

# SCAN 3XS CAD-8600

» Outstanding machine for mid-range CAD, delivering excellent CPU performance for well under a grand. By **Greg Corke**

- » **Dual Core Intel Core 2 Duo E8600 (3.33GHz)**
- » **4GB RAM (2 x 2GB PC6400 DDR2 memory)**
- » **Intel DP35DP iP35 Mainboard**
- » **2 x 750GB Samsung SpinPoint F1 SATA300 drives (RAID1)**
- » **ATI FireGL V3600 graphics card (256MB)**
- » **Windows Vista Business 64-bit (Free Windows XP Professional x64 downgrade)**

**£860**  
www.scan.co.uk

- » **Benchmarks**
- » **Graphics** (bigger is better)  
SolidWorks 2007 - N/A  
3ds Max Design 2009 - 98  
Inventor 2009 - 3.52
- » **CPU** (smaller is better)  
3ds Max Design - 1,707 secs

**Q**uad Core workstations may offer ultimate power for the number crunching stages of the product development process, but when it comes to pure CAD you can't beat Dual Core. In terms of price/performance Intel's Core 2 Duo is untouchable at the moment and unlike Quad Core you don't pay a hefty premium when you get into 3.0GHz + territory.

Indeed, despite featuring a processor with the fastest clock speed of any Intel CPU, Bolton-based workstation manufacturer Scan has still managed to put a quality machine together for well under a grand. The CPU in question is Intel's brand new Core 2 Duo E8600 and running at 3.33GHz it outpaces its closest Quad Core rival by a full 0.13 GHz, but more importantly it only costs £155 compared to the £860 a Intel Core 2 Quad Extreme QX9775 would set you back.

While Scan has gone for high-performance in the CPU department, it has economised on the graphics with an entry-level AMD ATI FireGL V3600. However, this 256MB card is still an excellent choice for CAD, particularly as many CAD applications don't benefit that much from faster graphics cards. Backing this up with hard facts, the Scan 3XS put in some excellent scores in our Inventor 2009 benchmark, which uses a huge assembly of an entire Mastenbroek digger. Unfortunately

we were unable to test with SolidWorks as our benchmark is incompatible with Windows XP 64-bit. This was installed as a free downgrade to Windows Vista Business 64-bit to make the most of the 4GB RAM.

The limitations of the low-end graphics card were apparent under 3ds Max, where spending more on a high-end graphics card such as the FireGL V7700 or Quadro FX 4600 would probably give you double the 3D performance.

Build quality inside the no-nonsense Silverstone TJ04B chassis is excellent and acoustics are superb. This is in part due to the quietness of the Coolermaster Hyper Z600 Passive CPU Cooler, which uses heatpipes to dissipate the heat away

from the CPU. Two low duty 120mm Zalman ZM-F3 fans and an Acoustipack Ultimate soundproofing kit do the rest.

Scan has taken the cautious approach to storage with a Raid 1 mirrored array. However, with 750GB on each of the two drives, capacity is never going to be a problem.

Overall, the 3XS CAD-8600 is an outstanding all round CAD workstation, ideal for mid-range applications like Inventor and SolidWorks, but if you need a bit more power in your system for high-end apps like NX or Pro/E then a graphics card upgrade is only a phone call away.



## WHY IS DUAL CORE SO GOOD FOR CAD?

For most CAD applications it is far more important to have a faster clock speed (GHz) than having multiple processors (cores). Most operations inside a CAD application are run on a single core and the graphics card is only able to work directly with a single CPU core to boost 3D performance.

Quad Core workstations are best suited to more complex operations such as rendering or simulation, where the software has been tuned to make use of multiple cores, though even here the performance of some FEA and CFD software peaks at two cores. High GHz Quad Core chips are still good for CAD, but can cost up to five times as much.

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“easy to implement, administer and use”

“support is second to none”

integrates with

Pro/ENGINEER® SolidWorks® Solid Edge® Inventor™ AutoCAD® IronCAD®

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