

A7N8X (Deluxe) Madness

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To: Linux Kernel Mailing List <linux-kernel@vger.kernel.org>

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Hello,

seriously, I'm pretty fed up with it.

I have an ASUS A7N8X Deluxe mainboard. Yeah, right, that thing causing serious trouble. I'm getting hard lockups all the time. No panic, no message, no sysrq, no blinking cursor in the framebuffer. Gone for good.

I went through the mailing list archive and tried out many things. However, this is how far I got:

With 2.6.0-test9, the machine locks up while booting or shortly after. This is clearly connected to high IDE (PATA) load, since it locks up with a 100% chance while doing an fsck. If I managed booting it (which means, if it doesn't do an fsck while booting) I can lock it up immediately by doing a `hdparm -t /dev/hda`. I don't know what SATA load would do on that kernel, I never got that far.

Specifying "noapic nolapic acpi=off noacpi=off" helps, I got no lockups. However, I don't like this, because of the performance flaws (I'll talk about this later).

So, one might suspect: Something between APIC or ACPI (or both) and the IDE controller broken, nothing to fix there, that's life. Right? Wrong. Because:

With 2.4.22-ac4 it actually works **better**. Not absolutely good, but better. I can achieve uptimes up to **several days**. However, it still locks up. Sometimes after several days, sometimes some minutes after booting. But basically I can actually use my computer with 2.4.22-ac4. Strangely, the lockups don't seem to be connected to IDE load with that kernel. When the machine locks up, it simply does, without any apparent cause. I can create as many CPU, disk, network or whatever load I want. All goes fine. Then I leave the computer, the machine staying idle, I come back and it's crashed. I even have the impression, that it only crashes when it has no load at all. Clearly

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spoken, I can't really remember that it locked up when I was sitting in front of the computer. Moving the mouse or typing things seems to create enough load to actually keep it from locking up?!

So, things are totally different between 2.6.0-test9 and 2.4.22-ac4. 2.6.0-test9 doesn't like the slightest IDE load with that mainboard at all. 2.4.22-ac4 doesn't care, runs for hours or for days and then locks up when it just gets bored or something similar.

The solution might look simple: why don't I just use 2.6.0-test9 with the enormous "noapic nolapic acpi=off pci=noacpi" command line? Because then, my SATA performance really is a pain compared to what I can get with 2.4.22-ac4. A simple example with hdparm -t (I tried other things, also, but this already gives a nice example): with 2.4.22-ac4 I get amazing 100 to 110 MB/s on the SATA RAID. With 2.6.0-test9 and the nasty command line, I get at most 40MB/s. To feel the difference, I just have to fire up Oracle and let it do some I/O expensive things.

Has nobody an idea what it could be? That's just strange, both kernels are unstable on that mainboard, but the one is much more stable while locking up in completely different situations.

If that continues like that, I'll begin to feel the urge of hunting ASUS and NVIDIA down.

Well, I hope I could give you some worthy information.

In great despair,
Julien

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