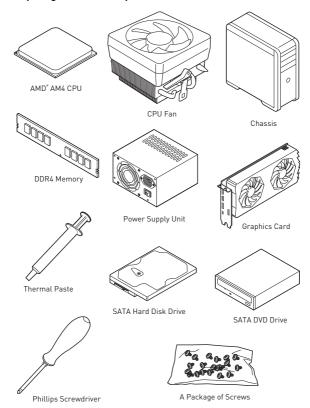
# **Quick Start**

Thank you for purchasing the MSI® MPG B550I GAMING EDGE WIFI 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.

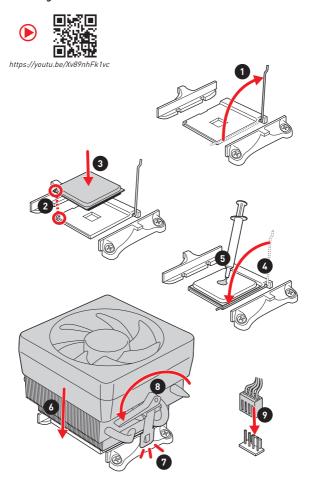
### **Preparing Tools and Components**



### Safety Information

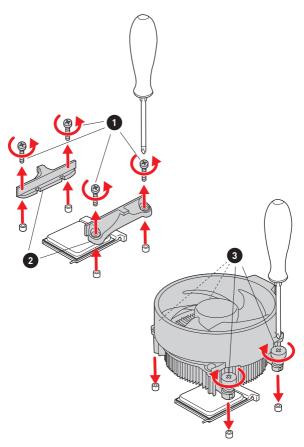
- The components included in this package are prone to damage from electrostatic discharge (ESD). Please adhere to the following instructions to ensure successful computer assembly.
- Ensure that all components are securely connected. Loose connections may cause the computer to not recognize a component 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.

# Installing a Processor



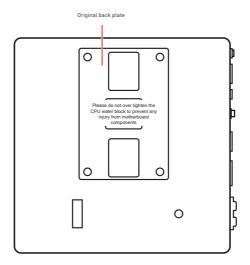


If you are installing the screw-type CPU heatsink, please follow the figure below to remove the retention module first and then install the heatsink.





If you want to replace the original retention module bracket, please note that you need to install the new back plate carefully to prevent any injury from motherboard component.

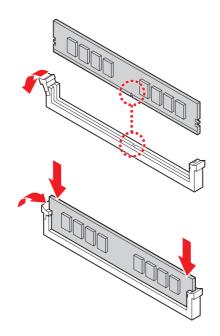


# Installing DDR4 memory

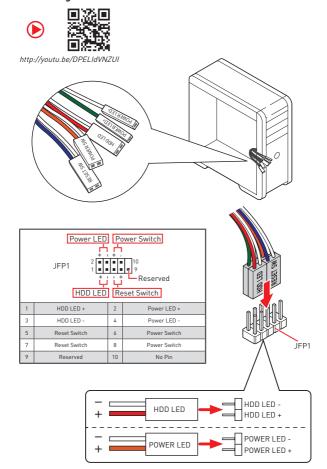




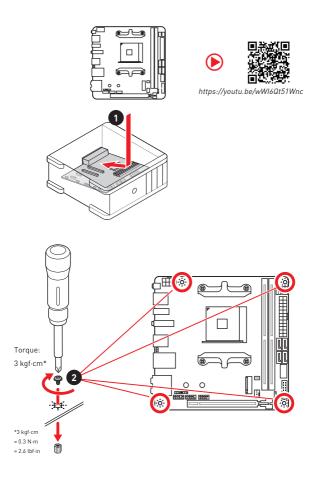
http://youtu.be/T03aDrJPyQs



### **Connecting the Front Panel Header**



# Installing the Motherboard

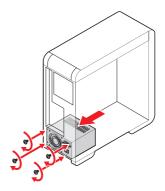


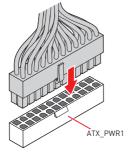
## **Connecting the Power Connectors**

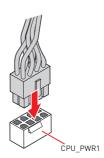




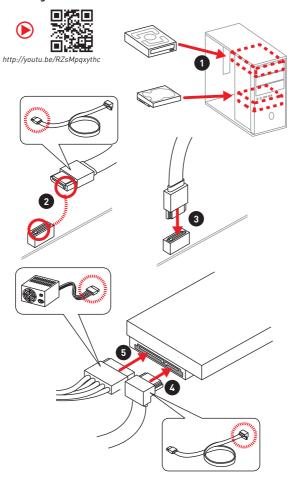
http://youtu.be/gkDYyR\_83I4



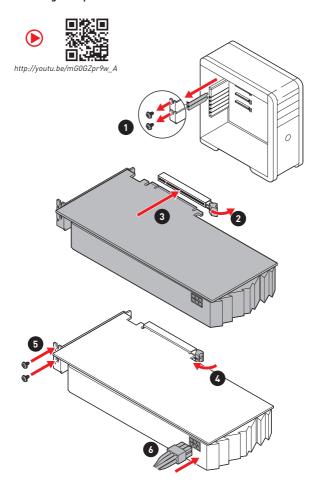




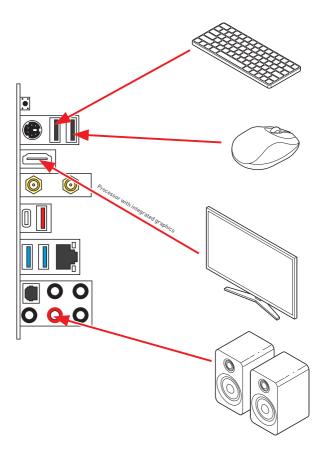
# **Installing SATA Drives**

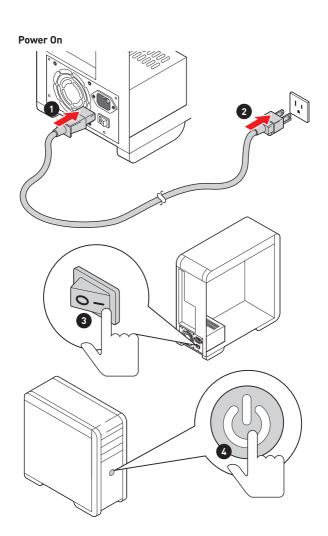


# Installing a Graphics Card



# **Connecting Peripheral Devices**





# **Contents**

Quick Start	1
Preparing Tools and Components	1
Safety Information	2
Installing a Processor	3
Installing DDR4 memory	6
Connecting the Front Panel Header	
Installing the Motherboard	8
Connecting the Power Connectors	
Installing SATA Drives	10
Installing a Graphics Card	11
Connecting Peripheral Devices	
Power On	13
Specifications	16
Package contents	21
Block Diagram	22
Rear I/O Panel	23
LAN Port LED Status Table	23
Audio Ports Configuration	
Realtek Audio Console	24
Overview of Components	27
Processor Socket	
DIMM Slots	30
PCI_E1: PCIe Expansion Slot	31
SATA1~4: SATA 6Gb/s Connectors	31
M2_1~2: M.2 Slots (Key M)	32
JFP1, JFP2: Front Panel Connectors	34
JAUD1: Front Audio Connector	34
CPU_PWR1, ATX_PWR1: Power Connectors	35
JUSB3: USB 2.0 Connector	36
JUSB1: USB 3.2 Gen 1 5Gbps Type-C Connector	36
JUSB2: USB 3.2 Gen 1 5Gbps Connector	37
CPU_FAN1, PUMP_FAN1, SYS_FAN1: Fan Connectors	38
JCI1: Chassis Intrusion Connector	39
JBAT1: Clear CMOS (Reset BIOS) Jumper	40
EZ Debug LED	40
	41

Installing OS, Drivers & Utilities	42
Installing Windows® 10	
Installing Drivers	42
Installing Utilities	42
UEFI BIOS	43
BIOS Setup	44
Entering BIOS Setup	44
Resetting BIOS	45
Updating BIOS	45
EZ Mode	47
Advanced Mode	50
SETTINGS Menu	51
OC Menu	53
M-FLASH Menu	56
OC PROFILE Menu	57
HARDWARE MONITOR Menu	58
AMD RAID Configuration	60
Enabling RAIDXpert2 Configuration Utility	60
Initializing Disks	61
Creating Arrays	62
Deleting Arrays	63
Installing RAID Driver	64
Troubleshooting	65

# **Specifications**

CPU	Supports AM4 socket 3rd Gen AMD Ryzen™ processors, and future AMD Ryzen™ processors with BIOS update				
Chipset	AMD B550 Chipset				
	• 2x DDR4 memory slots, support up to 64GB*				
	<ul> <li>Supports DDR4 1866/ 2133/ 2400/ 2667 MHz by JEDEC</li> </ul>				
	<ul> <li>Supports DDR4 2667/ 2800 /2933 /3000 /3066 /3200 /3466 /3600/ 3733 /3866 /4000 /4133 /4266 /4400/ 4466/ 4533/ 4600+ MHz by A-XMP OC MODE</li> </ul>				
Memory	<ul> <li>1DPC 1R max speed 4600 MHZ</li> </ul>				
,	<ul> <li>1DPC 2R max speed 4000 MHZ</li> </ul>				
	Dual channel memory architecture				
	Supports non-ECC UDIMM memory				
	Supports un-buffered memory				
	* Please refer www.msi.com for more information on compatible memory.				
Expansion Slot	• 1x PCIe 4.0/ 3.0 x16 slot*				
Expansion Stot	* The supported specification depends on installed processor.				
	• 1x HDMI 2.0/ 2.1 port, supports a maximum resolution of 4096x2160 @60Hz*				
Onboard Graphics	Maximum shared memory of 2048 MB				
	* Available for the processor with integrated graphics.				
	Realtek® ALC1200 Codec				
Audio	<ul> <li>7.1-Channel High Definition Audio</li> </ul>				
	<ul> <li>Supports S/PDIF output</li> </ul>				
LAN	• 1x Realtek® RTL8125B 2.5Gbps LAN controller				

	AMD B550 Chipset				
	4x SATA 6Gb/s ports				
	• 2x M.2 slots (Key M)				
	<ul> <li>M2_1 slot (from AMD Processor)</li> </ul>				
	<ul><li>Supports PCle 4.0/ 3.0 x4 *</li></ul>				
Storage	<ul> <li>Supports SATA 6Gb/s</li> </ul>				
	<ul> <li>Supports 2260/ 2280 storage devices</li> </ul>				
	<ul> <li>M2_2 slot (from AMD B550 chipset)</li> </ul>				
	<ul> <li>Supports PCIe 3.0x4</li> </ul>				
	<ul> <li>Supports 2280 storage devices</li> </ul>				
	* The supported specification depends on installed processor.				
Supports RAID 0, RAID 1 and RAID 10 for SATA sidevices					
	Supports RAID 0 and RAID 1 for M.2 NVMe storage devices				
	AMD B550 Chipset				
	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)				
USB	<ul> <li>4x USB 2.0 ports (2 Type-A ports on the back panel, 2 ports through the internal USB 2.0 connector)</li> </ul>				
	AMD Processor				
	<ul> <li>2x USB 3.2 Gen 2 10Gbps ports {1 Type-C port and 1 Type-A port) on the back panel</li> </ul>				
	<ul> <li>2x USB 3.2 Gen 1 5Gbps Type-A ports on the back panel</li> </ul>				
	Intel® AX200				
	The Wireless module is pre-installed in the M.2 (Key-E) slot				
Wireless LAN & Bluetooth®	Supports MU-MIMO TX/RX, 2.4GHz/ 5GHz (160MHz) up to 2.4Gbps				
	• Supports 802.11 a/ b/ g/ n/ ac/ ax				
	Supports Bluetooth® 5.1				

Internal Connectors	• 1x 24-pin ATX main power connector • 1x 8-pin ATX 12V power connector • 4x 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] • 1x USB 2.0 connector (supports additional 2 USB 2.0 ports] • 1x 4-pin CPU fan connector • 1x 4-pin water-pump fan connector • 1x 4-pin system fan connector		
	1x Front panel audio connector     2x System panel connectors     1x 3-pin RAINBOW LED connector     1x Chassis Intrusion connector     1x Clear CMOS jumper     4x EZ Debug LED		
Back Panel Connectors	1x Flash BIOS Button     2x USB 2.0 Type-A ports     1x PS/2 keyboard/ mouse combo port     1x HDMI 2.0/ 2.1 port     2x Wi-Fi Antenna connectors     1x USB 3.2 Gen 2 10Gbps Type-A port     1x USB 3.2 Gen 2 10Gbps Type-C port     1x LAN (RJ45) port     2x USB 3.2 Gen 1 5Gbps Type-A ports     5x Audio jacks     1x Optical S/PDIF Out connector		
I/O Controller NUVOTON NCT6687-R Controller Chip			

Hardware Monitor	CPU/ System/ Chipset temperature detection CPU/ System/ Pump fan speed detection CPU/ System/ Pump fan speed control		
Form Factor	Mini-ITX Form Factor     6.7 in. x 6.7 in. (17.0 cm x 17.0 cm)		
BIOS Features	<ul> <li>1x 256 Mb flash</li> <li>UEFI AMI BIOS</li> <li>ACPI 6.0, SMBIOS 2.8</li> <li>Multi-language</li> </ul>		
Software	Drivers     DRAGON CENTER     MSI APP Player [BlueStacks]     Open Broadcaster Software [OBS]     CPU-Z MSI GAMING     Google Chrome™, Google Toolbar, Google Drive     Norton™ Internet Security Solution		
Dragon Center Features	Gaming Mode Gaming Hotkey LAN Manager Mystic Light Ambient Link User Scenario Hardware Monitor True Color Live Update Speed Up Smart Tool Super Charger		

Δ			

Audio Boost

#### Network

- 2.5G LAN
- LAN Manager with Realtek 8125B
- Intel WiFi

### · Cooling

- Extended Heatsink Design
- Frozr Heatsink Design
- M.2 Shield Frozr
- Pump Fan
- Smart Fan Control
- MOSFET Baseplate

#### • LED

- Mystic Light Extension (RAINBOW)
- Mystic Light SYNC
- Ambient Link
- EZ DEBUG LED
- F7 LED Control

### Performance

- 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
  - Pre-installed I/O Shielding
- Experience
  - Dragon Center
  - Click BIOS 5
  - Flash BIOS Button

### Special Features

# Package contents

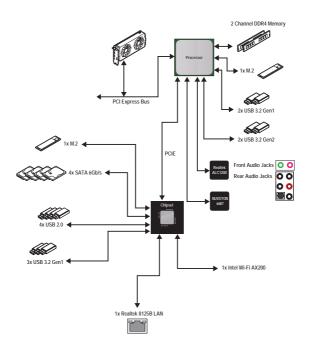
Please check the contents of your motherboard package. It should contain:

Motherboard	MPG B550I GAMING EDGE WIFI	
Cable	SATA 6G cables (2 cables/pack) 1	
	Wi-Fi Antenna	1
Accessories	M.2 screws (3 pcs./pack)	1
Accessories	Case Badge	1
	Product registration card	1
Application	tion Driver DVD 1	
	User manual	
Documentation	Quick installation guide	1
	MSI components compatibility & reward program card	

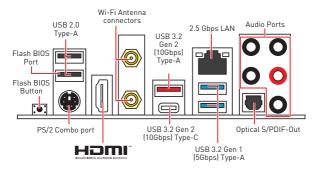


If any of the above items are damaged or missing, please contact your retailer.

# **Block Diagram**

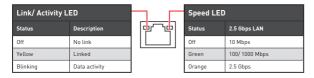


## Rear I/O Panel

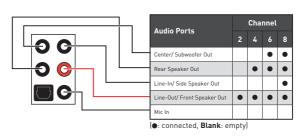


• Flash BIOS Port/ Button - Please refer to page 46 for Updating BIOS with Flash BIOS Button.

### LAN Port LED Status Table



### **Audio Ports Configuration**



### 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.



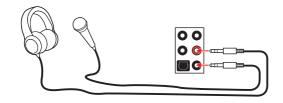
Each jack corresponds to its default setting as shown on the next page.



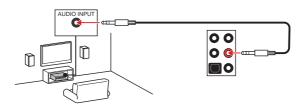
### Important

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

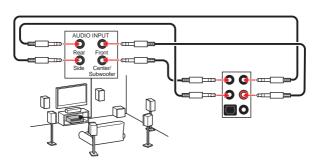
### Audio jacks to headphone and microphone diagram



### Audio jacks to stereo speakers diagram

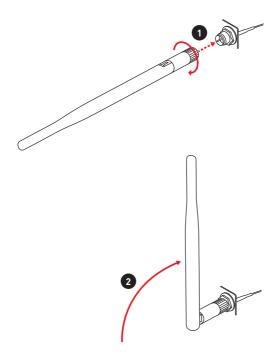


### Audio jacks to 7.1-channel speakers diagram



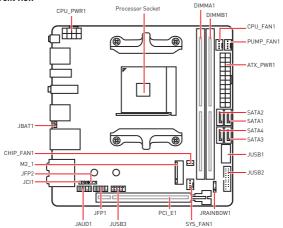
### Installing antennas

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

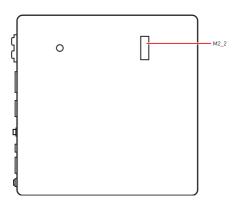


# **Overview of Components**

### Front view



### **Bottom view**

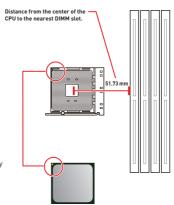


## **Component Contents**

Port Name	Port Type	Page
CPU_FAN1, PUMP_FAN1, SYS_FAN1	Fan Connectors	38
CPU_PWR1, ATX_PWR1	Power Connectors	35
DIMMA1, DIMMB1	DIMM Slots	30
JAUD1	Front Audio Connector	34
JBAT1	Clear CMOS (Reset BIOS) Jumper	40
JCI1	Chassis Intrusion Connector	
JFP1, JFP2	Front Panel Connectors 3	
JRAINBOW1	Addressable RGB LED connectors	
JUSB1	USB 3.2 Gen 1 5Gbps Type-C Connector	
JUSB2	USB 3.2 Gen 1 5Gbps Connector	37
JUSB3	USB 2.0 Connector	36
M2_1~2	M.2 Slots (Key M)	32
PCI_E1	PCIe Expansion Slot	31
Processor Socket	Socket AM4	29
SATA1~4	SATA 6Gb/s Connectors	31

### Processor Socket





### 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 vellow triangle is the Pin 1 indicator.

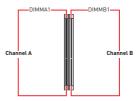


#### **Important**

- 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 for thermal tapel 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 quarantee the damages or risks caused by inadequate operation beyond product specifications.

### **DIMM Slots**



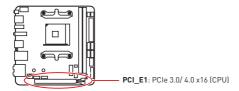




### Important

- Always insert memory modules in the DIMMA1 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: PCIe Expansion Slot





### 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.
- · 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.

#### SATA1~4: SATA 6Gb/s Connectors

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



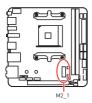




#### Important

- 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)





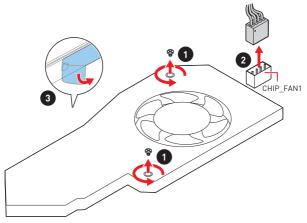


## Video Demonstration

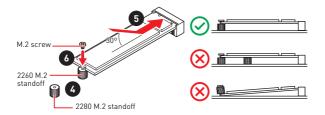
Watch the video to learn how to Install M.2 module. http://youtu.be/JCTFABytrYA

### M2\_1 slot installation

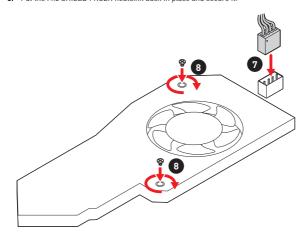
- 1. Loosen the screws of M.2 SHIELD FROZR heatsink.
- 2. Disconnect the heatsink fan from CHIP FAN1 connector of motherboard.
- 3. Remove the M.2 heatsink and remove the protective films from the thermal pads.



- 4. For 2260 SSD, please skip this step. For 2280 SSD, please remove the 2260 M.2 standoff to avoid damage to the M.2 SSD.
- 5. Insert your M.2 SSD into the M.2 slot at a 30-degree angle.
- 6. Secure the M.2 SSD in place with the M.2 screw.



- 7. Reconnect the heatsink fan to CHIP\_FAN1 connector of motherboard.
- 8. Put the M.2 SHIELD FROZR heatsink back in place and secure it.



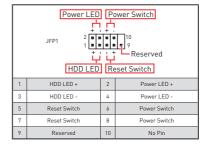
### M2\_2 slot installation

Please follows the step 5 and 6 above to install the M.2 SSD to the M2\_2 slot.

### 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.



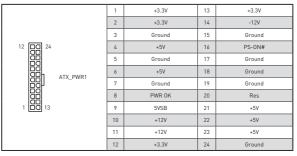


### CPU\_PWR1, ATX\_PWR1: Power Connectors

These connectors allow you to connect an ATX power supply.



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





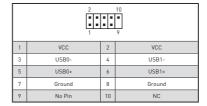
# / Important

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

### JUSB3: USB 2.0 Connector

This connector allows you to connect USB 2.0 ports on the front panel.





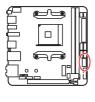


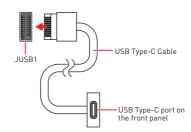
### Important

- 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.

### JUSB1: 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.





# JUSB2: USB 3.2 Gen 1 5Gbps Connector

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



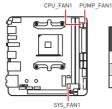
10 11 11 11 11 11 11 11 11 11 11 11 11 1						
1	Power	11	USB2.0+			
2	USB3_RX_DN	12	USB2.0-			
3	USB3_RX_DP	13	Ground			
4	Ground	14	USB3_TX_C_DP			
5	USB3_TX_C_DN	15	USB3_TX_C_DN			
6	USB3_TX_C_DP	16	Ground			
7	Ground	17	USB3_RX_DP			
8	USB2.0-	18	USB3_RX_DN			
9	USB2.0+	19	Power			
10	Ground	20	No Pin			



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

# CPU FAN1, PUMP FAN1, SYS FAN1: 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	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.

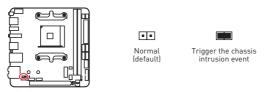
# Pin definition of fan connectors

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

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.



# 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.

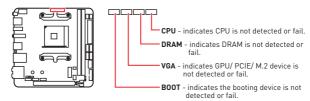


# Resetting BIOS to default values

- 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.

# EZ Debug LED

These LEDs indicate the debug status of the motherboard.



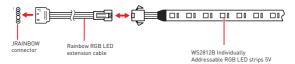
# JRAINBOW1: Addressable RGB LED connectors

The JRAINBOW connector allows you to connect the WS2812B Individually Addressable RGB LED strips 5V.

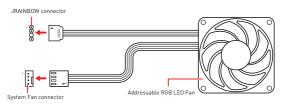




# Addressable RGB LED Strip Connection



#### Addressable RGB LED Fan Connection





#### **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.

# Installing OS. Drivers & Utilities

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

# Installing Windows 10

- 1. Power on the computer.
- 2. Insert the Windows 10 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
- 5. Select the Windows 10 installation disc/USB from the Boot Menu.
- 6. Press any key when screen shows Press any key to boot from CD or DVD... message.
- 7. Follow the instructions on the screen to install Windows 10.

# Installing Drivers

- 1. Start up vour computer in Windows 10.
- 2. Insert MSI 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 Drive Disc.
- 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.

# Installing Utilities

Before you install utilities, you must complete drivers installation.

- 1. Open the installer as described above.
- 2. Click the Utilities tab.
- 3. Select the utilities you want to install.
- 4. Click the Install button in the lower-right corner of the window.
- 5. The utilities installation will then be in progress, after it has finished it will prompt you to restart.
- 6. Click OK button to finish
- 7. Restart your computer.

# **UFFI 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. However, it still has a CSM (Compatibility Support Module) mode to be compatible with older devices. That allows you to replace legacy devices with UEFI compatible devices during the transition.



# **Important**

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

# **UEFI** advantages

- Fast booting UEFI can directly boot the operating system and save the BIOS selftest 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.



#### **Important**

We recommend that you to use a GOP/ UEFI compatible graphics card.

#### How to check the BIOS mode?

After entering the BIOS, find the BIOS Mode at the top of the screen.



**UEFI** boot mode



CSM boot mode

# **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 chapter are for reference only and may vary from the product you purchased.
- The BIOS items will vary with the processor.

# 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
- 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 F7 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

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

# 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.



# Important

Be sure the computer is off before clearing CMOS data. Please refer to the Clear CMOS jumper 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 DRAGON CENTER

Before updating:

Make sure the LAN driver is already installed and the internet connection is set properly.

# Updating BIOS:

- 1. Install and launch MSI DRAGON CENTER and go to Support page.
- 2. Select Live Update and click on Advance button.



- 3. Click on Scan button to search the latest BIOS file.
- 4. Select the BIOS file and click on Download icon to download and install the latest RIOS file
- 5. Click Next and choose In Windows mode. And then click Next and Start to start updating 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 your USB flash drive.
- 3. Connect the power supply to CPU\_PWR1 and ATX\_PWR1. (No need to install CPU and memory.)
- 4. Plug the USB flash drive 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.

# EZ Mode

At EZ mode, it provides the basic system information and allows you to configure the basic setting. To configure the advanced BIOS settings, please enter the Advanced Mode by pressing the Setup Mode switch or F7 function key.



• GAME BOOST - click on it to toggle the GAME BOOST for overclocking. This function is only available when both of the motherboard and CPU are supporting this function.



# **Important**

We don't recommend you to adjust any BIOS item after activating the GAME BOOST function for keeping the optimal performance and system stability.

- A-XMP Profile allows you to select the A-XMP profile for memory to overclock. This function is only available when the system, memory and CPU are supporting this function.
- Setup Mode switch press this tab or the F7 key to switch between Advanced mode and EZ mode.
- . Screenshot click on this tab or the F12 key to take a screenshot and save it to USB flash drive (FAT/ FAT32 format only).
- Search click on this tab or the Ctrl+F keys to enter the search page. It allows you to search by BIOS item name. Move the mouse over a blank space and right click the mouse to exit the search page.



## Important

In search page, only the F6, F10 and F12 function keys are available.

Language - allows you to select language of BIOS setup.

- System information shows the CPU/ DDR speed, CPU/ MB temperature, MB/ CPU type, memory size, CPU/ DDR voltage, BIOS version and build date.
- Boot device priority bar you can move the device icons to change the boot priority. The boot priority from high to low is left to right.
- . Component Information click on the CPU, Memory, Storage, Fan Info and Help buttons to show the information of connected component.
- Function buttons enable or disable these functions by clicking on these buttons. The function is enabled when the button shows ON.



# Important

The function buttons will vary with the motherboard you purchased.

- M-Flash click on this button to enter the M-Flash menu that provides the way to update BIOS with a USB flash drive.
- . Hardware Monitor click on this button to enter the Hardware Monitor menu that allows you to manually control the fan speed by percentage.
- Favorites click on this button or press the F3 key to show the Favorites window. It provides 5 menus for you to create personal BIOS menu where you can save and access favorite/ frequently-used BIOS setting items.



### . To add a BIOS item to a favorite menu

- 1. Select a BIOS item not only on BIOS menu but also on search page.
- 2. Right-click or press F2 key.
- 3. Choose a favorite page and click on OK.



# • To delete a BIOS item from favorite menu

- 1. Select a BIOS item on favorite menu.
- 2. Right-click or press F2 key.
- 3. Choose Delete and click on OK.



# Advanced Mode

Press Setup Mode switch or F7 function key can switch between EZ Mode and Advanced Mode in BIOS setup.



- BIOS menu selection the following options are available:
  - SETTINGS allows you to specify the parameters for chipset and boot devices.
  - OC allows you to adjust the frequency and voltage. Increasing the frequency may get better performance.
  - M-FLASH provides the way to update BIOS with a USB flash drive.
  - OC PROFILE allows you to manage overclocking profiles.
  - HARDWARE MONITOR allows you to set the speeds of fans and monitor voltages of system.
  - . BOARD EXPLORER provides the information of installed devices on this motherboard.
- Menu display provides BIOS setting items and information to be configured.

# SETTINGS Menu

This menu allows you to specify the parameters for system, chipset and boot devices.

# ➤ System Status sub-menu

The System Status sub-menu allows you to set the system clock and view system information

# ▶ System Date

Sets the system date. Use tab key to switch between date elements.

The format is <day> <month> <date> <year>.

Day of the week, from Sun to Sat, determined by BIOS. Read-only. <dav>

<month> The month from Jan. through Dec.

<date> The date from 1 to 31 can be keyed by numeric function keys.

<year> The year can be adjusted by users.

# ▶ System Time

Sets the system time. Use tab key to switch between time elements.

The time format is <hour> <minute> <second>.

### ► SATA PortX/ M2 X

Shows the information of connected SATA/ M.2 device.



# /!\ Important

If the connected SATA/ M.2 device is not displayed, turn off computer and re-check SATA/ M.2 cable and power cable connections of the device and motherboard.

# System Information

Shows detailed system information, including CPU type, BIOS version, and Memory fread only).

#### ► DMI Information

Shows system information, desktop board information and chassis information.

### Advanced sub-menu

The Advanced sub-menu allows you to adjust and set the parameters and behaviors of PCIe, ACPI, integrated peripherals, integrated graphics, USB, power management and Windows

#### ► PCIe/ PCI Subsystem Settings

Sets PCI, PCI express interface protocol and latency timer. Press Enter to enter the sub-menu.

#### ► ACPI Settings

Sets ACPI parameters of onboard power LED behaviors.

# Integrated Peripherals sub-menu

Sets integrated peripherals' parameters, such as LAN, Wi-Fi, HDD, SSD, USB and audio.

# Integrated Graphics Configuration sub-menu (optional)

Adjusts integrated graphics settings for optimum system. This sub-menu is only available when using the CPU which integrate with IGP.

# ▶ USB Configuration sub-menu

Sets the onboard USB controller and device function. Press Enter to enter the sub-menu.

### ► Power Management Setup sub-menu

Sets system Power Management of ErP and AC Power Loss behaviors. You can optimize the system power consumption in this menu.

# ▶ Windows OS Configuration

Sets Windows detailed configuration and behaviors. You also can set the secure boot and control key management to prevent the unauthorized accessing for system.

#### ► Wake Up Event Setup sub-menu

Sets system wake up behaviors for different sleep modes.

#### Secure Frase+

Enables or disables Secure Erase+ function. Secure Erase+ is the best way to effectively wipe all data from a SSD. Please note that data of SSD will be erased after enabling Secure Erase+.

## ► Realtek PCIe GbE Family Controller (MAC sub-menu

This sub-menu shows driver information and configuration of the Ethernet controller parameter.

#### ► Boot sub-menu

Use this menu to set the system boot states and the sequence of system boot devices.

# ➤ Security sub-menu

Use this menu to set the administrator password and the user password for system security. This menu also allows you to set the TPM (Trusted Platform Module) function



# Important

When selecting the Administrator / User Password items, a password box will appear on the screen. Type the password then press Enter. The password typed now will replace any previous set password from CMOS memory. You will be prompted to confirm the password. You may also press Esc key to abort the selection.

To clear a set password, press Enter when you are prompted to enter a new password. A message will confirm the password is being disabled. Once the password is disabled, you can enter the setup and OS without authorization.

#### Save & Fxit

This menu allows you to load the BIOS default values or factory default settings into the BIOS and exit the BIOS setup utility with or without changes.

# OC Menu

This menu allows you to configure the frequencies and voltages for overclocking. Please note that, higher frequency and voltage may benefit overclocking capability but cause system un-stability.



### Important

- Overclocking your PC manually is only recommended for advanced users.
- · Overclocking is not guaranteed, and if done improperly, it could void your warranty or severely damage your hardware.
- If you are unfamiliar with overclocking, we advise you to use GAME BOOST function for easy overclocking.
- The BIOS items in OC menu will vary with the processor.

#### ▶ 0C Explore Mode [Normal]

Enables or disables to show the normal or expert version of OC settings.

[Normal] Provides the regular OC settings in BIOS setup.

[Expert] Provides the advanced OC settings for OC expert to configure in BIOS setun.

Note: We use \* as the symbol for the OC settings of Expert mode.

#### ► CPU Ratio Apply Mode [All Core]\*

Sets applied mode for CPU ratio. This item only appears when a CPU that supports Turbo Boost is installed.

# ► CPU Ratio [Auto]

Sets the CPU ratio that is used to determine CPU clock speed. This item can only be changed if the processor supports this function.

# ► Advanced CPU Configuration

Press Enter to enter the sub-menu. User can set the parameters about CPU power/ current. The system may become unstable or unbootable after changing the parameters. If it occurs, please clear the CMOS data and restore the default settings.

#### ► FCH Base Clock (MHz) [Auto]

Sets the CPU Base clock. You may overclock the CPU by adjusting this value. Please note that overclocking behavior and stability is not guaranteed. This item appears when a CPU that support this function is installed.

#### ► A-XMP [Disabled]

Please enable A-XMP or select a profile of memory module for overclocking the memory. This item will be available when the installed processor, memory modules and motherboard support this function.

### ► DRAM Frequency [Auto]

Sets the DRAM frequency. Please note the overclocking behavior is not guaranteed.

# ► Adjusted DRAM Frequency

Shows the adjusted DRAM frequency, Read-only,

# ► FCLK Frequency [Auto]

Sets the FCLK frequency (Internal Data Fabric clock of DRAM). Please note the overclocking behavior is not guaranteed.

# ► UCLK DIV1 Mode [Auto]

Sets UCLK (Internal memory controller clock) mode.

# Memory Try It ! [Disabled]

It can improve memory compatibility or performance by choosing optimized memory preset. This item will be available when the installed processor supports this function.

# ▶ Memory Failure Retry [Enabled]

Enables or disables the system reboot function when the memory OC retry fails.

# ▶ Memory Fast Boot [Enabled] \*

Enables or disables the initiation and training for memory every booting.

[Auto] The setting will be configured automatically by BIOS.

[Enabled] System will completely keep the archives of first intiation and training for memory. So the memory will not be initialed and trained when

booting to accelerate the system booting time.

[Disabled] The memory will be initialed and trained every booting.

### ► Advanced DRAM Configuration

Press Enter to enter the sub-menu. User can set the memory timing for each/all memory channel. The system may become unstable or unbootable after changing memory timing. If it occurs, please clear the CMOS data and restore the default settings. (Refer to the Clear CMOS jumper section to clear the CMOS data, and enter the BIOS to load the default settings.)

### ▶ DigitALL Power sub-menu

Press Enter to enter the sub-menu. In the sub-menu, you can setup some protecting conditions about voltage/ current/ temputure for CPU.

# ► CPU Voltages control [Auto]

These options allows you to set the voltages related to CPU. If set to Auto. BIOS will set these voltages automatically or you can set it manually.

### ► DRAM Voltages control [Auto]

These options allows you to set the voltages related to memory. If set to Auto, BIOS will set these voltages automatically or you can set it manually.

# ► CPU Specifications sub-menu

Press Enter to enter the sub-menu. This sub-menu displays the information of installed CPU. You can also access this information menu at any time by pressing [F4]. Read only.

### ► MEMORY-Z sub-menu

Press Enter to enter the sub-menu. This sub-menu displays all the settings and timings of installed memory. You can also access this information menu at any time by pressing [F5].

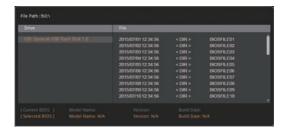
# M-FLASH Menu

M-FLASH provides the way to update BIOS with a USB flash drive. Please download the latest BIOS file that matches your motherboard model from MSI website, save the BIOS file into your USB flash drive. And then follow the steps below to update BIOS.

- 1. Insert the USB flash drive that contains the update file into the computer.
- 2. Click on M-FLASH tab, a demand message will be prompted. Click on Yes to reboot and enter the flash mode.



3. The system will enter the flash mode and a file selection menu will appear after rebooting.



- 4. Select a BIOS file to perform the BIOS update process.
- 5. After the flashing process is 100% completed, the system will reboot automatically.

# OC PROFILE Menu



### ► Overclocking Profile 1/2/3/4/5/6

Overclocking Profile 1/2/3/4/5/6 management. Press Enter to enter the sub-menu.

► Set Name for Overclocking Profile 1/2/3/4/5/6

Name the current overclocking profile.

- ► Save Overclocking Profile 1/2/3/4/5/6 Save the current overclocking profile.
- ► Load Overclocking Profile 1/2/3/4/5/6 Load the current overclocking profile.
- ► Clear Overclocking Profile 1/2/3/4/5/6 Clear the current overclocking profile.
- OC Profile Load from ROM

Load OC profile from BIOS ROM.

#### OC Profile Save to USB

Save OC profile to the USB flash drive. The USB flash drive should be FAT/ FAT32 format only.

### OC Profile Load from USB

Load OC profile from the USB flash drive. The USB flash drive should be FAT/ FAT32 format only.

# HARDWARE MONITOR Menu

This menu allows you to adjust the fan speed manually and monitor CPU/ system voltage.

Select a temperature curve line (white)

to be showed in Fan operating window Select a fan mode for target fan Select a fan to be configured Click to enable the Smart Fan Smart Fan duty information Fan operating window Setting Buttons Temperature information Voltage information

• Smart Fan - This setting enables/disables the Smart Fan function. Smart Fan is an excellent feature which will adjust the CPU/system fan speed automatically depending on the current CPU/system temperature, avoiding the overheating to damage your system.

### ► Settings Buttons

- All Full Speed configures all fans to run at full operating speed.
- All Set Default configures all fans' speeds return the BIOS default values.
- · All Set Cancel discards current changes and restores previous settings for all fan.



# Important

Make sure fans are working properly after adjusting the fan speed and switching the fan mode

# Adjusting fans

- Selects a fan that you want to adjust and to display the fan duty curve line (yellow) in fan operating windows.
- 2. Click and drag the duty points to adjust the fan speed.





The pictures in this section are for reference only and may vary from the motherboard you purchased.

# **AMD RAID Configuration**

The following are the RAID levels supported by RAIDXpert2.

- RAIDO (Striping) breaks the data into blocks which are written to separate hard drives. Spreading the hard drive I/O load across independent channels greatly improves I/O performance.
- RAID 1 (Mirroring) provides data redundancy by mirroring data between the hard drives and provides enhanced read performance.
- RAID 10 (Striped RAID1 Sets) uses four hard drives to create a combination of RAID 0 and 1 by forming a RAID 0 array from two RAID 1 arrays.

Volume (JBOD) provides the ability to link-together storage from one or several disks, regardless of the size of the space on those disks. Useful in scavenging space on disks unused by other disks in the array. Does not provide performance benefits or data redundancy.

RAIDABLE (also known as RAID Ready) allows the user to add more storage space or create a redundant array after a system is installed.

### RAID level comparison

	RAID 0	RAID 1	RAID 10
Minimum # drives	2	2	4
Data protection	None	Excellent	Excellent
Read performance	Excellent	0K	0K
Write performance	Excellent	Good	Good
Capacity utilization	100%	50%	50%



### \ Important

All the information volumes pictures listed in your system might differ from the illustrations in this appendix.

# Enabling RAIDXpert2 Configuration Utility

### To enter the RAIDXpert2 Configuration Utility menu

- 1. Power on and press Delete key to enter BIOS Setup menu.
- 2. Press F7 to switch to Advanced mode from F7 mode
- 3. Go to BIOS > SETTINGS > Advanced > Integrated Peripherals > SATA Mode and change setting to RAID Mode.
- 4. Go to BIOS > SETTINGS > Advanced > Windows OS Configuration > BIOS UEFI/ CSM Mode and change setting to UEFI.
- 5. Press F10 to save configuration and exit, and then reboot and press Delete key to enter BIOS Setup menu.
- 6. Go to BIOS > SETTINGS > Advanced > RAIDXpert2 Configuration Utility submenu.

# **Initializing Disks**

New disks and legacy disks must be initialized before they can be used to create an AMD-RAID array. Initialization writes AMD-RAID configuration information (metadata) to a disk.



# Important

- If a disk is part of an AMD-RAID array, the disk cannot be selected for initialization. To initial the disk anyway, delete the AMD-RAID array. Data on the disk is deleted during initialization so ensure the correct disks are chosen to initialize.
- A legacy disk can contain valid data. When a legacy disk is initialized, all data on the disk is lost.

#### To initialize disks

- 1. As previously mentioned, enable RAIDXpert2 Configuration Utility.
- 2. Go to BIOS > SETTINGS > Advanced > RAIDXpert2 Configuration Utility > Physical Disk Management > Select Physical Disk Operations > Initialize Disk sub-menu.



- 3. Select desired disks by changing the Physical Disk setting to Enabled.
- 4. Select OK, then press Enter.



- 5. Review the warning message, if you want to proceed, select YES, then press Enter.
- 6. Initialization takes 10 to 15 seconds per disk. During initialization, a complete rescan of all channels is done automatically.

# **Creating Arrays**

Arrays can be created after the disks are initialized.



# **Important**

- For redundant arrays, the Create process is not started until after the operating system and AMD-RAID OS drivers have been installed and the system has booted to the operating system. However, the arrays are immediately available to use for either a bootable array or a data array.
- · Array numbers are valid only for a given boot and might be different in the RAIDXpert2 Configuration Utility and RAIDXpert2. If a permanent label is required, use the RAIDXpert2 Web GUI Array Naming feature.
- At any point in the procedure, return to a prior window by pressing ESC.
- If the system is booted from an AMD-RAID bootable array, the first array in the Arrays section must be the bootable array. The system boots only from the first array in the Arrays section.

## To create an array

- 1. As previously mentioned, enable RAIDXpert2 Configuration Utility.
- 2. Go to BIOS > SETTINGS > Advanced > RAIDXpert2 Configuration Utility > Array Management > Create Array sub-menu.



- 3. Select the RAID level from the Select RAID Level drop down menu.
- 4. Enter Select Physical Disks sub-menu, select member disks by changing the Physical Disk setting to Enabled.



- 5. Select Apply Changes, then press Enter to apply and go back to previous submenu
- 6. Change the Select CacheTagSize, Read Cache Policy and Write Cache Policy settings according to your needs.
- 7. Select Create Array, then press Enter.

# **Deleting Arrays**



# Important

- Deleting an array permanently destroys all data that is on the array. This action cannot be undone and it is very unlikely that the data can be recovered.
- · Do not delete the first array listed in the Arrays section, if it is the AMD-RAID bootable array. Doing this deletes the operating system and AMD-RAID files.

# To delete an array

- 1. As previously mentioned, enable RAIDXpert2 Configuration Utility.
- 2. Go to BIOS > SETTINGS > Advanced > RAIDXpert2 Configuration Utility > Array Management > Delete Array sub-menu.



- 3. Select the desired array and change the setting to Enabled.
- 4. Enter Delete Array(s) sub-menu.



- 5. Review the warning message, if you want to proceed, Select Confirm and change the setting to Enabled.
- 6. Select YES then press Enter.

# Installing RAID Driver

# New Operating System Installation

The following details the installation of the drivers while installing operating system.

- 1. During the operating system installation, after selecting the location to install Windows click on Load driver button to install a third party RAID driver.
- 2. When prompted, insert the USB flash drive with AMD RAID Drivers and then click Browse
  - . To make an AMD RAID Drivers USB flash drive. Insert the MSI Driver Disc into the optical drive. Copy all the contents in \\Storage\AMD\
- 3. Navigate to the directory containing the saved AMD RAID drivers, then click OK.
- 4. Select the (rcbottom.inf) driver, click Next.
- 5. When prompted, click OK.
- 6. Click Browse and navigate to the directory containing the saved AMD RAID drivers again, then click OK.
- 7. Select the (rcraid.inf) driver, click Next.
- 8. You have successfully installed the RAID driver, and Windows setup should continue
- 9. Leave the disk/ USB drive in the computer until the system reboots itself. Windows setup will need to copy the files after the RAID volume is formatted, and Windows setup starts copying files.

# AMD RAIDXpert2 Management Suite Installation

- Set the SATA Mode to RAID Mode in BIOS
- 2. Insert the MSI Driver Disc into the 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 Driver Disc.
- 4. Under the Drivers/Software tab, check the AMD RAID Drivers check-box.
- 5. Click the Install button.
- 6. When prompt you to restart, click OK button to finish.
- 7. Restart your computer and enter the Windows operating system.
- 8. Double-click the RAIDXpert2 icon to open the RAIDXpert2 Web GUI.
  - . Default credentials are:
    - Username admin
    - Password admin
- 9. Change the credentials:
  - Create new username and password
- 10. Re-log into the RAIDXpert2 Web GUI with the new credentials.

# **Troubleshooting**

Before sending the motherboard for RMA repair, try to go over troubleshooting quide first to see if your got similar symptoms as mentioned below.

# The power is not on.

- . Connect the AC power cord to an electrical outlet securely.
- · Check if all ATX power connectors like ATX\_PWR1, CPU\_PWR1 are connected from the power supply to the motherboard?
- · Some power supply units have a power button on the rear side, make sure the button is turned on
- . Check if the power switch cable is connected to JFP1 pin header properly.
- · Verify the Clear CMOS jumper JBAT1 is set to Keep DATA.
- Test with another known working power supply of equal or greater wattage.

#### The power is on, but no signal to monitor

- · Connect the monitor power cord to a electrical outlet securely.
- Make sure the monitor is turned on.
- Select different inputs on the monitor.
- . If 3 long beeps are heard, remove all memory modules and try to install only one memory module in the DIMMA1 slot first and then restart the computer.
- . If 1 long 2 short beeps are heard, remove and reinstall the graphics card and then restart the computer.
- Test with another known working graphics card.

## The computer does not boot after updating the BIOS

- · Clear the CMOS.
- Use the secondary BIOS to bootup the system (Only for motherboard with Dual RIOS)

## Lost BIOS password

. Clear the CMOS, but that will cause you to lose all customized settings in the BIOS.

#### There is no audio

- · Adjust the volume.
- · Connect the speakers/headphones to audio ports on the motherboard rear IO panel.
- · Remove secondary speakers/ headphones, HDMI cables, USB audio devices
- Test with another known working speaker or headphone.

#### There is no network

- Make sure the network chipset driver has been installed.
- Verify if the network cable is properly connected and make sure the LAN port LEDs are properly illuminated.
- · Verify your TCP/IP settings.
- · Restart or reset your router.
- Test with another known working LAN cable.

### The USB device is not working

- . Make sure your USB drive driver has been installed.
- · Verify if USB device is listed in Windows® Device Manager.
- . Connect the USB device to other USB port on the motherboard rear IO panel.

# Regulatory Notices

# FCC Compliance Statement

Note: 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 the instructions, may cause harmful interference to radio communications. However, there is no quarantee 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
- Consult the dealer or an experienced radio/TV technician for help

Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



Tested to comply with FCC standards FOR HOME OR OFFICE USE

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

# 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. 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.

# B급 기기 (가정용 방송통신기자재)

이 기기는 가정용(B급) 전자파적합기기로서 주 로 가정에서 사용하는 것을 목적으로 하며, 모 든 지역에서 사용할 수 있습니다.

# 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

# C-Tick Compliance



# **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 visithttp://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 Councill, MSI provides the information of chemical substances in products at:

http://www.msi.com/html/popup/csr/evmtprtt 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 qpcontdev@msi.com for information regarding proper Disposal, Take-back, Recycling, and Disassembly of MSI products.

# WEEE (Waste Electrical and Electronic Equipment) Statement

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 Sammelund 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.

#### FRANCAIS

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 équipement 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.

#### РАССКИЙ

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.

#### FSPAÑOI

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

Baio 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 Electrische 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.

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

Po Direktivi Evropske unije ("EU") o odbačenoj ekektronskoj 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 prikuplianie.

Aby chronić nasze środowisko naturalne oraz jako

firma dbająca o ekologię, MSI przypomina, że... Zgodnie z Dyrektywa Unii Europejskiej ("UE") dotyczaca 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 iako śmieci komunalne, tak wiec producenci tych produktów beda zobowiazani do odbierania ich w momencie gdy produkt jest wycofywany z użycia. MSI wypełni wymagania UE, przyjmujać produkty (sprzedawane na terenie Unii Europejskiej) wycofywane z użycia. Produkty MSI bedzie można zwracać w

#### TÜRKCE

Cevreci özelliğiyle bilinen MSI dünyada cevreyi korumak icin hatırlatır.

wyznaczonych punktach zbiorczych.

Avrupa Birliği (AB) Kararnamesi Elektrik ve Elektronik Malzeme Atığı, 2002/96/EC Kararnamesi altında 13 Ağustos 2005 tarihinden itibaren gecerli olmak üzere, elektrikli ve elektronik malzemeler diğer atıklar gibi cöpe atılamavacak ve bu elektonik cihazların üreticileri, cihazların kullanım süreleri bittikten sonra ürünleri geri toplamakla vükümlü 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

#### ČECKA

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 odebírat takové výrobky zpět po skončení jejich životnosti. Společnost MSI splní požadavky na odebírání výrobků značky MSI, prodávaných v zemích EU, po skončení jejich životnosti. Tyto výrobky můžete odevzdat v místních sběrnách.

Annak érdekében, hogy környezetünket megyédiük. 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 kötelessé válnak az ilven termékek visszavételére azok hasznos élettartama végén. Az MSI betartia 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.

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 adequerà 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。

http://www.msi.com/html/popup/csr/cemm\_jp.html http://tw.msi.com/html/popup/csr tw/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 обладнані, затвердженого постановою Кабінету Міністрів України від 3 грудня 2008 № 1057.

### Viêt 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 guy định tam thời về giới han hàm lượng cho phép của một số hóa chất độc hai có trong các sản phẩm điện. điển tử

#### Wireless Radio Use

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

Cet annareil 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 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

#### T作精率2.4GHz 5GHz該結段開於室內使用。

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。

#### 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 :802.11 a/b/q/n/ac/ax, BT Frequency Range :2.4GHz, 5GHz Modulation :FHSS, DSSS, OFDM

Power Output :10, 20, 23 Channel Band Width :1, 5, 20,40,80MHz

# MS-7C92主板产品中有害物质的名称及含量

	有害物质						
部件名称	铅 (Pb)	汞 [Hg]	辆 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)	
印刷电路板组件*	×	0	0	0	0	0	
电池** 1	×	0	0	0	0	0	
外部信号连接头	×	0	0	0	0	0	
线材	×	0	0	0	0	0	

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。
- 產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	型號(型式): MS-7C92						
	限用物質及其化學符號						
單元	鉛 (Pb)	汞 [Hg]	鎬 (Cd)	六價路 [Cr <sup>+6</sup> ]	多溴聯苯 (PBB)	多溴二苯醚 (PBDE)	
電路板	0	0	0	0	0	0	
電子元件	_	0	0	0	0	0	
金屬機構件	_	0	0	0	0	0	
塑膠機構件	0	0	0	0	0	0	

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. "〇" 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

Micro-Star Int'l Co., Ltd.

Copyright @ 2020 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.

#### Revision History

Version 1.0, 2020/05, First release.

# 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

