

Types of M.2 SSD's: SATA vs NVMe

When we talk about M.2 in storage technology, we're usually talking about an SSD by referring to its form factor. M.2 refers to an SSD form factor that resembles a stick of chewing gum. Its small and slim size makes it ideal for computers that are lightweight and portable like laptops, notebooks, NUCs and ultrabooks.

An M.2 SSD module is connected to a host either through a SATA interface or via a PCI Express (PCIe) lane. Though M.2 supports both SATA and PCIe, an M.2 module may only be inserted in either one of the two interfaces, so check your motherboard documentation to make sure that your module fits and works with the corresponding socket on the motherboard.



SATA M.2 SSD

An M.2 SSD that has the B and M keys, as pictured below, will be a SATA SSD. Just because it's an M.2 SSD doesn't change the fact that it's a SATA SSD. The main difference between a SATA and NVMe M.2 SSD is the interface technology and levels of performance. A SATA M.2 SSD still uses the SATA-based interface technology which doesn't improve its speed and performance



NVMe M.2 SSD

An M.2 SSD that has only the M key, as pictured below, will be an NVMe SSD. NVMe M.2 SSDs utilize the NVMe protocol that was specifically designed for SSDs. When paired with the PCIe bus, an NVMe SSD offers the latest levels of performance and speed you can get.

