

# Scan 3XS Core i7 £1,362 (exc VAT)

How much workstation can you get for less than £1,500? When it comes to Scan's 3XS Core i7, apparently quite a lot...

**A** sub-£1,500 price would normally be associated with an entry-level workstation. But Scan has other ideas. With a wise choice of components, the 3XS iCore 7 offers mid-range performance for an entry-level price – plus a few features you wouldn't expect for the money too.

The iCore 7 is based around an Intel Core i7, but to keep costs under control Scan has opted for a mid-range 950 version rather than the top-end 980X. So this runs at a base frequency of 3.06GHz, and is a quad-core rather than six-core CPU. But it still offers Intel's Hyper-Threading and Turbo Boost technologies, both of which are potentially beneficial at different stages of the 3D content creation process. Hyper-Threading can pay dividends when rendering, as it splits each physical core into two virtual ones, so that unused units in the processing pipeline of one thread can be put to work on another. For highly parallel tasks like rendering, this promises a useful hike in performance.

Turbo Boost, on the other hand, comes into play when not all the cores are in use. The active cores can increase in frequency while inactive ones drop, without pushing power consumption over the specification or causing overheating. So when only a single core is active, this can run at 3.33GHz, and the Core i7 950 will readily run all of its cores at 3.2GHz – so you always get a little extra. Being a Core i7 processor, the 950 also supports triple-channel memory. So Scan has supplied the 3XS iCore 7 with three sticks of 1,600MHz DDR3 memory to take full advantage of the bandwidth available. This leaves a comfortable three DIMM slots free for upgrade.

The NVIDIA Quadro 2000 3D accelerator illustrates how rapidly graphics technology continues to progress. The previous mid-range Quadro offering – the FX 1800 – incorporated 64 CUDA processors. But the 2000, based on NVIDIA's Fermi technology, sports 192 – three times as many. As well as benefiting real-time 3D display, these will also pay dividends for other GPU-accelerated

tasks, including some 3D renderers, video editors and image manipulation apps.

The Quadro 2000's memory has been increased from the FX 1800's 768MB to 1GB, and is now the faster GDDR5 variety rather than GDDR3. However, with the memory interface dropping from 192-bit to 128-bit, the actual increase in bandwidth is marginal, and power consumption is about the same. OpenGL 4.1, Shader Model 5 and DirectX 11 are now supported. There are two DisplayPorts and a single DVI connection, for flexible multi-monitor options.

Scan hasn't skimped on storage provision either. The system comes with the now familiar combination, for high-end workstations, of a SSD and regular hard disk. The ultra-quick 120GB Corsair SSD takes care of operating system and applications, while the conventional 7,200rpm Western Digital Caviar Black provides an ample 1TB for general data. Finally, a 22x DVD rewriter and multi-format card reader cover most removable storage bases.

We put the iCore 7 through its paces with industry-standard MAXON CINEBENCH R11.5 and SPECviewperf 11 benchmarks. The rendering score of 6.35 is notably behind the latest six-core systems, but the OpenGL result of 43.26 is more competitive. Looking at key SPECviewperf tests, the score of 39.35 in LightWave-01 is decent, although the Maya-03 result of 17.03 is more entry-level. The proe-05 score of 9.21 and sw-02 score of 34.64 are both good, indicating capable engineering and product design grunt.

Overall, the Scan 3XS iCore 7 provides the kind of features and performance you would expect in a much more expensive system. One area where Scan has cut costs slightly is that only a single year warranty is included, but at least this is onsite. So, warranty aside, this is a great price for a comprehensive package. Although rendering and modelling performance won't be giving the highest-end workstations a run for their money, the 3XS iCore 7 nevertheless provides excellent value. **X**

## The good & the bad

- ✓ Reasonable rendering performance from Intel Core i7 950 processor
- ✓ NVIDIA Quadro 2000 graphics provides capable 3D acceleration
- ✓ Comprehensive complement of fixed and removable storage included
- ✗ Quad-core processor offers less rendering power than latest six-core CPUs
- ✗ One-year warranty only

**Essential info**  
**www.scan.co.uk**  
 • £1,362 (exc VAT)  
**OPERATING SYSTEMS**  
 • Windows 7 Professional 64-bit  
**SYSTEM SPECS**  
 • 3.06GHz Intel Core i7 950  
 • 6GB PC3-12800 DDR3 SDRAM  
 • 1GB NVIDIA Quadro 2000  
 • 120GB Corsair SSD  
 • 1TB Western Digital Caviar Black 7,200rpm SATA hard disk  
 • Pioneer 22x DVD rewriter  
 • Multi-format memory card reader  
 • Warranty: One year onsite

“With a wise choice of components, the 3XS iCore 7 offers mid-range performance for an entry-level price – plus a few features you wouldn't expect for the money too”

**Our verdict**  
 Features..... 8/10  
 Performance..... 8/10  
 Value for money..... 10/10

“Better features and performance than you would expect for a sub-£1,500 price tag”

**Final Score** 9/10