

Re: A7N8X (Deluxe) Madness

Source: <http://linux.derkeiler.com/Mailing-Lists/Kernel/2003-11/1728.html>

From: Josh McKinney (*forming_at_charter.net*)

Date: 11/12/03

Date: Tue, 11 Nov 2003 21:55:07 -0500

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

I thought I would share some of my experiences with the ASUS A7N8X. I just got this mobo last week, so I haven't had a whole lot of time with it nor do I have anything on the SATA controller. 2.6.0-test9-mm2 would crash hard with any IDE activity with APIC and IO-APIC enabled. recompiling the kernel without APIC or IO-APIC but with APCI still enabled and and **no** pci=noacpi on the command line the board is perfectly stable and I see no performance hit with the IDE disks. Here is my /proc/interrupts with the working config:

```
$ cat /proc/interrupts
CPU0
0: 90624732 XT-PIC timer
1: 21404 XT-PIC i8042
2: 0 XT-PIC cascade
5: 35712 XT-PIC ohci_hcd
8: 1 XT-PIC rtc
9: 0 XT-PIC acpi
11: 6930402 XT-PIC nvidia
12: 114340 XT-PIC ehci_hcd, ohci_hcd, eth0, NVidia
    nForce2
14: 887 XT-PIC ide0
15: 133930 XT-PIC ide1
NMI: 0
ERR: 0
```

If there is anything else I could test or anymore info I could give to help track down this problem I would be more than happy to help. I am planning on buying some SATA drives soon and might change my mind if this issue isn't cleared up.

Thanks

On approximately Tue, Nov 11, 2003 at 08:47:38PM +0100, Julien Oster wrote:

```
>
> Hello,
>
> seriously, I'm pretty fed up with it.
```

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>
> *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*
> *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.*

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>
> *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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> *the body of a message to majordomo@vger.kernel.org*
> *More majordomo info at <http://vger.kernel.org/majordomo-info.html>*
> *Please read the FAQ at <http://www.tux.org/lkml/>*

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Linux, the choice of the GNU generation -o) | They that can give up essential liberty
/\ | to obtain a little temporary safety deserve
-_v | neither liberty or safety.
- | -Benjamin Franklin

-
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