

M.2 SSD Connectors

The Simple Version

Both drives below plug into the same shape of slot on a computer, called M.2. But the little notch on the connector tells you what type it is -- and that changes everything.

(NGFF is just the old name for M.2 -- same connector, same thing.)



GREEN DRIVE SATA SSD (B+M Key)

TWO notches (2 gaps)

Two small gaps cut into the gold connector pins near the end.

Speed: ~550 MB/s (older, slower)

Best for:

Cheap storage upgrades, older laptops, or slots that say "SATA only".



BLUE DRIVE NVMe SSD (M Key)

ONE notch (1 gap)

Just one gap cut into the gold connector pins, in a different spot.

Speed: 2,000-7,000+ MB/s (fast!)

Best for:

Most modern laptops and PCs. Much faster for everyday use.

SIMPLE RULE

Count the notches. TWO notches = SATA (slower). ONE notch = NVMe (faster).

BEFORE YOU BUY - CHECK YOUR COMPUTER FIRST

A SATA drive will NOT work in a slot that only supports NVMe, even if it fits perfectly. Look up your laptop model online (search: "[your laptop model] M.2 slot type") before buying either drive.

M.2 is just the shape of the slot. The notch tells you the real type: SATA or NVMe.

Quick Reference Table

All the terms in one place

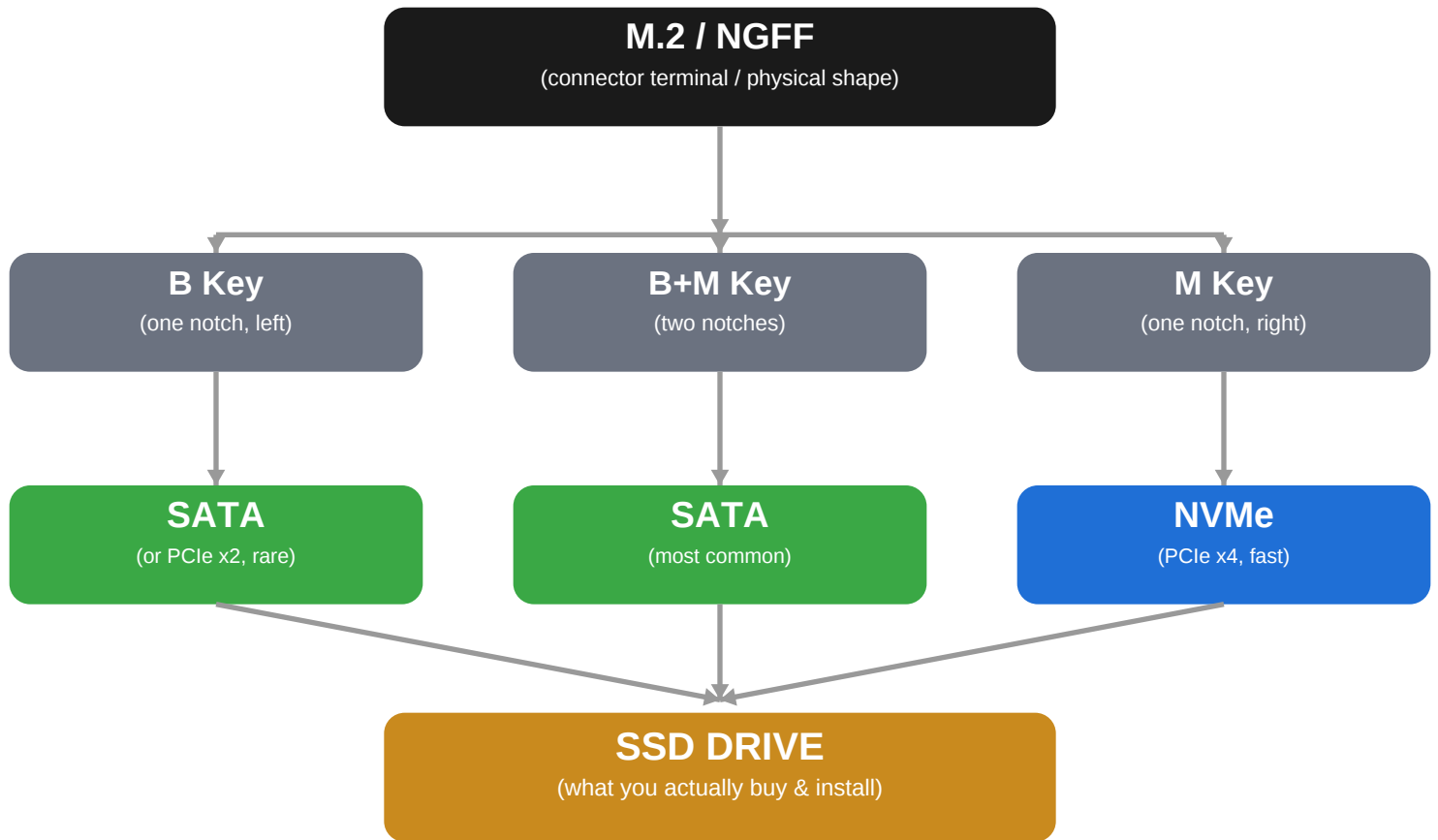
Term	What it is	Category	Simple meaning
M.2	Physical shape/size of the SSD card	Form factor	The connector shape. Not speed.
NGFF	Old name for M.2 (same thing)	Form factor	Just a rename. M.2 = NGFF.
SATA	Older data protocol	Protocol (speed)	Slower: ~550 MB/s
NVMe	Modern data protocol over PCIe	Protocol (speed)	Faster: 2,000-7,000+ MB/s
B Key	Notch on left side of connector	Key / notch	Usually SATA or PCIe x2
M Key	Notch on right side of connector	Key / notch	Usually NVMe (PCIe x4)
B+M Key	Two notches (both sides)	Key / notch	SATA drive, fits most slots

REMEMBER

M.2 / NGFF = the shape. SATA / NVMe = the speed. B key / M key / B+M key = what the notches tell you about which protocol the slot supports.

How It All Connects

Connector -> Key -> Protocol -> Drive



How to read this

M.2 / NGFF is just the slot shape. The key notch (B, M, or B+M) tells you which protocol wires are connected. The protocol (SATA or NVMe) determines real-world speed -- and that's the SSD you end up with.