

AI TOP CXL R5X4

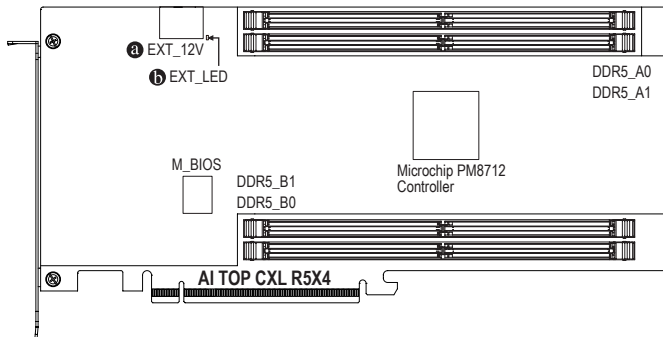
User's Manual

12ME-ATCXL54-101AR



GIGABYTE will reduce paper use in order to fulfill the responsibilities of a global citizen. Also, to reduce the impacts on global warming, the packaging materials of this product are recyclable and reusable. GIGABYTE works with you to protect the environment.

Connectors



a EXT_12V (2x4 12V Power Connector)

Before turning on your computer, make sure to connect the power supply cable to the EXT_12V power connector.

b EXT_LED (Power Connector Indicator LED)

The LED will be on if the EXT_12V power connector is not connected.

Product Specifications

| | |
|------------------------|--|
| Interface | ◆ PCI Express x16 |
| PCIe Generation | ◆ CXL 2.0/1.1 |
| Memory Interface | ◆ Support for DDR5 ECC Registered memory modules (RDIMM) ◆ 4 x DDR5 DIMM sockets, supporting up to 512 GB of memory (up to 128 GB per DIMM) |
| PCB Size | ◆ 12.0cm x 25.4cm |
| Supported Motherboards | ◆ TRX50 AI TOP ^(Note) ◆ W790 AI TOP |

(Note) The PCIEX16_4 slot on the TRX50 AI TOP motherboard doesn't support the CXL specification.

Memory Installation

The table below shows the recommended memory slot configuration based on the number of memory modules you plan to install.

* Recommended Memory Configurations:

| | DDR5_A0 | DDR5_A1 | DDR5_B0 | DDR5_B1 |
|-----------|---------|---------|---------|---------|
| 1 Module | ✓ | -- | -- | -- |
| 2 Modules | ✓ | -- | ✓ | -- |
| 4 Modules | ✓ | ✓ | ✓ | ✓ |

(" ✓ " = Installed, " - " = No Memory)

Memory Support List

For the most up-to-date QVL list, please refer to the product website.

* DDR QVL

| Module Supplier | Capacity | Rank | Module P/N | Chip Brand | Timing | Voltage | Memory Socket Support | | |
|-----------------|----------|------|--------------------------|------------|--------------|---------|-----------------------|---|---|
| | | | | | | | 1 | 2 | 4 |
| Kingston FURY | 128 GB | 2Rx4 | KSM64R52BD4-128MB | Micron B | 52-52-52-103 | 1.1v | ✓ | ✓ | ✓ |
| Micron | 64 GB | 2Rx4 | MTC40F2046S1RC64BD2R | Micron | CL52 | 1.1v | ✓ | ✓ | |
| Micron | 128 GB | 2Rx4 | MTC40F2047S1RC64BB1R | Micron | CL52 | 1.1v | ✓ | ✓ | ✓ |
| Micron | 64 GB | 2Rx4 | MTC40F2046S1RC56BD1 MMCC | Micron D | 46-45-45 | 1.1v | ✓ | ✓ | |
| Micron | 64 GB | 2Rx4 | MTC40F2046S1RC56BD1 MLCC | Micron D | 46-45-45 | 1.1v | ✓ | ✓ | ✓ |
| Micron | 96 GB | 2Rx4 | MTC40F204WS1RC56BB1 | Micron | CL46 | 1.1v | ✓ | ✓ | |
| Micron | 128 GB | 2Rx4 | MTC40F2047S1RC56BB1 | Micron | CL46 | 1.1v | ✓ | ✓ | ✓ |
| Samsung | 128 GB | 2Rx4 | M321RAJA0MB0-CWMNX | Samsung | 45-45-45-90 | 1.1v | ✓ | ✓ | ✓ |
| V-COLOR | 64 GB | 2Rx4 | TRA564G60D432Q | Hynix M | 32-38-38-96 | 1.25v | ✓ | ✓ | ✓ |
| V-COLOR | 96 GB | 2Rx4 | TRA596G60D432Q | Hynix M | 32-38-38-96 | 1.25v | ✓ | ✓ | |
| V-COLOR | 64 GB | 2Rx4 | TR564G56D446O | Hynix M | 46-45-45-90 | 1.1v | ✓ | ✓ | |
| V-COLOR | 96 GB | 2Rx4 | TR596G56D446O | Hynix M | 46-45-45-90 | 1.1v | ✓ | ✓ | ✓ |
| V-COLOR | 64 GB | 2Rx4 | TR564G48D440Q | Hynix M | 40-39-39-77 | 1.1v | ✓ | ✓ | ✓ |
| V-COLOR | 96 GB | 2Rx4 | TR596G48D440Q | Hynix M | 40-39-39-77 | 1.1v | ✓ | ✓ | |

QVL Version: April 22, 2025

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: **AI TOP CXL R5X4**

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.

United States of America, Federal Communications Commission Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and 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 products have not intended to add and safe from hazardous substances (Cd, Pb, Hg, Cr+6, PBDE, PBB, DEHP, BBP, DBP and DIBP). The parts and components have been carefully selected to meet RoHS requirement. Moreover, we at GIGABYTE are continuing our efforts to develop products that do not use internationally banned toxic chemicals.

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.

Battery Information

European Union—Disposal and recycling information

GIGABYTE Recycling Program (available in some regions)



This symbol indicates that this product and/or battery should not be disposed of with household waste. You must use the public collection system to return, recycle, or treat them in compliance with the local regulations.

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.

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 zur Europäischen 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/UE; Diretiva CEM 2014/30/UE; 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/UE), Directiva de bajo voltaje (2014/35/UE), Directiva RoHS (recast) (2011/65/UE). 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



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>

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