SilverStone SST-RC05-220

SilverStone Technology RC05 220mm Flexible PCIe 4.0 x16 Riser Cable User Manual

Model: SST-RC05-220 | Brand: SilverStone

INTRODUCTION

The SilverStone Technology RC05 is a 220mm flexible PCIe 4.0 x16 riser cable designed to extend the connection between a PCIe 4.0 supported motherboard and a compatible graphics or expansion card. This cable facilitates alternative mounting orientations for components within a computer chassis, offering high-speed data transmission and robust signal integrity.

Image: The SilverStone RC05 220mm Flexible PCIe 4.0 x16 Riser Cable, showcasing its overall design and length.

KEY FEATURES

- **High-Speed Data Transmission:** Supports PCIe 4.0 x16 for optimal performance with compatible

motherboards and graphics cards.

- **Flexible Design:** 220mm length with a flexible ribbon design allows for folding and twisting without impacting signal reliability or performance.
- **EMI Shielding:** Incorporates comprehensive EMI shielding to prevent electromagnetic interference and maintain signal integrity.
- **Strengthened Connection Protection:** Enhanced durability at connector points to minimize signal loss.
- **Versatile Installation:** Ideal for various graphics card installation orientations, including vertical mounts.

SETUP AND INSTALLATION

Proper installation of the SilverStone RC05 riser cable is crucial for stable system operation and optimal performance. Follow these steps carefully:

1. **Prepare Your System:**

   - Power off your computer completely and unplug it from the power outlet.
   - Open your computer case to access the motherboard and PCIe slots.
   - Ensure you are working in a static-free environment or use an anti-static wrist strap.

2. **Identify PCIe Slots:**

   Locate the primary PCIe x16 slot on your motherboard where the graphics card would normally be installed. Also, identify the desired mounting location for your graphics card within the chassis.

Image: Close-up view of the male PCIe connector on the riser cable, designed to plug into the motherboard's PCIe

3. **Connect to Motherboard:**

   Carefully insert the male end of the RC05 riser cable into the PCIe x16 slot on your motherboard. Ensure it is fully seated and the retention clip (if present on your motherboard slot) is engaged.

4. **Connect to Graphics Card:**

   Take your graphics card and carefully insert it into the female PCIe x16 slot on the other end of the RC05 riser cable. Ensure it is fully seated. If a protective cover is present on the female connector, remove it before insertion.

Image: Close-up view of the female PCIe connector on the riser cable, showing a protective cover that should be removed before connecting a graphics card.

5. **Secure Components:**

   Once both ends are connected, carefully route the flexible cable to the desired position for your graphics card. Secure the graphics card in its new mounting location within the chassis using appropriate screws or retention mechanisms. Ensure the cable is not sharply bent or under excessive tension.

Image: This diagram highlights the durability and flexibility of the RC05 cable, demonstrating how it can be routed and bent to accommodate various graphics card orientations within a computer case.

6. **Power On and Test:**

   Close your computer case, reconnect the power cable, and power on your system. Verify that the graphics card is detected and functioning correctly in your operating system.

Important Note: For systems with PCIe 3.0 motherboards, it is recommended to manually set the PCIe slot speed to Gen3 in the motherboard's BIOS/UEFI settings before installing a PCIe 4.0 riser cable to ensure compatibility and stability. While the RC05 is designed for PCIe 4.0, some older motherboards may require this adjustment for proper operation with riser cables.

OPERATION

The SilverStone RC05 PCIe riser cable is a passive component designed to extend a PCIe connection. Once correctly installed, it operates transparently, allowing your graphics card or other PCIe expansion card to communicate with the motherboard as if it were directly plugged in. No additional software or drivers are required for the cable itself.

High speed data transmission

RC05 provides high bandwidth PCIe 4.0 x16 transmission speed that allows extended connection from PCIe 4.0 supported motherboard to PCIe 4.0 compatible graphics or expansion cards with little to none performance loss.

Image: This diagram illustrates the high-speed data transmission capabilities of the RC05, ensuring minimal performance loss when extending a PCIe 4.0 x16 connection.

MAINTENANCE

The SilverStone RC05 riser cable requires minimal maintenance. To ensure longevity and optimal performance:

- **Keep Clean:** Periodically inspect the cable and connectors for dust accumulation. Use compressed air to gently clean any dust.
- **Avoid Stress:** Do not excessively bend, twist, or pull on the cable, especially near the connectors. While flexible, extreme stress can damage internal wiring.
- **Secure Connections:** Ensure both ends of the cable remain firmly seated in their respective slots. Loose connections can lead to intermittent issues or performance degradation.
- **Environmental Conditions:** Operate the cable within standard computer operating temperatures and humidity levels.

TROUBLESHOOTING

If you encounter issues after installing the RC05 riser cable, consider the following troubleshooting steps:

- **No Display/System Not Booting:**
  - Ensure the riser cable and graphics card are fully seated in their slots.
  - Verify that all necessary power cables are connected to the graphics card.
  - If your motherboard is PCIe 3.0, try setting the PCIe slot speed to Gen3 in the BIOS/UEFI.
  - Test the graphics card by plugging it directly into the motherboard's PCIe slot to rule out a card issue.

- **Reduced Performance:**
  - Confirm that your motherboard and graphics card both support PCIe 4.0 for optimal speed.

- Check BIOS/UEFI settings to ensure the PCIe slot is configured for PCIe 4.0 (if supported by all components).
- Ensure the cable is not excessively bent or kinked, which could affect signal integrity.

- **Intermittent Issues/Crashes:**

  - Reseat the riser cable and graphics card.
  - Check for any physical damage to the cable or connectors.
  - Ensure proper airflow within the case to prevent overheating of components.

SPECIFICATIONS

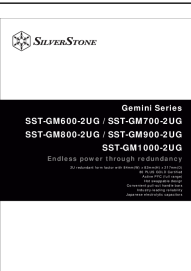| Feature	Detail
Brand	SilverStone
Model Number	SST-RC05-220
Cable Length	220mm
PCIe Version	PCIe 4.0 x16
Connector Type	PCIe x16 Male to PCIe x16 Female
Data Transfer Rate	Up to 16 Gigabits Per Second (PCIe 4.0)
Special Features	Flexible ribbon design, EMI shielding, strengthened connection protection
Compatible Devices	PCIe 4.0 supported motherboards and graphics/expansion cards
Product Dimensions	10.35 x 4.61 x 0.35 inches (approx. 263 x 117 x 9 mm)
Item Weight	7 ounces (approx. 0.2 kg)

PRODUCT OVERVIEW VIDEO

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Video: An official SilverStone overview of the PCIe Riser Cable, highlighting its features and compatibility. This video provides a visual demonstration of the product's design and functionality.

WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official SilverStone Technology website or contact their customer service directly. Keep your purchase receipt for warranty claims.
Official SilverStone Website: www.silverstonetek.com

Related Documents - SST-RC05-220

SilverStone ECM40 PCIe 4.0 x16 to 4-Bay NVMe M.2 SSD Adapter Card with Active Cooling - Installation and Warranty Guide

Comprehensive guide for the SilverStone ECM40, a PCIe 4.0 x16 to 4-bay NVMe M.2 SSD adapter card with active cooling. Includes package contents, detailed installation instructions, troubleshooting FAQs, and warranty information.

SilverStone Extreme Series 550W/650W SFX Power Supply Specifications

Detailed specifications for SilverStone's Extreme Series 550Rz Gold and 650Rz Gold SFX power supplies, including input/output characteristics, efficiency, protection features, and environmental requirements.

SilverStone HELA 1200R Platinum 1200W ATX 3.0 Power Supply Specifications

Detailed specifications for the SilverStone HELA 1200R Platinum 1200W ATX 3.0 fully modular ATX power supply, including electrical characteristics, output regulations, protection features, environmental requirements, and connector usage guidelines.

SilverStone HELA Series 850W/750W ATX PSU Specifications

Detailed specifications for the SilverStone HELA Series 850R Platinum and 750R Platinum fully modular ATX Power Supply Units (PSUs), including AC input, DC output, efficiency, environmental, and safety information.

SilverStone Decathlon Series DA1000R Gold / DA1200R Gold ATX 3.0 Power Supply Specifications

Detailed technical specifications for the SilverStone Decathlon Series DA1000R Gold and DA1200R Gold ATX 3.0 fully modular power supplies, covering electrical characteristics, efficiency, protection features, environmental requirements, and connector usage guidelines.

SilverStone Gemini Series Redundant Power Supplies: Specifications and Features

Explore the SilverStone Gemini Series 2U redundant power supplies (SST-GM600-2UG to SST-GM1000-2UG), featuring 80 PLUS Gold certification, hot-swappable design, active PFC, and industry-leading reliability for critical server and workstation applications.