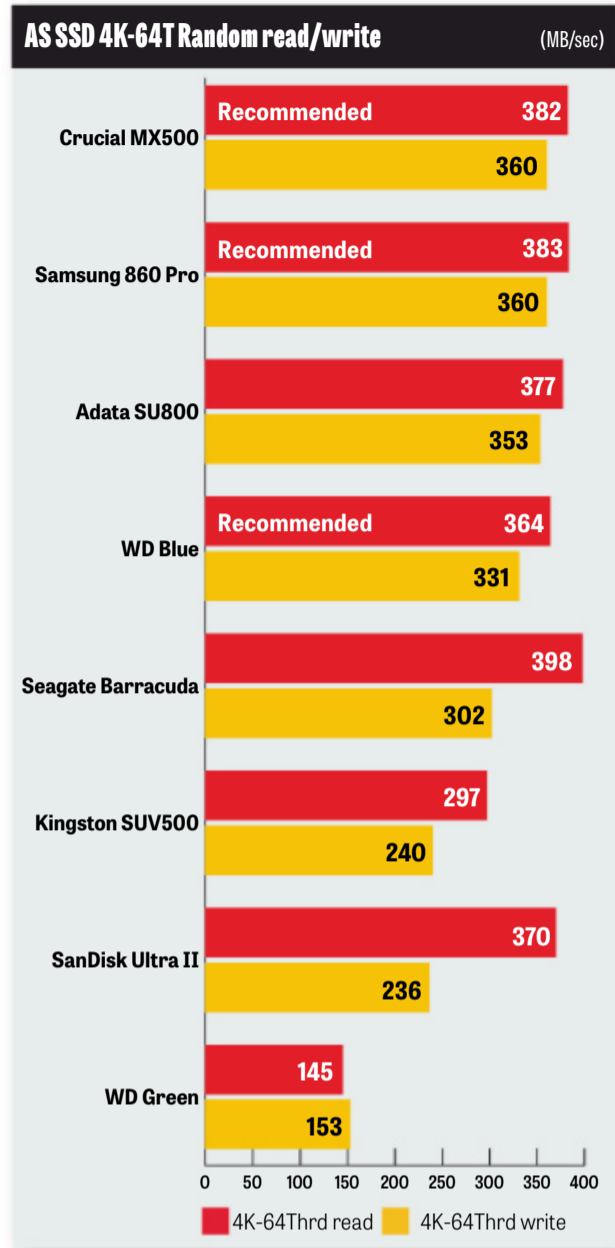
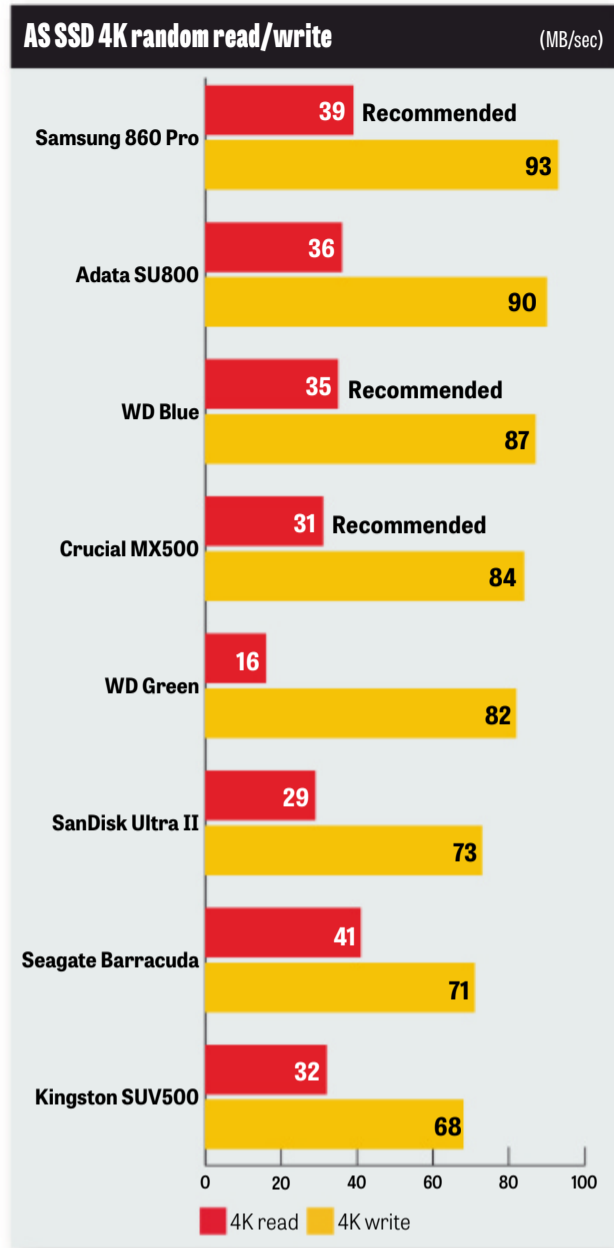
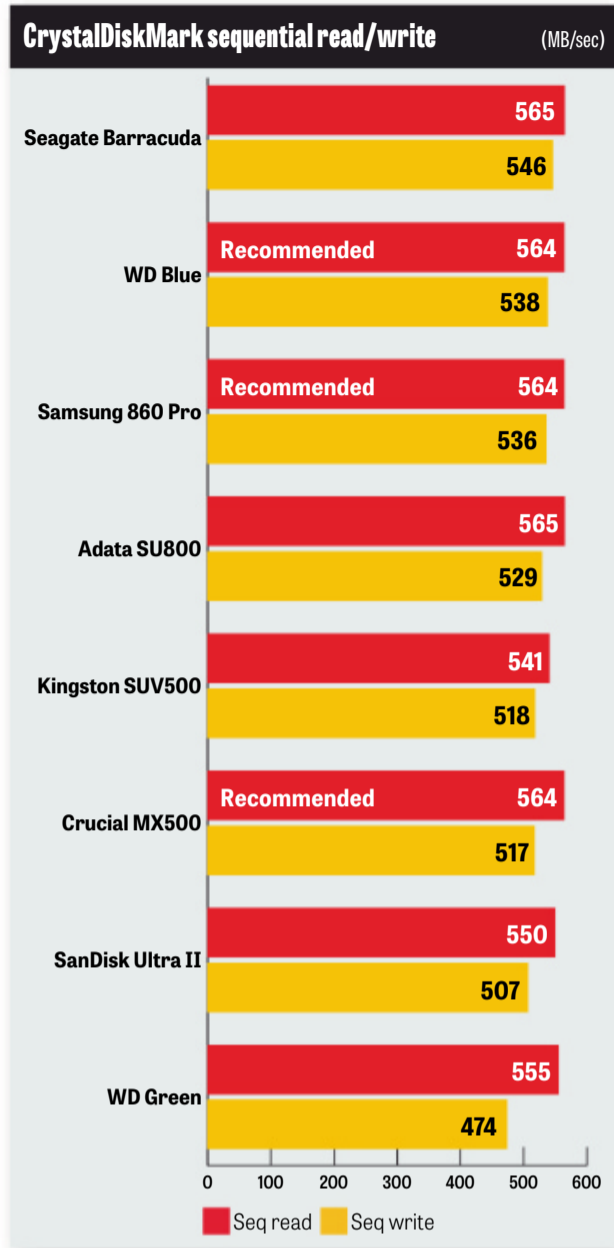
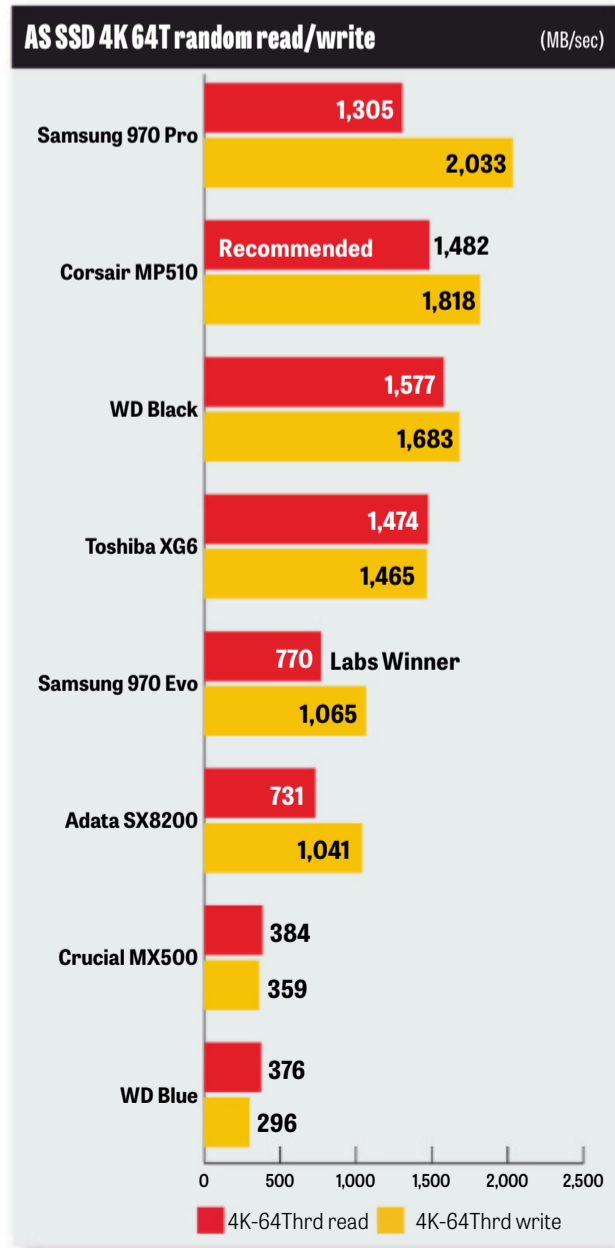
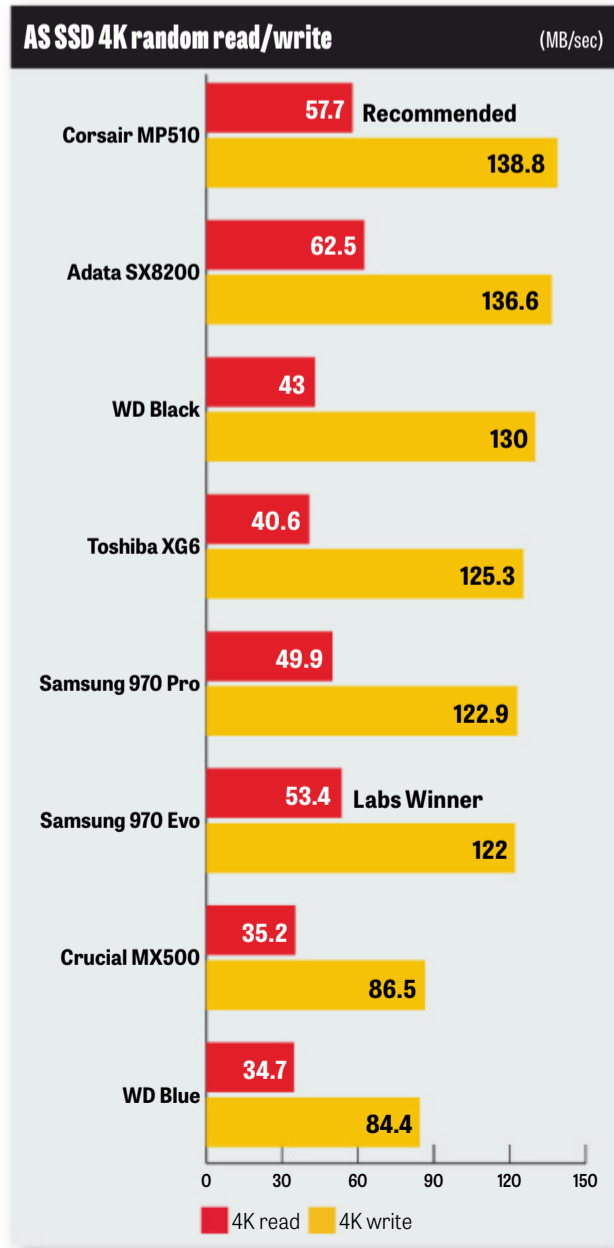
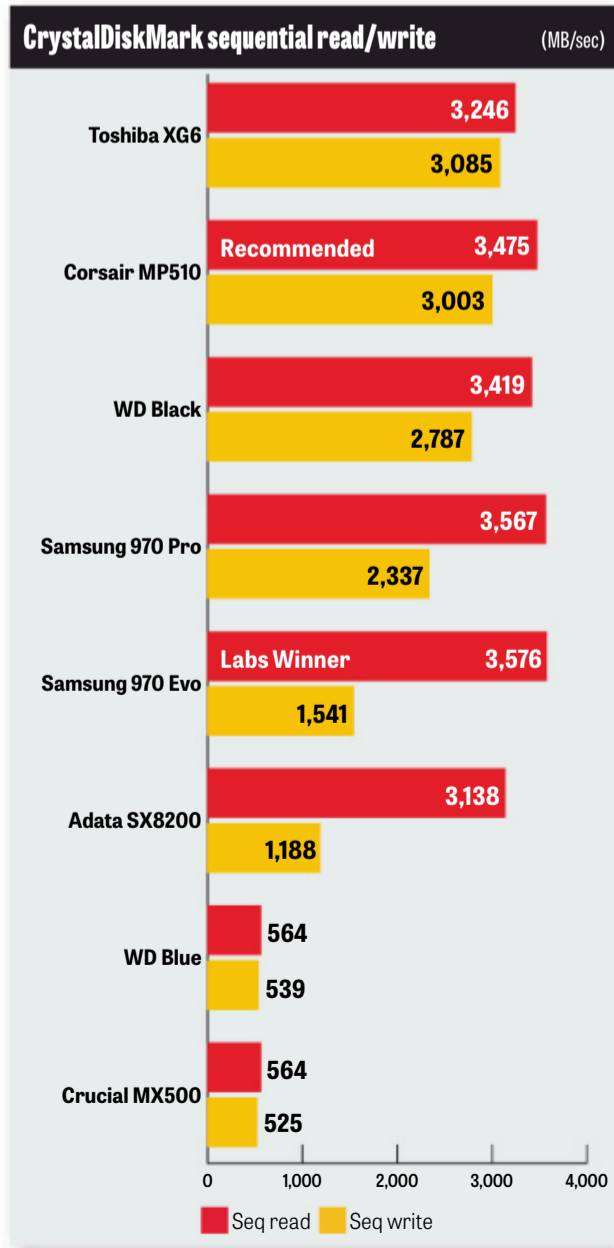




# 2.5in results



# M.2 results



# VIEW from the LABS

While it's brilliant to have so much choice when it comes to SSDs, buyers should be wary before making their purchase

When I first set foot in the PC Pro Labs over 20 years ago, the drive was the Quantum Fireball. If you got a PC in for testing and it had a Quantum Fireball in it, there was a good chance that the PC was going to win awards (and a Matrox Millennium graphics card never hurt). In the past few years, you have really had two choices: the Samsung 970 Pro and its cheaper sibling the 970 Evo. Speeds were through the roof, the performance profile boosted performance in real-world applications, while Samsung's NAND technology always seemed a step ahead of the rest.

Now Samsung's rivals have finally caught up. The drives packing Toshiba's latest BiCS 3D NAND technology are matching Samsung's champs in some scenarios and even besting them in others, making for a much more closely-fought race for our awards. And even in the 2.5in SATA market, there's stiff



Stuart Andrews is a former reviews editor of PC Pro and has the hard disks to prove it

competition, with the best drives from Crucial and Western Digital delivering an awesome combination of great SATA 3 performance and even better value.

All this competition is, as always, good for buyers. Speeds are increasing, prices are dropping and higher capacities are growing more affordable. Even a year ago many high-performance desktops needed two drives: an M.2 SSD to run Windows and a SATA hard disk to host your apps, games, media and documents. We're now at the point where a single SSD can do both jobs, and the choice really comes down to whether you want more capacity (and buy SATA) or performance (and buy NVMe). In fact, I suspect we'll see more systems packing in one of each.

There's only one problem: with that choice comes a lot of complexity, which makes me

concerned for any potential buyers. For one thing, trying to navigate what drives will work where and at what speeds on some motherboards can be an absolute nightmare – particularly on AMD motherboards.

For another thing, it's easy to underestimate how much capacity affects performance. As the capacity of these NAND drive increases, so does sequential write (and even read performance), so there's a real danger that someone buying a 256GB drive thinks they're getting the same performance as the 512GB drive that figures in all the reviews and advertising, when they're actually getting something that writes roughly half as fast. That's not necessarily a disaster, or even something you'll notice in everyday use, but it's something that you should be aware of – and check before you buy.

You knew where you were with the ol' Quantum Fireball. Whatever the capacity, damn, that thing was fast. ●

**“Trying to navigate what drives will work where and at what speeds on some motherboards can be an absolute nightmare”**

## Combined results

