

Re: Problems with AMD64 and 8 GB RAM?

Source: <http://unix.derkeiler.com/Mailing-Lists/FreeBSD/stable/2005-03/0869.html>

From: Greg 'groggy' Lehey (grog_at_FreeBSD.org)

Date: 03/31/05

Date: Thu, 31 Mar 2005 14:44:58 +0930

To: Scott Long <scottl@samsco.org>

[gratuitous empty lines removed]

On Wednesday, 30 March 2005 at 21:28:36 -0700, Scott Long wrote:

> Greg 'groggy' Lehey wrote:

>> On Wednesday, 30 March 2005 at 23:01:03 -0500, John Baldwin wrote:

>>

>>> On Mar 30, 2005, at 8:54 PM, Greg 'groggy' Lehey wrote:

>>>

>>>> *lapic0: LINT1 trigger: edge*

>>>> *lapic0: LINT1 polarity: high*

>>>> *lapic1: Routing NMI -> LINT1*

>>>> *lapic1: LINT1 trigger: edge*

>>>> *lapic1: LINT1 polarity: high*

>>>> *-ioapic0 <Version 0.3> irqs 0-23 on motherboard*

>>>> *+ioapic0 <Version 0.0> irqs 0-23 on motherboard*

>>>> *cpu0 BSP:*

>>>> *ID: 0x00000000 VER: 0x00040010 LDR: 0x01000000 DFR: 0x0ffffff*

>>>> *lint0: 0x00010700 lint1: 0x00000400 TPR: 0x00000000 SVR: 0x000001ff*

>>>

>>> *This shows that in the - case the APIC is broken somehow (0.0 isn't a*

>>> *valid I/O APIC version).*

>>

>> *You mean the + case, I suppose. Yes, that's what I suspected.*

>>

>>> *It would seem that the system has mapped RAM over top of the I/O*

>>> *APIC perhaps?*

>>

>> *That's what I suspected too, but imp doesn't think so.*

>

> *I'd be more inclined to believe that there is an erroneous mapping*

> *by the OS, not that things are fundamentally broken in hardware.*

Agreed. This has been my favourite hypothesis all along. But isn't that what jhb is saying?

freebsd-stable: Re: Problems with AMD64 and 8 GB RAM?

- > *Your SMAP table shows everything correctly. It's becoming hard to*
- > *break through your pre-concieved notions here and explain how things*
- > *actually work.*

No, there's nothing to break through. I think you're just having problems

1. expressing yourself, and
2. understanding what I'm saying.

I have no preconceived notions. All I can see here is an antagonistic attitude on your part. What's the problem? You'll recall from my first message that I asked for suggestions about how to approach the issue. jhb provided some; you haven't so far. From what you've written, it's unclear whether you disagree with jhb or not. If you do, why? If you don't, what's your point here?

- >>> *It would be interesting to see the contents of your MADT to see if*
- >>> *it's trying to use a 64-bit PA for your APIC.*
- >>
- >> *Any suggestions about how to do so?*
- >
- > *man acpidump*

How do you run that on a system that won't boot?

Greg

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See complete headers for address and phone numbers.

-
- application/pgp-signature attachment: stored