

# COMPATIBILITY

How do I know Samsung NVMe M.2 SSDs are compatible with my PC?

Please check whether your system satisfies the minimum system requirements specified below:

Category	Minimum Requirements
<b>Main-board</b>          <b>(System)</b>	Intel Haswell Refresh or later client chipset based mainboard with an unallocated M.2 PCIe Gen3 x4 lane connector
<b>Processor</b>	64-bit processor (recommended) single, dual or higher number of processors can be used

<b>Memory</b>	More than 2 GB DRAM
<b>Connector</b>	M.2 ('M' Key) or third party adapter (AIC) for use with PCIe connector
<b>Form-Factor</b>	Space for a single sided M.2 2280 (SSD with dimensions 22 mm x 80 mm), or use third party adapter (AIC) to connect to PCIe connector
<b>Power</b>	25 W compatible PCIe slot

\* The Samsung NVMe driver ensures maximum compatibility between host and Samsung NVMe PCIe M.2 SSDs, and optimizes system performance.

- **Do Samsung NVMe M.2 SSDs work with any M.2 slot?**

There are different types of M.2 slots. A “B-Key” enables SATA or PCIe NVMe SSDs using up to 2 PCIe lanes, while an “M-Key” enables NVMe SSDs with the use of up to 4 PCIe lanes.

Performance of PCIe NVMe M.2 SSDs leveraging PCIe x4 lanes is roughly twice as high as with PCIe x2 lanes, so the vast majority of mainboards today support “M-Key” slots with 4 lanes. This is the solution supported by Samsung NVMe SSDs, and works in the majority of M.2 slots.

Please check the type of M.2 (M or B Key) slots available on your mainboard by reading the user manual or contacting your system vendor.

- **Will Samsung NVMe M.2 SSDs work on Z97 Mainboards?**

Yes. Samsung NVMe SSDs will work on Haswell Refresh or newer chipsets that follow the standard mainboard requirements defined by Intel (note that some mainboards customized for certain PC makers might not offer the required M.2 slot). Should you have any doubt, please contact your mainboard or PC vendor for more information.

- **Do Samsung NVMe M.2 SSDs work with AMD Ryzen?**

Yes. Samsung NVMe M.2 SSDs will work with standard Ryzen chipsets.

- **Are there any issues with running Windows 7 on a Samsung NVMe M.2 SSD?**

Samsung NVMe SSDs are compatible with Windows 7, but for optimal performance and ease of use we recommend Win 8.1 or newer.

- **Do Samsung NVMe M.2 SSDs work under Linux?**

Samsung NVMe SSDs are compatible with Linux. Please note, however, that Samsung NVMe SSDs are optimized for use under Windows operating systems.

- **Which Generation PCIe does Samsung NVMe M.2 SSD use?**

Samsung NVMe SSDs use PCIe Gen 3.0. For more information please refer to Samsung NVMe SSD datasheets available at [www.samsungssd.com](http://www.samsungssd.com)

# INSTALLATION

- **How should a Samsung NVMe M.2 SSD be installed on a PC?**

Installation of Samsung NVMe M.2 SSDs is essentially plug-and-play. Simply insert the NVMe SSD in an M.2 PCIe slot, tighten the SSD in place with the screw and spacer provided by your mainboard manufacturer, and boot up your system from an external source before proceeding with a fresh install of your operating system. Windows has an in-box driver that ensures your Samsung NVMe SSD is operational from the start, but we recommend installing the Samsung NVMe Driver specifically designed for Samsung NVMe SSDs, to ensure optimal performance and to maximize compatibility with your system.

For more information, please refer to: [www.samsungssd.com](http://www.samsungssd.com)

- **Are Samsung NVMe M.2 SSDs delivered with a screw?**

Samsung NVMe M.2 SSDs are not delivered with a screw. This is because mainboard manufacturers typically provide the specific screws and spacers that fit the proprietary needs of each mainboard.

- **Can I move data from an HDD or SATA SSD to a Samsung NVMe M.2 SSD?**

Yes. It is possible to clone a SATA HDD or SATA SSD to an NVMe SSD. Samsung, however, recommends performing a “clean install” of the OS and later transferring the desired non-executable files.

Because the registry information needed for NVMe SSDs is different from those of SATA HDDs or SSDs, a clean install helps to avoid unnecessary compatibility and performance issues that may arise from simply cloning a storage device.

- **Can I plug a Samsung NVMe M.2 SSD in a traditional PCIe slot?**

Yes. Many add-in-card adapters exist, but for optimal performance and compatibility Samsung recommends using an original M.2 slot for your Samsung NVMe SSD.