

Re: [PATCH][INCOMPLETE] sata_nv: merge ADMA support

Source: <http://linux.derkeiler.com/Mailing-Lists/Kernel/2006-06/msg02527.html>

- *From:* "Bill Rugolsky Jr." <bill@xxxxxxxxxxxx>
 - *Date:* Fri, 9 Jun 2006 11:32:12 -0400
-

On Wed, Jun 07, 2006 at 03:09:31PM -0700, Dan Carpenter wrote:

Bill Rugolsky Jr. <bill@xxxxxxxxxxxx> wrote:

Here is an incomplete attempt to get the sata_nv ADMA code working.

I made another pass through my merge of the sata_nv driver to fix and clean up a few things. I've only made the minimal changes necessary to get it into a testable state; methinks it could do with a lot of refactoring and cleanup, instead of all the "if (host->...host_type == ADMA)" tests.

Did you ever figure this out?

It looks like you're mixing two completely separate bugs. The ata timeouts and the lost ticks messages.

BIOS Information
Vendor: Phoenix Technologies Ltd.
Version: 2004Q3
Release Date: 10/12/2005

This is causing the sata failures:
https://bugzilla.redhat.com/bugzilla/show_bug.cgi?id=190856
Downgrade to match your other system (version 1.01). That will fix the ata timeouts at least.

Interesting; I still have one such machine set aside for testing purposes, so I can give that a try; in my limited testing, ADMA didn't exhibit the same long latencies.

I'm just rolling up a 2.6.17 kernel patchset, so I'll pull in Jeff's

Re: [PATCH][INCOMPLETE] sata_nv: merge ADMA support

sata_nv branch and give it a try; the patch queue is long though, so it will probably be sometime next week.

I'm still interested in the lost ticks messages though...

My workaround has been to just use John Stultz's new timekeeping code (actually the variant in Thomas Gleixner's hrtimers rollup -- <http://tgx.de/projects/hrtimers/>). Our PostgreSQL servers now maintain sub-millisecond NTP offsets, whereas previously they would drift 100+ms away, lose sync, and require an NTP restart every day or so.

John wrote the other day:

With the current code in -mm I can run a test app that disables interrupts for 2 seconds at a time over and over and I'm still keeping synched w/ an NTP server within 30 microseconds.

The patches in -mm are set to be merged in 2.6.18-rc1, so I have no qualms about including them in my internal 2.6.17 patchset.

Kudos to John, Thomas, Ingo, and others who have worked on the new timekeeping code. This is yet another area where work on the -rt kernel benefits everyone in a measurable way.

-Bill

-

To unsubscribe from this list: send the line "unsubscribe linux-kernel" in the body of a message to majordomo@xxxxxxxxxxxxxxxxx

More majordomo info at <http://vger.kernel.org/majordomo-info.html>

Please read the FAQ at <http://www.tux.org/lkml/>

Re: [PATCH][INCOMPLETE] sata_nv: merge ADMA support