

Re: Variations on XTAL clock frequency

Source: <http://coding.derkeiler.com/Archive/General/comp.arch.embedded/2005-02/1552.html>

From: MC (*MC_at_nonexistant.place*)

Date: 02/26/05

Date: Sun, 27 Feb 2005 09:24:24 +1100

mc wrote:

>> *You're fortunate...*

>> *I've only had one laptop out of 4 that didn't drift in time too much.*

>> *My current one loses about 4 seconds per day., my previous one*

>> *gained about 2 seconds per day.*

>> *The PC battery-backed-up clock system was 'adequate' when it was*

>> *created back in the mid 1980's, but unfortunately that part of*

>> *the PC architecture hasn't changed much since then.*

>

> *Do they use crystals that are much lower-grade than even the cheapest RF*

> *crystals?*

>

> *Ceramic resonators, maybe?*

Who knows ?. Every manufacturer will use what they want at the time.

> *Do they have firmware that is incorrect? Maybe the problem isn't just*

> *frequency.*

It's not a firmware issue, more a situation that the hardware timekeeper is not intended to be super accurate and therefore providing things to make it more accurate (such as temperature control and accurate oscillators) can become expensive.