GC-MAPLE RIDGE

Installation Guide/安裝指南/安装指南

12WE6-MAPLER-12AAR

For more product details, please visit GIGABYTE's website.

Product Specification

Chip	◆	Intel® JHL8540 Thunderbolt™ 4 Controller
Back Panel Connectors	◆	1 x DisplayPort, supporting a maximum resolution of 8K (7680x3840)@60 Hz (Note 1) (Note 2) * Support for DisplayPort 1.4 version, HDCP 2.2, and HDR.
	◆	2 x Thunderbolt™ 4 out ports (Thunderbolt™ 4 Port 1/Thunderbolt™ 4 Port 2), supporting up to 40 Gbps bandwidth and a maximum display resolution of 8K (7680x3840)@60 Hz (Note 1) (Note 2)
	◆	2 x Mini-DisplayPort In ports (DP_IN1/DP_IN2)
Internal Connectors	◆	2 x 6-pin PCIe power connectors
	◆	1 x USB 2.0/1.1 header
	◆	1 x 5-pin Thunderbolt™ header
	◆	1 x 3-pin Thunderbolt™ header
Interface	◆	PCIe 3.0 interface (PCIe x4)
Data Transfer Rate	◆	40 Gbps Bi-directional per port
Supported Operating Systems	◆	Support for Windows 10 (64-bit) with RS3 or later
Compatible Motherboards	◆	Go to GIGABYTE's website for the latest motherboard support list.

(Note 1) Actual resolutions supported are dependent on the graphics card being used.

(Note 2) Due to hardware limitations, the DisplayPort connector, Thunderbolt™ 4 connector 1, and Thunderbolt™ 4 connector 2 require signal input from external devices and support up to two display outputs at a time.

產品規格

晶片	◆	Intel® JHL8540 Thunderbolt™ 4 控制器
後方面板裝置連接插座	◆	1個DisplayPort輸出插座，可支援至最高8K(7680 x 3840)@60 Hz的解析度(註一)(註二) * 支援DisplayPort 1.4版本、HDCP 2.2及HDR。
	◆	2個Thunderbolt™ 4輸出插座(Thunderbolt™ 4插座1/Thunderbolt™ 4插座2)，最高可支援40 Gbps傳輸速度，螢幕可支援至最高8K(7680 x 3840)@60 Hz的解析度(註一)(註二)
	◆	2個Mini-DisplayPort輸入插座(DP_IN1/DP_IN2)
內接插座	◆	2個6-pin PCIe電源插座
	◆	1個USB 2.0/1.1插座
	◆	1個5-pin Thunderbolt™ 插座
	◆	1個3-pin Thunderbolt™ 插座
介面	◆	PCIe 3.0 介面(PCIe x4)
資料傳輸速度	◆	每埠可支援至最高40 Gbps雙向傳輸速度
支援作業系統	◆	支援Windows 10 (64-bit) RS3(含)以上版本
可相容主機板	◆	請至技嘉網站查詢有關支援的主機板列表

(註一) 實際所支援的解析度會依您所使用的顯示卡而有不同。

(註二) 由於硬體限制，DisplayPort插座、Thunderbolt™ 4插座1和Thunderbolt™ 4插座2 需要外部輸入訊號，並且同時只支援兩個顯示輸出。

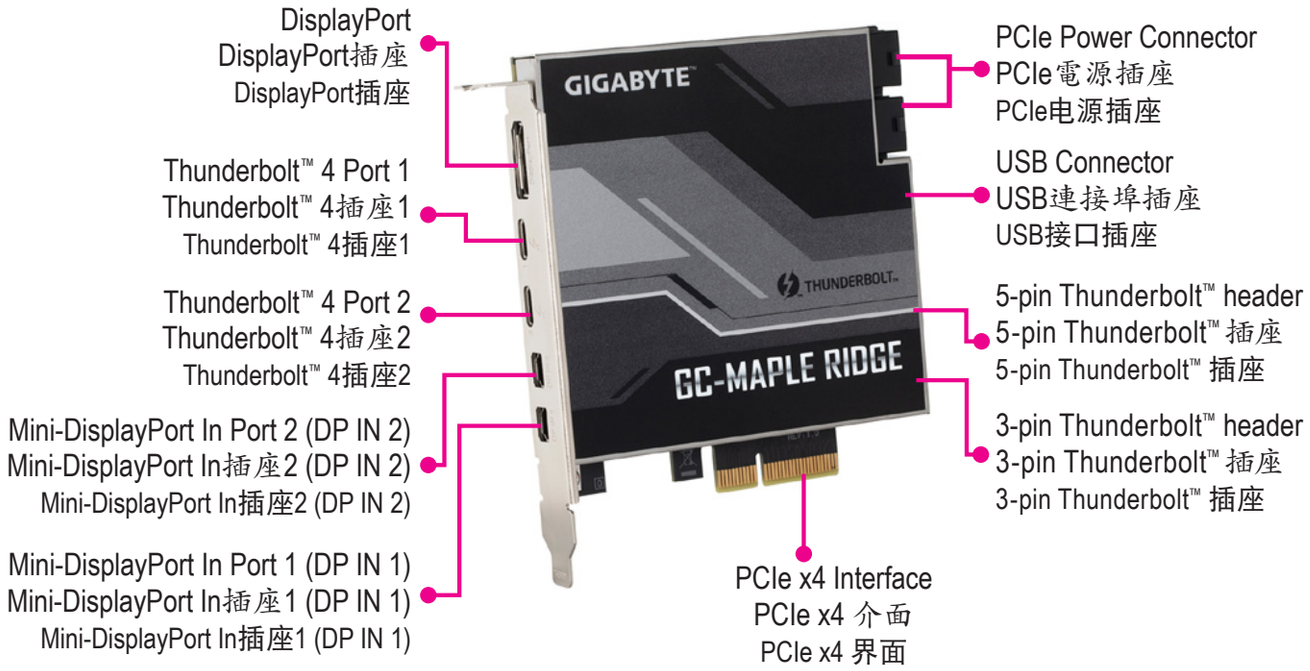
产品规格

芯片	◆	Intel® JHL8540 Thunderbolt™ 4 控制器
后方面板设备连接插座	◆	1个DisplayPort输出插座，可支持至最高8K(7680 x 3840)@60 Hz的分辨率(注一)(注二) * 支持DisplayPort 1.4版本、HDCP 2.2及HDR。
	◆	2个Thunderbolt™ 4输出插座(Thunderbolt™ 4插座1/Thunderbolt™ 4插座2)，最高可支持40 Gbps传输速度，屏幕可支持至最高8K(7680 x 3840)@60 Hz的分辨率(注一)(注二)
	◆	2个Mini-DisplayPort输入插座(DP_IN1/DP_IN2)
内接插座	◆	2个6-pin PCIe电源插座
	◆	1个USB 2.0插座
	◆	1个5-pin Thunderbolt™ 插座
	◆	1个3-pin Thunderbolt™ 插座
界面	◆	PCIe 3.0 界面(PCIe x4)
数据传输速度	◆	每个接口可支持至最高40 Gbps双向传输速度
支持操作系统	◆	支持Windows 10 (64-bit) RS3(含)以上版本
可兼容主板	◆	请至技嘉网站查询有关支持的主板列表

(注一) 实际所支持的分辨率会依您所使用的显卡而有不同。

(注二) 由于硬件限制，DisplayPort插座、Thunderbolt™ 4插座1和Thunderbolt™ 4插座2 需要外部输入信号，并且同时只支持两个显示输出。

Installing the GC-MAPLE RIDGE Add-in Card
安裝GC-MAPLE RIDGE卡 • 安裝GC-MAPLE RIDGE卡





Mini-DisplayPort Cable x 2
Mini-DisplayPort連接線-2條
Mini-DisplayPort连接线-2条



USB 2.0/1.1 Header Cable x 1
USB 2.0/1.1插座連接線-1條
USB 2.0插座连接线-1条



Thunderbolt™ Header Cable (5-pin) x 1
Thunderbolt™ 插座連接線 (5-pin)-1條
Thunderbolt™ 插座连接线 (5-pin)-1条



Thunderbolt™ Header Cable (3-pin) x 1
Thunderbolt™ 插座連接線 (3-pin)-1條
Thunderbolt™ 插座连接线 (3-pin)-1条



Step 1:
Install the GC-MAPLE RIDGE add-in card in the PCIEX4 slot.

步驟1：
將GC-MAPLE RIDGE卡安裝至PCIEX4插槽。

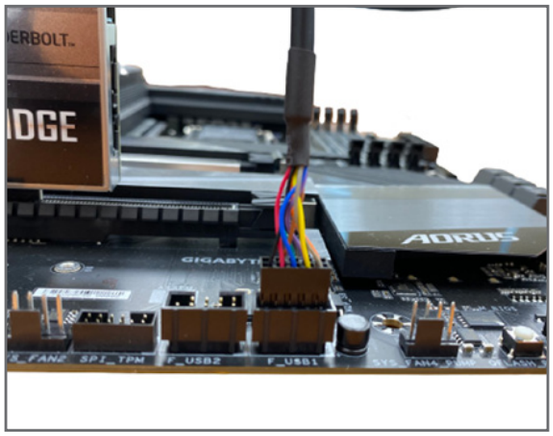
步骤1：
将GC-MAPLE RIDGE卡安装至PCIEX4插槽。



Step 2:
Connect one end of the USB cable to the USB connector on the GC-MAPLE RIDGE card.

步驟2：
將USB排線的一端接至GC-MAPLE RIDGE卡的USB連接埠插座。

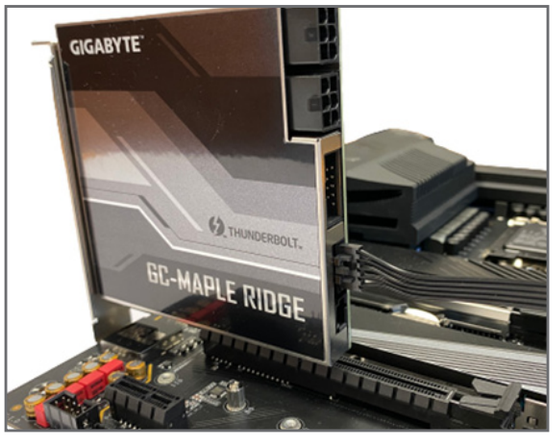
步骤2：
将USB扁平电缆的一端接至GC-MAPLE RIDGE卡的USB接口插座。



Step 3:
Connect the other end of the USB cable to the F_USB connector on the motherboard.

步驟3：
再將USB排線的另一端接至主機板的F_USB插座。

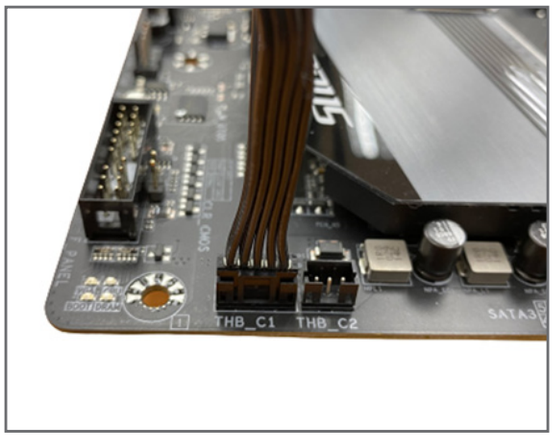
步骤3：
再将USB扁平电缆的另一端接至主板的F_USB插座。



Step 4:
Connect one end of the Thunderbolt™ header cable (5-pin) to the 5-pin Thunderbolt™ header on the GC-MAPLE RIDGE add-in card.

步驟4：
將Thunderbolt™插座連接線 (5-pin)的一端連接至GC-MAPLE RIDGE卡上的5-pin Thunderbolt™插座 。

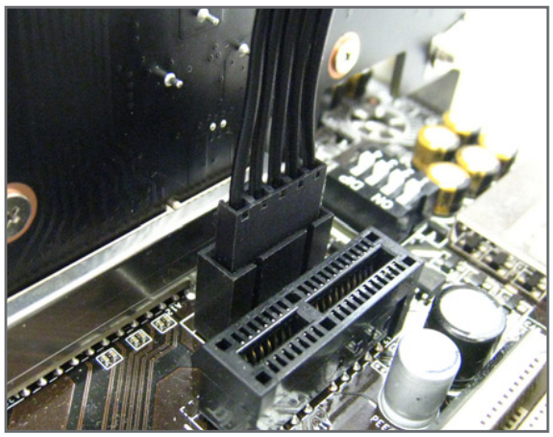
步骤4：
将Thunderbolt™ 插座连接线 (5-pin)的一端连接至GC-MAPLE RIDGE卡上的5-pin Thunderbolt™插座。



Step 5:
Connect the other end of the cable to the Thunderbolt™ add-in card header (Note 1) on the motherboard.

步驟5：
將另一端連接至主機板上的Thunderbolt™擴充子卡插座(註一) 。

步骤5：
将另一端连接至主板上的Thunderbolt™扩展子卡插座(注一)。



(Note 1) The Thunderbolt™ header cable (5-pin) provided has two connectors. Choose the correct connector according to the Thunderbolt™ add-in card header on your motherboard.

(註一) 隨貨附贈的Thunderbolt™ 插座連接線 (5-pin)提供兩種接頭，請依主機板上的Thunderbolt™擴充子卡插座選擇接頭類型 。

(注一) 随货附赠的Thunderbolt™插座连接线 (5-pin)提供两种接口，请依主板上的Thunderbolt™扩展子卡插座选择接口类型。



Step 6:
Connect one end of the Thunderbolt™ header cable (3-pin) to the 3-pin Thunderbolt™ header on the GC-MAPLE RIDGE add-in card.

步驟6：
將Thunderbolt™插座連接線 (3-pin)的一端連接至GC-MAPLE RIDGE卡上的3-pin Thunderbolt™插座 。

步骤6：
将Thunderbolt™插座连接线 (3-pin)的一端连接至GC-MAPLE RIDGE卡上的3-pin Thunderbolt™插座。



Step 7:
Connect the other end of the cable to the Thunderbolt™ add-in card header (Note 2) on the motherboard.

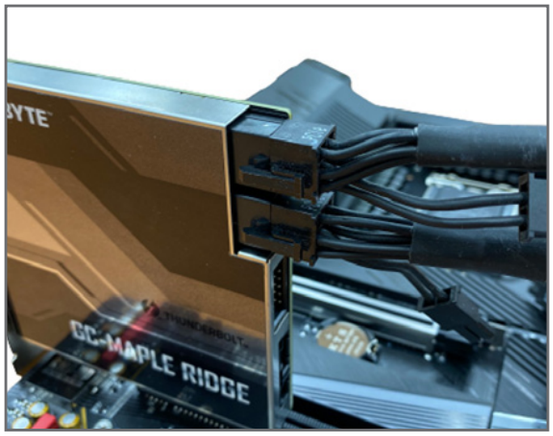
步驟7：
將另一端連接至主機板上的Thunderbolt™擴充子卡插座(註二) 。

步骤7：
将另一端连接至主板上的Thunderbolt™扩展子卡插座(注二)。

(Note 2) Whether the connector is supported depends on the motherboard models.

(註二) 是否支援此插座依主機板而定。

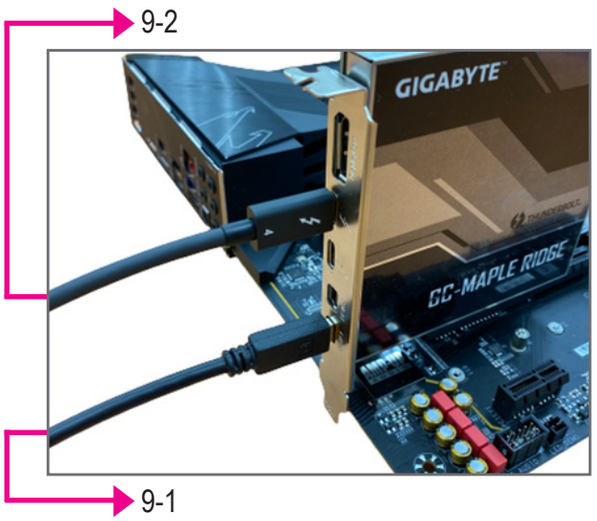
(注二) 是否支持此插座依据主板而定。



Step 8:
Connect the power cables from the power supply to the two PCIe connectors.

步驟8：
將電源供應器上的電源接頭連接至兩組PCIe電源插座。

步骤8:
将电源供应器上的电源接头连接至两组PCIe电源插座。



Step 9:
Follow the steps below to use the included Mini-DisplayPort cable to connect your graphics card to the GC-MAPLE RIDGE add-in card.
9-1: Connect the cable from the DisplayPort In connector on the GC-MAPLE RIDGE add-in card to the DisplayPort on your graphics card.
9-2: Connect the Thunderbolt™ device's or DisplayPort monitor's cable to the Thunderbolt™ 4 connector on the GC-MAPLE RIDGE add-in card.

步驟9：
請依照下列步驟使用所附的Mini-DisplayPort連接線將您的顯示卡與GC-MAPLE RIDGE卡做連結。
9-1：GC-MAPLE RIDGE卡上的Mini-DisplayPort In插座需連結至顯示卡的DisplayPort。
9-2：GC-MAPLE RIDGE卡上的Thunderbolt™ 4插座則需連結至Thunderbolt™裝置或DisplayPort螢幕。

步骤9:
请依照下列步骤使用所附的Mini-DisplayPort连接线将您的显卡与GC-MAPLE RIDGE卡做连接。
9-1: GC-MAPLE RIDGE卡上的Mini-DisplayPort In插座需链接至显卡的DisplayPort。
9-2: GC-MAPLE RIDGE卡上的Thunderbolt™ 4插座则需链接至Thunderbolt™设备或DisplayPort屏幕。



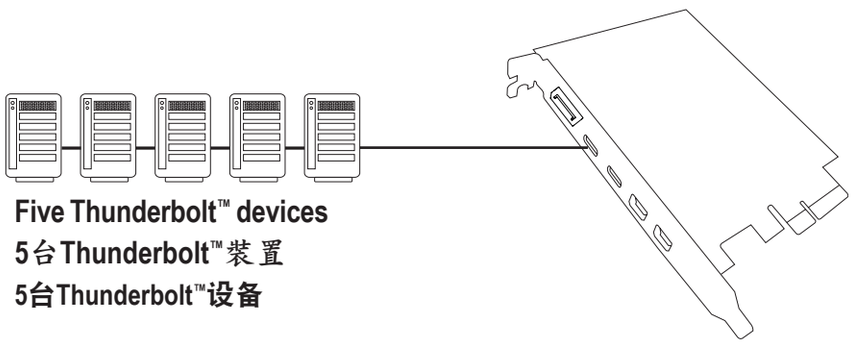
- When connecting one DisplayPort monitor, please connect the Mini-DisplayPort cable to the DP IN 1 connector, then connect the monitor's cable to the DisplayPort connector or Thunderbolt™ 4 connector 1.
- When connecting two DisplayPort monitors, please connect one of the Mini-DisplayPort cables to the DP IN 1 connector and connect the monitor's cable to the DisplayPort connector or Thunderbolt™ 4 connector 1. Then connect the other Mini-DisplayPort cable to the DP IN 2 connector and the monitor's cable to Thunderbolt™ 4 connector 2.
- 連接一台DisplayPort螢幕時，請將Mini-DisplayPort連接線連接至DP IN 1插座，並將螢幕連接線接至DisplayPort或Thunderbolt™ 4插座1。
- 連接兩台DisplayPort螢幕時，請將Mini-DisplayPort連接線連接至DP IN 1插座，並將螢幕連接線接至DisplayPort或Thunderbolt™ 4插座1；Mini-DisplayPort連接線連接至DP IN 2插座，並將螢幕連接線接至Thunderbolt™ 4插座2。
- 连接一台DP显示器时，请将Mini-DP连接线连接至DP IN 1接口，并将显示器连接线连接至DP或Thunderbolt™ 4接口1。
- 连接两台DP显示器时，请将Mini-DP连接线连接至DP IN 1接口，并将显示器连接线接至DP或Thunderbolt™ 4接口1；Mini-DP连接线连接至DP IN 2接口，并将显示器连接线接至Thunderbolt™ 4接口2。
- Make sure to update the motherboard BIOS to the latest version.
- 請確認您主機板的BIOS為最新版本。
- 请确认您主板的BIOS为最新版本。

Daisy-chaining Thunderbolt™ Enabled Devices•串接Thunderbolt™ 裝置•串接Thunderbolt™

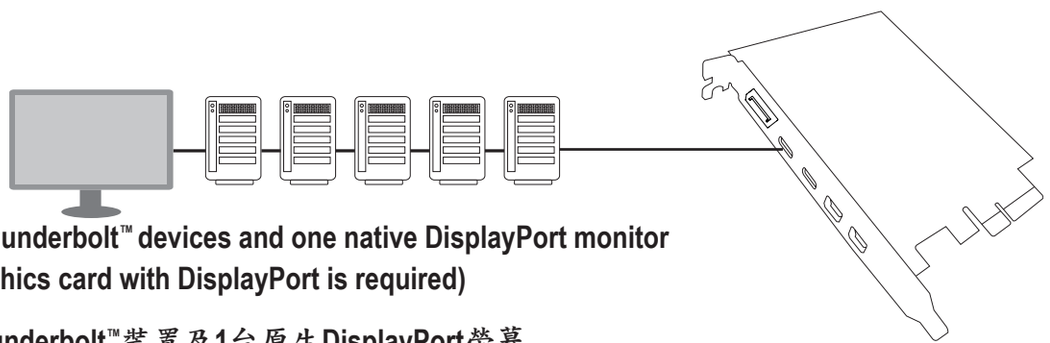
Refer to the following for connecting Thunderbolt™-enabled devices in a daisy-chaining configuration. The following are single-port configurations. (Make sure the Thunderbolt™-enabled devices to be daisy-chained have both Thunderbolt™ in and out ports.)

若要以菊鏈式串接方式串連Thunderbolt™裝置，請參考下列說明。以下為單一連接埠的串接示意圖。(請先確認要串接的裝置皆具備Thunderbolt™輸出及輸入插座。)

若要以菊链式串接方式串连Thunderbolt™设备，请参考下列说明。以下为单一接口的串接示意图。(请先确认要串接的设备皆具备Thunderbolt™输出及输入插座。)



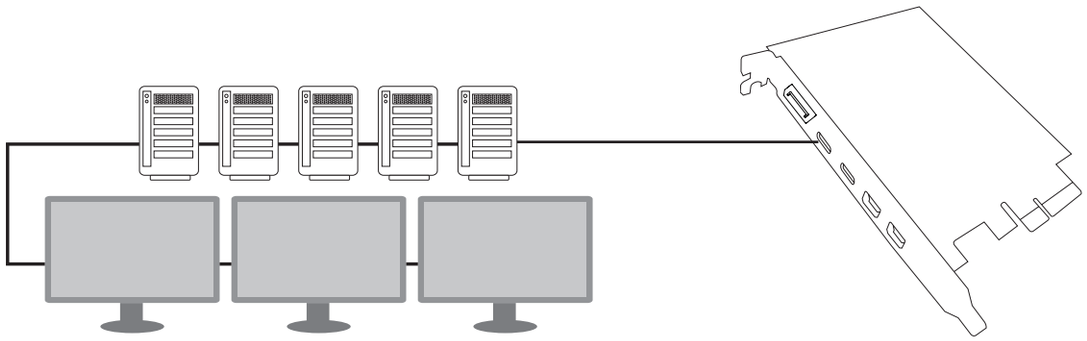
Five Thunderbolt™ devices
5台Thunderbolt™裝置
5台Thunderbolt™设备



Five Thunderbolt™ devices and one native DisplayPort monitor
(A graphics card with DisplayPort is required)

5台Thunderbolt™裝置及1台原生DisplayPort螢幕
(需搭配支援DisplayPort的顯示卡)

5台Thunderbolt™设备及1台原生DisplayPort屏幕
(需搭配支持DisplayPort的显卡)



Five Thunderbolt™ devices and three DisplayPort monitors
(A graphics card with DisplayPort support is required)

5台Thunderbolt™裝置及3台DisplayPort規格螢幕
(需搭配支援DisplayPort 規格的顯示卡)

5台Thunderbolt™设备及3台DisplayPort规格屏幕
(需搭配支持DisplayPort规格的显卡)

Installing the Driver•安裝驅動程式•安装驱动程序

After the computer starts, install the driver for the GC-MAPLE RIDGE add-in card. Insert the included driver disc and follow the on-screen instructions to install the driver.

電腦重新開機後，請安裝GC-MAPLE RIDGE的驅動程式。將所附的驅動程式光碟片插入並且依螢幕指示完成驅動程式的安裝。

电脑重新启动后，请安装GC-MAPLE RIDGE的驱动程序。将所附的驱动程序光盘插入并且依屏幕指示完成驱动程序的安装。

Please visit GIGABYTE's global website (http://www.gigabyte.com) and click on **Support & Downloads** for the latest software driver.

請至技嘉網站(http://www.gigabyte.tw)點選「支援與下載」查詢最新版的驅動程式。

请至技嘉网站(http://www.gigabyte.com)点选「支持与下载」查询最新版的驱动程序。

Regulatory Notices

United States of America, Federal Communications Commission Statement

Supplier's Declaration of Conformity
47 CFR § 2.1077 Compliance Information

Product Name: **PCI Express add-on Card**
Trade Name: **GIGABYTE**
Model Number: **GC-MAPLE RIDGE**

Responsible Party – U.S. Contact Information: **G.B.T. Inc.**
Address: 17358 Railroad street, City Of Industry, CA91748
Tel.: 1-626-854-9338
Internet contact information: https://www.gigabyte.com

FCC Compliance Statement:
This device complies with Part 15 of the FCC Rules, Subpart B, Unintentional Radiators.
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.

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

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

Canadian Department of Communications Statement
This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications. This class B digital apparatus complies with Canadian ICES-003.

Avis de conformité à la réglementation d'Industrie Canada
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

European Union (EU) CE Declaration of Conformity
This device complies with the following directives: Electromagnetic Compatibility Directive 2014/30/EU, Low-voltage Directive 2014/35/EU, RoHS directive (recast) 2011/65/EU & the 2015/863 Statement. This product has been tested and found to comply with all essential requirements of the Directives.

European Union (EU) RoHS (recast) Directive 2011/65/EU & the European Commission Delegated Directive (EU) 2015/863 Statement

GIGABYTE prohibits the intentional addition of hazardous substances (Pb, Hg, Cd, Cr^{6+}, PBB, PBDE, DEHP, BBP, DBP, and DIBP), except for uses permitted under applicable RoHS exemptions. Incidental presence of these substances shall comply with the applicable maximum concentration values (MCVs) specified in Directive 2011/65/EU, as amended by Directive (EU) 2015/863.

European Union (EU) Community Waste Electrical & Electronic Equipment (WEEE) Directive Statement

GIGABYTE will fulfill the national laws as interpreted from the 2012/19/EU WEEE (Waste Electrical and Electronic Equipment) (recast) directive. The WEEE Directive specifies the treatment, collection, recycling and disposal of electric and electronic devices and their components. Under the Directive, used equipment must be marked, collected separately, and disposed of properly.

WEEE Symbol Statement



The symbol shown below is on the product or on its packaging, which indicates that this product must not be disposed of with other waste. Instead, the device should be taken to the waste collection centers for activation of the treatment, collection, recycling and disposal procedure.

For more information about where you can drop off your waste equipment for recycling, please contact your local government office, your household waste disposal service or where you purchased the product for details of environmentally safe recycling.

End of Life Directives-Recycling



The symbol shown below is on the product or on its packaging, which indicates that this product must not be disposed of with other waste. Instead, the device should be taken to the waste collection centers for activation of the treatment, collection, recycling and disposal procedure.

For any support regarding the EU General Product Safety Regulation (GPSR), please contact Giga-Byte Technology B.V. Steenoven 24, 5626 DK Eindhoven, Netherlands. Email: EU.grp@gigabyte.com

Déclaration de Conformité aux Directives de l'Union européenne (UE)

Cet appareil portant la marque CE est conforme aux directives de l'UE suivantes: directive Compatibilité Electromagnétique 2014/30/UE, directive Basse Tension 2014/35/UE et directive RoHS II 2011/65/UE. La conformité à ces directives est évaluée sur la base des normes européennes harmonisées applicables.

European Union (EU) CE-Konformitätserklärung

Dieses Produkte mit CE-Kennzeichnung erfüllen folgenden EU-Richtlinien: EMV-Richtlinie 2014/30/EU, Niederspannungsrichtlinie 2014/30/EU und RoHS-Richtlinie 2011/65/EU erfüllt. Die Konformität mit diesen Richtlinien wird unter Verwendung der entsprechenden Standards zurEuropäischen Normierung beurteilt.

CE declaração de conformidade

Este produto com a marcação CE estão em conformidade com das seguintes Diretivas UE: Diretiva Baixa Tensão 2014/35/EU; Diretiva CEM 2014/30/EU; Diretiva RSP 2011/65/UE. A conformidade com estas diretivas é verificada utilizando as normas europeias harmonizadas.

CE Declaración de conformidad

Este producto que llevan la marca CE cumplen con las siguientes Directivas de la Unión Europea: Directiva EMC (2014/30/EU), Directiva de bajo voltaje (2014/35/EU), Directiva RoHS (recast) (2011/65/EU). El cumplimiento de estas directivas se evalúa mediante las normas europeas armonizadas.

Dichiarazione di conformità CE

Questo prodotto è conforme alle seguenti direttive: Direttiva sulla compatibilità elettromagnetica 2014/30/UE, Direttiva sulla bassa tensione 2014/35/UE, Direttiva RoHS (rifusione) 2011/65/UE. Questo prodotto è stato testato e trovato conforme a tutti i requisiti essenziali delle Direttive.

D33006
RoHS

BSMI CNS15663 限用物質含有情況標示聲明書

Declaration of the Presence Condition of the Restricted Substances Marking

設備名稱：PCI Express add-on Card Equipment name						型號（型式）：GC-MAPLE RIDGE Type designation (Type)
單元Unit	限用物質及其化學符號 Restricted substances and its chemical symbols					
	鉛 Lead (Pb)	汞 Mercury (Hg)	鎘 Cadmium (Cd)	六價鉻 Hexavalent chromium (Cr^{+6})	多溴聯苯 Polybrominated biphenyls (PBB)	多溴二苯醚 Polybrominated diphenyl ethers (PBDE)
印刷電路板 PCB	○	○	○	○	○	○
外殼 Shell	○	○	○	○	○	○
晶片及其他主動零件 Chip and other Active components	—	○	○	○	○	○
被動電子元器件 Passive Components	—	○	○	○	○	○
連接器 Connectors	—	○	○	○	○	○
焊接金屬 Soldering metal	○	○	○	○	○	○
線材 Cables	○	○	○	○	○	○

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。

Note 1: "Exceeding 0.1 wt %" and "exceeding 0.01 wt %" indicate that the percentage content of the restricted substance exceeds the reference percentage value of presence condition.

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。

Note 2: "○" indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.

備考3."—"係指該項限用物質為排除項目。

Note 3: The "—" indicates that the restricted substance corresponds to the exemption.

《废弃电器电子产品回收处理管理条例》提示性说明

为了更好地关爱及保护地球，当用户不再需要此产品或产品寿命终止时，请遵守国家废弃电器电子产品回收处理相关法律法规，将其交给当地具有国家认可的回收处理资质的厂商进行回收处理。

环保使用期限



本产品的"环保使用期限"，以年为单位，其标识如左图所示。其数字表示产品中有害物质在用户按照产品说明正常使用时，电器电子产品中含有的有害物质不会发生外泄或突变，不会对环境造成严重污染或对其人身、财产造成严重损害的期限。

产品中有害物质的名称及含有信息表

部件名称	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr^{6+})	多溴联苯 (PBBs)	多溴二苯醚 (PBDEs)	邻苯二甲酸二正丁酯 (DBP)	邻苯二甲酸二异丁酯 (DIBP)	邻苯二甲酸丁苄酯 (BBP)	邻苯二甲酸二(2-乙基)己酯 (DEHP)
印刷电路板及其零组件	×	○	○	○	○	○	○	○	○	○
线材	×	○	○	○	○	○	○	○	○	○

注1：O：表示该有害物质在该部件所有均质材料中的含量均不超出电器电子产品有害物质限制使用国家标准要求。

X：表示该有害物质至少在该部件的某一均质材料中含量超出电器电子产品有害物质限制使用国家标准要求。

注2：以上未列出的部件，表明其有害物质含量均不超出电器电子产品有害物质限制使用国家标准要求。

注3：上述表格标注"X"之部件，皆符合达标管理目录限用物质应用例外清单之限值要求。



Contact Us

GIGA-BYTE TECHNOLOGY CO., LTD.

Address: No.6, Baoqiang Rd., Xindian Dist., New Taipei City 231

TEL: +886-2-8912-4000, FAX: +886-2-8912-4005

Tech. and Non-Tech. Support (Sales/Marketing) : https://esupport.gigabyte.com

WEB address (English): https://www.gigabyte.com

WEB address (Chinese): https://www.gigabyte.com/tw

Copyright

© 2026 GIGA-BYTE TECHNOLOGY CO., LTD. All rights reserved.
The trademarks mentioned in this manual are legally registered to their respective owners.

Disclaimer

Information in this manual is protected by copyright laws and is the property of GIGABYTE.
Changes to the specifications and features in this manual may be made by GIGABYTE without prior notice.
No part of this manual may be reproduced, copied, translated, transmitted, or published in any form or by any means without GIGABYTE's prior written permission.
For product-related information, check on our website at: https://www.gigabyte.com

GIGABYTE 技嘉科技