Evergreen 586
Processor Upgrade
for 486 systems

Frequently Asked Questions (FAQ)
Version 2.0, 01/14/97

Evergreen Refresh Cycle™

EVERGREEN technologies

Frequently Asked Questions

Compatibility

Q: For what platform is the Evergreen 586 designed?
A: The Evergreen 586 is designed for 486 SX, SX2, DX, DX2 and some DX4 systems
   with bus speeds of 16, 20, 25, 33 and 40 MHz.

Q: Does it make sense to upgrade my DX4-75 or DX4-100 system?
A: Yes and no. A DX4-75 receives a significant performance increase from the
   Evergreen 586, although a DX4-100 does not.

Q: For which sockets is the upgrade designed?
A: The Evergreen 586 can be used in LIF (Low Insertion Force) or ZIF (Zero Insertion
   Force) sockets. The upgrade fits in socket 1 (169 pins), socket 2 (238 pins) and
   socket 3 (237 pins) sockets. These are the most commonly used sockets for 486
   processors.

Q: Will the Evergreen 586 physically fit into my system?
A: The Evergreen 586 fits most desktop and tower systems. It is low profile and requires
   only 1.1 inches of height clearance above your original 486-processor socket. If the
   processor is soldered to the motherboard the Evergreen 586 requires an OverDrive®
   or secondary socket. The Evergreen 586 has a jumper that can be set for use in the
   OverDrive socket. Set the jumper to position "ovrdrv".

Q: Will the upgrade work with my BIOS?
A: Yes, if your system's BIOS was written after 1991, which is the case for most 486
   systems. Technical Support can respond to your specific model inquiries.

Q: What computer models are compatible with the Evergreen 586?
A: The Evergreen 586 is compatible with nearly all standard 486-based system.
    We do not recommend upgrading the following systems for performance reasons:
        Canon Innova
        ATT Globalyst 330
        AST Advantage Adventure 4066D

  Some of the following systems are incompatible because of their BIOS version
  (contact Technical Support for information on your system):
        IBM 2168 26p
        IBM 2144-67p

  Other incompatible systems are:
        IBM 6381-F30
        IBM 8595-KF or LF series
        HP Vectra N (D26 only)
        Apple-DOS Compatibility Card

Q: Can I upgrade my 486 DX-50 system?
A: You can upgrade your DX-50 system if it is possible to change the bus speed of your
    motherboard from 50 MHz to 25, 33 or 40MHz. We recommend a change to 40
    MHz and the use of the clock tripling (3x) jumper setting on the Evergreen 586.

Q: Is the Evergreen 586 compatible with SLC/DLC systems?
A: No, SLC and DLC processors are designed to fit in 386 sockets.

Q: Can the Evergreen 586 be used for my portable?
A: No, the Evergreen 586 is for desktop and tower systems only.

Q: Will the Evergreen 586 work with my operating system/software?
A: The AMD 5x86 processor used in the Evergreen 586 has been fully certified by
    Microsoft® as a Windows® 95 and Windows NT compatible processor. It is also
    compatible with Windows 3.xx, OS/2® and UNIX®.

Performance

Q: What performance improvement can I expect from the Evergreen 586?
A: The Evergreen 586 increases processor performance up to 350%, Windows
    performance increases dramatically. It also includes an FPU (mathematical floating-
    point unit) that speeds up math calculations.
    Generally, the performance increase depends on the system that you are upgrading.
    Most users find that the performance boost of the Evergreen 586 improves the
    productivity of the original system enough to run leading Windows software such as
    Windows 95.

Q: How does the Evergreen 586 compare to the Intel® OverDrive® processor for 486s?

A: The Evergreen 586 is comparable in performance and more compatible than the Intel OverDrive.

Q: Does 5x86 mean the same as Pentium®?

A: The name Pentium is a registered trademark of the Intel Corporation. It is not an industry standard used by other processor manufacturers. The naming of processors has traditionally followed the x86 principle (e.g. 386, 486…) to indicate the generation of the chip. Intel uses the name Pentium (Pentium stems from the Latin word for five) for its fifth generation of processors, while other producers use names such as 586 or 5x86.

Process/Service

Q: How difficult is the installation?

A: The Evergreen 586 installation is an easy-to-perform processor replacement. The Evergreen 586 includes an easy-to-use pictorial installation guide.

Q: Do I need to buy or install a heat sink or fan?

A: No, a cooling fan or heat sink is included in the upgrade and already installed on the chip.

Q: Do I have to change any jumper settings?

A: The Evergreen 586 has three jumpers: Cache setting (WB-WT [default]), Clock setting (4x/2x [default]-3x), OverDrive socket setting (ovrdrv-normal [default]). In most cases the default settings are sufficient. In some cases it may be helpful to change jumpers on the upgrade.
You may want to make changes to bus speed or processor type on your motherboard in order to utilize the full power of the upgrade.

Q: What warranty is offered for the Evergreen 586?

A: Evergreen offers a limited lifetime warranty for the Evergreen 586.

Q: How do I contact technical support?

A: Evergreen offers technical support via its web site, email, fax and telephone; 7 days a week from 6 a.m. to 6 p.m. PST. Fax: 541.752.9851
Email: techsupport@evertech.com
Fax: 541 752 9851
Phone 541 757 7341

Q: What is your return policy?

A: The return policy is the set by your reseller. If you have any concerns regarding limitations on returning a product, you should inquire about the return policy of your reseller before purchasing.

Q: Where can I buy the Evergreen 586? At what price can I buy your upgrade?
A: Please contact a reseller or distributor for updated information or call our sales department (541)-757-0934.

Technical

Q: How much cache memory does the Evergreen 586 have?
A: The Evergreen 586 has 16KB of L1 cache (internal cache).

Q: Does the Evergreen 586 include a coprocessor?
A: The processor used in the Evergreen 586 has a math coprocessor, also known as an FPU (Floating Point Unit).

Q: What voltage does the upgrade require?
A: The Evergreen 586 requires 5V.

Q: What happens if I have a lower voltage than 5V for my old processor?
A: Some motherboards use 3.45 volt instead of 5. In that case it is necessary to change the voltage setting on the motherboard to 5V. This may be the case for DX4-100, DX2-80 and DX4-75 processors.

Q: What does clock tripling and quadrupling mean?
A: The processor uses the system bus speed to determine its internal speed. If your bus speed is 16, 20, 25 or 33 MHz, the Evergreen 586 will quadruple this speed and run at 64, 80, 100 or 133 MHz. For a bus speed of 40 MHz, it will triple the bus speed and run at 120 MHz. To enable clock tripling set the jumper from "4x" (default) to "3x".

Q: What is the system bus speed?
A: The bus speed is the speed that is used for the data/information exchange between the system components. Generally, the bus speed is included in your model specification (e.g. 486DX-33 equals a bus speed of 33 MHz). More advanced 486 processors, such as DX2 or DX4 processors, implemented clock multiplying (e.g. 486 DX2-66 equals a bus speed of 33 MHz with clock doubling).

Q: Can I change my bus speed?
A: Most motherboards give you the choice of changing bus speeds. Generally, bus speeds of 16, 20, 25, 33, 40 or 50 MHz are available.

Q: What is the best bus speed for the upgrade?
A: If you can change the bus speed on your motherboard, the best choice is either 33 MHz or 40 MHz.

Q: Why is my BIOS still reporting a 486 processor?
A: The BIOS is only capable of reporting processors, which were available at the time the BIOS was programmed and installed in the computer. After upgrading your system's processor to the Evergreen 586, you might expect to see the system BIOS report your new processor as being a 586 processor. In most system BIOSs, the processor identification routines were written before 586 technology was developed. These systems will realize the speed increase, but will not label the processor as a 586.

Q: Do I have to update my operating system?
A: No.

For any further questions please feel free to contact
    Customer Service: (541)-757-0934
    Tech-Support: (541)-757-7341