New SSD Works Faster Than You Can Say
THNSNH256GCST

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12 Out of Thirteen

Toshiba's THNSNH256GCST SSD may not have an amazingly catchy (or pronounceable) name, but it works amazingly well. I tried it out on my famously slow and temperamental laptop, and while using the hard drive, the computer didn't crash or stall or show any signs of ageing – a significant improvement for a 3 year old mid-range laptop. I was blown away by the initial speed of the SSD, but thought it couldn't last too long because of my dying 2.0 GHZ processor.

As it turned out, it did last, and the SSD seemed to inject a new life source into the processor. At first, having put a fresh install of Windows 7 on the SSD, the massive amount of updates that had to be installed slowed my machine down slightly, but it was still usable and didn't induce the lag-frustration brought about by a standard HDD. When everything had been installed, I attempted a speed test to put a number to the hard drive's colossal power. However, I was unable to obtain results, as the actual test kept freezing and crashing every time I tried it. Possibly an issue with my laptop, but it greatly decreased the performance either way. However, when the offending programme was closed, the performance shot right back up and carried on as if nothing had happened.

So, without a number to measure the speed (sorry!), I opted for a more ad-hoc approach, put the laptop into power saver mode and opened as many programs and windows as I could before a drop in performance was noticed. This drop came after 13 programs and 17 windows,

including 3 two-tabbed internet windows. Even still, this didn't have a massive effect on the performance. Putting it into high performance mode to check on the battery life, I found that it stood at 89%, or 1 hour 55, which, with my other hard drive, was unreachable even at full charge. The Toshiba SSD instantly boosted both my laptop speed and battery life – an unexpected treat. Later on, however, that battery life estimate started decreasing exponentially, so I had to plug it back in within the hour. Again, this may be attributed to the decaying cells of the 3-year old battery itself.

Being flash-based, SSD's have the ability to retrieve files in fractions of a second, making for a noticeable speed boost in standard operations. Restart time on my machine was so fast with the Toshiba SSD that I missed most of it because I had to blink. I was so overwhelmed that I thought it hadn't done it properly, so tested it again. It managed to completely shut down Windows and then reboot and make it ready for use in under thirty seconds both times. Considering the laptop can't normally reboot itself and be ready to use in under 5 minutes, this was a great surprise.

So, after all the initial tests, I downloaded and installed Steam (which took less than two minutes) and then accessed my account, choosing Expeditions: Conquistador at random to test the speed of its download and how it ran. Steam estimated the download and installation time as 2 hours 13 minute, but it was done and opened up in under a quarter of an hour. The name "THNSNH256GCST" is so

confusing it even confuses Valve!

The game itself lagged a bit, but this was most likely due to my aged processor being below the recommended spec of the game. Nonetheless, it was still performed quicker than it did on my old hard drive, which is just a stock Toshiba HDD that came with the laptop. The loading screens passed me by in less than half the time I was used to, and although the cut-scenes were still a little jumpy, it was still an improvement.

I was pleasantly surprised that Toshiba, whose Satellite laptop has caused me so much grief in the past, and continues to do so, have managed to produce a brilliant SSD hard drive that's compatible with my dated processor. I tested the 256gb model, which in the grand scheme of things isn't that much disc-space, so I'd recommend getting one with a larger capacity if you have the funds. However, if you're on a budget, the smaller model is still worth buying for the performance boost it brings. Compared to the excellent Samsung 840 Series SSD the Toshiba SSD actually offers slightly better performance, but it comes at a cost of a higher price per gigabyte, so search the market first if you're on a strict budget.

I'd highly recommend this for PC gamers who have budget laptops; I'm now considering purchasing a better hard drive rather than a brand new laptop, and definitely ensuring I have an SSD ready to go when I do purchase a new machine.

Office 2010 Installation — Lower is better

Drive	Time
MX-DS Turbo SLC (120 GB)	44.4 s
Toshiba THNSNH512GCST (512 GB)	44.6 s
Toshiba THNSNH256GCST (256 GB)	45.0 s
OCZ Vertex 4 (256 GB)	45.1 s
Kingston HyperX 3K (240 GB)	45.6 s
OCZ Vector (256 GB)	45.6 s
Samsung 840 Pro (256 GB)	46.2 s
Intel 330 Series (180 GB)	46.6 s
OCZ Agility 3 (240 GB)	46.7 s
Corsair Neutron GTX (240 GB)	47.2 s
Samsung 830 Series (512 GB)	47.6 s
Mushkin Chronos (240 GB)	48.4 s
Intel 510 Series (120 GB)	48.4 s
Crucial M500 (480 GB)	48.6 s
Seagate 600 (480 GB)	51.1 s
Crucial M4 (128 GB)	51.6 s
Samsung 840 (250 GB)	51.9 s