acer FA200

acer FA200 NVMe Gen4 SSD 2TB Instruction Manual

Model: FA200-2TB | Brand: acer

1. Introduction

This instruction manual provides essential information for the proper installation, operation, and maintenance of your acer FA200 NVMe Gen4 SSD 2TB. Please read this manual thoroughly before proceeding with installation or use to ensure optimal performance and longevity of your product. The acer FA200 SSD is designed to deliver high-speed storage performance for compatible desktop PCs, laptops, and PlayStation 5 consoles.

2. Safety Information

- Always handle the SSD by its edges to avoid touching the gold connectors or components.
- Ensure your system is powered off and unplugged from the power source before installation.
- Discharge any static electricity from your body by touching a grounded metal object before handling the SSD.
- Keep the SSD away from moisture, extreme temperatures, and strong magnetic fields.
- If you are unsure about any installation steps, consult a qualified technician.

3. Package Contents

Verify that all items are present in the package:

- 1 x acer FA200 M.2 NVMe SSD (2TB capacity)

Note: Mounting screws or heatsinks are typically provided with your motherboard or system chassis and are not included with the SSD.

4. Setup and Installation

The acer FA200 SSD utilizes an M.2 2280 form factor and connects via a PCIe Gen4 x4 interface. Ensure your motherboard or device has a compatible M.2 slot.

4.1. Physical Installation (Desktop/Laptop)

1. **Power Off System:** Shut down your computer completely and disconnect the power cable.
2. **Open Chassis:** Open your computer case or laptop bottom cover to access the motherboard.
3. **Locate M.2 Slot:** Identify an available M.2 slot on your motherboard. It is typically labeled 'M.2' or 'PCIe NVMe'.
4. **Insert SSD:** Gently insert the acer FA200 SSD into the M.2 slot at a 30-degree angle. The gold contacts should align with the slot.
5. **Secure SSD:** Push the SSD down until it is parallel with the motherboard. Secure it with the M.2 screw provided with your motherboard or system.
6. **Close Chassis:** Reassemble your computer or laptop.



Image: The acer FA200 NVMe Gen4 SSD module, illustrating its M.2 2280 form factor and connectors.

4.2. Physical Installation (PlayStation 5)

The acer FA200 SSD is compatible with PlayStation 5 for storage expansion. Refer to the official PlayStation 5 user guide for detailed instructions on how to open the console and install an M.2 SSD. Ensure the SSD is properly seated and secured in the expansion slot.



Image: The acer FA200 SSD highlighting its M.2 2280 form factor, single-sided design, and compatibility with PS5.

4.3. Initializing and Formatting the SSD

After physical installation, the SSD needs to be initialized and formatted for your operating system to recognize it. This process varies slightly between Windows, macOS, and Linux.

- **Windows:** Open Disk Management (right-click Start button > Disk Management). Locate the new SSD, right-click it, and select 'Initialize Disk'. Choose GPT (GUID Partition Table) for modern systems, then create a New Simple Volume and format it (NTFS is recommended).

- **macOS:** Use Disk Utility to erase and format the drive (APFS or HFS+).
- **Linux:** Use tools like GParted or `fdisk`/`mkfs` to partition and format the drive.
- **PlayStation 5:** The console will prompt you to format the drive upon startup after installation. Follow the on-screen instructions.

4.4. Data Migration (Cloning)

If you are replacing an existing drive, you can use the included Acronis True Image software to clone your old drive's contents to the new acer FA200 SSD. This allows for seamless data transfer and system migration without reinstalling the operating system.

- Download the customized version of Acronis True Image from the official acer support website or the link provided in your product documentation.
- Install and follow the software's instructions for cloning your existing drive to the acer FA200 SSD.



Image: A monitor displaying the Acronis True Image software interface, used for data cloning and backup.

5. Operation

The acer FA200 SSD operates as a high-speed storage device within your system. Its advanced features ensure efficient data handling and sustained performance.

- **High-Speed Performance:** Leveraging PCIe Gen4 x4 and NVMe 2.0, the SSD achieves sequential read speeds up to 7200 MB/s and write speeds up to 6200 MB/s, significantly reducing loading times for applications, games, and large files.
- **HMB and SLC Cache:** Host Memory Buffer (HMB) and SLC Cache mechanisms are employed to optimize data transfer speeds and improve overall system responsiveness, particularly during boot-up and frequent file access.
- **Thermal Management:** The integrated Thermal Throttle and Power Management system, along with a high thermal conductivity graphene thermal pad, helps maintain optimal operating temperatures, preventing performance degradation during intensive tasks.

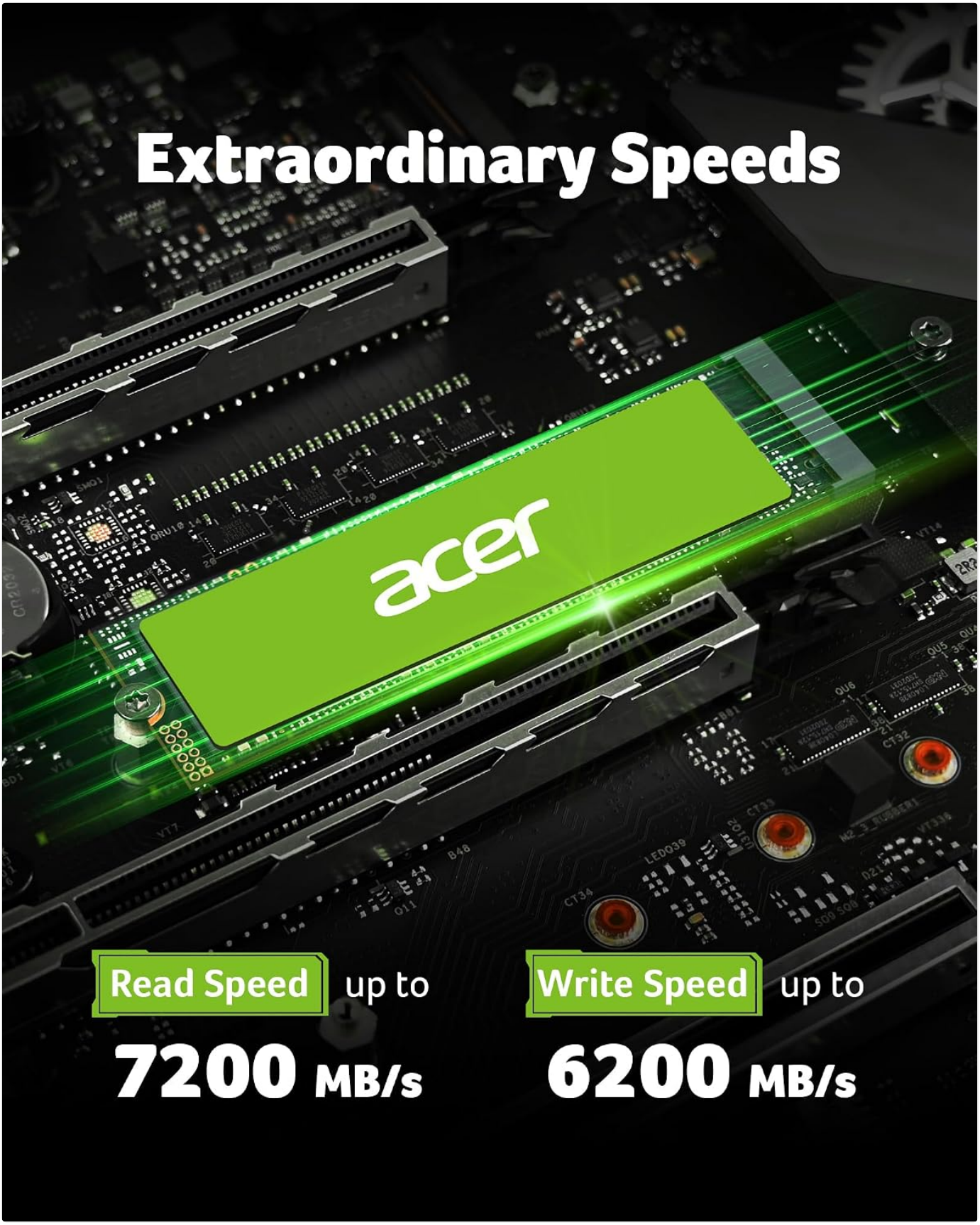


Image: The acer FA200 SSD installed on a motherboard, illustrating its high read speed of 7200 MB/s and write speed of 6200 MB/s.

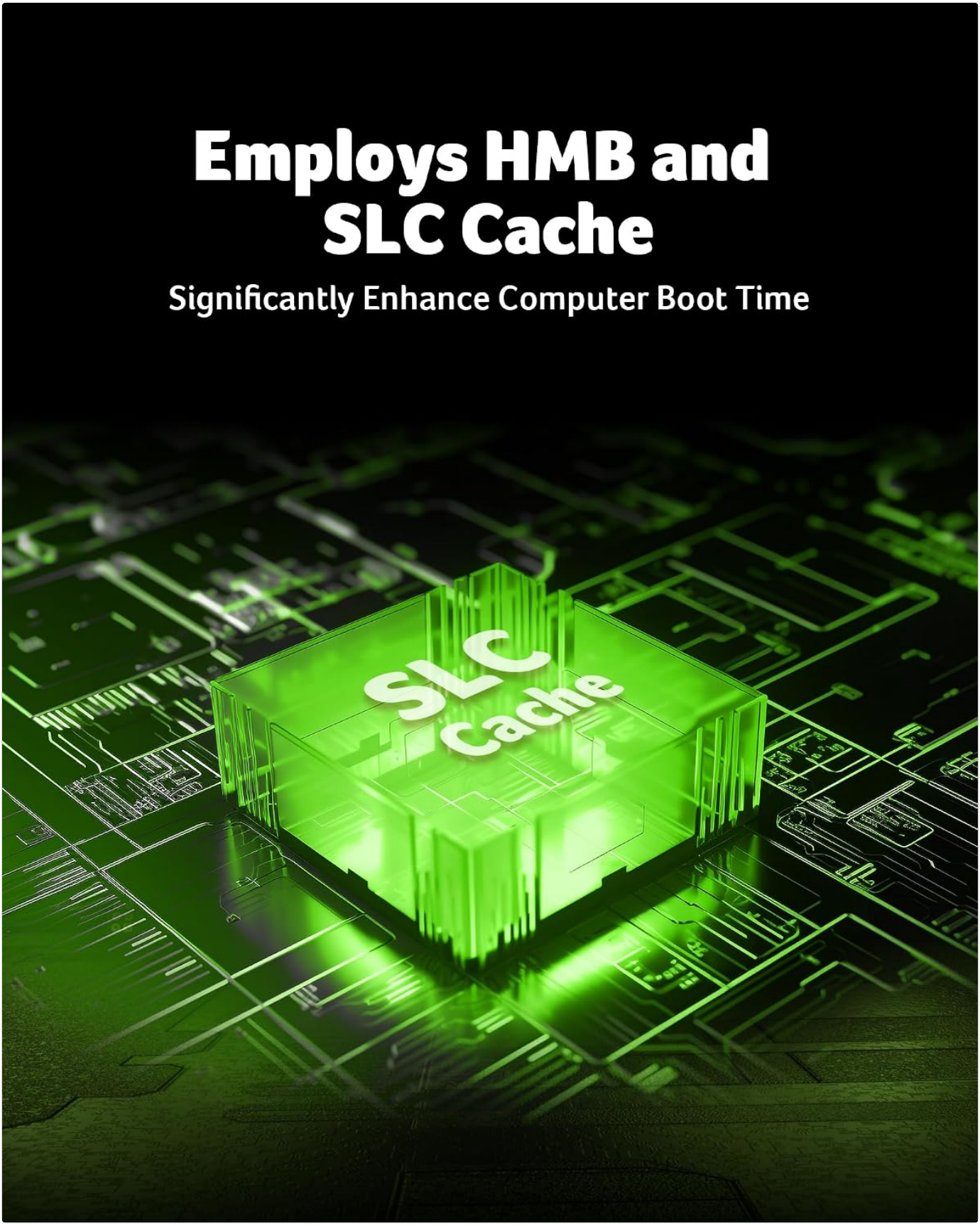


Image: A diagram depicting the SLC Cache mechanism, which enhances SSD performance by accelerating data writes.



Image: A cross-section diagram showing the graphene thermal pad layer on the SSD, designed for efficient heat dissipation.

6. Maintenance

Proper maintenance ensures the longevity and consistent performance of your SSD.

- **Firmware Updates:** Periodically check the official acer support website for any available firmware updates for your FA200 SSD. Firmware updates can improve performance, stability, and compatibility.
- **TRIM Support:** Ensure TRIM is enabled in your operating system. TRIM helps the SSD manage data more efficiently, preventing performance degradation over time. Most modern operating systems enable TRIM by default for SSDs.
- **Data Backup:** Regularly back up important data. While SSDs are reliable, no storage device is immune to failure.
- **Avoid Full Capacity:** Try to avoid filling the SSD to its absolute maximum capacity. Leaving some free space (e.g., 10-15%) can help maintain optimal performance and wear leveling.

7. Troubleshooting

If you encounter issues with your acer FA200 SSD, refer to the following common troubleshooting steps.

7.1. SSD Not Detected

- **Check Physical Connection:** Ensure the SSD is correctly seated in the M.2 slot and the retaining screw is tightened.
- **BIOS/UEFI Settings:** Enter your system's BIOS/UEFI settings. Verify that the M.2 slot is enabled and configured correctly (e.g., set to NVMe or PCIe mode, not SATA mode if applicable).
- **Driver Installation:** For some systems, NVMe drivers may need to be installed. Check your motherboard manufacturer's website for the latest drivers.
- **Initialization and Formatting:** As described in Section 4.3, a new SSD must be initialized and formatted by the operating system before it appears in File Explorer or Finder.
- **Compatibility:** Confirm your motherboard or device supports PCIe Gen4 NVMe M.2 2280 SSDs.

7.2. Slow Performance

- **PCIe Slot:** Ensure the SSD is installed in a PCIe Gen4 x4 compatible M.2 slot. Using a Gen3 slot will limit performance to Gen3 speeds.
- **TRIM Enabled:** Verify that TRIM is enabled in your operating system.
- **Firmware:** Check for and install any available firmware updates for the SSD.
- **Overheating:** Monitor the SSD's temperature using system monitoring software. Excessive heat can cause thermal throttling, reducing performance. Ensure adequate airflow in your system.
- **System Resources:** Ensure your system's CPU, RAM, and other components are not bottlenecking the SSD's performance.

8. Specifications

Feature	Specification
Brand	acer

Feature	Specification
Model	FA200-2TB
Digital Storage Capacity	2 TB
Hard Disk Interface	Solid State
Connectivity Technology	M.2 (PCIe Gen4 x4 NVMe 2.0)
Form Factor	M.2 2280
Sequential Read Speed	Up to 7200 MB/s
Sequential Write Speed	Up to 6200 MB/s
Special Feature	TRIM Support, HMB, SLC Cache, Thermal Throttle, Graphene Thermal Pad
Compatible Devices	Desktop PC, Laptop, PS5
Item Dimensions (LxWxH)	3.15 x 0.12 x 0.87 inches
Item Weight	0.212 ounces
Manufacturer	Biwin
Date First Available	September 12, 2024

9. Warranty and Support

The acer FA200 SSD comes with a manufacturer's warranty. For specific warranty terms, duration, and conditions, please refer to the warranty card included with your product or visit the official acer support website. For technical assistance, troubleshooting beyond this manual, or warranty claims, please contact acer customer support through their official channels.

Online Support: Visit the official acer website for FAQs, driver downloads, firmware updates, and contact information.

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Question

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Details

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Submit question