink and CPU before you install the heatsink and fan if necessary.

# System memory

## Overview

This motherboard comes with two Double Data Rate 4 (DDR4) Small Outline Dual Inline Memory Module (SO-DIMM) sockets. The figure illustrates the location of the DDR4 DIMM sockets:



Channel	Sockets
Channel A	DIMM_A1
Channel B	DIMM_B1



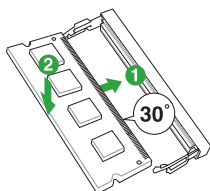
- You may install varying memory sizes in Channel A and Channel B. The system maps the total size of the lower-sized channel for the dual-channel configuration. Any excess memory from the higher-sized channel is then mapped for single-channel operation.
- Always install the DIMMS with the same CAS Latency. For an optimum compatibility, we recommend that you install memory modules of the same version or data code (D/C) from the same vendor. Check with the vendor to get the correct memory modules.
- Always install a DIMM into the DIMM\_A1 slot for the motherboard to work properly.
- This motherboard supports 1.2V DDR4 DIMMs.
- DDR4 2666MHz and higher memory modules will run at max. 2666MHz on Intel® 8th Gen. 6-core or higher processors.
- Memory modules with memory frequency higher than 2133 MHz and its corresponding timing or the loaded X.M.P. Profile is not the JEDEC memory standard. The stability and compatibility of these memory modules depend on the CPU's capabilities and other installed devices.



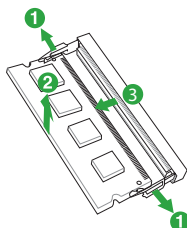
- The default memory operation frequency is dependent on its Serial Presence Detect (SPD), which is the standard way of accessing information from a memory module. Under the default state, some memory modules for overclocking may operate at a lower frequency than the vendor-marked value.
- Refer to [www.asus.com](http://www.asus.com) for the latest Memory QVL (Qualified Vendors List).

## Recommended memory configuration

### To install a DIMM



### To remove a DIMM





# BIOS information

# 2



Scan the QR code to view the BIOS update guide.



The system will automatically activate ASUS Self-Recovering BIOS after reboot from the BIOS update failure.

## ASUS Self-Recovering BIOS

ASUS-exclusive BIOS protection technology automatically recovers the system's BIOS with a verified backup in the event of an update failure, preventing the need to replace or reinstall your hardware.

- Ensures safe BIOS updates
- Requires no additional software
- Provides automatic update failure detection and recovery
- Reduces maintenance frequency and costs

## BIOS setup program

Use the BIOS Setup program to update the BIOS or configure its parameters. The BIOS screens include navigation keys and brief online help to guide you in using the BIOS Setup program.

### Entering BIOS Setup at startup

#### To enter BIOS Setup at startup:

Press <Delete> or <F2> during the Power-On Self Test (POST). If you do not press <Delete> or <F2>, POST continues with its routines.

### Entering BIOS Setup after POST

#### To enter BIOS Setup after POST:

Press <Ctrl>+<Alt>+<Del> simultaneously.

Press the reset button on the system chassis.

Press the power button to turn the system off then back on. Do this option only if you failed to enter BIOS Setup using the first two options.



Using the power button, reset button, or the <Ctrl>+<Alt>+<Del> keys to force reset from a running operating system can cause damage to your data or system. We recommend you always shut down the system properly from the operating system.



- The BIOS setup screens shown in this section are for reference purposes only, and may not exactly match what you see on your screen.
- Visit the ASUS website at [www.asus.com](http://www.asus.com) to download the latest BIOS file for this motherboard.
- If the system becomes unstable after changing any BIOS setting, load the default settings to ensure system compatibility and stability. Select the **Load Optimized Defaults** item under the Exit menu or press hotkey F5.
- If the system fails to boot after changing any BIOS setting, try to clear the CMOS and reset the motherboard to the default value. See section **Motherboard overview** for information on how to erase the RTC RAM.

## BIOS menu screen

**Menu bar**

**General Help**

```
Aptio Setup Utility - Copyright (C) 2018 American Megatrends, Inc.
Main  Ai Tweaker  Advanced  Monitor  Boot  Tool  Exit

BIOS Information
BIOS Version                0219 x64
Build Date and Time        04/20/2018

ME FW Version              12.0.0.1062
PCH Stepping               B0

Processor Information
Brand String                Intel(R) Core(TM)
                           i5-8400 CPU @ 2.80GHz
CPU Speed                  2800MHz
Total Memory                4096MB
Memory Frequency           2133MHz

System Language             [English]

System Date                 [Mon 04/20/2018]
System Time                 [21:25:25]

Access Level                Administrator

Security

Version 2.19.1.269 Copyright (C) 2018 American Megatrends, Inc.

Choose the default language

---
-->: Select Screen
↑↓: Select Item
Enter: Select
+/: Change Opt.
F1: General Help
F2: Previous Values
F5: Optimized Defaults
F10: Save & Exit
ESC: Exit
```

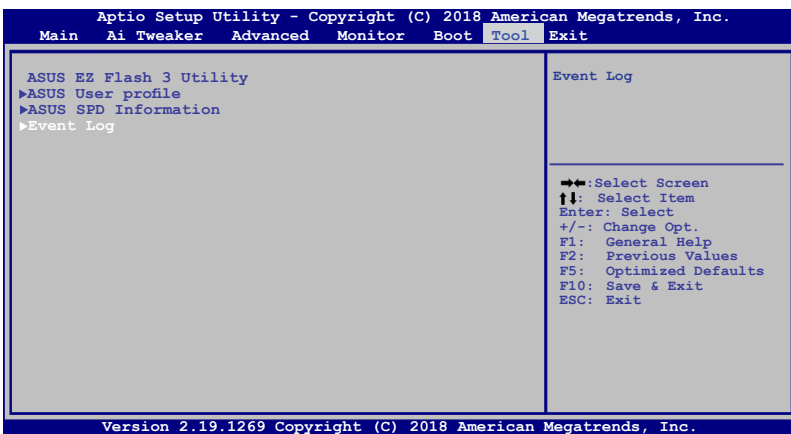
**Sub-menu item**

**Menu items**

**Configuration fields**

## Event Log

You can access Event Log from the Tool menu.



A built-in event log enables easier troubleshooting by capturing useful system information , including:

Event Category	Description	Event Log
BIOS Updates	Update status, latest version and update time	BIOS updated from xxxx to xxxx BIOS update successful
AC Power loss	Abnormal power loss events	AC Power Loss 4S Forced Shutdown
RTC reset	Real-time-clock (RTC) reset time	RTC time reset has occurred
Chassis intrusion	Record of when the chassis has been opened	A chassis intrusion has occurred
Hardware changes	Modifications to the CPU, memory or HDDs	New CPU Installed HDD has been changed! Memory has been changed!
BIOS Updates	USB current*, CPU temperature**, and CPU voltage events**	USB Over Current occurred CPU Over Heating Error! CPU Over Voltage Error!

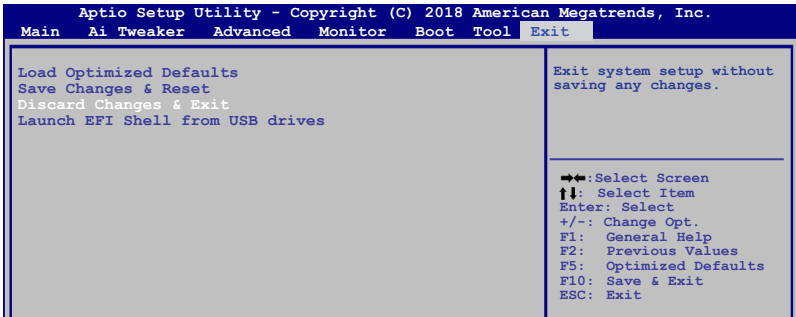
\* Record of when USB Over Current occurs

\*\* Record of when CPU temperature rises above 75°C

\*\*\*Record of when CPU Voltage reaches below 0 mV or above 1550mV

# Exit menu

The Exit menu items allow you to load the optimal default values for the BIOS items, and save or discard your changes to the BIOS items.



## Load Optimized Defaults

This option allows you to load the default values for each of the parameters on the Setup menus. When you select this option or if you press <F5>, a confirmation window appears. Select OK to load the default values.

## Save Changes & Reset

Once you are finished making your selections, choose this option from the Exit menu to ensure the values you selected are saved. When you select this option or if you press <F10>, a confirmation window appears. Select OK to save changes and exit.

## Discard Changes & Exit

This option allows you to exit the Setup program without saving your changes. When you select this option or if you press <Esc>, a confirmation window appears. Select OK to discard changes and exit.

## Launch EFI Shell from USB drives

This option allows you to attempt to launch the EFI Shell application (shellx64.efi) from one of the available USB devices.

# Appendix

## Notices

### Federal Communications Commission Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with manufacturer's instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



The use of shielded cables for connection of the monitor to the graphics card is required to assure compliance with FCC regulations. Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

---

## Compliance Statement of Innovation, Science and Economic Development Canada (ISED)

This device complies with Innovation, Science and Economic Development Canada licence exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

CAN ICES-3(B)/NMB-3(B)

## Déclaration de conformité de Innovation, Sciences et Développement économique Canada (ISED)

Le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

CAN ICES-3(B)/NMB-3(B)

## VCCI: Japan Compliance Statement

### Class B ITE

この装置は、クラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。

取扱説明書に従って正しい取り扱いをして下さい。

VCCI-B

## KC: Korea Warning Statement

B급 기기 (가정용 방송통신기자재)

이 기기는 가정용(B급) 전자파적합기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다.

## REACH

Complying with the REACH (Registration, Evaluation, Authorisation, and Restriction of Chemicals) regulatory framework, we published the chemical substances in our products at ASUS REACH website at <http://csr.asus.com/english/REACH.htm>.



---

DO NOT throw the motherboard in municipal waste. This product has been designed to enable proper reuse of parts and recycling. This symbol of the crossed out wheeled bin indicates that the product (electrical and electronic equipment) should not be placed in municipal waste. Check local regulations for disposal of electronic products.

---



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DO NOT throw the mercury-containing button cell battery in municipal waste. This symbol of the crossed out wheeled bin indicates that the battery should not be placed in municipal waste.

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## ASUS Recycling/Takeback Services

ASUS recycling and takeback programs come from our commitment to the highest standards for protecting our environment. We believe in providing solutions for you to be able to responsibly recycle our products, batteries, other components as well as the packaging materials. Please go to <http://csr.asus.com/english/Takeback.htm> for detailed recycling information in different regions.

## Regional notice for California



### WARNING

Cancer and Reproductive Harm -  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

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**English** ASUSTek Computer Inc. hereby declares that this device is in compliance with the essential requirements and other relevant provisions of current Directives. Full text of EU declaration of conformity is available at: [www.asus.com/support](http://www.asus.com/support)

**Français** ASUSTek Computer Inc. déclare par la présente que cet appareil est conforme aux critères essentiels et autres clauses pertinentes des directives concernées. La déclaration de conformité de l'UE peut être téléchargée à partir du site Internet suivant: [www.asus.com/support](http://www.asus.com/support)

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**Български** С настоящото ASUSTek Computer Inc. декларира, че това устройство е в съответствие със съществените изисквания и другите приложими постановления на свързаните директиви. Пълният текст на декларацията за съответствие на ЕС е достъпен на адрес: [www.asus.com/support](http://www.asus.com/support)

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**Eesti** Käesolevaga kinnitab ASUSTek Computer Inc, et see seade vastab asjakohaste direktiivide olulistele nõuetele ja teistele asjassepuutuvatele sätetele. EL vastavusdeklaratsiooni täielik tekst on saadaval järgmisel aadressil: [www.asus.com/support](http://www.asus.com/support)

**Suomi** ASUSTek Computer Inc. ilmoittaa täten, että tämä laite on asiaankuuluvien direktiivien olennaisien vaatimusten ja muiden tätä koskevien säädösten mukainen. EU-yhdenmukaisuusilmoituksen koko teksti on luettavissa osoitteessa: [www.asus.com/support](http://www.asus.com/support)

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**Magyar** Az ASUSTek Computer Inc. ezennel kijelenti, hogy ez az eszköz megfelel a kapcsolódó irányelvek lényeges követelményeinek és egyéb vonatkozó rendelkezéseinek. Az EU megfelelőségi nyilatkozat teljes szövege innen letölthető: [www.asus.com/support](http://www.asus.com/support)

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**Srpski** ASUSTek Computer Inc. ovim izjavljuje da je ovaj uređaj u saglasnosti sa osnovnim zahtevima i drugim relevantnim odredbama povezanim Direktiva. Pun tekst EU deklaracije o usaglašenosti je dostupan da adresi: [www.asus.com/support](http://www.asus.com/support)

**Slovensky** Spoločnosť ASUSTek Computer Inc. týmto vyhlasuje, že toto zariadenie vyhovuje základným požiadavkám a ostatým príslušným ustanoveniam príslušných smerníc. Celý text vyhlásenia zohode pre štáty EU je dostupný na adrese: [www.asus.com/support](http://www.asus.com/support)

**Slovenščina** ASUSTek Computer Inc. izjavlja, da je ta naprava skladna z bistvenimi zahtevami in drugimi ustreznimi določbami povezanih direktiv. Celotno besedilo EU-izjave o skladnosti je na voljo na spletnem mestu: [www.asus.com/support](http://www.asus.com/support)

**Español** Por la presente, ASUSTek Computer Inc. declara que este dispositivo cumple los requisitos básicos y otras disposiciones pertinentes de las directivas relacionadas. El texto completo de la declaración de la UE de conformidad está disponible en: [www.asus.com/support](http://www.asus.com/support)

**Svenska** ASUSTek Computer Inc. förklarar härmed att denna enhet överensstämmer med de grundläggande kraven och andra relevanta föreskrifter i relaterade direktiv. Fulltext av EU-försäkran om överensstämmelse finns på: [www.asus.com/support](http://www.asus.com/support)

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Support Fax +49-2102-959911  
Online support <http://qr.asus.com/techserv>

# FCC COMPLIANCE INFORMATION

Per FCC Part 2 Section 2.1077



**Responsible Party:** **Asus Computer International**  
**Address:** **800 Corporate Way, Fremont, CA 94539.**  
**Phone/Fax No:** **(510)739-3777/(510)608-4555**

hereby declares that the product

**Product Name :** **Motherboard**  
**Model Number :** **PRIME H310T**

**compliance statement:**

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.

Ver. 180125