

IDE ultraDMA problem (hackers WAS via IDE controller problem) – SOLVED !!

Source: <http://unix.derkeiler.com/Mailing-Lists/FreeBSD/questions/2007-08/msg00740.html>

- *From:* Mario Lobo <mario.lopez@xxxxxxxxxxxx>
 - *Date:* Sat, 11 Aug 2007 16:11:21 +0000
-

*** Re-cap of problem:

FreeBSD 6.2-STABLE was not recognizing the VT8237A south bridge ultraDMA ata controller on a P5VD2-X ASUS mobo.

<snip>

```
FreeBSD/SMP: Multiprocessor System Detected: 2 CPUs
cpu0 (BSP): APIC ID: 0
cpu1 (AP): APIC ID: 1
ioapic0: Changing APIC ID to 4
ioapic0 <Version 0.3> irqs 0-23 on motherboard
ioapic1 <Version 0.3> irqs 24-47 on motherboard
kbd1 at kbdmux0
ath_hal: 0.9.20.3 (AR5210, AR5211, AR5212, RF5111, RF5112, RF2413, RF5413)
acpi0: <AWARD ASUSACPI> on motherboard
acpi_hpet0: <High Precision Event Timer> iomem 0xfe800000-0xfe8003ff on acpi0
Timecounter "HPET" frequency 14318180 Hz quality 2000
acpi0: Power Button (fixed)
acpi0: reservation of fe800000, 100 (3) failed
Timecounter "ACPI-fast" frequency 3579545 Hz quality 1000
acpi_timer0: <24-bit timer at 3.579545MHz> port 0x408-0x40b on acpi0
cpu0: <ACPI CPU> on acpi0
cpu1: <ACPI CPU> on acpi0
acpi_button0: <Power Button> on acpi0
acpi_button1: <Sleep Button> on acpi0
pcib0: <ACPI Host-PCI bridge> port 0xcf8-0xcff on acpi0
pci0: <ACPI PCI bus> on pcib0
pcib1: <PCI-PCI bridge> at device 1.0 on pci0
pci1: <PCI bus> on pcib1
pcib2: <ACPI PCI-PCI bridge> irq 27 at device 2.0 on pci0
pci2: <ACPI PCI bus> on pcib2
nvidia0: <GeForce 7100 GS> mem
0xdc000000-0xdcffffff,0xc0000000-0xcfffffff,0xdd000000-0xddffffff irq 24 at
device 0.0 on pci2
nvidia0: [GIANT-LOCKED]
atapci0: <GENERIC ATA controller> port
0x1f0-0x1f7,0x3f6,0x170-0x177,0x376,0xfc00-0xfc0f at device 15.0 on pci0
```

IDE ultraDMA problem (hackers WAS via IDE controller problem) – SOLVED !!

```
ata0: <ATA channel 0> on atapci0
ata1: <ATA channel 1> on atapci0
```

<snip>

*** end of recap

pciconf -lv gave me this clue:

```
atapci0@pci0:15:0: class=0x01018a card=0x81cf1043 chip=0x53371106 rev=0x07
hdr=0x00
vendor = 'VIA Technologies Inc'
class = mass storage
subclass = ATA
```

after a long, long search, I found that chip id 0x53371106 belongs to SATA150 controller, not PATA !! Then I enabled all mass storage controllers on the board (although no SATA drives present), then two more ids showed up:

```
chip=0x016a10de (jmicron SATA300)
chip=0x05711106 <- thats it !!
```

Then I went into /usr/src/sys/dev/ata/ata-pci.h and changed the line

```
from
#define ATA_VIA8237A 0x05911106
to
#define ATA_VIA8237A 0x05711106
```

recompiled, install and BANG!

<snip>

```
nvidia0: <GeForce 7100 GS> mem
0xdc000000-0xdcffffff,0xc0000000-0xcfffffff,0xdd000000-0xddffffff irq 24 at
device 0.0 on pci2
nvidia0: [GIANT-LOCKED]
pcib3: <ACPI PCI-PCI bridge> irq 31 at device 3.0 on pci0
pci3: <ACPI PCI bus> on pcib3
atapci0: <JMicron JMB363 SATA300 controller> port
0xcc00-0xcc07,0xc800-0xc803,0xc400-0xc407,0xc000-0xc003,0xbc00-0xbc0f mem
0xdfefe000-0xdfefffff irq 28 at device 0.0 on pci3
atapci0: AHCI Version 01.00 controller with 2 ports detected
ata2: <ATA channel 0> on atapci0
ata3: <ATA channel 1> on atapci0
ata4: <ATA channel 2> on atapci0
atapci1: <VIA 8237A SATA150 controller> port
0xfc00-0xfc07,0xf800-0xf803,0xf400-0xf407,0xf000-0xf003,0xec00-0xec0f,0xe800-0xe8ff
irq 21 at device 15.0 on pci0
ata5: <ATA channel 0> on atapci1
ata6: <ATA channel 1> on atapci1
atapci2: <VIA 8237A UDMA133 controller> port
```

IDE ultraDMA problem (hackers WAS via IDE controller problem) – SOLVED !!

IDE ultraDMA problem (hackers WAS via IDE controller problem) – SOLVED !!

```
0x1f0-0x1f7,0x3f6,0x170-0x177,0x376,0xe400-0xe40f at device 15.1 on pci0
ata0: <ATA channel 0> on atapci2
ata1: <ATA channel 1> on atapci2
<snip>
ad0: 114498MB <SAMSUNG SP1203N TL100-23> at ata0-master UDMA100
ad1: 117246MB <Maxtor 6Y120L0 YAR41VW0> at ata0-slave UDMA133
ad2: 76351MB <SAMSUNG SP0802N TK100-23> at ata1-master UDMA133
acd0: DVDR <HL-DT-ST DVDROM GSA-4160B/A304> at ata1-slave UDMA66
<snip>
```

Normal life returned :-D

I dont know if this fix applies to ALL mobos that use VIA chipset (VT8237A)
but it shure did to my ASUS mobo

Thanks Wojciech Puchar and Sten Daniel Soersdal for your kind attention.

—

```
*****
//|//| Mario Lobo
//||| http://www.ipad.com.br
//||| FreeBSD since 2.2.8 – 100% Rwindows-free
*****
```

freebsd-questions@xxxxxxxxxxx mailing list

<http://lists.freebsd.org/mailman/listinfo/freebsd-questions>

To unsubscribe, send any mail to "freebsd-questions-unsubscribe@xxxxxxxxxxx"