COMPAQ
Better answers

For Customers who want more than 4GB of memory access: INFORMATION ABOUT INTEL PSE36 AND MICROSOFT PAE

Currently, most IA-32 microprocessor operating systems are capable of supporting only 32-bit memory a memory. Intel has provided the Physical Address Extensions (PAE) virtual memory management feature 64GB of physical memory. IA-32 microprocessor operating systems have been slow to adopt a PAE virtu For the Pentium II processors, Intel added Page Size Extension (PSE36) to simplify the virtual memory m memory capacity over 4GB.

Compaq recommends customers research their present and future requirements for a management system work with both virtual memory management architectures; however, Intel technically supports the system the two management systems that include benefits and requirements:

What is PSE36?

Intel offers Page Size Extension, 32-bit (PSE36), a memory management system for accessing memory over 4GB.

How it Works

This implementation, like the PAE, allows a processor to extend the amount of memory that a system can manage, up to 64GB. Access to and from the upper memory is done by read and write routines that mimic ramdisk functionality. This results in the data being copied, which affects system performance.

Benefits of PSE36

The new scheme allows up to 64GB of 4MB pages and allows access to all memory at the same time, providing a large-memory system.

System Requirements

PSE36 is supported by Windows NT 4.0, Enterprise Edition, Service Pack 3 or later.

The PSE36 driver runs on Intel Architecture with suitably configured systems based on Pentium III Xeon processors. The system memory controller must include support for 36-bit physical addressing.

Note: This system is intended for only a very limited number of hardware and software developers and should only be downloaded by relevant ISVs and OEMs, not end-users.

What is PAE?

The Physical Addres management system to the 32-bit system memory under 4GB. of physical memory the virtual memory

How it Works

This implementation processor to extend t processor can manag implementation in W extend the amount o providing the ability be positioned to acce

Benefits of PAE

With Microsoft Win Intel 32-bit (IA-32) for over 4GB of mem up to 64GB of physi 4KB pages, providin available through the Intel. Customers wil Windows 2000, as th

Another feature of P ability to have more to 3GB of address sp the same time, provi memory. PAE is su 2000 Advanced Serv UnixWare 7.x, and S

Support

Purchasing and Technical Support from Intel: For more information on how to purchase PSE36 and detailed information go to: http://www.developer.intel.com/vtune/vtcd or http://www.intel.com/ebusiness/server/resources/pentiumiii/xeon/whitep

Microsoft support of PAE : For more information, go to http://www.microsoft.com/Windows/server