

## Transcend TS256GMTS400

# Transcend MTS400 256GB M.2 SATA III SSD User Manual

Model: TS256GMTS400 | Brand: Transcend

## 1. INTRODUCTION

The Transcend MTS400 256GB M.2 SATA III Solid State Drive is designed to enhance the speed and capacity of compatible computing devices. Featuring a compact 42mm M.2 form factor and MLC NAND Flash memory, this SSD offers reliable performance with read speeds up to 560MB/s and write speeds up to 320MB/s. It is ideal for ultrabooks, tablets, and other compact systems requiring a significant storage upgrade.



*Image: Transcend MTS400 256GB M.2 SATA III SSD retail packaging.*

## 2. SAFETY INFORMATION

- Always power off and unplug your computer before installation.
- Discharge any static electricity from your body before handling the SSD to prevent damage to electronic components.
- Handle the SSD by its edges to avoid touching the gold connectors or components.
- Ensure proper ventilation around your device to prevent overheating.
- Do not attempt to disassemble or modify the SSD. This will void the warranty.

### 3. PACKAGE CONTENTS

Your Transcend MTS400 256GB M.2 SATA III SSD package should contain:

- 1 x Transcend MTS400 256GB M.2 SATA III Solid State Drive

*Note: Mounting screws or additional cables may not be included and might need to be purchased separately depending on your system.*

## 4. SPECIFICATIONS

Feature	Description
Model Number	TS256GMTS400
Capacity	256 GB
Interface	SATA III 6Gb/s
Form Factor	M.2 2242 (42mm)
Flash Type	MLC NAND Flash
Max Read Speed	Up to 560 MB/s
Max Write Speed	Up to 320 MB/s
Dimensions (LxWxH)	1.65 x 0.14 x 0.87 inches (42 x 3.5 x 22 mm)
Weight	0.32 ounces (9 g)
Operating System Support	Windows XP/Vista/7/8 or Linux Kernel 2.6.31, or later
Special Features	Power Shield, Dev Sleep mode, DDR3 DRAM cache, S.M.A.R.T., TRIM, NCQ, RoHS compliant

## 5. SETUP AND INSTALLATION

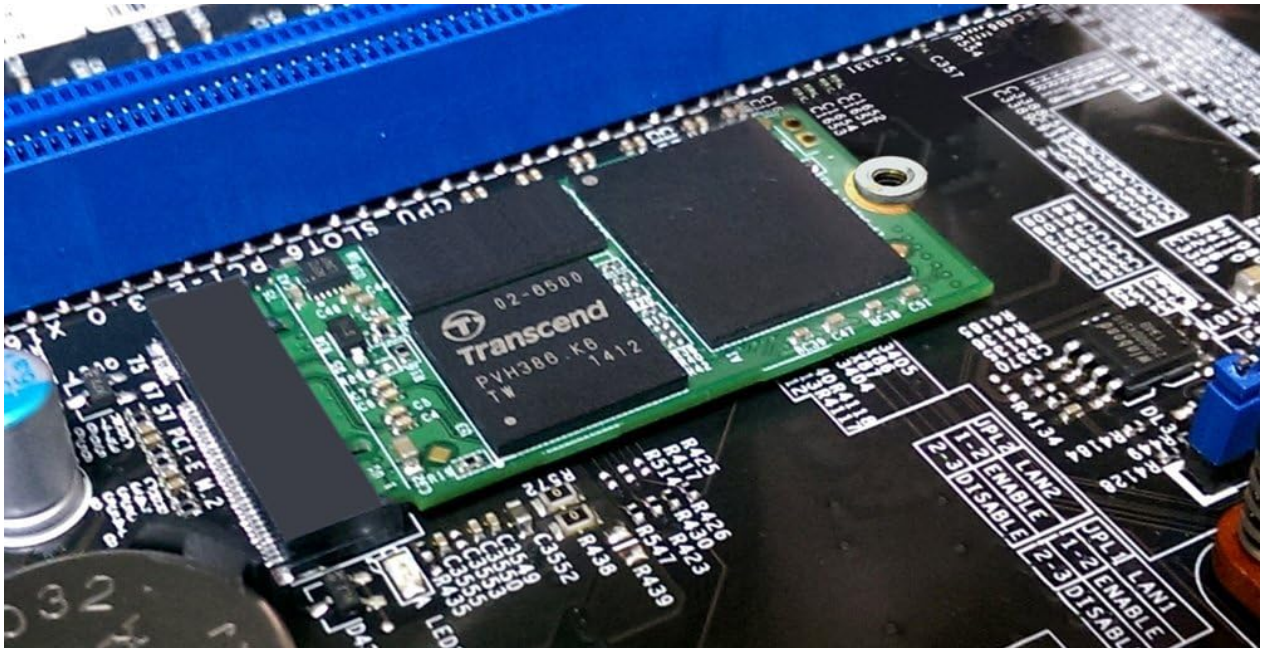
### 5.1. Pre-Installation Checklist

- **Compatibility:** Ensure your device has an available M.2 slot that supports SATA-based M.2 SSDs (specifically the 2242 form factor). M.2 NVMe and M.2 SATA drives are not interchangeable at the protocol level.
- **Backup:** Back up all important data from your existing storage drive before proceeding.
- **Tools:** You may need a small Phillips-head screwdriver and possibly an anti-static wrist strap.
- **Power Off:** Completely shut down your computer and disconnect all power cables.

## 5.2. Physical Installation (Desktop/Laptop)

The installation process varies slightly between desktops and laptops. Refer to your device's manual for specific instructions on accessing the M.2 slot.

1. Open your computer case or laptop's back panel.
2. Locate the M.2 slot on your motherboard. It typically has a small screw at the end.
3. Carefully insert the Transcend MTS400 SSD into the M.2 slot at a slight angle (approximately 30 degrees). The gold contacts should slide in smoothly.
4. Gently press the SSD down until it is parallel with the motherboard.
5. Secure the SSD with the small screw provided with your motherboard or device.



*Image: Transcend MTS400 M.2 SSD installed in a motherboard slot.*



*Image: Close-up view of the Transcend MTS400 M.2 SATA III SSD.*

### 5.3. Software Setup (Windows)

After physical installation, you need to initialize and format the new SSD for your operating system to recognize and use it.

1. Reconnect power and turn on your computer.
2. Open **Disk Management**: Right-click the Start button, then select 'Disk Management'.
3. You should see your new SSD listed as 'Disk [number]' and marked as 'Unallocated'.
4. Right-click on the unallocated space of your new SSD and select 'New Simple Volume'.
5. Follow the New Simple Volume Wizard to assign a drive letter and format the drive. It is recommended to use the NTFS file system.
6. Once formatted, the SSD will be ready for use.

### 5.4. Video Guides for M.2 SSD Installation

For visual assistance with M.2 SSD installation and setup, please refer to the following video guides:  
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*Video: General M.2 SSD installation steps. This video provides a step-by-step guide on how to install an M.2 SSD into a compatible system, including physical placement and securing the drive.*

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*Video: Explanation of M.2 SATA SSD form factors (2280, 2242). This video clarifies the different M.2 sizes and types, which is crucial for ensuring compatibility with your device's M.2 slot.*

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*Video: Overview of a KingSpec M.2 2242 SSD. While featuring a different brand, this video demonstrates the physical characteristics and handling of an M.2 2242 SSD, similar to the Transcend MTS400.*

## 6. OPERATING INSTRUCTIONS

Once installed and formatted, your Transcend MTS400 SSD operates like any other storage drive. You can install operating systems, applications, and store files on it. The benefits of an SSD include faster boot times, quicker application loading, and improved overall system responsiveness compared to traditional hard disk drives.

- **Operating System:** For optimal performance, it is recommended to install your operating system on the SSD.
- **Data Storage:** Use the SSD for frequently accessed programs and files to leverage its speed.

## 7. MAINTENANCE

To ensure the longevity and optimal performance of your Transcend MTS400 SSD, consider the following maintenance tips:

- **TRIM Support:** Ensure your operating system has TRIM enabled. TRIM helps the SSD maintain its performance over time by efficiently managing data blocks. Most modern operating systems (Windows 7 and later, Linux kernels 2.6.31 and later) support TRIM automatically.
- **S.M.A.R.T. Monitoring:** Utilize S.M.A.R.T. (Self-Monitoring, Analysis, and Reporting Technology) tools to monitor the health and status of your SSD.
- **Firmware Updates:** Periodically check the Transcend website for any available firmware updates for your SSD model. Firmware updates can improve performance, stability, and compatibility.
- **Avoid Overfilling:** While SSDs perform well even when nearly full, leaving some free space (e.g., 10-15%) can help maintain optimal performance and extend lifespan.
- **Power Shield:** The MTS400 supports Power Shield, which helps prevent data loss during sudden power outages. Ensure your system's power supply is stable.

## 8. TROUBLESHOOTING

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### 8.1. Drive Not Detected

- **Check Connections:** Ensure the SSD is correctly seated in the M.2 slot and the mounting screw is secure.
- **BIOS/UEFI Settings:** Enter your system's BIOS/UEFI settings (usually by pressing Del, F2, F10, or F12 during boot-up). Verify that the M.2 slot is enabled and configured correctly (e.g., SATA mode).
- **Compatibility:** Double-check that your motherboard's M.2 slot supports SATA-based M.2 SSDs. Some slots are NVMe-only.
- **Try Another Slot/Device:** If available, test the SSD in a different M.2 slot or another compatible device to rule out a faulty SSD.

### 8.2. Initialization/Formatting Issues

- **Disk Management:** Ensure you are using Windows Disk Management (or an equivalent tool in Linux) to initialize and format the drive.
- **Online Status:** In Disk Management, if the drive is listed as 'Offline', right-click it and select 'Online'.
- **Rescan Disks:** In Disk Management, go to 'Action' > 'Rescan Disks' to refresh the view.

### 8.3. Slow Performance

- **TRIM Enabled:** Verify that TRIM is enabled in your operating system.
- **Firmware:** Check for and install any available firmware updates for the SSD.
- **SATA III Port:** Ensure the SSD is connected to a SATA III (6Gb/s) compatible M.2 slot for maximum speed.
- **Driver Updates:** Ensure your motherboard's chipset drivers are up to date.

## 9. WARRANTY INFORMATION

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Transcend products are manufactured to the highest standards and undergo rigorous testing. This product is

covered by a limited warranty. For detailed warranty terms and conditions, please visit the official Transcend website or contact Transcend customer support.

## 10. SUPPORT

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If you encounter any issues or have questions regarding your Transcend MTS400 SSD that are not covered in this manual, please refer to the following resources:

- **Transcend Official Website:** Visit [www.transcend-info.com](http://www.transcend-info.com) for product information, drivers, firmware, and FAQs.
- **Customer Service:** Contact Transcend customer support through their website for technical assistance.