#### PRIME H510M-E

Especificaciones



## **CPU**

Intel<sup>®</sup> Socket LGA1200 for 11<sup>th</sup> Gen Intel<sup>®</sup> Core<sup>™</sup> Processors & 10<sup>th</sup> Gen Intel<sup>®</sup> Core<sup>™</sup>, Pentium<sup>®</sup> Gold and Celeron<sup>®</sup> Processors\*

Supports Intel® 14 nm CPU

Supports Intel<sup>®</sup> Turbo Boost Technology 2.0 and Intel<sup>®</sup> Turbo Boost Max Technology 3.0\*\*

\* Refer to www.asus.com for CPU support list.

\*\* Intel® Turbo Boost Max Technology 3.0 support depends on the CPU types.

# Chipset

Intel<sup>®</sup> H510 Chipset

## Memory

2 x DIMM, Max. 64GB, DDR4 3200(OC)/2933/2800/2666/2400/2133 MHz Non-ECC, Un-buffered Memory\*

Dual Channel Memory Architecture

Supports Intel® Extreme Memory Profile (XMP)

\* 10<sup>th</sup> Gen Intel<sup>®</sup> Core™ i7/i9 processors support 2933/2800 /2666/2400/2133 natively, others will run at the maximum transfer rate of DDR4 2666MHz.

- \* 11<sup>th</sup> Gen Intel<sup>®</sup> processors support 2933/2800/2666/2400/2133 natively.
- \* Refer to www.asus.com for the Memory QVL (Qualified Vendors Lists), and memory frequency support depends on the CPU types.

## **Graphics**

1 x DisplayPort 1.4\*\*

1x D-Sub

1 x HDMI<sup>TM</sup> 2.0\*\*\*

- \* Graphics specifications may vary between CPU types.
- \*\* Intel®  $11^{th}$  &  $10^{th}$  Gen processors support DisplayPort 1.4 with max. resolution of  $4096 \times 2304$  @60Hz. Please refer to www.intel.com for any update.
- \*\*\* Only Intel® 11<sup>th</sup> Gen processors support HDMI<sup>m</sup> 2.0 with max. resolution of 4K@60Hz, others will only support HDMI<sup>m</sup> 1.4 with max. resolution of 4K@30Hz. Please refer to www.intel.com for any updates.

# **Expansion Slots**

#### Intel® 11th & 10th Gen Processors

1 x PCle 4.0/3.0 x16 slot

- Intel<sup>®</sup> 11<sup>th</sup> Gen processors support PCle 4.0 x16
- Intel<sup>®</sup> 10<sup>th</sup> Gen processors support PCle 3.0 x16

### Intel® H510 Chipset

2 x PCle 3.0 x1 slots

#### Total supports 1 x M.2 slot and 4 x SATA 6Gb/s ports

## Intel® H510 Chipset

M.2 slot (Key M), type 2242/2260/2280 (supports PCle 3.0 x4 & SATA modes)

4 x SATA 6Gb/s ports

\* The M.2 slot shares bandwidth with SATA6G\_2. When a device in SATA mode is installed on the M.2 slot, SATA6G\_2 port cannot be used.

## **Ethernet**

1 x Intel<sup>®</sup> I219-V 1Gb Ethernet

## **USB**

#### Rear USB (Total 4 ports)

2 x USB 3.2 Gen 1 ports (2 x Type-A)

2 x USB 2.0 ports (2 x Type-A)

#### Front USB (Total 6 ports)

1 x USB 3.2 Gen 1 header supports additional 2 USB 3.2 Gen 1 ports

2 x USB 2.0 headers support additional 4 USB 2.0 ports

## **Audio**

Realtek ALC897/887 7.1 Surround Sound High Definition Audio CODEC\*

- Supports: Jack-detection, Multi-streaming, Front Panel Jack-retasking
- Supports up to 24-Bit/192 kHz playback

Δı	idio	Fea	stii	rac
$\sim$	Juliu	re	alu	1 63

- Audio Shielding
- Premium Japanese audio capacitors
- Dedicated audio PCB layers
- \* A chassis with an HD audio module in the front panel is required to support 7.1 Surround Sound audio output.

# **Back Panel I/O Ports**

2 x USB 3.2 Gen 1 ports (2 x Type-A)

2 x USB 2.0 ports (2 x Type-A)

1x DisplayPort

1x D-Sub port

1x HDMI<sup>™</sup> port

1 x Intel<sup>®</sup> I219-V 1Gb Ethernet port

3 x Audio jacks

1x PS/2 Keyboard (purple) port

1 x PS/2 Mouse (green) port

# Internal I/O Connectors

## Fan and Cooling related

1 x 4-pin CPU Fan header

1 x 4-pin Chassis Fan header

#### Power related

```
1 x 24-pin Main Power connector
1 x 8-pin +12V Power connector
Storage related
1 x M.2 slot (Key M)
4 x SATA 6Gb/s ports
USB
1 x USB 3.2 Gen 1 header supports additional 2 USB 3.2 Gen 1 ports
2 x USB 2.0 headers support additional 4 USB 2.0 ports
Miscellaneous
1x RGB header
1x Clear CMOS header
1x COM Port header
1x Front Panel Audio header (AAFP)
1x S/PDIF Out header
1 x Speaker header
```

# **Special Features**

#### **ASUS 5X PROTECTION III**

1 x SPI TPM header (14-1pin)

1 x 10-1 pin System Panel header

- Overvoltage Protection
- SafeSlot Core
- Stainless-Steel Back I/O
ASUS Q-Design
- Q-DIMM
- Q-Slot
ASUS Thermal Solution
- Aluminum heatsink design
ASUS Lighting Control
ASUS Lighting Control
DCP hooder
ASUS Exclusive Software
ASUS Exclusive Software  Armoury Crate
ASUS Exclusive Software  Armoury Crate  Al Suite 3

- LANGuard

DIGI+ VRM

Fan Xpert

**Software Features** 

	ASUS CPU-Z
	Al Charger
	DAEMON Tools
	Norton Anti-virus software (Free Trial version)
	WinRAR
	UEFI BIOS
	ASUS EZ DIY
	- ASUS CrashFree BIOS 3
	- ASUS EZ Flash 3
BIOS	128 Mb Flash ROM, UEFI AMI BIOS
Manageability	WOL by PME, PXE
Accessories	Cables
	2 x SATA 6Gb/s cables
	Miscellaneous
	1 x I/O Shield
	1 x M.2 SSD screw package

- EZ update

Ineta	llation	Media
IIISta	IIauon	Media

1 x Support DVD

#### Documentation

1 x User manual

# Operating System

Windows® 11 64-bit, Windows® 10 64-bit

# Form Factor

mATX Form Factor

8.9 inch x 8.3 inch ( 22.6 cm x 21.1 cm )