

InterPro workstations IPW-Ci7X

» This powerful six core workstation presents an interesting proposition for rendering and CAD/CAM/CAE users who want multi-core performance from a single CPU machine



Spring has arrived and so has a new family of six core processors from Intel. The chip giant's new flagship processor, the Core i7 980X Extreme Edition runs at a phenomenal 3.33GHz and is the lifeblood of this machine from UK workstation newcomer InterPro Workstations.

Six cores is an exceptional amount of compute power to have on a single CPU and this is actually doubled to 12 when you take into account HyperThreading, Intel's virtual core technology. The evolution from four to six physical cores is all down to Intel's new Westmere architecture, which uses a new 32nm manufacturing process. This means less voltage is required and as a result the chip can still fit into the 130W thermal envelope that was common with the 45nm 'Nehalem' quad core Core i7 chips.

Having six cores on a single high clock speed chip is big news for visualisers who want to cut rendering times without having to invest in an expensive dual processor workstation. And with a time of 211 secs in our 3ds Max rendering test the IPW-Ci7X doesn't disappoint. To put this into perspective this is faster than the HP Z600 workstation (tinyurl.com/D3DZ600), which had two Xeon E5530 processors running at 2.4GHz, a specification that will still set you back well over £2,000.

Because of its high clock speed the IPW-Ci7X also performs excellently under single threaded applications and coupled with the workhorse Nvidia Quadro FX 1800 graphics card delivered some impressive scores under our CAD benchmarks.

Elsewhere, the machine is notable for its two drive system which features a 64GB Ocz solid state drive for accelerated loading of operating system and applications and a 1TB Western Digital 7,200RPM drive for data.

The IPW-Ci7X is well built and quiet even under full load, but the Antec case, which is capable of housing two CPUs, could be smaller. All in all, this is a welcome debut from InterPro Workstations. The machine offers an attractive proposition for CAD/CAM/CAE users who need plenty of power for single multi-threaded tasks, but don't want to pay a premium for a dual processor machine. Finally, for those that consider four cores to be overkill, downgrading to a Core i7 960 (4x 3.20GHz) will shave off a cool £300.

Greg Corke

» **Intel Core i7 980X Extreme Edition CPU (6 x 3.33GHz)**

» **6GB (3 x 2GB) DDR3 1333MHz ECC memory**

» **MSI X58 PRO-E mainboard**

» **64GB Ocz SSD + 1TB Western Digital (7,200RPM) drives**

» **PNY Quadro FX 1800 (768MB) graphics card**

» **Microsoft Windows 7 Professional Edition (64-bit)**

» **One year return to base warranty**

£2,075

www.ipworkstations.com

» **Benchmarks**

Graphics (frames per second - bigger is better)

SolidWorks 2010 - 34
3ds Max Design 2010 - 4.4
Inventor 2010 - 4.0

CPU (secs - smaller is better)
3ds Max Design 2010 - 211