

## 2.4.26 doesn't boot on a 386 without "Unsynced TSC support"

*Source:* <http://linux.derkeiler.com/Mailing-Lists/Kernel/2004-07/5491.html>

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To: [linux-kernel@vger.kernel.org](mailto:linux-kernel@vger.kernel.org)

Hi,

I tried to boot 2.4.26 on my good old 386 board, but got a kernel panic:

CPU: 386

Kernel panic: Kernel compiled for Pentium+, requires TSC feature!

The error message comes from the function `check_config()` in `include/asm-i386/bugs.h` (thanks to wli for figuring out faster than I did).

I am sure I selected support for a 80386 CPU, so the error message looks wrong to me. `CONFIG_M586TSC` is not set, but `CONFIG_X86_TSC` is enabled by default. The only way to disable it, is to enable "Unsynced TSC support", (`CONFIG_X86_TSC_DISABLE`).

The help for `CONFIG_X86_TSC_DISABLE` mentions to use it for "NUMA mult-mode boxes, laptops and other systems suffering from unsynced TSCs or TSC drift, which can cause `gettimeofday` to return non-monotonic values." A simple 80386 board doesn't belong to these, and I can't remember having problems with `gettimeofday()` in the past (IIRC the board last ran linux-1.2 or 2.0).

My question is: is this a code bug, or a documentation bug? Right now, I guess 2.4.26 will not run on anything < Pentium without `CONFIG_X86_TSC_DISABLE` enabled.

Erik

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## Linux–Kernel: 2.4.26 doesn't boot on a 386 without "Unsynced TSC support"

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