PCPlus Verdict

We've waded through a pile of motherboards. Now we pick out the ones most worthy of your consideration



Editor's Choice

Biostar K8VHA Pro

PRICERM459 SUPPLIER Gatum Dale (M) Sdn Bhd PHONE 03-8024 2455 WEBSITE www.biostar.com.tw

he Editor's Choice award goes to the product with the best blend between features, performance and price. Among the contenders in the comparison, the Biostar K8VHA Pro sneaks in to claim the top prize. Granted, the feature set isn't the most jam packed of all, and it didn't top the tables in the performance stakes, but it did come at a very good price tag and came in a



close second in all our testing as well as sporting a very respectable number of features. This is definitely our choice of motherboard to get if we were to go the way of Athlon 64.





Best Value

Gigabyte **GA-K8VT800**

PRICE RM430 **SUPPLIER** Nation-Tech Sdn Bhd PHONE 03-4280 6636 WEBSITE www.gigabyte.com.tw

f you're just looking for a decently performing motherboard, with only a bare minimum of features available, the Gigabyte GA-K8VT800 is just the ticket. While this board lacks IEEE 1394 support, it does come with Serial ATA support as well as SATA RAID via the Southbridge. The relative lack of any pile of extras in the box aside from the usual I/O panel, cables and manual also help contribute to the affordable price tag. Even with the lower number of features, the performance of the board isn't affected, as it manages to keep up with the majority of the motherboards in the comparison. For users looking for performance on a budget, the K8VT800 from Gigabyte is an excellent choice.





Best Performance

Abit KV8-MAX3

PRICE RM800

SUPPLIER ScanArt Data System (M) Sdn Bhd

PHONE 03-7956 4700 WEBSITE www.abit.com.tw

ith the majority of the Athlon 64 motherboards competing neck and neck in the performance stakes, the boards based on VIA's K8T800 consistently outperformed boards based on NVIDIA's nForce3 150. Being based on the K8T800, Abit's KV8-MAX3 topped the charts in nearly every single benchmarking test we ran. Abit is no stranger to producing top notch performance motherboards, and the KV8-MAX3 continues to build on that reputation. With the OTES cooling system and a slew of features, this board is definitely the performance king, if you are willing to shell out some major Ringgit. As far as snatching the Performance Award, the KV8-MAX3 has no peer.

PCPlus verdict **12345678**910

ANALYSIS

It didn't take much prodding for users to switch to 32-bit capable systems over from the old 16-bit dinosaurs of yesteryear. 32-bit versions of popular software suites were easily available, making the transition that much easier. The transition from 16-bit to 32-bit hardware and software opened new pathways for better and more powerful applications, making the PC much more powerful and suited to a wider range of tasks. While the transition from 32-bit hardware to 64-bit hardware is simply another inevitable step in the evolution of computer technology, switching over at the current moment doesn't make much sense; at least not for the regular users out there.

Additionally, for the most part, 32-bit applications still work very well for the majority of the computing community. Think about it, how much more power do you really need to run spreadsheet and word processing applications?

While 64-bit computing has actually been around for quite some time, the hardware was meant for use in hardware like servers and workstations which required massive amounts of computing power and oodles of memory which a 64-bit architecture could provide. Nevertheless, any switch to newer forms of technology is bound to experience some bumps in the road, especially since users haven't been properly educated in the advantages of the new, being firmly and comfortably entrenched in the old.

The Athlon 64 architecture is very interesting in the sense that it 'switches modes'. The Athlon 64 provides full compatibility with existing 32-bit and the older 16-bit x86 code. When running in legacy mode, the processor functions exactly like a standard x86 CPU; it runs a 32-bit OS and 32-bit code; none of x86-64's added capabilities are turned on.

In legacy mode, the Athlon 64 looks just like any another Athlon. It's in the 64-bit long mode that things start to get interesting. To run application software in long mode you need a 64-bit operating system. Long mode provides two submodes -- 64-bit mode and compatibility mode -- in which the OS can run either x86-64 or plain x86 code.

At this current point in time, users (read: regular consumers) don't have much choice in terms of 64-bit compliant software and operating systems, though software makers are hard at work to rectify that particular issue. All new technology takes time to really sink in. You can't expect a leopard to change his spots overnight, can you?