



MAG B550 TOMAHAWK MAX WIFI

Motherboard

User Guide

Benutzerhandbuch

Manuel d'utilisation

Руководство пользователя

取扱説明書

사용 명서

使用手冊

使用手冊

English

Deutsch

Français

Русский

日本語

한국어

繁體中文

簡体中文

Quick Start

Thank you for purchasing the MSI® motherboard. This Quick Start section provides demonstration diagrams about how to install your computer. Some of the installations also provide video demonstrations. Please link to the URL to watch it with the web browser on your phone or tablet. You may have even link to the URL by scanning the QR code.

Kurzanleitung

Danke, dass Sie das MSI® Motherboard gewählt haben. Dieser Abschnitt der Kurzanleitung bietet eine Demo zur Installation Ihres Computers. Manche Installationen bieten auch die Videodemonstrationen. Klicken Sie auf die URL, um diese Videoanleitung mit Ihrem Browser auf Ihrem Handy oder Table anzuzeigen. Oder scannen Sie auch den QR Code mit Ihrem Handy, um die URL zu öffnen.

Présentation rapide

Merci d'avoir choisi la carte mère MSI®. Ce manuel fournit une rapide présentation avec des illustrations explicatives qui vous aideront à assembler votre ordinateur. Des tutoriels vidéo sont disponibles pour certaines étapes. Cliquez sur le lien fourni pour regarder la vidéo sur votre téléphone ou votre tablette. Vous pouvez également accéder au lien en scannant le QR code qui lui est associé.

Быстрый старт

Благодарим вас за покупку материнской платы MSI®. В этом разделе представлена информация, которая поможет вам при сборке компьютера. Для некоторых этапов сборки имеются видеoinструкции. Для просмотра видео, необходимо открыть соответствующую ссылку в веб-браузере на вашем телефоне или планшете. Вы также можете выполнить переход по ссылке, путем сканирования QR-кода.

クイックスタート

この度は MSI® マザーボードをお買い上げいただき、誠にありがとうございます。このクイックスタートにはPCの組み立て方法のデモンストレーション図を掲載しています。いくつかの組み立て手順につきましては、実演ビデオを提供しています。スマートフォンやタブレット端末のウェブブラウザで本書に記載されたURLにアクセスしてご覧ください。QRコードをスキャンすることでもURLのリンク先をご参照頂けます。

퀵 스타트

MSI® 메인보드를 선택해주셔서 감사합니다. 이 부분에서는 컴퓨터를 설치하는 방법에 대한 데모 다이어그램과 일부 데모 동영상을 제공하고 있습니다. 휴대전화 또는 태블릿의 웹 브라우저를 통하여 URL에 링크한 후 설치 동영상을 감상하시기 바랍니다. 또는 QR 코드를 스캔하여 URL에 링크할 수도 있습니다.

快速指引

感謝您購買 MSI® 主機板。本快速指引章節提供您安裝電腦的示範圖解，亦提供部分組件的安裝示範影片；請您以智慧型手機或平板的瀏覽器連上 URL 網址進行觀看。您也可以掃描 QR code 的方式快速連接至網址。

快速入门

感谢您购买 MSI® 主板。本快速入门部分提供了有关如何安装计算机演示图。某些设施还提供了视频演示。请使用您的手机或平板电脑上的网页浏览器链接至网址观看。您也可以扫描QR码链接到URL。

Installing a Processor/ Installation des Prozeorsors/ Installer un processeur/ Установка процессора/ CPUの取り付け/ 프로세서 설치하기/ 安裝處理器/ 安裝处理器

Youtube

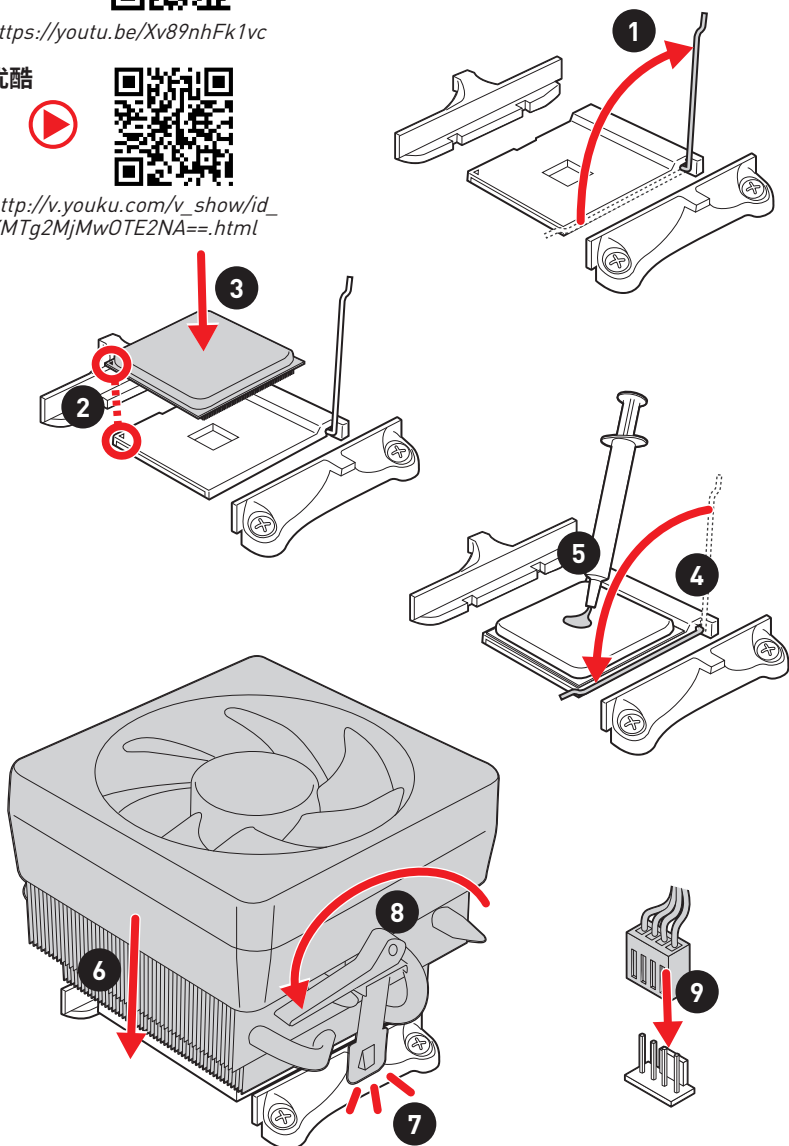


<https://youtu.be/Xv89nhFk1vc>

优酷



http://v.youku.com/v_show/id_XMTg2MjMwOTE2NA==.html



! If you are installing the screw-type CPU heatsink, please follow the figure below to remove the retention module first and then install the heatsink.

Wenn Sie einen CPU-Kühler mit Schraubenbefestigung einsetzen, folgen Sie bitte den Anweisungen unten um das Retention-Modul zu entfernen und den Kühler zu installieren.

Si vous voulez installer un ventilad pour processeur à vis, veuillez suivre les instructions ci-dessous pour d'abord retirer le module de rétenion puis installer le ventilad.

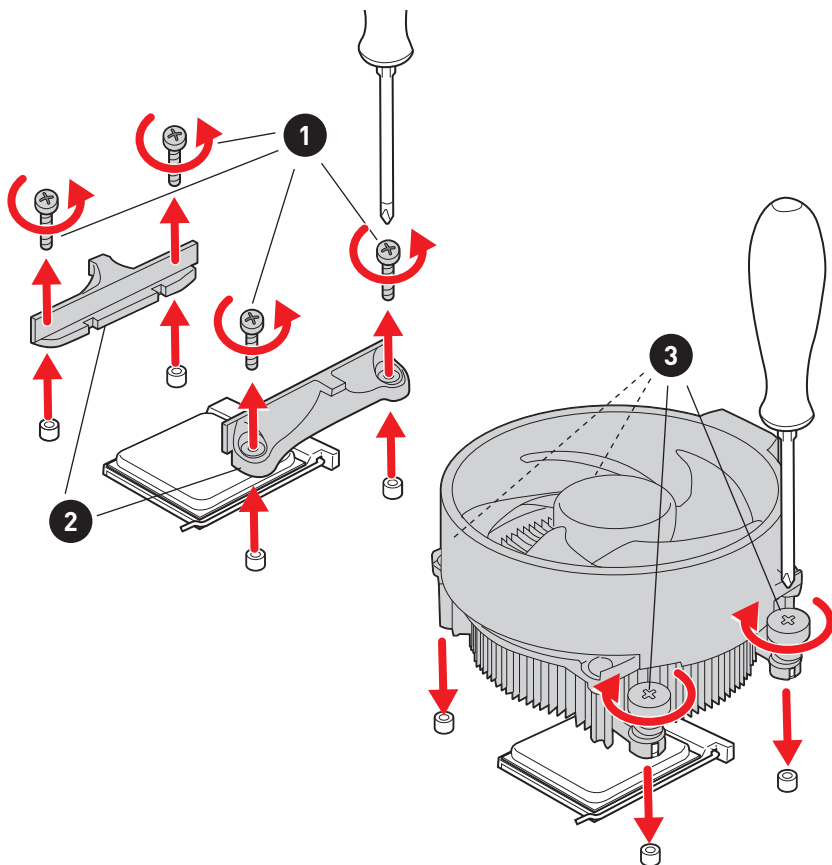
В случае установки процессорного кулера с системой крепления на винтах, следуйте указаниям на рисунке ниже для снятия пластикового модуля крепления. Затем установите кулер.

スクリュータイプのCPUクーラーを取り付ける場合は、下記の図のように、まずリテンションモジュールを外してからCPUクーラーを取り付けて下さい。

나사타입의 CPU 히트싱크를 장착 할 경우, 아래 그림과 같이 쿨러 지지대를 제거 후 히트싱크를 장착 하십시오.

如果要安裝螺絲式的CPU散熱器，請遵照下圖步驟先移除固定模組，再安裝散熱器。

如果要安裝螺絲式CPU散熱器，請按照如下圖步驟先移除固定模塊，然后再安裝散熱器。



Installing DDR5 memory/ Installation des DDR5-Speichers/ Installer une mémoire DDR5/ Установка памяти DDR5/ DDR5× メモリの取り付け/ DDR5 메모리 설치하기/ 安裝 DDR5 記憶體/ 安裝 DDR5 内存

Youtube

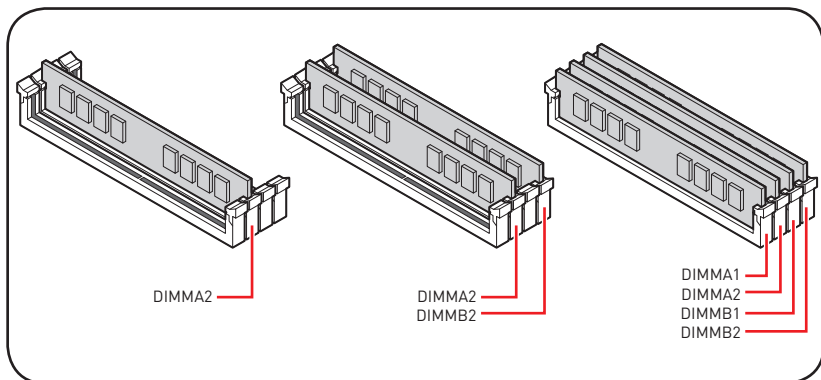
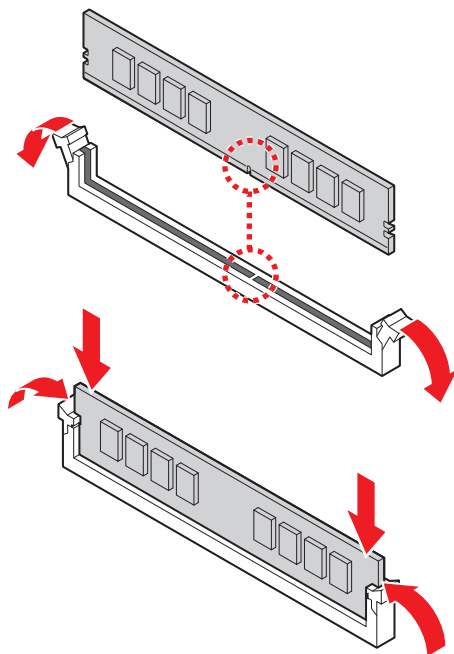


优酷



<http://youtu.be/T03aDrJPYQs>

http://v.youku.com/v_show/id_XNzUyMTI5ODI4.html



Connecting the Front Panel Header/ Anschließen der Frontpanel-Stiftleiste/ Connecter un connecteur du panneau avant/ Подключение разъемов передней панели/ フロントパネルヘッダーの接続/ 전면 패널 커넥터 연결하기/ 連接前置面板針腳/ 连接前置面板接头

Youtube

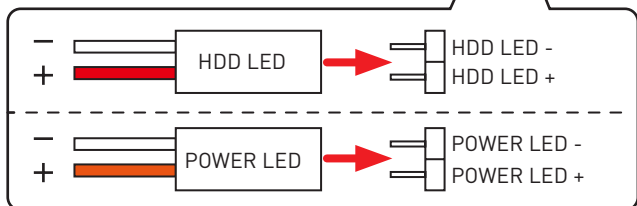
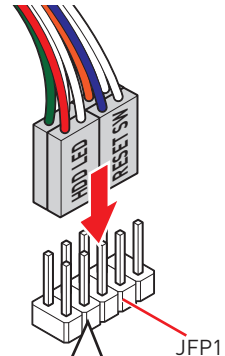
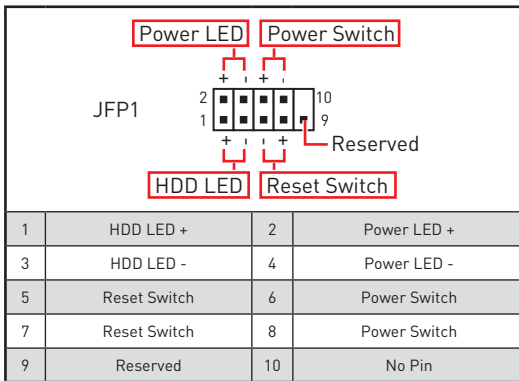
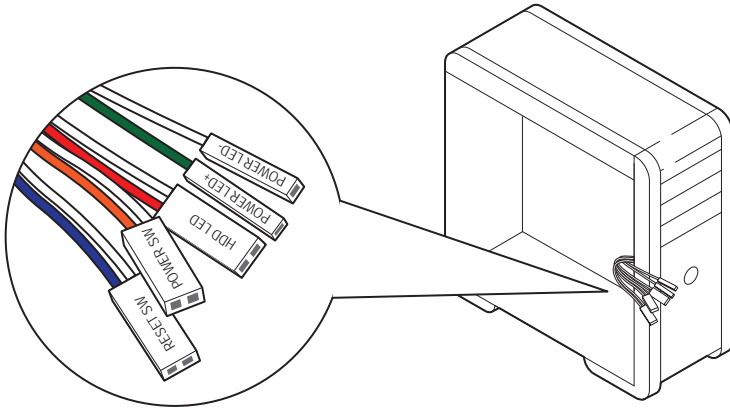


优酷

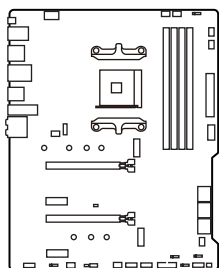


<http://youtu.be/DPELIdVNZUI>

http://v.youku.com/v_show/id_XNjcyMTczMzM2.html



Installing the Motherboard/ Installation des Motherboards/ Installer la carte mère/ Установка материнской платы/ マザー ボードの取り付け/ 메인보드 설치하기/ 安裝主機板/ 安裝主板



Youtube

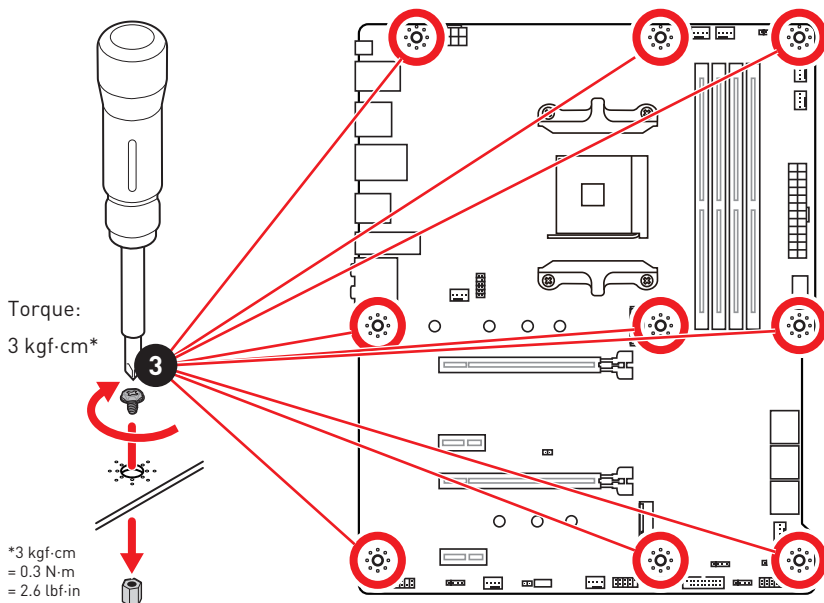
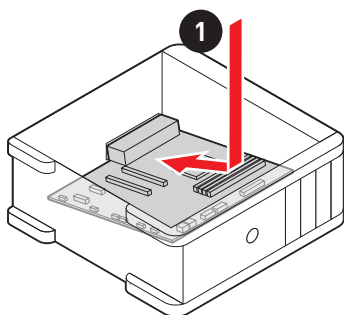


<https://youtu.be/wWl6Qt51Wnc>

优酷



https://v.youku.com/v_show/id_XNDUwMDUyNTkwOA==.html



**Connecting the Power Connectors/ Stromanschlüsse
anschiessen/ Connecter les câbles du module d'alimentation/
Подключение разъемов питания/ 電源コネクターの接続/ 전원
커넥터 연결하기/ 插上電源接頭/ 连接电源接头**

Youtube

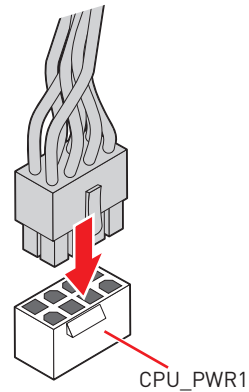
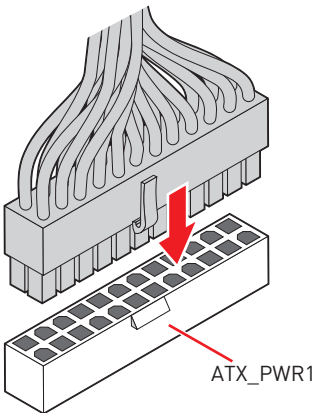
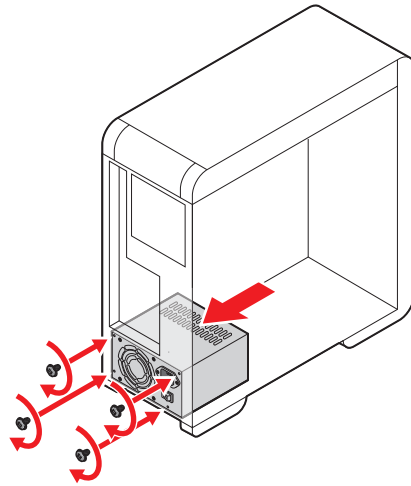


优酷



http://youtu.be/gkDYyR_8314

http://v.youku.com/v_show/id_XNDkzODU0MDQw.html



Installing SATA Drives/ Installation der SATA-Laufwerke/ Installer le disque dur SATA/ Установка дисков SATA/ SATAド ライブの取り付け/ SATA 드라이브 설치하기/ 安裝 SATA 磁碟機/ 安 裝 SATA 设备

Youtube

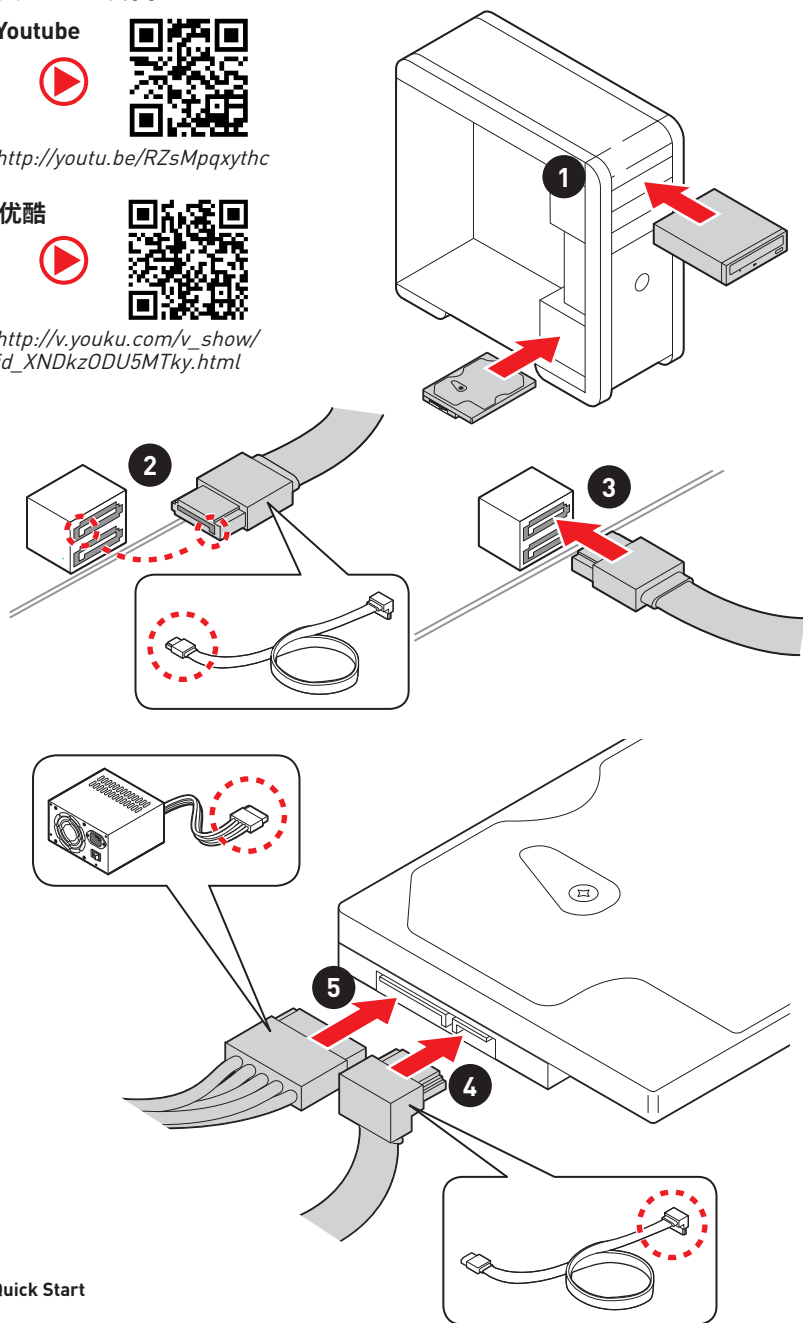


<http://youtu.be/RZsMpqxythc>

优酷



http://v.youku.com/v_show/id_XNDkzODU5MTky.html



Installing a Graphics Card/ Einbau der Grafikkarte/ Installer une carte graphique/ Установка дискретной видеокарты/ グラフィックカードの取り付け/ 그래픽 카드 설치하기 / 安裝顯示卡/ 安裝显卡

Youtube

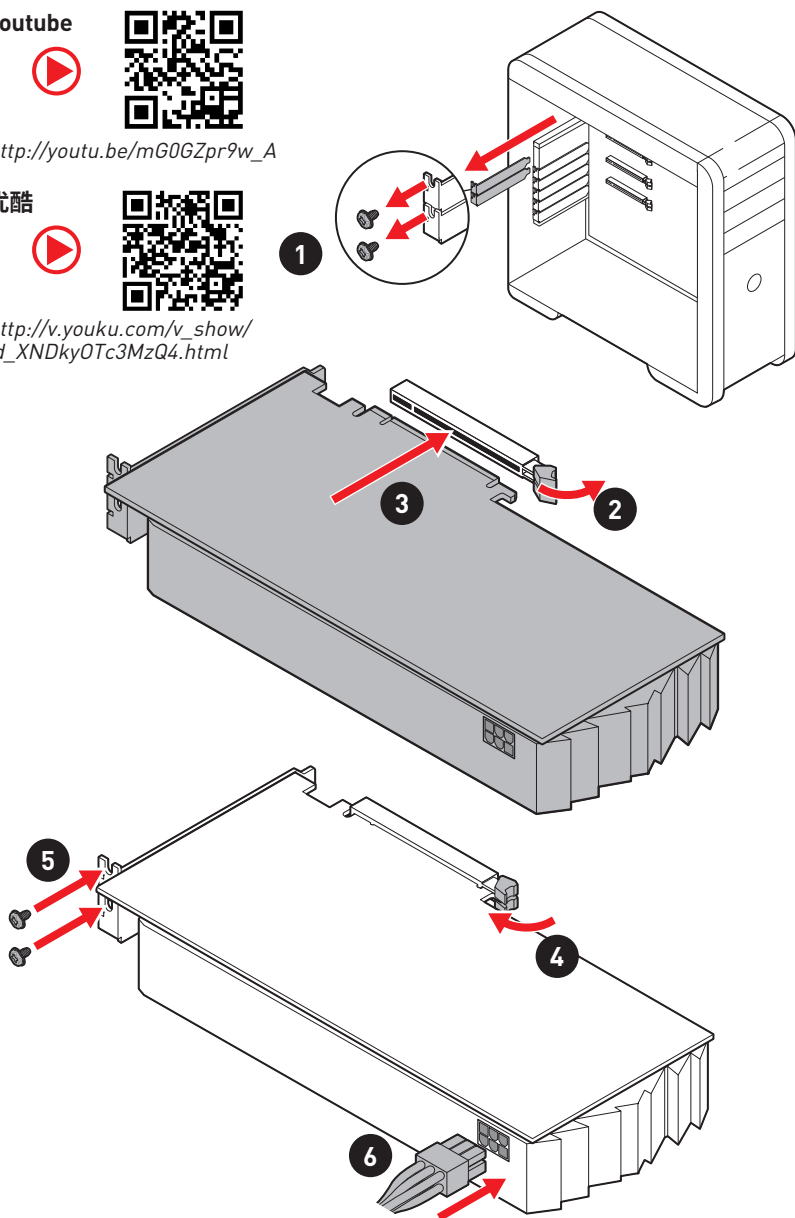


http://youtu.be/mG0GZpr9w_A

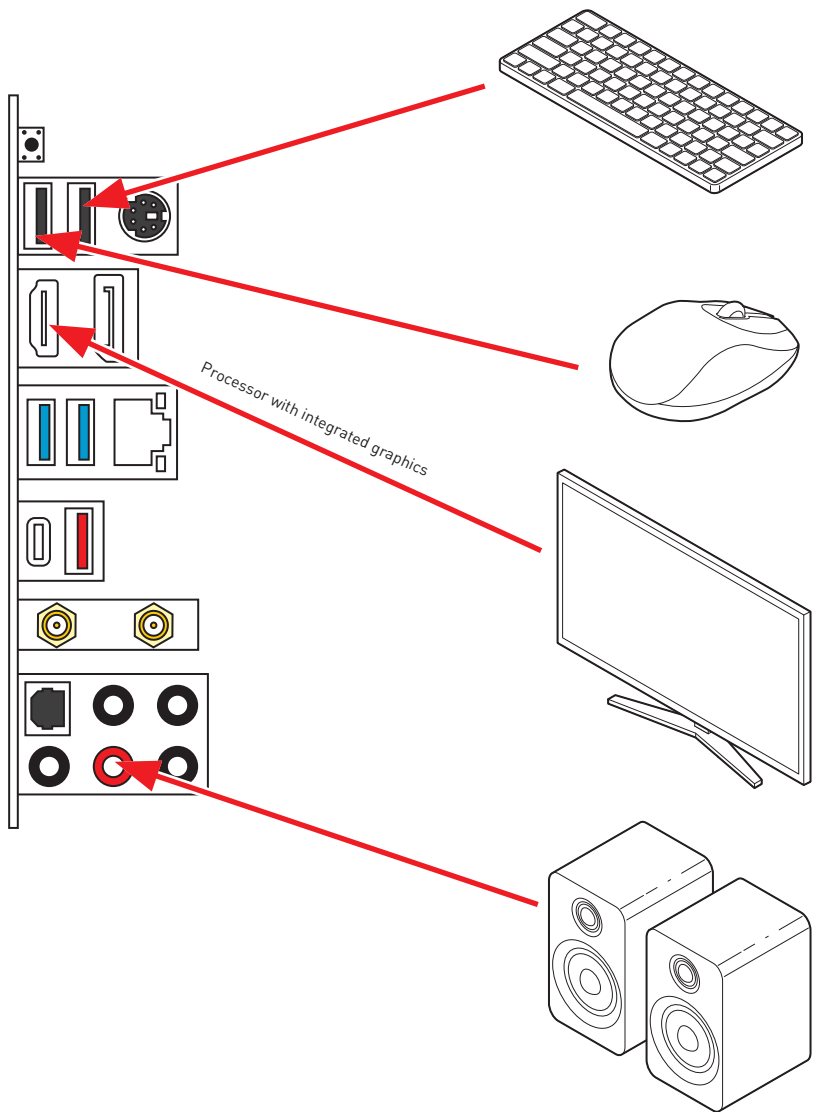
优酷



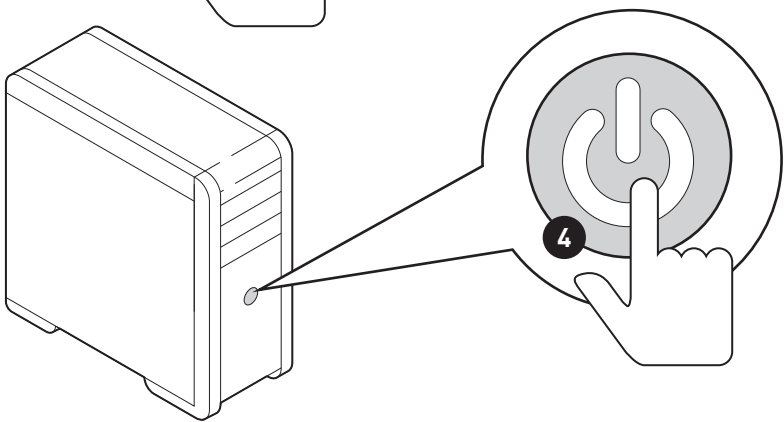
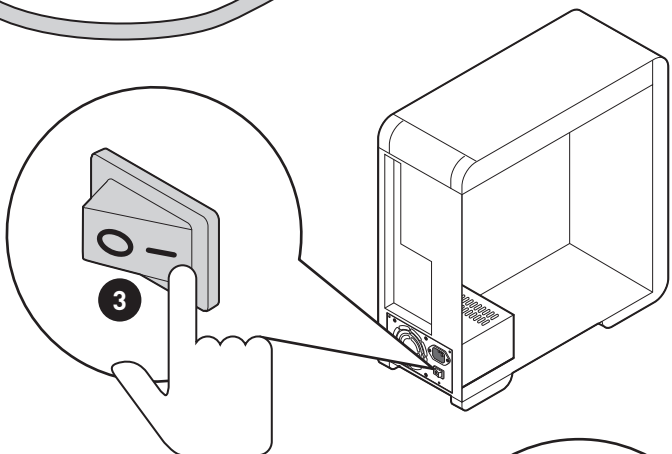
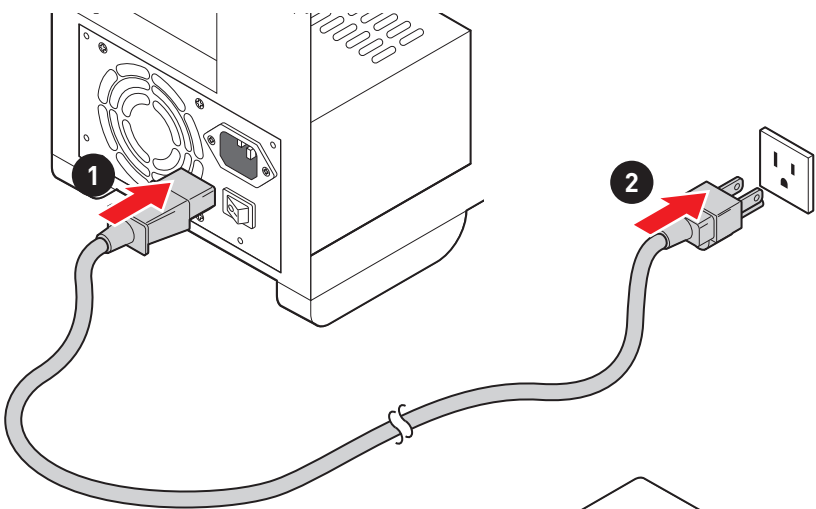
http://v.youku.com/v_show/id_XNDkyOTc3MzQ4.html



Connecting Peripheral Devices/ Peripheriegeräte/ Connecter un périphérique anschliessen/ Подключение периферийных устройств/ 周辺機器の接続/ 주변 장치 연결하기/ 連接周邊設備/ 连接外围设备



Power On/ Einschalten/ Mettre sous-tension/ Включение питания/ 通電/ 전원 켜기/ 啟動電源/ 开机



Contents

Safety Information	3
Specifications	4
Package contents	10
Rear I/O Panel	11
LAN Port LED Status Table	11
Audio Ports Configuration	11
Realtek Audio Console	12
Overview of Components	15
Processor Socket	16
DIMM Slots.....	17
PCI_E1~4: PCIe Expansion Slots.....	18
SATA1~6: SATA 6Gb/s Connectors.....	19
M2_1~2: M.2 Slots (Key M)	19
JFP1, JFP2: Front Panel Connectors.....	21
JAUD1: Front Audio Connector	21
CPU_PWR1, ATX_PWR1: Power Connectors.....	22
JUSB4: USB 3.2 Gen 1 5Gbps Type-C Connector.....	23
JUSB3: USB 3.2 Gen 1 5Gbps Connector	23
JUSB1~2: USB 2.0 Connectors.....	24
JTPM1: TPM Module Connector.....	24
CPU_FAN1, PUMP_FAN1, SYS_FAN1~6: Fan Connectors.....	25
JCI1: Chassis Intrusion Connector.....	26
JBAT1: Clear CMOS (Reset BIOS) Jumper.....	27
JRGB1~2: RGB LED connectors	28
JRAINBOW1~2: Addressable RGB LED connectors	29
EZ Debug LED.....	30
LED_SW1: EZ LED Control.....	30
Installing OS, Drivers & Utilities	31
Installing Windows® 10.....	31
Installing Drivers	31
Installing Utilities	31
UEFI BIOS	32
BIOS Setup.....	33
Entering BIOS Setup.....	33
Resetting BIOS.....	34
Updating BIOS.....	34
EZ Mode	36

Advanced Mode	39
OC Menu.....	40

Safety Information

- The components included in this package are prone to damage from electrostatic discharge (ESD). Please adhere to the following instructions to ensure successful computer assembly.
- Ensure that all components are securely connected. Loose connections may cause the computer to not recognize a component or fail to start.
- Hold the motherboard by the edges to avoid touching sensitive components.
- It is recommended to wear an electrostatic discharge (ESD) wrist strap when handling the motherboard to prevent electrostatic damage. If an ESD wrist strap is not available, discharge yourself of static electricity by touching another metal object before handling the motherboard.
- Store the motherboard in an electrostatic shielding container or on an anti-static pad whenever the motherboard is not installed.
- Before turning on the computer, ensure that there are no loose screws or metal components on the motherboard or anywhere within the computer case.
- Do not boot the computer before installation is completed. This could cause permanent damage to the components as well as injury to the user.
- If you need help during any installation step, please consult a certified computer technician.
- Always turn off the power supply and unplug the power cord from the power outlet before installing or removing any computer component.
- Keep this user guide for future reference.
- Keep this motherboard away from humidity.
- Make sure that your electrical outlet provides the same voltage as is indicated on the PSU, before connecting the PSU to the electrical outlet.
- Place the power cord such a way that people can not step on it. Do not place anything over the power cord.
- All cautions and warnings on the motherboard should be noted.
- If any of the following situations arises, get the motherboard checked by service personnel:
 - Liquid has penetrated into the computer.
 - The motherboard has been exposed to moisture.
 - The motherboard does not work well or you can not get it work according to user guide.
 - The motherboard has been dropped and damaged.
 - The motherboard has obvious sign of breakage.
- Do not leave this motherboard in an environment above 60°C (140°F), it may damage the motherboard.

Specifications

CPU	<ul style="list-style-type: none"> • Supports AMD Ryzen™ 5000 Series, 5000 G-Series, 4000 G-Series, and 3000 Series processors • Supports Socket AM4
Chipset	AMD B550 Chipset
Memory	<ul style="list-style-type: none"> • 4x DDR4 memory slots, support up to 128GB* <ul style="list-style-type: none"> ▪ Supports DDR4 1866/ 2133/ 2400/ 2667/ 2800/ 2933/ 3000/ 3066/ 3200 MHz by JEDEC ▪ Supports DDR4 2667/ 2800 /2933 /3000 /3066 /3200 /3466 /3600/ 3733 /3866 /4000 /4133 /4266 /4400 /4533 /4600 /4733/ 4800/ 4866+ MHz by A-XMP OC MODE <ul style="list-style-type: none"> ▫ 1DPC 1R max speed 4866 MHz ▫ 1DPC 2R max speed 3866 MHz ▫ 2DPC 1R max speed 4000 MHz ▫ 2DPC 2R max speed 3600 MHz • Dual channel memory architecture • Supports non-ECC UDIMM memory • Supports ECC UDIMM memory (non-ECC mode) • Supports un-buffered memory <p>* Please refer www.msi.com for more information on compatible memory.</p>
Expansion Slot	<ul style="list-style-type: none"> • 1x PCIe 4.0/ 3.0 x16 slot (PCI_E1)* • 1x PCIe 3.0 x16 slot (PCI_E3), supports x4 speed** • 2x PCIe 3.0 x1 slots <p>* The supported specification depends on installed processor. ** When installing devices in M.2_2, PCI_E2 & PCI_E3 slots at the same time, PCI_E3 slot will be unavailable, and M2_2 slot only supports PCIe x2. Please refer to page 18 for details.</p>
Multi-GPU	<ul style="list-style-type: none"> • Supports 2-Way AMD CrossFire™ Technology
Onboard Graphics	<ul style="list-style-type: none"> • 1x HDMI 2.1 port, supports a maximum resolution of 4096x2160 @60Hz* • 1x DisplayPort, supports a maximum resolution of 4096x2160 @60Hz* • Maximum shared memory of 16 GB <p>* Available for the processor with integrated graphics. ** Graphics specifications may vary depending on the CPU installed.</p>

Continued on next page

Continued from previous page

Storage	<p>AMD B550 Chipset</p> <ul style="list-style-type: none">• 6x SATA 6Gb/s ports• 2x M.2 slots (Key M)<ul style="list-style-type: none">▪ M2_1 slot (from AMD Processor)<ul style="list-style-type: none">▫ Supports PCIe 4.0/ 3.0 x4*▫ Supports SATA 6Gb/s▫ Supports 2242/ 2260/ 2280/ 22110 storage devices▪ M2_2 slot (from AMD B550 chipset)<ul style="list-style-type: none">▫ Supports PCIe 3.0x4▫ Supports 2242/ 2260/ 2280 storage devices <p>* The supported specification depends on installed processor.</p>
RAID	<ul style="list-style-type: none">• Supports RAID 0, RAID 1 and RAID 10 for SATA storage devices• Supports RAID 0 and RAID 1 for M.2 NVMe storage devices
USB	<p>AMD B550 Chipset</p> <ul style="list-style-type: none">▪ 3x USB 3.2 Gen 1 5Gbps ports (1 Type-C internal connector, and 2 ports are available through the internal USB 3.2 Gen 1 5Gbps connector)▪ 6x USB 2.0 ports (2 Type-A ports on the back panel, 4 ports through the internal USB 2.0 connectors) <p>AMD Processor</p> <ul style="list-style-type: none">▪ 2x USB 3.2 Gen 2 10Gbps ports (1 Type-C port and 1 Type-A port on the back panel)▪ 2x USB 3.2 Gen 1 5Gbps Type-A ports on the back panel
Audio	<p>Realtek® ALC897 Codec</p> <ul style="list-style-type: none">▪ 7.1-Channel High Definition Audio▪ Supports S/PDIF output
LAN	<ul style="list-style-type: none">• 1x Realtek® RTL8125B 2.5Gbps LAN controller

Continued on next page

Continued from previous page

Wireless LAN & Bluetooth®	<p>AMD® Wi-Fi 6E*</p> <ul style="list-style-type: none">• The Wireless module is pre-installed in the M.2 (Key-E) slot• Supports MU-MIMO TX/RX• Supports 20MHz, 40MHz, 80MHz bandwidth in 2.4GHz/5GHz or 6GHz bands• Supports 802.11 a/ b/ g/ n/ ac/ ax• Supports Bluetooth® 5.2** <p>* Wi-Fi 6E 6GHz may depend on every country's regulations and will be ready in Windows 10 version 21H1 and Windows 11. ** Bluetooth 5.2 will be ready in Windows 10 version 21H1 and Windows 11.</p>
Internal Connectors	<ul style="list-style-type: none">• 1x 24-pin ATX main power connector• 1x 8-pin ATX 12V power connector• 6x SATA 6Gb/s connectors• 2x M.2 slots (M-Key)• 1x USB 3.2 Gen 1 5Gbps Type-C port• 1x USB 3.2 Gen 1 5Gbps connector (supports additional 2 USB 3.2 Gen 1 5Gbps ports)• 2x USB 2.0 connectors (supports additional 4 USB 2.0 ports)• 1x 4-pin CPU fan connector• 1x 4-pin water-pump fan connector• 6x 4-pin system fan connectors• 1x Front panel audio connector• 2x System panel connectors• 1x Chassis Intrusion connector• 2x 4-pin RGB LED connectors• 2x 3-pin RAINBOW LED connectors• 1x TPM module connector• 1x Clear CMOS jumper
LED Features	<ul style="list-style-type: none">• 1x EZ LED Control switch• 4x EZ Debug LED

Continued on next page

Continued from previous page

Back Panel Connectors	<ul style="list-style-type: none">• 1x Flash BIOS Button• 1x PS/2 keyboard/ mouse combo port• 2x USB 2.0 Type-A ports• 1x Display port• 1x HDMI port• 1x LAN (RJ45) port• 2x USB 3.2 Gen 1 5Gbps Type-A ports• 1x USB 3.2 Gen 2 10Gbps Type-A port• 1x USB 3.2 Gen 2 10Gbps Type-C port• 2x Wi-Fi Antenna connectors• 5x OFC audio jacks• 1x Optical S/PDIF Out connector
I/O Controller	NUVOTON NCT6687-R Controller Chip
Hardware Monitor	<ul style="list-style-type: none">• CPU/ System/ Chipset temperature detection• CPU/ System/ Pump fan speed detection• CPU/ System/ Pump fan speed control
Form Factor	<ul style="list-style-type: none">• ATX Form Factor• 12 in. x 9.6 in. (30.5 cm x 24.4 cm)
BIOS Features	<ul style="list-style-type: none">• 1x 256 Mb flash• UEFI AMI BIOS• ACPI 6.0, SMBIOS 2.8• Multi-language
Software	<ul style="list-style-type: none">• Drivers• MSI CENTER• MSI APP Player (BlueStacks)• Open Broadcaster Software (OBS)• CPU-Z MSI GAMING• Google Chrome™, Google Toolbar, Google Drive• Norton™ Internet Security Solution

Continued on next page

Continued from previous page

MSI Center Features	<ul style="list-style-type: none">• Gaming Mode• Smart Priority• Game Highlights• LAN Manager• Mystic Light• Ambient Devices• Frozr AI Cooling• User Scenario• True Color• Live Update• Hardware Monitoring• Super Charger• Devices Speed Up• Smart Image Finder• MSI Companion• System Diagnosis
Special Features	<ul style="list-style-type: none">• Audio<ul style="list-style-type: none">▪ Audio Boost• Network<ul style="list-style-type: none">▪ 2.5G LAN▪ LAN Manager with Realtek 8125B▪ AMD WiFi• Cooling<ul style="list-style-type: none">▪ Extended Heatsink Design▪ M.2 Shield Frozr▪ Pump Fan▪ Smart Fan Control• LED<ul style="list-style-type: none">▪ Mystic Light Extension (RAINBOW/RGB)▪ Mystic Light SYNC▪ Ambient Link▪ EZ LED Control▪ EZ DEBUG LED

Continued on next page

Continued from previous page

Special Features

- Performance
 - Multi GPU-CrossFire Technology
 - DDR4 Boost
 - Core Boost
 - GAME Boost
 - USB 3.2 Gen 2 10G
 - USB with Type A+C
 - Front USB Type-C
- Protection
 - PCI-E Steel Armor
 - PCI-E Steel Slot
 - Pre-installed I/O Shielding
- Experience
 - MSI Center
 - Click BIOS 5
 - Flash BIOS Button

Package contents

Please check the contents of your motherboard package. It should contain:

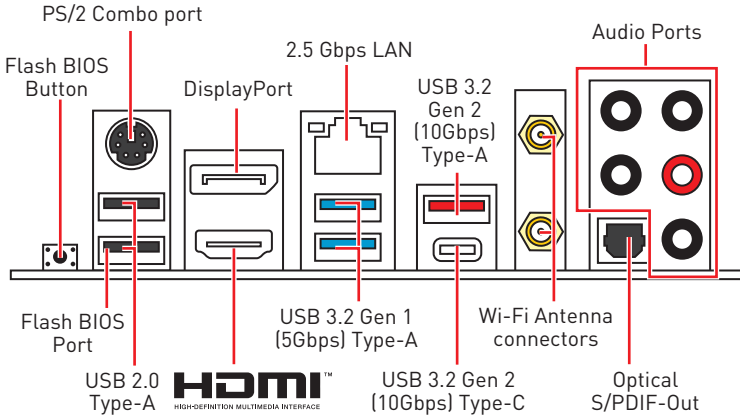
Motherboard	MAG B550 TOMAHAWK MAX WIFI	
Cable	SATA 6G cables (2 cables/pack)	1
Accessories	Wi-Fi antenna	1
	M.2 screws (3 pcs./pack)	1
	MAG Sticker	1
	Case badge	1
	Product registration card	1
Application	Driver DVD	1
Documentation	Quick installation guide	1
	MSI components compatibility & reward program card	1



Important

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

Rear I/O Panel



- **Flash BIOS Port/ Button** - Please refer to page 35 for Updating BIOS with Flash BIOS Button.

LAN Port LED Status Table

Link/ Activity LED			Speed LED	
Status	Description		Status	2.5 Gbps LAN
Off	No link		Off	10 Mbps
Yellow	Linked		Green	100/ 1000 Mbps
Blinking	Data activity		Orange	2.5 Gbps

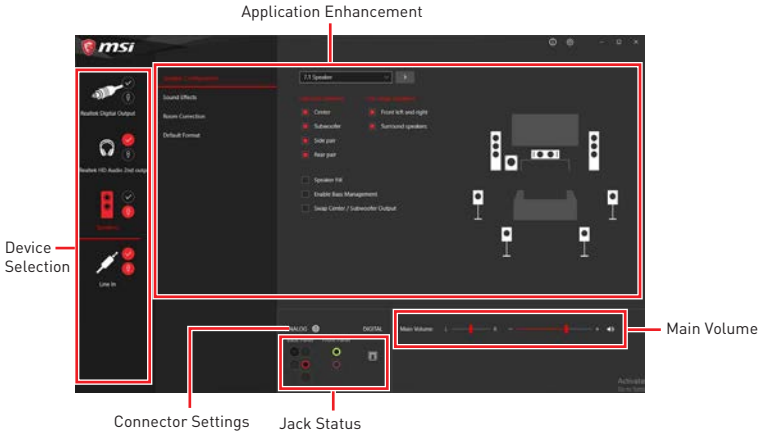
Audio Ports Configuration

Audio Ports	Channel			
	2	4	6	8
Center/ Sub-woofer Out			●	●
Rear Speaker Out		●	●	●
Line-In/ Side Speaker Out				●
Line-Out/ Front Speaker Out	●	●	●	●
Mic In				

(●: connected, Blank: empty)

Realtek Audio Console

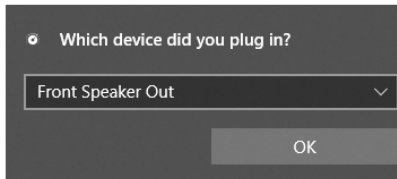
After Realtek Audio Console is installed. You can use it to change sound settings to get better sound experience.



- **Device Selection** - allows you to select a audio output source to change the related options. The **check** sign indicates the devices as default.
- **Application Enhancement** - the array of options will provide you a complete guidance of anticipated sound effect for both output and input device.
- **Main Volume** - controls the volume or balance the right/left side of the speakers that you plugged in front or rear panel by adjust the bar.
- **Jack Status** - depicts all render and capture devices currently connected with your computer.
- **Connector Settings** - configures the connection settings.

Auto popup dialog

When you plug into a device at an audio jack, a dialogue window will pop up asking you which device is current connected.

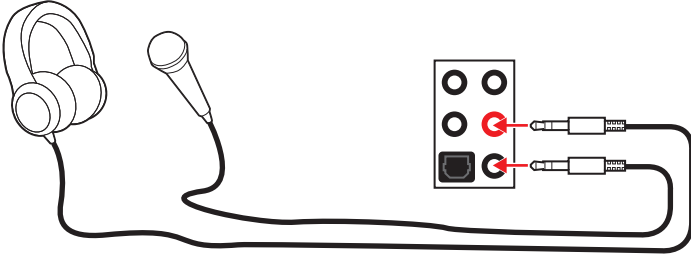


Each jack corresponds to its default setting as shown on the next page.

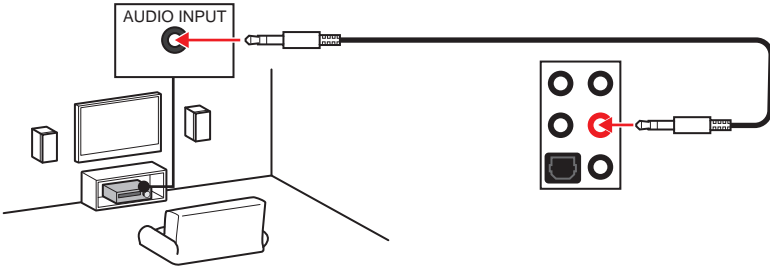


The pictures above for reference only and may vary from the product you purchased.

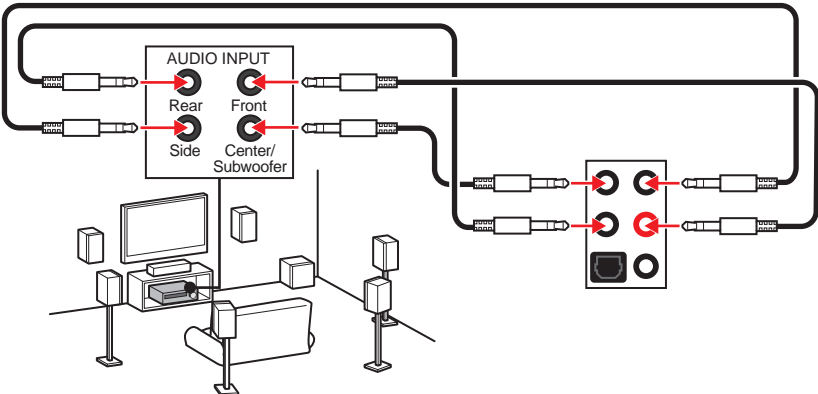
Audio jacks to headphone and microphone diagram



Audio jacks to stereo speakers diagram

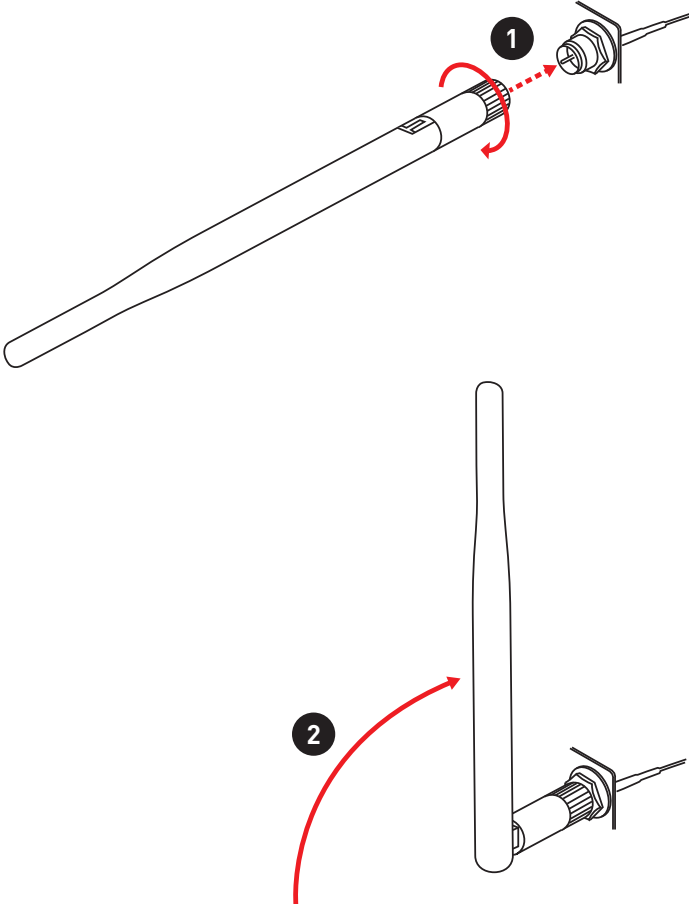


Audio jacks to 7.1-channel speakers diagram

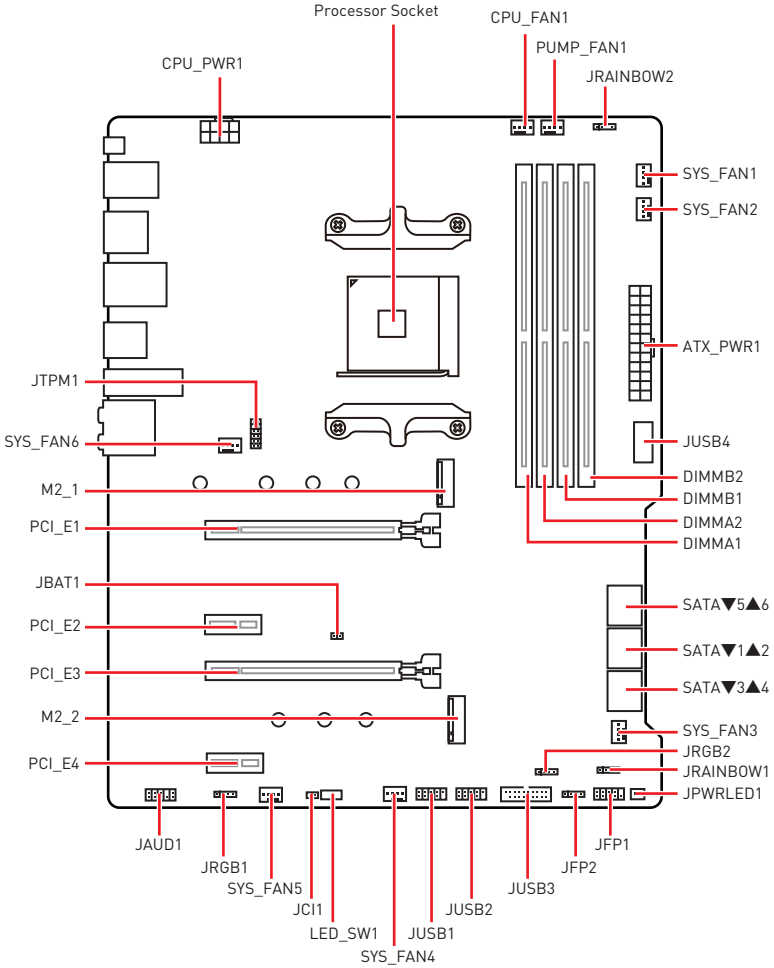


Installing antennas

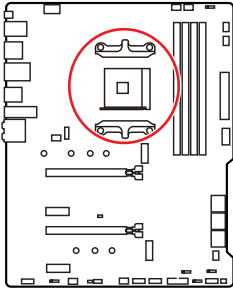
1. Screw the antennas tight to the antenna connectors as shown below.
2. Orient the antennas.



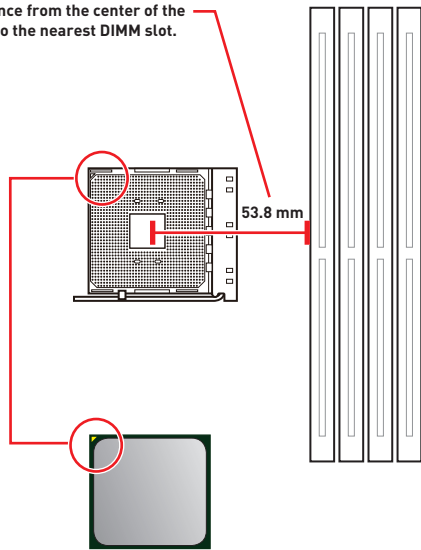
Overview of Components



Processor Socket



Distance from the center of the CPU to the nearest DIMM slot.



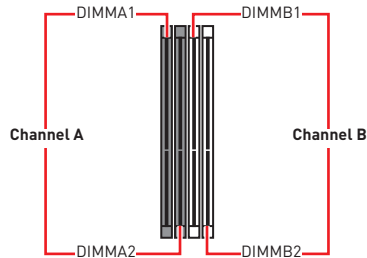
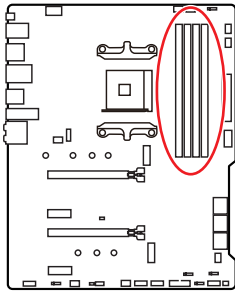
Introduction to the AM4 CPU

The surface of the AM4 CPU has a yellow triangle to assist in correctly lining up the CPU for motherboard placement. The yellow triangle is the Pin 1 indicator.

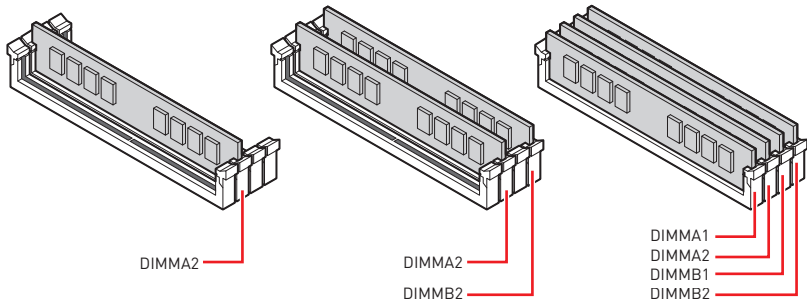
Important

- When changing the processor, the system configuration could be cleared and reset BIOS to default values, due to the AM4 processor's architecture.
- Always unplug the power cord from the power outlet before installing or removing the CPU.
- When installing a CPU, always remember to install a CPU heatsink. A CPU heatsink is necessary to prevent overheating and maintain system stability.
- Confirm that the CPU heatsink has formed a tight seal with the CPU before booting your system.
- Overheating can seriously damage the CPU and motherboard. Always make sure the cooling fans work properly to protect the CPU from overheating. Be sure to apply an even layer of thermal paste (or thermal tape) between the CPU and the heatsink to enhance heat dissipation.
- If you purchased a separate CPU and heatsink/ cooler, Please refer to the documentation in the heatsink/ cooler package for more details about installation.
- This motherboard is designed to support overclocking. Before attempting to overclock, please make sure that all other system components can tolerate overclocking. Any attempt to operate beyond product specifications is not recommended. MSI® does not guarantee the damages or risks caused by inadequate operation beyond product specifications.

DIMM Slots



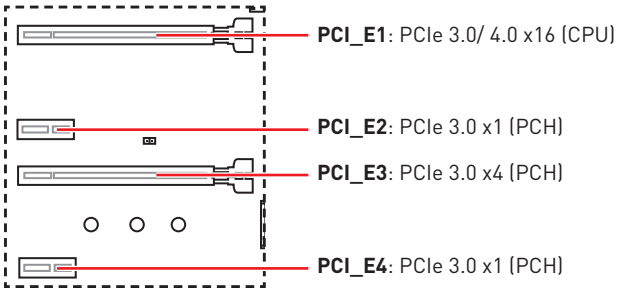
Memory module installation recommendation



Important

- Always insert memory modules in the **DIMMA2** slot first.
- Due to chipset resource usage, the available capacity of memory will be a little less than the amount of installed.
- Based on CPU specification, the Memory DIMM voltage below 1.35V is suggested to protect the CPU.
- To ensure system stability for Dual channel mode, memory modules must be of the same type, number and density.
- Some memory modules may operate at a lower frequency than the marked value when overclocking due to the memory frequency operates dependent on its Serial Presence Detect (SPD). Go to BIOS and find the **DRAM Frequency** to set the memory frequency if you want to operate the memory at the marked or at a higher frequency.
- It is recommended to use a more efficient memory cooling system for full DIMMs installation or overclocking.
- The stability and compatibility of installed memory module depend on installed CPU and devices when overclocking.
- Please refer www.msi.com for more information on compatible memory.

PCI_E1~4: PCIe Expansion Slots



Important

- If you install a large and heavy graphics card, you need to use a tool such as **MSI Gaming Series Graphics Card Bolster** to support its weight to prevent deformation of the slot.
- For a single PCIe x16 expansion card installation with optimum performance, using the **PCI_E1** slot is recommended.
- When adding or removing expansion cards, always turn off the power supply and unplug the power supply power cable from the power outlet. Read the expansion card's documentation to check for any necessary additional hardware or software changes.
- When installing devices in M.2_2, PCI_E2 & PCI_E3 slots at the same time, PCI_E3 slot will be unavailable, and M2_2 slot only supports PCIe x2.

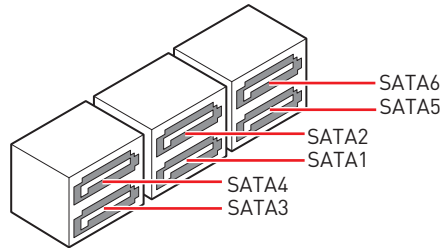
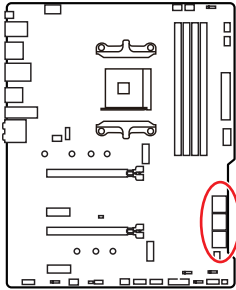
M.2 slots and PCIe slots combination table

Slot	Combination			
	PCIe/SATA			
M2_1 (CPU)	PCIe/SATA			
M2_2 (PCH)	PCIe x2	PCIe x4	X	X
PCI_E1 (CPU)	✓	✓	✓	✓
PCI_E2 (PCH)	✓	X	✓	X
PCI_E3 (PCH)	—	X	PCIe x2	PCIe x4
PCI_E4 (PCH)	✓	✓	✓	✓

[SATA: M.2 SATA SSD, PCIe: M.2 PCIe SSD, X: no device, ✓: available, —: unavailable]

SATA1~6: SATA 6Gb/s Connectors

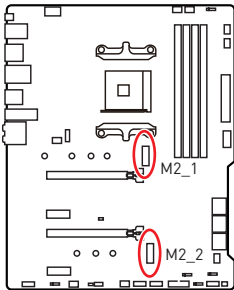
These connectors are SATA 6Gb/s interface ports. Each connector can connect to one SATA device.



Important

- Please do not fold the SATA cable at a 90-degree angle. Data loss may result during transmission otherwise.
- SATA cables have identical plugs on either sides of the cable. However, it is recommended that the flat connector be connected to the motherboard for space saving purposes.

M2_1~2: M.2 Slots (Key M)



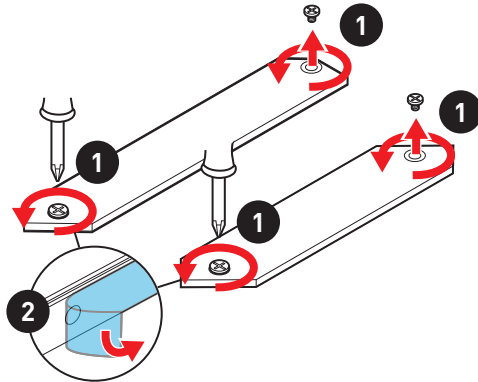
Video Demonstration

Watch the video to learn how to Install M.2 module.

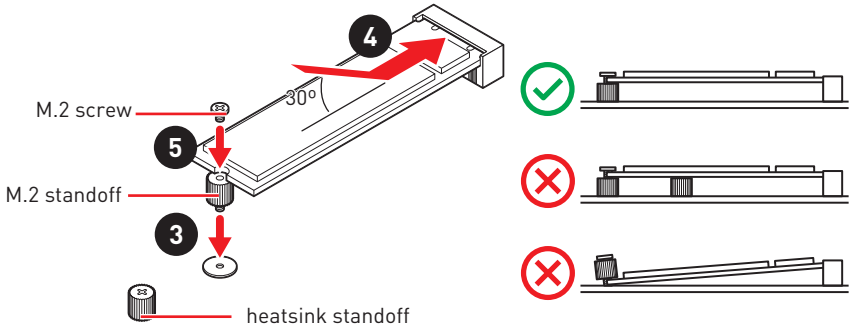
<http://youtu.be/JCTFABytrYA>

Installing M.2 module

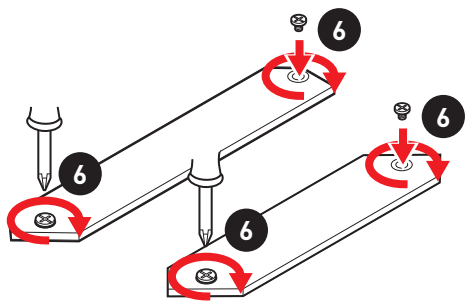
1. Loosen the screws of M.2 SHIELD FROZR heatsink.
2. Remove the M.2 SHIELD FROZR and remove the protective films from the thermal pads.



3. Move and fasten the M.2 standoff to the appropriate position for your M.2 SSD, or remove the M.2 standoff if your M.2 SSD length is same as the length of M.2 heatsink to avoid damage to the M.2 SSD.
4. Insert your M.2 SSD into the M.2 slot at a 30-degree angle.
5. Secure the M.2 SSD in place with the M.2 screw, or skip this step if you remove the M.2 standoff in step 3.

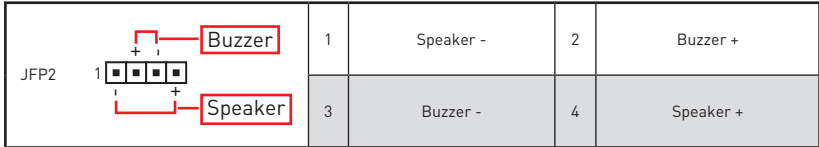
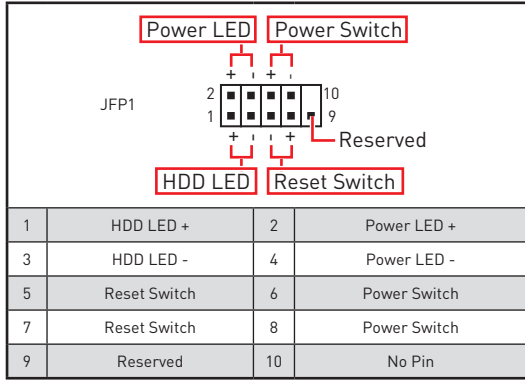
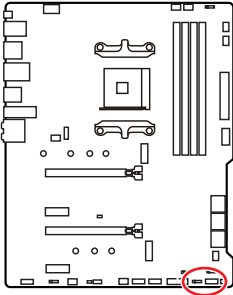


6. Put the M.2 SHIELD FROZR heatsink back in place and secure it.



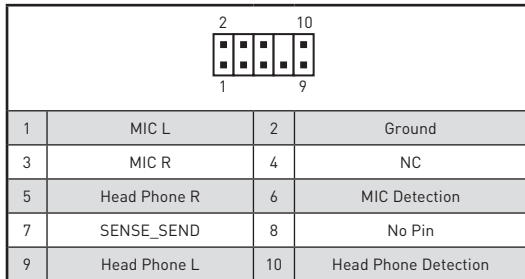
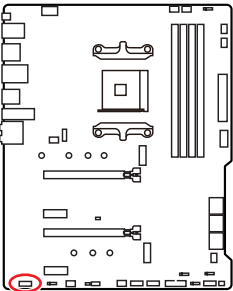
JFP1, JFP2: Front Panel Connectors

These connectors connect to the switches and LEDs on the front panel.



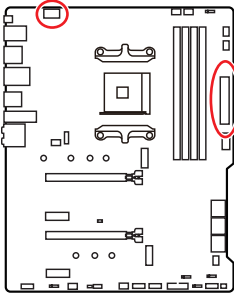
JAUD1: Front Audio Connector

This connector allows you to connect audio jacks on the front panel.



CPU_PWR1, ATX_PWR1: Power Connectors

These connectors allow you to connect an ATX power supply.



1	Ground	5	+12V
2	Ground	6	+12V
3	Ground	7	+12V
4	Ground	8	+12V

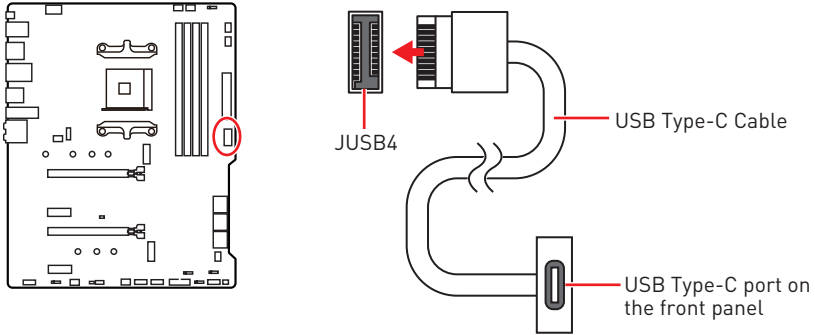
1	+3.3V	13	+3.3V
2	+3.3V	14	-12V
3	Ground	15	Ground
4	+5V	16	PS-ON#
5	Ground	17	Ground
6	+5V	18	Ground
7	Ground	19	Ground
8	PWR OK	20	Res
9	5VSB	21	+5V
10	+12V	22	+5V
11	+12V	23	+5V
12	+3.3V	24	Ground

Important

Make sure that all the power cables are securely connected to a proper ATX power supply to ensure stable operation of the motherboard.

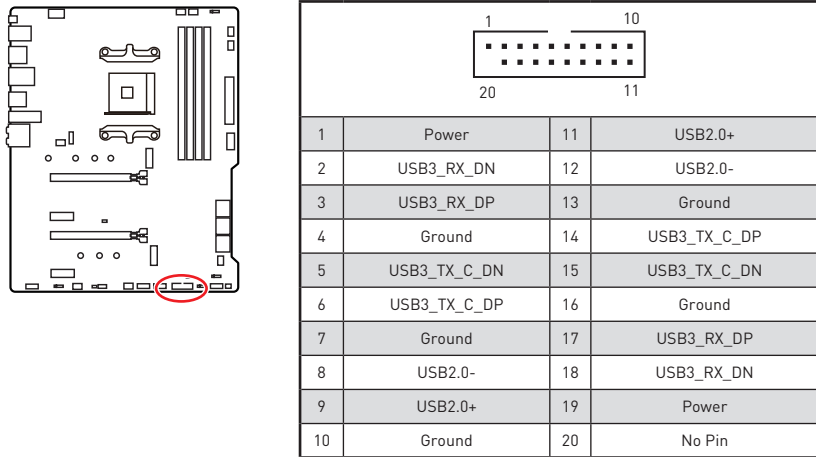
JUSB4: USB 3.2 Gen 1 5Gbps Type-C Connector

This connector allows you to connect USB 3.2 Gen 1 5Gbps Type-C connector on the front panel. The connector possesses a foolproof design. When you connect the cable, be sure to connect it with the corresponding orientation.



JUSB3: USB 3.2 Gen 1 5Gbps Connector

This connector allows you to connect USB 3.2 Gen 1 5Gbps ports on the front panel.

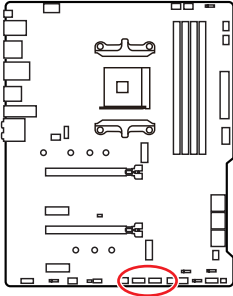


Important

Note that the Power and Ground pins must be connected correctly to avoid possible damage.

JUSB1~2: USB 2.0 Connectors

These connectors allow you to connect USB 2.0 ports on the front panel.



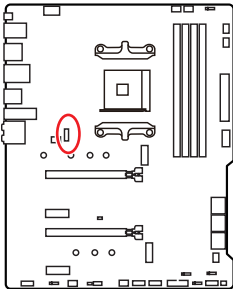
1	VCC	2	VCC
3	USB0-	4	USB1-
5	USB0+	6	USB1+
7	Ground	8	Ground
9	No Pin	10	NC

Important

- Note that the VCC and Ground pins must be connected correctly to avoid possible damage.
- In order to recharge your iPad, iPhone and iPod through USB ports, please install MSI® DRAGON CENTER utility.

JTPM1: TPM Module Connector

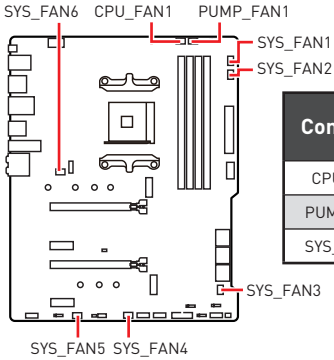
This connector is for TPM (Trusted Platform Module). Please refer to the TPM security platform manual for more details and usages.



1	SPI Power	2	SPI Chip Select
3	Master In Slave Out (SPI Data)	4	Master In Slave In (SPI Data)
5	Reserved	6	SPI Clock
7	Ground	8	SPI Reset
9	Reserved	10	No Pin
11	Reserved	12	Interrupt Request

CPU_FAN1, PUMP_FAN1, SYS_FAN1~6: Fan Connectors

Fan connectors can be classified as PWM (Pulse Width Modulation) Mode or DC Mode. PWM Mode fan connectors provide constant 12V output and adjust fan speed with speed control signal. DC Mode fan connectors control fan speed by changing voltage. The auto mode fan connectors can automatically detect PWM and DC mode. However, you can follow the instruction below to adjust the fan connector to PWM or DC Mode manually.



Connector	Default fan mode	Max. current	Max. power
CPU_FAN1	Auto mode	2A	24W
PUMP_FAN1	PWM mode	3A	36W
SYS_FAN1~6	DC mode	1A	12W

Switching fan mode and adjusting fan speed

You can switch between PWM mode and DC mode and adjust fan speed in **BIOS > HARDWARE MONITOR**.

Select **PWM** mode or **DC** mode





There are gradient points of the fan speed that allow you to adjust fan speed in relation to CPU temperature.

Important

Make sure fans are working properly after switching the PWM/ DC mode.

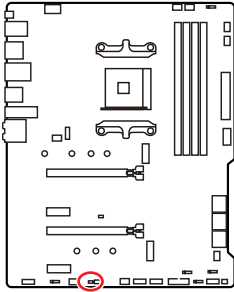
Pin definition of fan connectors

1  PWM Mode pin definition			
1	Ground	2	+12V
3	Sense	4	Speed Control Signal

1  DC Mode pin definition			
1	Ground	2	Voltage Control
3	Sense	4	NC

JCI1: Chassis Intrusion Connector

This connector allows you to connect the chassis intrusion switch cable.



Normal
(default)



Trigger the chassis
intrusion event

Using chassis intrusion detector

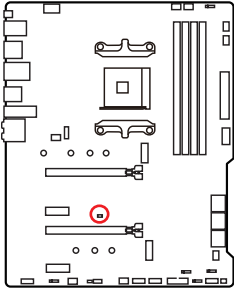
1. Connect the **JCI1** connector to the chassis intrusion switch/ sensor on the chassis.
2. Close the chassis cover.
3. Go to **BIOS > SETTINGS > Security > Chassis Intrusion Configuration**.
4. Set **Chassis Intrusion** to **Enabled**.
5. Press **F10** to save and exit and then press the **Enter** key to select **Yes**.
6. Once the chassis cover is opened again, a warning message will be displayed on screen when the computer is turned on.

Resetting the chassis intrusion warning

1. Go to **BIOS > SETTINGS > Security > Chassis Intrusion Configuration**.
2. Set **Chassis Intrusion** to **Reset**.
3. Press **F10** to save and exit and then press the **Enter** key to select **Yes**.

JBAT1: Clear CMOS (Reset BIOS) Jumper

There is CMOS memory onboard that is external powered from a battery located on the motherboard to save system configuration data. If you want to clear the system configuration, set the jumpers to clear the CMOS memory.



Keep Data
(default)



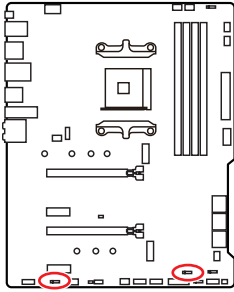
Clear CMOS/
Reset BIOS

Resetting BIOS to default values

1. Power off the computer and unplug the power cord.
2. Use a jumper cap to short **JBAT1** for about 5-10 seconds.
3. Remove the jumper cap from **JBAT1**.
4. Plug the power cord and Power on the computer.

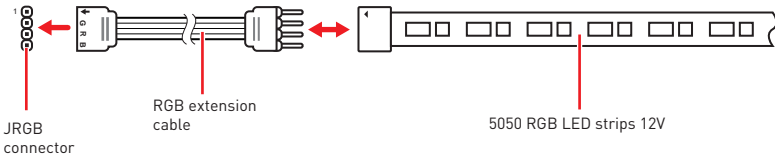
JRGB1~2: RGB LED connectors

These JRGB connectors allow you to connect the 5050 RGB LED strips 12V.

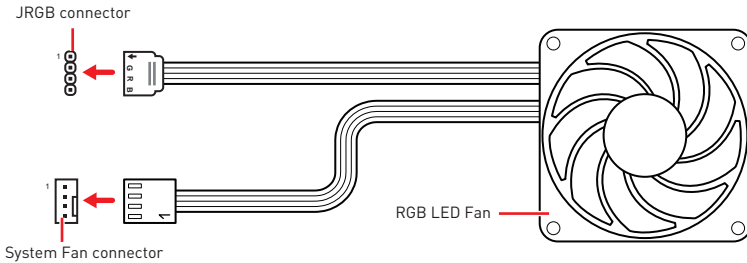


1			
1	+12V	2	G
3	R	4	B

RGB LED Strip Connection



RGB LED Fan Connection

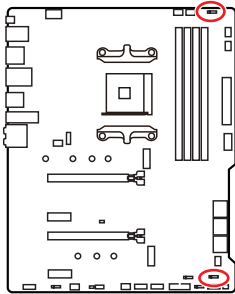


Important

- The JRGB connector supports up to 2 meters continuous 5050 RGB LED strips (12V/G/R/B) with the maximum power rating of 3A (12V).
- Always turn off the power supply and unplug the power cord from the power outlet before installing or removing the RGB LED strip.
- Please use MSI's software to control the extended LED strip.

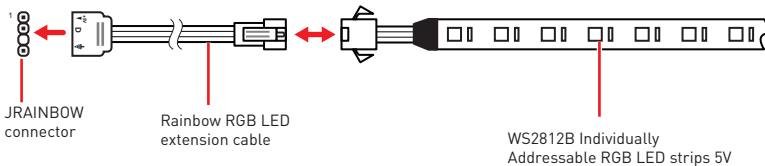
JRAINBOW1~2: Addressable RGB LED connectors

The JRAINBOW connectors allow you to connect the WS2812B Individually Addressable RGB LED strips 5V.

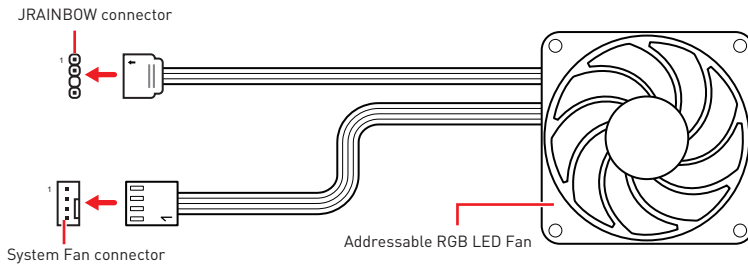


1			
1	+5V	2	Data
3	No Pin	4	Ground

Addressable RGB LED Strip Connection



Addressable RGB LED Fan Connection



CAUTION

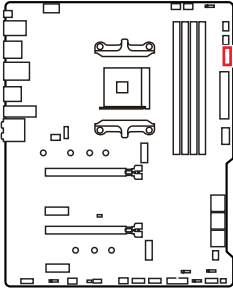
Do not connect the wrong type of LED strips. The JRGB connector and the JRAINBOW connector provide different voltages, and connecting the 5V LED strip to the JRGB connector will result in damage to the LED strip.

Important

- The JRAINBOW connector supports up to 75 LEDs WS2812B Individually Addressable RGB LED strips [5V/Data/Ground] with the maximum power rating of 3A (5V). In the case of 20% brightness, the connector supports up to 200 LEDs.
- Always turn off the power supply and unplug the power cord from the power outlet before installing or removing the RGB LED strip.
- Please use MSI's software to control the extended LED strip.

EZ Debug LED

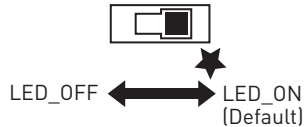
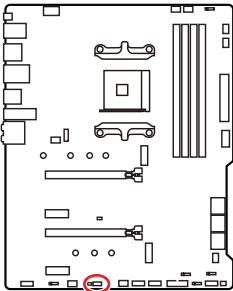
These LEDs indicate the debug status of the motherboard.



- CPU** - indicates CPU is not detected or fail.
- DRAM** - indicates DRAM is not detected or fail.
- VGA** - indicates GPU/ PCIE/ M.2 device is not detected or fail.
- BOOT** - indicates the booting device is not detected or fail.

LED_SW1: EZ LED Control

This switch is used to switch on/ off all the LEDs of motherboard.



Installing OS, Drivers & MSI Center

Please download and update the latest utilities and drivers at www.msi.com

Installing Windows 10/ Windows 11

1. Power on the computer.
2. Insert the Windows 10/ Windows 11 installation disc/ USB into your computer.
3. Press the **Restart** button on the computer case.
4. Press **F11** key during the computer POST (Power-On Self Test) to get into Boot Menu.
5. Select the Windows 10/ Windows 11 installation disc/USB from the Boot Menu.
6. Press any key if screen shows **Press any key to boot from CD or DVD...** message. If not please skip this step.
7. Follow the instructions on the screen to install Windows 10/ Windows 11.

Installing Drivers

1. Start up your computer in Windows 10/ Windows 11.
2. Insert MSI® DVD Drive disc into your optical drive.
3. Click the **Select to choose what happens with this disc** pop-up notification, then select **Run DVDSetup.exe** to open the installer. If you turn off the AutoPlay feature from the Windows Control Panel, you can still manually execute the **DVDSetup.exe** from the root path of the MSI USB Drive.
4. The installer will find and list all necessary drivers in the **Drivers/Software** tab.
5. Click the **Install** button in the lower-right corner of the window.
6. The drivers installation will then be in progress, after it has finished it will prompt you to restart.
7. Click **OK** button to finish.
8. Restart your computer.

MSI Center

MSI Center is an application that helps you easily optimize game settings and smoothly use content creation softwares. It also allows you to control and synchronize LED light effects on PCs and other MSI products. With MSI Center, you can customize ideal modes, monitor system performance, and adjust fan speed.

MSI Center User Guide



If you would like to know more information about MSI Center, please refer to <http://download.msi.com/manual/mb/MSICENTER.pdf>

or scan the QR code to access.



Important

Functions may vary depending on the product you have.

UEFI BIOS

MSI UEFI BIOS is compatible with UEFI (Unified Extensible Firmware Interface) architecture. UEFI has many new functions and advantages that traditional BIOS cannot achieve, and it will completely replace BIOS in the future. The MSI UEFI BIOS uses UEFI as the default boot mode to take full advantage of the new chipset's capabilities.



The term BIOS in this user guide refers to UEFI BIOS unless otherwise noted.

UEFI advantages

- Fast booting - UEFI can directly boot the operating system and save the BIOS self-test process. And also eliminates the time to switch to CSM mode during POST.
- Supports for hard drive partitions larger than 2 TB.
- Supports more than 4 primary partitions with a GUID Partition Table (GPT).
- Supports unlimited number of partitions.
- Supports full capabilities of new devices - new devices may not provide backward compatibility.
- Supports secure startup - UEFI can check the validity of the operating system to ensure that no malware tampers with the startup process.

Incompatible UEFI cases

- **32-bit Windows operating system** - this motherboard supports only Windows 10 64-bit operating system.
- **Older graphics card** - the system will detect your graphics card. When display a warning message **There is no GOP (Graphics Output protocol) support detected in this graphics card.**



We recommend that you to replace with a GOP/UEFI compatible graphics card or using integrated graphics from CPU for having normal function.

How to check the BIOS mode?

1. Power on your computer.
2. Press **Delete** key, when the **Press DEL key to enter Setup Menu, F11 to enter Boot Menu** message appears on the screen during the boot process.
3. After entering the BIOS, you can check the **BIOS Mode** at the top of the screen.

BIOS Mode: UEFI

BIOS Setup

The default settings offer the optimal performance for system stability in normal conditions. You should **always keep the default settings** to avoid possible system damage or failure booting unless you are familiar with BIOS.



Important

- BIOS items are continuously update for better system performance. Therefore, the description may be slightly different from the latest BIOS and should be for reference only. You could also refer to the **HELP** information panel for BIOS item description.
- The pictures in this guide are for reference only .
- The BIOS screens, options and settings will vary depending on your system.

Entering BIOS Setup

Press **Delete** key, when the **Press DEL key to enter Setup Menu, F11 to enter Boot Menu** message appears on the screen during the boot process.

Function key

- F1:** General Help list
- F2:** Add/ Remove a favorite item
- F3:** Enter Favorites menu
- F4:** Enter CPU Specifications menu
- F5:** Enter Memory-Z menu
- F6:** Load optimized defaults
- F7:** Switch between Advanced mode and EZ mode
- F8:** Load Overclocking Profile
- F9:** Save Overclocking Profile
- F10:** Save Change and Reset*
- F12:** Take a screenshot and save it to USB flash drive (FAT/ FAT32 format only).
- Ctrl+F:** Enter Search page

* When you press F10, a confirmation window appears and it provides the modification information. Select between Yes or No to confirm your choice.

BIOS User Guide

If you'd like to know more instructions on setting up the BIOS, please refer to <http://download.msi.com/manual/mb/AMD570BIOS.pdf>

or scan the QR code to access.

Resetting BIOS

You might need to restore the default BIOS setting to solve certain problems. There are several ways to reset BIOS:

- Go to BIOS and press **F6** to load optimized defaults.
- Short the **Clear CMOS** jumper on the motherboard.
- Press the **Clear CMOS** button on the rear I/O panel. (optional)



Important

*Be sure the computer is off before clearing CMOS data. Please refer to the **Clear CMOS** section for resetting BIOS.*

Updating BIOS

Updating BIOS with M-FLASH

Before updating:

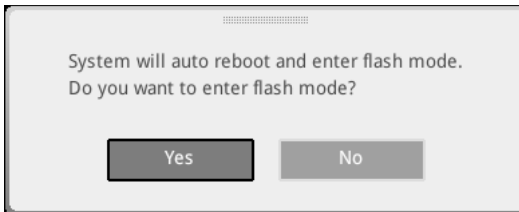
Please download the latest BIOS file that matches your motherboard model from MSI website. And then save the BIOS file into the USB flash drive.

Updating BIOS:

1. Insert the USB flash drive that contains the update file into the USB port.
2. Please refer the following methods to enter flash mode.
 - Reboot and press **Ctrl + F5** key during POST and click on **Yes** to reboot the system.

Press <Ctrl+F5> to activate M-Flash for BIOS update.

- Reboot and press **Del** key during POST to enter BIOS. Click the **M-FLASH** button and click on **Yes** to reboot the system.



3. Select a BIOS file to perform the BIOS update process.
4. When prompted click on **Yes** to start recovering BIOS.
5. After the flashing process is 100% completed, the system will reboot automatically.

Updating the BIOS with MSI Center

Before updating:

- Make sure the LAN driver is already installed and the internet connection is set properly.
- Please close all other application software before updating the BIOS.

To update BIOS:

1. Install and launch MSI Center and go to **Support** page.
2. Select **Live Update** and click on **Advance** button.
3. Select the BIOS file and click on **Install** button.
4. The installation reminder will appear, then click the Install button on it.
5. The system will automatically restart to update BIOS.
6. After the flashing process is 100% completed, the system will restart automatically.

Updating BIOS with Flash BIOS Button

1. Please download the latest BIOS file that matches your motherboard model from the MSI® website.
2. Rename the BIOS file to MSI.ROM, and save it to the root of the USB storage device.
3. Connect the power supply to **CPU_PWR1** and **ATX_PWR1**. (No need to install CPU and memory.)
4. Plug the USB storage device that contains the MSI.ROM file into the **Flash BIOS Port** on the rear I/O panel.
5. Press the **Flash BIOS** Button to flash BIOS, and the LED starts flashing.
6. The LED will be turned off when the process is completed.

Regulatory Notices

FCC-B Radio Frequency Interference Statement

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 radiates radio frequency energy, and, if not installed and used in accordance with the 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 into an outlet on a circuit different from that to which the receiver is connected.

NOTE

- The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- Shield interface cables and AC power cord, if any, must be used in order to comply with the emission limits.

FCC Conditions

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.

MSI Computer Corp.

901 Canada Court, City of Industry, CA 91748, USA

(626)913-0828

www.msi.com

CE Conformity

Products bearing the CE marking comply with one or more of the following EU Directives as may be applicable:



- RED 2014/53/EU
- Low Voltage Directive 2014/35/EU
- EMC Directive 2014/30/EU
- RoHS Directive 2011/65/EU
- ErP Directive 2009/125/EC

Compliance with these directives is assessed using applicable European Harmonized Standards.

The point of contact for regulatory matters is MSI, MSI-NL Eindhoven 5706 5692 ER Son.

Products with Radio Functionality (EMF)

This product incorporates a radio transmitting and receiving device. For computers in normal use, a separation distance of 20 cm ensures that radio frequency exposure levels comply with EU requirements. Products designed to be operated at closer proximities, such as tablet computers, comply with applicable EU requirements in typical operating positions. Products can be operated without maintaining a separation distance unless otherwise indicated in instructions specific to the product.

Restrictions for Products with Radio Functionality



CAUTION: IEEE 802.11x wireless LAN with 5.15–5.35 GHz frequency band is restricted for indoor use only in all European Union member states, EFTA (Iceland, Norway, Liechtenstein), and most other European countries (e.g., Switzerland, Turkey, Republic of Serbia). Using this WLAN application outdoors might lead to interference issues with existing radio services.



Radio frequency bands and maximum power levels

- Features: Wi-Fi 6E, BT
- Frequency Range:
 - 2412–2484MHz
 - 5150–5350MHz (RLAN 1)
 - 5470–5725MHz (RLAN 2)
 - 5725–5875MHz (RLAN 3)
 - 5875–5925MHz (RLAN 4)
 - 5925–6425MHz
- Max Power Level: 2.4 GHz: 20dBm; 5 GHz: 23dBm; 6 GHz: 23dBm

Wireless Radio Use

This device is restricted to indoor use when operating in the 2.4GHz, 5GHz, 6GHz frequency band.

Cet appareil doit être utilisé à l'intérieur.

당해 무선설비는 운용중 전파혼신 가능성이 있음.

この製品は、周波数帯域 2.4GHz, 5GHz, 6GHz で動作しているときは、屋内においてのみ使用可能です。

NCC無線設備警告聲明

工作頻率2.4GHz, 5GHz, 6GHz該頻段限於室內使用。

經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

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

This device complies with with Innovation, Science and Economic Development Canada's licence-exempt RSS(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.

Operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

CAN ICES-003(B)/NMB-003(B)

Australia and New Zealand notice

This equipment incorporates a radio transmitting and receiving device. In normal use, a separation distance of 20 cm ensures that radio frequency exposure levels comply with the Australian and New Zealand Standards.

クラスB情報技術装置

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

KC인증서



R-R-MSI-11-7C91

상호: [주]엠에스아이코리아

제품명: 메인보드

모델명: 11-7C91

제조년월: 2022년

제조사 및 제조국가: MSI/중국

Battery Information

European Union:



Batteries, battery packs, and accumulators should not be disposed of as unsorted household waste. Please use the public collection system to return, recycle, or treat them in compliance with the local regulations.

Taiwan:



廢電池請回收

For better environmental protection, waste batteries should be collected separately for recycling or special disposal.

California, USA:



The button cell battery may contain perchlorate material and requires special handling when recycled or disposed of in California.

For further information please visit:

<http://www.dtsc.ca.gov/hazardouswaste/perchlorate/>

CAUTION: There is a risk of explosion, if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer.

Chemical Substances Information

In compliance with chemical substances regulations, such as the EU REACH Regulation (Regulation EC No. 1907/2006 of the European Parliament and the Council), MSI provides the information of chemical substances in products at:

https://storage-asset.msi.com/html/popup/csr/evmtprrt_pcm.html

Environmental Policy

- The product has been designed to enable proper reuse of parts and recycling and should not be thrown away at its end of life.
- Users should contact the local authorized point of collection for recycling and disposing of their end-of-life products.
- Visit the MSI website and locate a nearby distributor for further recycling information.
- Users may also reach us at gpcontdev@msi.com for information regarding proper Disposal, Take-back, Recycling, and Disassembly of MSI products.



WEEE (Waste Electrical and Electronic Equipment) Statement

ENGLISH

To protect the global environment and as an environmentalist, MSI must remind you that...

Under the European Union ("EU") Directive on Waste Electrical and Electronic Equipment, Directive 2002/96/EC, which takes effect on August 13, 2005, products of "electrical and electronic equipment" cannot be



discarded as municipal wastes anymore, and manufacturers of covered electronic equipment will be obligated to take back such products at the end of their useful life. MSI will comply with the product take back requirements at the end of life of MSI-branded products that are sold into the EU. You can return these products to local collection points.

DEUTSCH

Hinweis von MSI zur Erhaltung und Schutz unserer Umwelt

Gemäß der Richtlinie 2002/96/EG über Elektro- und Elektronik-Altgeräte dürfen Elektro- und Elektronik-Altgeräte nicht mehr als kommunale Abfälle entsorgt werden. MSI hat europaweit verschiedene Sammel- und Recyclingunternehmen beauftragt, die in die Europäische Union in Verkehr gebrachten Produkte, am Ende seines Lebenszyklus zurückzunehmen. Bitte entsorgen Sie dieses Produkt zum gegebenen Zeitpunkt ausschliesslich an einer lokalen Altgerätesammelstelle in Ihrer Nähe.

FRANÇAIS

En tant qu'écologiste et afin de protéger l'environnement, MSI tient à rappeler ceci...

Au sujet de la directive européenne (EU) relative aux déchets des équipements électriques et électroniques, directive 2002/96/EC, prenant effet le 13 août 2005, que les produits électriques et électroniques ne peuvent être déposés dans les décharges ou tout simplement mis à la poubelle. Les fabricants de ces équipements seront obligés de récupérer certains produits en fin de vie. MSI prendra en compte cette exigence relative au retour des produits en fin de vie au sein de la communauté européenne. Par conséquent vous pouvez retourner localement ces matériels dans les points de collecte.

РУССКИЙ

Компания MSI предпринимает активные действия по защите окружающей среды, поэтому напоминаем вам, что....

В соответствии с директивой Европейского Союза (ЕС) по предотвращению загрязнения окружающей среды использованным электрическим и электронным оборудованием (директива WEEE 2002/96/EC), вступающей в силу 13 августа 2005 года, изделия, относящиеся к электрическому и электронному оборудованию, не могут рассматриваться как бытовой мусор, поэтому производители вышеперечисленного электронного оборудования обязаны принимать его для переработки по окончании срока службы. MSI обязуется соблюдать требования по приему продукции, проданной под маркой MSI на территории ЕС, в переработку по окончании срока службы. Вы можете вернуть эти изделия в специализированные пункты приема.

ESPAÑOL

MSI como empresa comprometida con la protección del medio ambiente, recomienda:

Bajo la directiva 2002/96/EC de la Unión Europea en materia de desechos y/o equipos electrónicos, con fecha de rigor desde el 13 de agosto de 2005, los productos clasificados como "eléctricos y equipos electrónicos" no pueden ser depositados en los contenedores habituales de su municipio, los fabricantes de equipos electrónicos, están obligados a hacerse cargo de dichos productos al termino de su período de vida. MSI estará comprometido con los términos de recogida de sus productos vendidos en

la Unión Europea al final de su periodo de vida. Usted debe depositar estos productos en el punto limpio establecido por el ayuntamiento de su localidad o entregar a una empresa autorizada para la recogida de estos residuos.

NEDERLANDS

Om het milieu te beschermen, wil MSI u eraan herinneren dat....

De richtlijn van de Europese Unie (EU) met betrekking tot Vervuiling van Electricische en Electronische producten (2002/96/EC), die op 13 Augustus 2005 in zal gaan kunnen niet meer beschouwd worden als vervuiling. Fabrikanten van dit soort producten worden verplicht om producten retour te nemen aan het eind van hun levenscyclus. MSI zal overeenkomstig de richtlijn handelen voor de producten die de merknaam MSI dragen en verkocht zijn in de EU. Deze goederen kunnen geretourneerd worden op lokale inzamelingspunten.

SRPSKI

Da bi zaštitili prirodnu sredinu, i kao preduzeće koje vodi računa o okolini i prirodnoj sredini, MSI mora da vas podesti da...

Po Direktivi Evropske unije ("EU") o odbačenoj eelektronskoj i električnoj opremi, Direktiva 2002/96/EC, koja stupa na snagu od 13. Avgusta 2005, proizvodi koji spadaju pod "elektronsku i električnu opremu" ne mogu više biti odbačeni kao običan otpad i proizvođači ove opreme biće prinuđeni da uzmu natrag ove proizvode na kraju njihovog uobičajenog veka trajanja. MSI će poštovati zahtev o preuzimanju ovakvih proizvoda kojima je istekao vek trajanja, koji imaju MSI oznaku i koji su prodati u EU. Ove proizvode možete vratiti na lokalnim mestima za prikupljanje.

POLSKI

Aby chronić nasze środowisko naturalne oraz jako firma dbająca o ekologię, MSI przypomina, że...Zgodnie z Dyrektywą Unii Europejskiej ("UE") dotyczącą odpadów produktów elektrycznych i elektronicznych (Dyrektywa 2002/96/EC), która wchodzi w życie 13 sierpnia 2005, tzw. "produkty oraz wyposażenie elektryczne i elektroniczne" nie mogą być traktowane jako śmieci komunalne, tak więc producenci tych produktów będą zobowiązani do odbierania ich w momencie gdy produkt jest wycofywany z użycia. MSI wypełni wymagania UE, przyjmując produkty (sprzedawane na terenie Unii Europejskiej) wycofywane z użycia. Produkty MSI będzie można zwracać w wyznaczonych punktach zbiorczych.

TÜRKÇE

Çevreci özelliğiyle bilinen MSI dünyada çevreyi korumak için hatırlatır: Avrupa Birliği (AB) Kararnamesi Elektrik ve Elektronik Malzeme Atığı, 2002/96/EC Kararnamesi altında 13 Ağustos 2005 tarihinden itibaren geçerli olmak üzere, elektrikli ve elektronik malzemeler diğer atıklar gibi çöpe atılmayacak ve bu elektronik cihazların üreticileri, cihazların kullanım süreleri bittikten sonra ürünleri geri toplamakla yükümlü olacaktır. Avrupa Birliği'ne satılan MSI markalı ürünlerin kullanım süreleri bittiğinde MSI ürünlerin geri alınması isteği ile işbirliği içerisinde olacaktır. Ürünlerinizi yerel toplama noktalarına bırakabilirsiniz.

ČESKY

Záleží nám na ochraně životního prostředí - společnost MSI upozorňuje...

Podle směrnice Evropské unie ("EU") o likvidaci elektrických a elektronických výrobků 2002/96/EC platné od 13. srpna 2005 je zakázáno likvidovat "elektrické a elektronické

výrobky” v běžném komunálním odpadu a výrobci elektronických výrobků, na které se tato směrnice vztahuje, budou povinni odebrat takové výrobky zpět po skončení jejich životnosti. Společnost MSI splní požadavky na odebrání výrobků značky MSI, prodávaných v zemích EU, po skončení jejich životnosti. Tyto výrobky můžete odevzdat v místních sběrnách.

MAGYAR

Annak érdekében, hogy környezetünket megvédjük, illetve környezetvédőként fellépve az MSI emlékezteti Önt, hogy ...

Az Európai Unió („EU”) 2005. augusztus 13-án hatályba lépő, az elektromos és elektronikus berendezések hulladékairól szóló 2002/96/EK irányelve szerint az elektromos és elektronikus berendezések többé nem kezelhetőek lakossági hulladékként, és az ilyen elektronikus berendezések gyártói köteleessé válnak az ilyen termékek visszavételére azok hasznos élettartama végén. Az MSI betartja a termékvisszavétellel kapcsolatos követelményeket az MSI márkanév alatt az EU-n belül értékesített termékek esetében, azok élettartamának végén. Az ilyen termékeket a legközelebbi gyűjtőhelyre viheti.

ITALIANO

Per proteggere l'ambiente, MSI, da sempre amica della natura, ti ricorda che....

In base alla Direttiva dell'Unione Europea (EU) sullo Smaltimento dei Materiali Elettrici ed Elettronici, Direttiva 2002/96/EC in vigore dal 13 Agosto 2005, prodotti appartenenti alla categoria dei Materiali Elettrici ed Elettronici non possono più essere eliminati come rifiuti municipali: i produttori di detti materiali saranno obbligati a ritirare ogni prodotto alla fine del suo ciclo di vita. MSI si adegnerà a tale Direttiva ritirando tutti i prodotti marchiati MSI che sono stati venduti all'interno dell'Unione Europea alla fine del loro ciclo di vita. È possibile portare i prodotti nel più vicino punto di raccolta

日本JIS C 0950材質宣言

日本工業規格JIS C 0950により、2006年7月1日以降に販売される特定分野の電気および電子機器について、製造者による含有物質の表示が義務付けられます。

https://storage-asset.msi.com/html/popup/csr/cemm_jp.html

India RoHS

This product complies with the "India E-waste (Management and Handling) Rule 2011" and prohibits use of lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers in concentrations exceeding 0.1 weight % and 0.01 weight % for cadmium, except for the exemptions set in Schedule 2 of the Rule.

Türkiye EEE yönetmeliği

Türkiye Cumhuriyeti: EEE Yönetmeliğine Uygundur


Україна обмеження на наявність небезпечних речовин

Обладнання відповідає вимогам Технічного регламенту щодо обмеження використання деяких небезпечних речовин в електричному та електронному обладнанні, затвердженого постановою Кабінету Міністрів України від 3 грудня 2008 № 1057.

Việt Nam RoHS

Kể từ ngày 01/12/2012, tất cả các sản phẩm do công ty MSI sản xuất tuân thủ Thông tư số 30/2011/TT-BCT quy định tạm thời về giới hạn hàm lượng cho phép của một số hóa chất độc hại có trong các sản phẩm điện, điện tử”

MS-7C91主板产品中有害物质的名称及含量

部件名称	有害物质					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
印刷电路板组件*	×	○	○	○	○	○
电池** 	×	○	○	○	○	○
外部信号连接头	×	○	○	○	○	○
线材	×	○	○	○	○	○

本表格依据 SJ/T 11364 的规定编制。

○: 表示该有害物质在该部件所有均质材料中的含量均在 GB/T 26572 规定的限量要求以下。

×: 表示该有害物质至少在该部件的某一均质材料中的含量超出 GB/T 26572 规定的限量要求,但所有部件都符合欧盟RoHS要求。

* 印刷电路板组件: 包括印刷电路板及其构成的零部件。

** 电池本体上如有环保使用期限标识,以本体标识为主。

■ 上述有毒有害物质或元素清单会依型号之部件差异而有所增减。

■ 产品部件本体上如有环保使用期限标识,以本体标识为主。

限用物質含有情況標示聲明書

設備名稱:電腦主機板		型號(型式):MS-7C91				
單元	限用物質及其化學符號					
	鉛 (Pb)	汞 (Hg)	鎘 (Cd)	六價鉻 (Cr+6)	多溴聯苯 (PBB)	多溴二苯醚 (PBDE)
電路板	○	○	○	○	○	○
電子元件	—	○	○	○	○	○
金屬機構件	—	○	○	○	○	○
塑膠機構件	○	○	○	○	○	○

備考1. “超出0.1 wt %” 及 “超出0.01 wt %” 係指限用物質之百分比含量超出百分比含量基準值。

備考2. “○” 係指該項限用物質之百分比含量未超出百分比含量基準值。

備考3. “—” 係指該項限用物質為排除項目。

Copyright and Trademarks Notice

Copyright © Micro-Star Int'l Co., Ltd. All rights reserved. The MSI logo used is a registered trademark of Micro-Star Int'l Co., Ltd. All other marks and names mentioned may be trademarks of their respective owners. No warranty as to accuracy or completeness is expressed or implied. MSI reserves the right to make changes to this document without prior notice.



Technical Support

If a problem arises with your system and no solution can be obtained from the user guide, please contact your place of purchase or local distributor. Alternatively, please try the following help resources for further guidance.

- Visit the MSI website for technical guide, BIOS updates, driver updates, and other information: <http://www.msi.com>
- Register your product at: <http://register.msi.com>

Revision History

- Version 1.0, 2022/02, First release.

