MusicTech CHOICE

Scan SA-I7 POWERDAW+

Scan has upped the ante by kitting out its flagship PC with Intel's latest processors. Hollin Jones powers up.

KEY FEATURES
- Intel Core i7 quad-core 2.66GHz CPU
- Gigabyte EX58-UD4 motherboard
- 3GB DDR3 RAM
- 512MB Palit 9500GT graphics card
- 1.7TB storage
- Acoustipack foam silencing treatment
- Multiple USB 2.0/FireWire ports

SA-I7 POWERDAW+

Manufacturer **Scan**

Price **£1,520**

Contact **Scan 0871 472 4747**

Web **www.scan.co.uk**

Anyone looking to buy a PC for pro audio use is well advised to use a specialist audio PC company since an off-the-shelf box is often not up to the demands of low-latency audio performance. Scan computers is one of the first such PC builders to release a model fitted with the new Intel Core i7 processor, also known as 'Nehalem'. Sporting the very latest in processor technology, these CPUs promise greatly improved performance at clock speeds comparable to recent chips. Scan will custom-build a system to your specifications and also offers some pre-configured setups.

Nuts and bolts

The tower is solid and stately in appearance, with a good selection of ports and I/O. Behind the front-panel door are multiple card reader slots plus a USB port; on the top, for easy access, you'll find further USB, FireWire and mini audio sockets. Around the back are more USB and FireWire ports, Ethernet, more mini audio jacks and S/PDIF. The review model also had a 512MB Palit 9500GT graphics card and an optional RME soundcard fitted. Inside, there's a very quick DVD rewriter, a 250GB system drive, two 750GB data drives and extensive acoustic foam treatment, which ensures that the system is very quiet even when under load. A wireless card is optional due to the extra processing power that Windows uses when scanning (power which is then not available for audio work).

The PC has a new Gigabyte EX58-UD4 motherboard, offering three PCI slots and six RAM slots. There's 3GB of RAM fitted, which is understandable given that the operating system in use is Windows XP. Scan will pre-install a 64-bit OS such as XP64 or Vista 64 and install more RAM if you want to take advantage of the CPU's 64-bit capabilities. The company, however, is currently recommending XP due to the generally patchy driver support for XP64 and ongoing issues with Vista and audio. When Windows 7 is released, this machine should be more than capable of running it satisfactorily.

To the core

The processor is a quad-core i7 running at 2.66GHz. Thanks to its hyperthreading technology, it appears to the system as having eight cores and is also able to dynamically allocate resources for maximum performance. We tested the PC with Cubase 5 and found its performance to be excellent. Freezing lengthy tracks, time-stretching using extreme values and loading CPU-intensive plug-ins all failed to trouble it.

Under pressure, it seemed to load all eight of its cores, spreading the load without overloading any single core. We were able to run quite heavy projects at a buffer setting of 32 samples without glitching, using the RME card's ASIO drivers (32 is perhaps lower than you really need to go; 64 or 128 samples are perfectly reasonable settings that will keep latency very low while freeing up a few CPU cycles).

Some other, consumer-centric, applications didn't make effective use of all of the cores, but this is down to programming. iTunes encoding, for example, appeared to load only one core heavily and the others not at all. This, however, is something we have seen before with multi-core systems – it's down to programmers to code properly for multiple cores. After all, the power is there to be exploited. Happily, it's something that pro audio software manufacturers have known for years, and so more or less all major DAWs are able to fully harness this power.

The i7 is a fearsome processor and would seem to represent a new generation of high-performance computing. As a system, the SA-i7 PowerDAW+ is a great studio workhorse with a ton of I/O and storage, while the capacity for more RAM – should you wish to take the 64-bit route – brings even more music-making potential. MTM

MEASURING UP

Inta Audio offers the X4R Pro PC (£1,099), which has a quad-core 2.83GHz chip, 4GB DDR2 RAM, 2.5TB of storage and full acoustic treatment. Its processor is an older model than the SA-i7's. Apple's Mac Pros start at £1,712 for an octo-core 2.8GHz Intel Xeon model with 2GB DDR2 RAM, but a capacity of 32GB. The Mac Pros are expected to be updated to use the i7 processors soon.

SUMMARY

WHY BUY
- Very powerful CPU
- Hyperthreading makes the system recognise eight cores
- Very quiet in operation and under load
- Low-latency performance
- Good I/O
- Lots of storage
- Pre-tweaked for audio work

WALK ON BY
- Running a fully 64-bit Windows system, including all software and drivers, can still prove problematic

VERDICT

A very powerful PC with everything you need to deal with the increasingly high demands of pro audio production.

★★★★★★★★★½