

GIGABYTE GC-WIFI7

GIGABYTE WiFi 7 GC-WIFI7 PCIe Expansion Card User Manual

Model: GC-WIFI7 | Brand: GIGABYTE

1. INTRODUCTION

The GIGABYTE AORUS GC-WIFI7 PCIe Expansion Card is designed to provide cutting-edge wireless connectivity for your desktop PC. Featuring Wi-Fi 7 (802.11be) technology, it supports high-speed wireless connections up to 5800Mbps across tri-band frequencies (2.4GHz, 5GHz, and 6GHz). This card also integrates Bluetooth 5.3 for seamless peripheral connectivity. With advanced features like 4K-QAM, Multi-Link Operation (MLO), and Multiple RU (MRU), the GC-WIFI7 ensures efficient, reliable, and high-performance networking for demanding applications such as gaming, 4K streaming, and large file transfers.

2. WHAT'S IN THE BOX

- GIGABYTE GC-WIFI7 PCIe Wi-Fi 7 Card
- Ultra-high Gain Antenna with Magnetic Base
- USB Header Cable (for Bluetooth functionality)
- Low-Profile Bracket (for small form factor cases)
- Mounting Screws
- Quick Installation Guide / User Manual
- Driver CD/USB Drive (may vary by package)

3. SETUP AND INSTALLATION

3.1. System Requirements

- Available PCIe x1 slot or larger.
- Windows 11 (for full Wi-Fi 7 functionality). Windows 10 is compatible but may not support all Wi-Fi 7 features.
- Available USB 2.0 header on motherboard (for Bluetooth functionality).

3.2. Hardware Installation

1. **Power Off PC:** Shut down your computer and unplug the power cord.
2. **Open PC Case:** Remove the side panel of your computer case.

3. **Locate PCIe Slot:** Find an available PCIe x1, x4, x8, or x16 slot on your motherboard.
4. **Remove Slot Cover:** Remove the metal slot cover corresponding to the chosen PCIe slot.
5. **Insert Wi-Fi Card:** Carefully align the GC-WIFI7 card with the PCIe slot and press down firmly until it is securely seated.
6. **Secure Card:** Fasten the card to the case with a screw.
7. **Connect USB Header Cable:** Connect one end of the provided USB header cable to the GC-WIFI7 card and the other end to an available USB 2.0 header on your motherboard. This connection is essential for Bluetooth functionality.
8. **Connect Antennas:** Screw the antenna cables from the magnetic base into the connectors on the GC-WIFI7 card's bracket.
9. **Position Antenna:** Place the magnetic antenna base in an optimal location, preferably on top of your PC case or a metal surface, to ensure the best signal reception.
10. **Close PC Case:** Replace the side panel and plug in the power cord.



Image 1: GIGABYTE GC-WIFI7 PCIe card. This image shows the compact design of the PCIe card with its gold-plated connectors and antenna ports.



Image 2: GIGABYTE GC-WIFI7 external antenna. This image displays the high-gain external antenna with its magnetic base, designed for flexible placement and optimized signal.



Image 3: GIGABYTE GC-WIFI7 card with antenna connected. This image illustrates the PCIe card installed in a desktop PC with the external antenna connected via cables.

3.3. Driver Installation

1. **Power On PC:** Turn on your computer.
2. **Obtain Drivers:** If your operating system does not automatically detect and install the drivers, you will need to install them manually. It is recommended to download the latest drivers from the official GIGABYTE support website (gigabyte.com/support/download). Alternatively, use the provided driver CD/USB drive.
3. **Install Drivers:** Follow the on-screen instructions to install both the Wi-Fi and Bluetooth drivers. Note that there may be different hardware versions (Qualcomm, MediaTek, Intel) requiring specific drivers. Ensure you select the correct drivers for your card's version and operating system.

4. **Restart PC:** After installation, restart your computer to apply the changes.

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Video 1: Product Overview Video. This video provides a general overview of the GIGABYTE GC-WIFI7 PCIe card and its features.

4. OPERATING INSTRUCTIONS

4.1. Connecting to Wi-Fi Networks

- Enable Wi-Fi:** After successful driver installation, Wi-Fi should be enabled automatically. You can verify this in your operating system's network settings.
- Select Network:** Click on the Wi-Fi icon in your system tray (Windows) or menu bar (macOS) to view available wireless networks.
- Connect:** Select your desired Wi-Fi 7 (or older standard) network and enter the password if prompted. The GC-WIFI7 supports 2.4GHz, 5GHz, and 6GHz bands, automatically connecting to the optimal band for your router.

4.2. Bluetooth Connectivity

- Enable Bluetooth:** Ensure Bluetooth is enabled in your operating system's settings.
- Pair Device:** Go to Bluetooth settings and select "Add device" or "Pair new device."
- Connect:** Select your Bluetooth device from the list and follow any on-screen prompts to complete the pairing process.

4.3. Advanced Features

- Multi-Link Operation (MLO):** Enables simultaneous connections on two bands (e.g., 5GHz and 6GHz) for increased throughput and reduced latency.
- Multiple RU (MRU):** Enhances interference mitigation and OFDMA efficiency for better performance in congested environments.
- 4K-QAM:** Allows for higher transmission rates, resulting in increased efficiency and faster data transfer.

5. SPECIFICATIONS

Brand	GIGABYTE
Model	GC-WIFI7
Wi-Fi Standard	Wi-Fi 7 (802.11be)
Bluetooth Version	5.3
Frequency Bands	2.4GHz, 5GHz, 6GHz (Tri-Band)
Max Wireless Speed	Up to 5800Mbps
Bandwidth Support	Up to 320MHz
Interface	PCIe x1
Antenna	Ultra-high Gain Antenna with Magnetic Base
Advanced Features	MLO (Multi-Link Operation), MRU (Multiple RU), 4K-QAM
Dimensions (Card)	Approx. 8 x 6 x 2 inches (Product Dimensions)
Weight	Approx. 8.4 ounces

6. MAINTENANCE

- **Keep Drivers Updated:** Regularly check the GIGABYTE support website for the latest Wi-Fi and Bluetooth drivers to ensure optimal performance and compatibility.
- **Optimal Antenna Placement:** Ensure the external antenna is positioned in an open area, away from obstructions, to maintain strong signal strength.
- **Cleanliness:** Keep your PC case clean to prevent dust buildup on the Wi-Fi card, which can affect performance and longevity.

7. TROUBLESHOOTING

7.1. No Wi-Fi Connection After Installation

- **Check PCIe Slot:** Ensure the card is fully seated in the PCIe slot.
- **Verify Drivers:** Confirm that both Wi-Fi and Bluetooth drivers are correctly installed. Reinstall if necessary, ensuring the correct version for your card (Qualcomm, MediaTek, Intel) and OS.
- **Antenna Connection:** Make sure the antenna cables are securely screwed into the card.
- **BIOS Settings:** Check your motherboard's BIOS/UEFI settings to ensure the PCIe slot is enabled.

7.2. Slow Wi-Fi Speeds

- **Wi-Fi 7 Router:** To achieve maximum speeds, ensure you are connected to a Wi-Fi 7 compatible router.
- **Antenna Placement:** Adjust the position of the external antenna for optimal signal strength. Avoid placing it behind metal objects or in enclosed spaces.
- **Interference:** Minimize interference from other wireless devices or electronics.
- **Driver Updates:** Ensure you have the latest drivers installed.

7.3. Bluetooth Not Working

- **USB Header Cable:** Verify that the USB header cable is correctly connected to both the GC-WIFI7 card and an available USB 2.0 header on your motherboard.
- **Bluetooth Drivers:** Ensure Bluetooth drivers are properly installed.
- **Device Pairing:** Re-attempt pairing your Bluetooth device.

7.4. Windows 10 Compatibility

- While the GC-WIFI7 card is compatible with Windows 10, full Wi-Fi 7 features and performance may only be available on Windows 11 (version 24H2 or higher).

8. WARRANTY AND SUPPORT

For warranty information, technical support, driver downloads, and frequently asked questions, please visit the official GIGABYTE support website:

GIGABYTE Support

Please retain your proof of purchase for warranty claims.