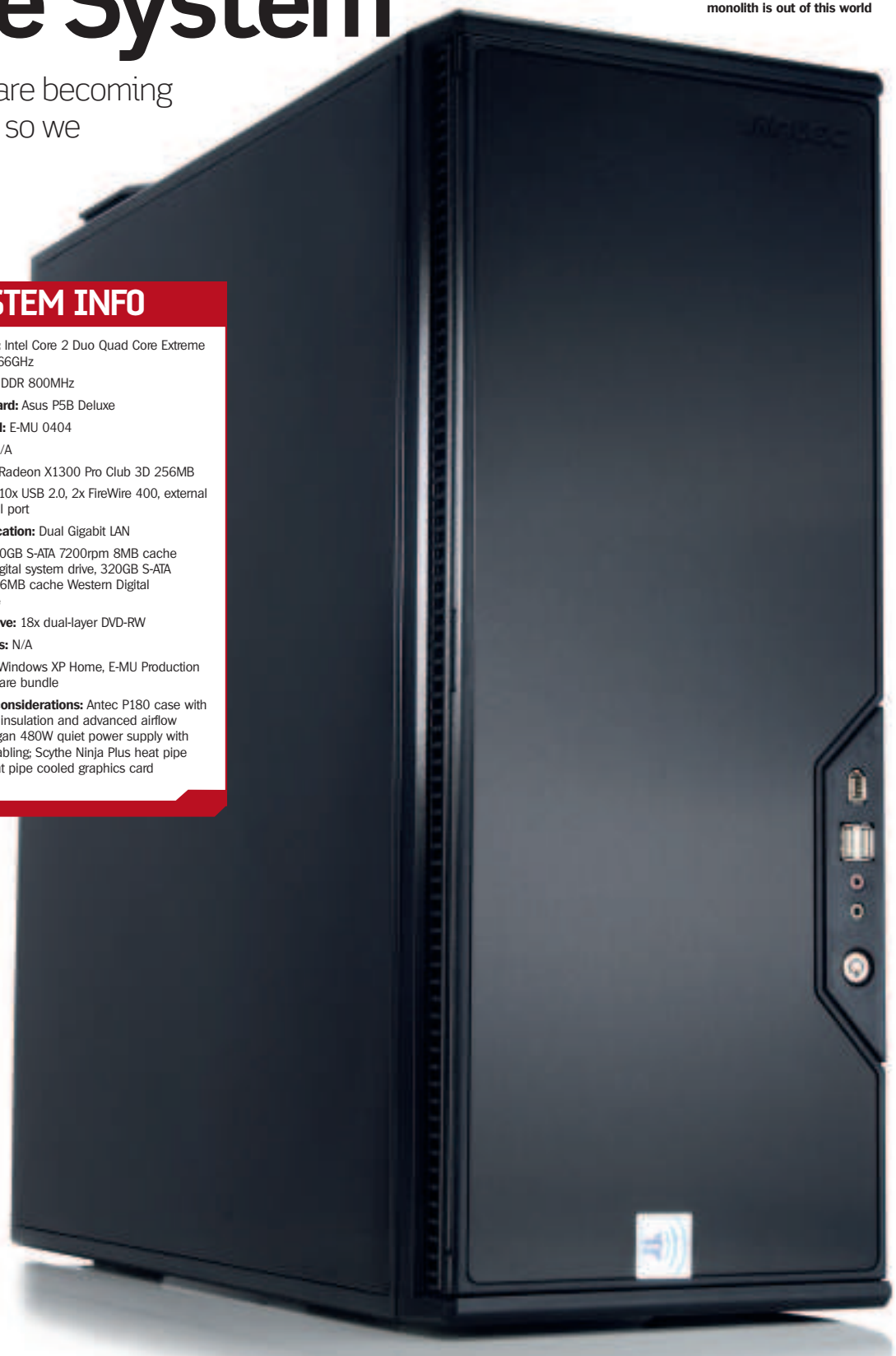


What is it? Quad-core audio PC PRICE: £1650  
 CONTACT: Music-PC.com, 0115 985 9500 WWW.music-pc.com

# MUSIC-PC.COM Quad Core System

▼ Even Arthur C. Clarke would concede that this processing monolith is out of this world

Quad-core computer systems are becoming more affordable by the month, so we thought it high time to take a closer look at one...



**M**usic-PC.com have been in the business of building music workstation PCs for more than 15 years, and with a slick new website that makes all the right promises (painstaking system testing, excellent customer service, and so on), they look likely to attract plenty more customers in the future. What we all really want to know, however, is: Are their systems actually any good?

Entering the dark, musty realm of our tester's lair this month is the Quad Core System: a mighty desktop that contains one of the latest quad-core processors.

## A true heavyweight

If the weight of a PC then is at all indicative of its quality, this machine must be a good 'un. Its large Antec case is of minimalist design (it offers a full-length front door and a variety of apertures to aid cooling), and the system as a whole is well built and nicely finished.

Engineered with cool and quiet operation in mind, the enclosure sports a number of interesting design features. The side panels are manufactured with integral three-layer acoustic insulation; an 'advanced airflow system' is said to improve cooling efficiency; and the power supply is isolated in a zone at the bottom of the case.

This power supply is a 480W Tagan model that uses a modular wiring system. In practice, this means that on the inside edge of the unit you'll find a number of colour-coded sockets into which you can plug a variety of supplied cables. The idea is that you need only clog up your case with wiring that you're using, creating more space and thus better airflow.

### ► SYSTEM INFO

- Processor:** Intel Core 2 Duo Quad Core Extreme QX6700 2.66GHz
- RAM:** 2GB DDR 800MHz
- Motherboard:** Asus P5B Deluxe
- Soundcard:** E-MU 0404
- Monitor:** N/A
- Graphics:** Radeon X1300 Pro Club 3D 256MB
- Interface:** 10x USB 2.0, 2x FireWire 400, external S-ATA, serial port
- Communication:** Dual Gigabit LAN
- Storage:** 80GB S-ATA 7200rpm 8MB cache Western Digital system drive, 320GB S-ATA 7200rpm 16MB cache Western Digital audio drive
- Optical drive:** 18x dual-layer DVD-RW
- Peripherals:** N/A
- Software:** Windows XP Home, E-MU Production Tools software bundle
- Acoustic considerations:** Antec P180 case with three-layer insulation and advanced airflow system; Tagan 480W quiet power supply with modular cabling; Scythe Ninja Plus heat pipe cooler; heat pipe cooled graphics card

An exercise in cubist architecture, the formidable aluminium structure that is the CPU cooler probably needed planning permission prior to installation. Hinting at the power that lurks beneath, the Scythe Ninja Plus unit is clearly visible through the large grills at the top and rear of the case and just begs to be peered at.

Underneath this mass of metal sits an Intel Core 2 Duo Quad Core Extreme QX6700 processor. Just to clarify, this features four processor cores, each running at a clock speed of 2.66GHz. All we can say to that is, core blimey!

To whet the appetite of those considering an upgrade to a quad-core system, Music-PC.com are claiming that the tests they've performed on this machine indicate that it can be up to 20 times quicker than a 3GHz P4 (feel free to dribble uncontrollably when you read that back again).

Aside from its number-crunching capabilities, quad-core processing also has implications for multitasking. The Intel chip we're dealing with here can spread its resources across multiple applications with ease, leading to noticeably better performance.

## Board approval

Naturally, a hot processor deserves a foxy motherboard; Music-PC.com have chosen the Asus P5B deluxe. One of the main reasons to recommend this board is that it uses the P965 chipset, which was designed specifically for use with quad-core processors (some other boards have to 'adapt' their existing technologies to cope). Ultimately, this translates to better performance and stability for the end user.

As you might expect, the processor demands huge memory bandwidth. Music-PC.com's solution is to fit the machine with two 1GB sticks of 800MHz RAM, while two further slots remain free to host any additional memory that you might add in the future.

Graphics power comes from a Radeon X1300 Pro Club. This PCI-Express card is loaded with 256MB of GDDR2 memory and cooled passively using heatpipes and heatsinks. Output is via two DVI ports, which can be used separately to feed a dual-monitor setup, or together to provide a single display with a resolution up to 2560x1600.

Bolted into the chassis are a pair of 7200rpm Western Digital hard disks. One, an 80GB drive with 8MB cache, is designated as the system drive, while the other is a much larger 320GB (for all your music projects) and has twice the cache.



▲ If the exterior of the Quad Core System is a little unexciting, then what's inside is anything but

Starting up the machine reveals that while it's not the quietest we've reviewed (this is mostly due to the two large grills in the top and back next to the CPU cooler) it's certainly not too noisy for studio use.

## Peripheral vision

With its ten USB 2.0 ports, two FireWire 400 ports, external S-ATA connection and serial port, the system is well set up to accept any peripherals that you might wish to plug into it. A pair of Gigabit LAN ports opens up channels of communication with the outside world.

Music-PC.com have chosen to install Windows XP Home edition (not Pro) as the operating system, reasoning that this is more than adequate for music production and that they would prefer to spend money elsewhere on the system. Fair enough, we think. Windows' settings are all optimised for best performance.

Should you desperately want Vista, Music-PC.com will happily install Home Basic for the same cost. However, due to unknown compatibility, reliability and stability issues, the company's current recommendation is to go for XP.

Our review machine came loaded with an entry-level E-MU 0404 soundcard: this offers stereo analogue, MIDI, optical and S/PDIF ins and outs. You could, of course, choose to plug your existing audio hardware into this PC, or to spec something a bit more 'pro' at the time of purchase.

Music-PC.com's after sales support takes the form of online help and free phone support when you first get your system. A one-year back-to-base warranty

also comes as standard, and there's a three-year back-to-base warranty on hard drives and monitors.

The Quad Core System is a very well-crafted machine, with good attention to detail and rigorous testing on the part of Music-PC.com ensuring that it's a reliable and rock-solid workstation solution. As we've already mentioned, we have reviewed quieter systems, but this one certainly doesn't make the sort of din that would cause you any discomfort. Factor in its breathtaking performance and the Quad Core System looks like a very fine machine for the musician who's willing to pay that little bit extra for a lot more power. **cm**

## VERDICT

- For**
- + Super-powerful
  - + Fast RAM
  - + Very well built
  - + Clever case architecture
  - + Modular power supply

- Against**
- Expensive
  - There are quieter systems (but they're dual-core)

This is a scorchingly powerful PC that performs even better than we dared hope it would. Only quieter operation could really improve it

### RATING



## Performance

Ker-ching! We've hit the performance jackpot here. Scoring approximately two hundred million gabillion points in every benchmark test, this is easily the most powerful machine ever to grace our test bench. The CPU test results are huge and the memory bandwidth phenomenal.

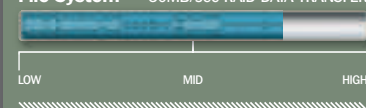
Each of the hard disks performs at the expected level; the only way to get significantly faster data transfer rates would be to invest in some extra drives and create a RAID array.

This machine's display of all-out raw power is even more impressive than Geoff Capes turning over a Mini on *Record Breakers*. Twice.

## Benchmarks

Every month we put our review system through a series of hoops to assess its processing prowess. We use SiSoft's SANDRA Standard benchmarking program, downloadable for free from [www.sisoftware.net](http://www.sisoftware.net). You can run SANDRA on your own machine and compare the results to those of the reviewed machine to see what you're missing out on or crow smugly about the superiority of your system.

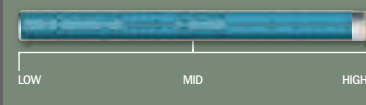
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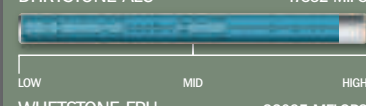
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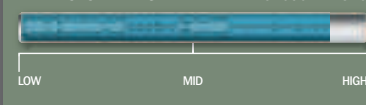
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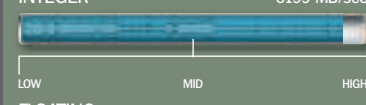
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### WHETSTONE FPU 32095 MFLOPS



### Memory Bandwidth INTEGER 6199 MB/sec



### FLOATING 6206 MB/sec

