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› Silicon Power 1TB NVMe M.2 PCIe Gen3x4 2280 SSD (P34A80) Instruction Manual

SP Silicon Power P34A80

Silicon Power P34A80 NVMe M.2 PCIe Gen3x4 2280 SSD

INSTRUCTION MANUAL

Introduction

This manual provides detailed instructions for the installation, operation, and maintenance of your Silicon Power P34A80 NVMe M.2 PCIe Gen3x4 2280 Solid State Drive. Please read this manual thoroughly before installation and retain it for future reference.

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 before installation.
- Discharge any static electricity from your body by touching a grounded metal object before handling the SSD.
- Do not attempt to disassemble or modify the SSD. This will void the warranty.
- Keep the SSD away from liquids, extreme temperatures, and strong magnetic fields.

Package Contents

- Silicon Power P34A80 NVMe M.2 PCIe Gen3x4 2280 SSD

Note: Mounting screws for the M.2 slot are typically provided with your motherboard or PC chassis and are not included with the SSD.

Specifications

Feature	Description
Model Name	P34A80
Digital Storage Capacity	1 TB
Connectivity Technology	PCIe Gen3.0 x4
Form Factor	M.2 2280

Feature	Description
Read Speed (Max)	Up to 3400 MB/s
Write Speed (Max)	Up to 3000 MB/s
Item Weight	8 Grams
Dimensions (L x W x T)	3.15" x 0.87" x 0.16" (80mm x 22mm x 4mm)
Interface	NVMe 1.3
TBW (Terabytes Written)	800

The Silicon Power P34A80 NVMe M.2 SSD is designed for high-performance computing, offering fast data transfer rates and a compact form factor suitable for various systems.

Setup and Installation

Before installation, ensure your system has an M.2 slot with an M key. The P34A80 SSD does not have a B notch, so it will not fit into a B key slot.

General Installation Steps:

1. Power off your computer and unplug all cables.
2. Open your computer case or laptop chassis.
3. Locate an available M.2 PCIe slot on your motherboard.
4. Carefully insert the P34A80 SSD into the M.2 slot at a 30-degree angle.
5. Gently push down the SSD until it is parallel with the motherboard.
6. Secure the SSD with the appropriate M.2 screw (not included).
7. Close your computer case or laptop chassis.
8. Reconnect all cables and power on your computer.

Product Overview and Dimensions



Super-compact for Ultra-thin Devices

Compact M.2 form factor, ideal for ultrabooks, tablet computers and mini PCs.

This image displays the Silicon Power P34A80 NVMe M.2 SSD, highlighting its compact dimensions of 22mm in width and 80mm in length, making it suitable for various devices.

SSD Installed in a Motherboard



This image shows the Silicon Power P34A80 NVMe M.2 SSD correctly installed in an M.2 slot on an ASRock Z390 Taichi motherboard, demonstrating its physical integration into a PC system.

Video Installation Guide

Your browser does not support the video tag.

This official video from Silicon Power provides a visual guide on how to install the P34A80 NVMe SSD in both laptop and desktop PC environments, including steps for locating the M.2 slot, inserting the SSD, and securing it.

Operating the SSD (Initialization and Formatting)

After physical installation, a new SSD must be initialized and formatted before it can be used by your operating system. The following steps are for Windows operating systems:

1. Right-click on the Start button and select "Disk Management".
2. In the Disk Management window, you should see your new SSD listed as "Disk [number]" and marked as "Unallocated".
3. Right-click on the "Unallocated" space of your new SSD and select "New Simple Volume...".

4. Follow the New Simple Volume Wizard prompts:

- Click "Next" to begin.
- Specify the volume size (usually the maximum available). Click "Next".
- Assign a drive letter. Click "Next".
- Format the partition: Choose NTFS as the file system, set the Allocation unit size to Default, and you can name the Volume label (e.g., "SP1TB"). Ensure "Perform a quick format" is checked. Click "Next".
- Click "Finish" to complete the process.

5. Your new SSD should now appear as a usable drive in "This PC" or "My Computer".

Disk Management Initialization Example



This image illustrates the process within Windows Disk Management for initializing and formatting a new SSD, guiding users through the New Simple Volume Wizard to make the drive usable.

Maintenance

TRIM Support

The P34A80 SSD supports TRIM technology, which helps maintain performance over time by actively managing data blocks. Ensure TRIM is enabled in your operating system for optimal SSD health and speed. Modern operating systems typically enable TRIM by default for SSDs.

Firmware Updates

Occasionally, Silicon Power may release firmware updates to improve SSD performance, stability, or compatibility. Check the official Silicon Power website for any available firmware updates for your P34A80 model. Follow the provided instructions carefully when performing firmware updates.

Thermal Management

NVMe SSDs can generate heat during intensive operations. Ensure adequate airflow within your system chassis. If your motherboard includes an M.2 heatsink, consider using it to help dissipate heat and prevent thermal throttling, which can reduce performance during prolonged heavy use.

Troubleshooting

• SSD Not Detected:

- Ensure the SSD is correctly seated in the M.2 slot.
- Verify that your motherboard's BIOS/UEFI settings are configured to detect NVMe devices.
- Check for BIOS/UEFI updates for your motherboard.
- Confirm the M.2 slot is an M-key slot compatible with NVMe SSDs.

• Slow Performance:

- Ensure your motherboard's M.2 slot supports PCIe Gen3x4 speeds.
- Verify that TRIM is enabled in your operating system.
- Check for high temperatures that might cause thermal throttling. Consider adding an M.2 heatsink if available.
- Ensure your operating system and drivers are up to date.

• Installation Screw Missing:

The M.2 mounting screw is typically supplied by your motherboard or PC manufacturer. If you do not have one, contact your system or motherboard vendor for a replacement.

Warranty and Support

Silicon Power SSDs are covered by a limited warranty. The warranty terms are based on whether the warranty length or the TBW (Terabytes Written) limit occurs first. For specific warranty details, please refer to the official Silicon Power website or the warranty card included with your product.

For technical support, driver downloads, or further assistance, please visit the official Silicon Power support page: [Silicon Power Support](#)

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question