

P4 HT with SMP kernel, FreeBSD 5.2.1-p4 problem

Source: <http://unix.derkeiler.com/Mailing-Lists/FreeBSD/hackers/2004-04/0023.html>

From: Claudiu Dragalina-Paraipan (*clau_at_reversedhell.net*)

Date: 04/01/04

Date: Thu, 01 Apr 2004 22:17:20 +0300

To: freebsd-hackers@freebsd.org

Hello,

I have a Pentium 4 2.8E (with HT), and an Intel 865GBF motherboard. After I made a bios upgrade I have this problem with it: every time I do a reboot or a shutdown the kernel hangs. Sometimes it gives a specific error message, sometimes the last lines of text are garbage, and rarely it just resets before it should.

Seems that it happens before the file system is unmounted, because every next boot I have problems with it. Until now I didn't lose any important file, but I assume that this can happen giving this situation.

Also, this does not happen if I compile a kernel without SMP support, or if I disable HT from bios (with SMP or not).

Running a kernel with INVARIANTS and WITNESS seems to fix this problem too.

I have attached a dmesg result after a boot -v.

Please let me know what other informations you need for solving this situation.

With respect,

--

Claudiu Dragalina-Paraipan
Reversed Hell Networks / reversedhell.net
e-mail: clau@reversedhell.net
GPG KeyID: BFACC244 (9F07 2B86 7965 B9A8 9AAB 1BEA 9B41 56C5 BFAC C244)
gpg --keyserver gpg.mit.edu --recv-keys BFACC244

Copyright (c) 1992-2004 The FreeBSD Project.

Copyright (c) 1979, 1980, 1983, 1986, 1988, 1989, 1991, 1992, 1993, 1994

The Regents of the University of California. All rights reserved.

FreeBSD 5.2.1-RELEASE-p4 #43: Thu Apr 1 21:15:02 EEST 2004

root@oxygen:/usr/obj/usr/src/sys/OXYGEN

Preloaded elf kernel "/boot/kernel/kernel" at 0xc0766000.

Preloaded elf module "/boot/kernel/acpi.ko" at 0xc0766278.

Table 'FACP' at 0xef30200

Table 'APIC' at 0xef30300

MADT: Found table at 0xef30300
MP Configuration Table version 1.4 found at 0xc00fca70
APIC: Using the MADT enumerator.
MADT: Found CPU APIC ID 0 ACPI ID 1: enabled
SMP: Added CPU 0 (AP)
MADT: Found CPU APIC ID 1 ACPI ID 2: enabled
SMP: Added CPU 1 (AP)
ACPI APIC Table: <INTEL D865GBF >
Calibrating clock(s) ... i8254 clock: 1193118 Hz
CLK_USE_I8254_CALIBRATION not specified - using default frequency
Timecounter "i8254" frequency 1193182 Hz quality 0
Calibrating TSC clock ... TSC clock: 2793198625 Hz
CPU: Intel(R) Pentium(R) 4 CPU 2.80GHz (2793.20-MHz 686-class CPU)
Origin = "GenuineIntel" Id = 0xf33 Stepping = 3
Features=0xbfefbf<FPU,VME,DE,PSE,TSC,MSR,PAE,MCE,CX8,APIC,SEP,MTRR,PGE,MCA,CMOV,PAT,PSI
Hyperthreading: 2 logical CPUs
real memory = 250802176 (239 MB)
Physical memory chunk(s):
0x0000000000001000 - 0x000000000009efff, 647168 bytes (158 pages)
0x0000000000100000 - 0x00000000003fffff, 3145728 bytes (768 pages)
0x0000000000829000 - 0x0000000000ead3fff, 237678592 bytes (58027 pages)
avail memory = 238174208 (227 MB)
APIC ID: physical 0, logical 0:0
APIC ID: physical 1, logical 0:1
FreeBSD/SMP: Multiprocessor System Detected: 2 CPUs
cpu0 (BSP): APIC ID: 0
cpu1 (AP): APIC ID: 1
bios32: Found BIOS32 Service Directory header at 0xc00f0000
bios32: Entry = 0xf0010 (c00f0010) Rev = 0 Len = 1
pcbios: PCI BIOS entry at 0xf0000+0x31
pnpbios: Found PnP BIOS data at 0xc00f3e80
pnpbios: Entry = f000:44aa Rev = 1.0
Other BIOS signatures found:
APIC: CPU 0 has ACPI ID 1
APIC: CPU 1 has ACPI ID 2
MADT: Found IO APIC ID 2, Vector 0 at 0xfec00000
ioapic0: intpin 0 -> ExtINT (edge, activehi)
ioapic0: intpin 1 -> irq 1 (edge, activehi)
ioapic0: intpin 2 -> irq 2 (edge, activehi)
ioapic0: intpin 3 -> irq 3 (edge, activehi)
ioapic0: intpin 4 -> irq 4 (edge, activehi)
ioapic0: intpin 5 -> irq 5 (edge, activehi)
ioapic0: intpin 6 -> irq 6 (edge, activehi)
ioapic0: intpin 7 -> irq 7 (edge, activehi)
ioapic0: intpin 8 -> irq 8 (edge, activehi)
ioapic0: intpin 9 -> irq 9 (edge, activehi)
ioapic0: intpin 10 -> irq 10 (edge, activehi)
ioapic0: intpin 11 -> irq 11 (edge, activehi)
ioapic0: intpin 12 -> irq 12 (edge, activehi)
ioapic0: intpin 13 -> irq 13 (edge, activehi)
ioapic0: intpin 14 -> irq 14 (edge, activehi)

```
ioapic0: intpin 15 -> irq 15 (edge, activehi)
ioapic0: intpin 16 -> irq 16 (level, activelo)
ioapic0: intpin 17 -> irq 17 (level, activelo)
ioapic0: intpin 18 -> irq 18 (level, activelo)
ioapic0: intpin 19 -> irq 19 (level, activelo)
ioapic0: intpin 20 -> irq 20 (level, activelo)
ioapic0: intpin 21 -> irq 21 (level, activelo)
ioapic0: intpin 22 -> irq 22 (level, activelo)
ioapic0: intpin 23 -> irq 23 (level, activelo)
lapic0: Routing NMI -> LINT1
lapic1: Routing NMI -> LINT1
MADT: intr override: source 0, irq 2
ioapic0: Routing IRQ 0 -> intpin 2
ioapic0: intpin 2 trigger: edge
ioapic0: intpin 2 polarity: active-hi
MADT: intr override: source 9, irq 9
ioapic0: intpin 9 trigger: level
ioapic0: intpin 9 polarity: active-hi
ioapic0 <Version 2.0> irqs 0-23 on motherboard
cpu0 BSP:
  ID: 0x00000000 VER: 0x00050014 LDR: 0x01000000 DFR: 0x0fffffff
  lint0: 0x00010700 lint1: 0x00000400 TPR: 0x00000000 SVR: 0x000001ff
null: <null device, zero device>
random: <entropy source>
mem: <memory & I/O>
Pentium Pro MTRR support enabled
npx0: [FAST]
npx0: <math processor> on motherboard
npx0: INT 16 interface
acpi0: <INTEL D865GBF > on motherboard
pci_open(1): mode 1 addr port (0x0cf8) is 0x80000094
pci_open(1a): mode1res=0x80000000 (0x80000000)
pci_cfgcheck: device 0 [class=060000] [hdr=00] is there (id=25708086)
pcibios: BIOS version 2.10
Using $PIR table, 12 entries at 0xc00f3d30
PCI-Only Interrupts: none
Location Bus Device Pin Link IRQs
embedded 0 0 A 0x60 3 4 5 6 7 9 10 11 12 14 15
embedded 0 0 B 0x61 3 4 5 6 7 9 10 11 12 14 15
embedded 0 2 A 0x60 3 4 5 6 7 9 10 11 12 14 15
embedded 0 1 A 0x62 3 4 5 6 7 9 10 11 12 14 15
embedded 1 8 A 0x68 3 4 5 6 7 9 10 11 12 14 15
embedded 0 31 A 0x62 3 4 5 6 7 9 10 11 12 14 15
embedded 0 31 B 0x61 3 4 5 6 7 9 10 11 12 14 15
embedded 0 29 A 0x60 3 4 5 6 7 9 10 11 12 14 15
embedded 0 29 B 0x63 3 4 5 6 7 9 10 11 12 14 15
embedded 0 29 C 0x62 3 4 5 6 7 9 10 11 12 14 15
embedded 0 29 D 0x6b 3 4 5 6 7 9 10 11 12 14 15
slot 1 1 0 A 0x69 3 4 5 6 7 9 10 11 12 14 15
slot 1 1 0 B 0x6a 3 4 5 6 7 9 10 11 12 14 15
slot 1 1 0 C 0x6b 3 4 5 6 7 9 10 11 12 14 15
```

```
slot 1 1 0 D 0x68 3 4 5 6 7 9 10 11 12 14 15
slot 2 1 1 A 0x6a 3 4 5 6 7 9 10 11 12 14 15
slot 2 1 1 B 0x69 3 4 5 6 7 9 10 11 12 14 15
slot 2 1 1 C 0x68 3 4 5 6 7 9 10 11 12 14 15
slot 2 1 1 D 0x6b 3 4 5 6 7 9 10 11 12 14 15
slot 3 1 2 A 0x61 3 4 5 6 7 9 10 11 12 14 15
slot 3 1 2 B 0x62 3 4 5 6 7 9 10 11 12 14 15
slot 3 1 2 C 0x63 3 4 5 6 7 9 10 11 12 14 15
slot 3 1 2 D 0x60 3 4 5 6 7 9 10 11 12 14 15
slot 4 1 3 A 0x63 3 4 5 6 7 9 10 11 12 14 15
slot 4 1 3 B 0x62 3 4 5 6 7 9 10 11 12 14 15
slot 4 1 3 C 0x69 3 4 5 6 7 9 10 11 12 14 15
slot 4 1 3 D 0x6a 3 4 5 6 7 9 10 11 12 14 15
slot 5 1 4 A 0x62 3 4 5 6 7 9 10 11 12 14 15
slot 5 1 4 B 0x6b 3 4 5 6 7 9 10 11 12 14 15
slot 5 1 4 C 0x60 3 4 5 6 7 9 10 11 12 14 15
slot 5 1 4 D 0x68 3 4 5 6 7 9 10 11 12 14 15
slot 6 1 5 A 0x61 3 4 5 6 7 9 10 11 12 14 15
slot 6 1 5 B 0x68 3 4 5 6 7 9 10 11 12 14 15
slot 6 1 5 C 0x6a 3 4 5 6 7 9 10 11 12 14 15
slot 6 1 5 D 0x69 3 4 5 6 7 9 10 11 12 14 15
AcpiOsDerivePciId: bus 0 dev 31 func 0
acpi0: Power Button (fixed)
ACPI timer looks GOOD min = 3, max = 3, width = 0
ACPI timer looks GOOD min = 3, max = 4, width = 1
ACPI timer looks GOOD min = 3, max = 3, width = 0
ACPI timer looks GOOD min = 3, max = 3, width = 0
ACPI timer looks GOOD min = 3, max = 3, width = 0
ACPI timer looks GOOD min = 3, max = 3, width = 0
ACPI timer looks GOOD min = 3, max = 3, width = 0
ACPI timer looks GOOD min = 3, max = 3, width = 0
ACPI timer looks GOOD min = 3, max = 4, width = 1
ACPI timer looks GOOD min = 3, max = 3, width = 0
Timecounter "ACPI-fast" frequency 3579545 Hz quality 1000
acpi_timer0: <24-bit timer at 3.579545MHz> port 0x408-0x40b on acpi0
acpi_cpu0: <CPU> on acpi0
acpi_cpu1: <CPU> on acpi0
acpi_cpu1: Failed to attach throttling P_CNT
pcib0: <ACPI Host-PCI bridge> port 0xcf8-0xcff on acpi0
---- initial configuration -----
---- before setting priority for links -----
---- before fixup boot-disabled links -----
---- after fixup boot-disabled links -----
---- arbitrated configuration -----
pci0: <ACPI PCI bus> on pcib0
pci0: physical bus=0
map[10]: type 3, range 32, base f8000000, size 26, enabled
found-> vendor=0x8086, dev=0x2570, revid=0x02
bus=0, slot=0, func=0
class=06-00-00, hdrtype=0x00, mfdev=0
cmdreg=0x0106, statreg=0x2090, cachelsz=0 (dwords)
```

freebsd-hackers: P4 HT with SMP kernel, FreeBSD 5.2.1-p4 problem

lattimer=0x00 (0 ns), mingnt=0x00 (0 ns), maxlat=0x00 (0 ns)
map[10]: type 3, range 32, base f0000000, size 27, enabled
map[14]: type 1, range 32, base ffa80000, size 19, enabled
map[18]: type 4, range 32, base 0000ec00, size 3, enabled
pcib0: matched entry for 0.2.INTA (source)
pcib0: device is hardwired to IRQ 16
found-> vendor=0x8086, dev=0x2572, revid=0x02
bus=0, slot=2, func=0
class=03-00-00, hdrtype=0x00, mfdev=0
cmdreg=0x0007, statreg=0x0090, cachelsz=0 (dwords)
lattimer=0x00 (0 ns), mingnt=0x00 (0 ns), maxlat=0x00 (0 ns)
intpin=a, irq=16
powerspec 1 supports D0 D3 current D0
map[20]: type 4, range 32, base 0000c800, size 5, enabled
pcib0: matched entry for 0.29.INTA (source)
pcib0: device is hardwired to IRQ 16
found-> vendor=0x8086, dev=0x24d2, revid=0x02
bus=0, slot=29, func=0
class=0c-03-00, hdrtype=0x00, mfdev=1
cmdreg=0x0005, statreg=0x0280, cachelsz=0 (dwords)
lattimer=0x00 (0 ns), mingnt=0x00 (0 ns), maxlat=0x00 (0 ns)
intpin=a, irq=16
map[20]: type 4, range 32, base 0000cc00, size 5, enabled
pcib0: matched entry for 0.29.INTB (source)
pcib0: device is hardwired to IRQ 19
found-> vendor=0x8086, dev=0x24d4, revid=0x02
bus=0, slot=29, func=1
class=0c-03-00, hdrtype=0x00, mfdev=0
cmdreg=0x0005, statreg=0x0280, cachelsz=0 (dwords)
lattimer=0x00 (0 ns), mingnt=0x00 (0 ns), maxlat=0x00 (0 ns)
intpin=b, irq=19
map[20]: type 4, range 32, base 0000d000, size 5, enabled
pcib0: matched entry for 0.29.INTC (source)
pcib0: device is hardwired to IRQ 18
found-> vendor=0x8086, dev=0x24d7, revid=0x02
bus=0, slot=29, func=2
class=0c-03-00, hdrtype=0x00, mfdev=0
cmdreg=0x0005, statreg=0x0280, cachelsz=0 (dwords)
lattimer=0x00 (0 ns), mingnt=0x00 (0 ns), maxlat=0x00 (0 ns)
intpin=c, irq=18
map[20]: type 4, range 32, base 0000d400, size 5, enabled
pcib0: matched entry for 0.29.INTA (source)
pcib0: device is hardwired to IRQ 16
found-> vendor=0x8086, dev=0x24de, revid=0x02
bus=0, slot=29, func=3
class=0c-03-00, hdrtype=0x00, mfdev=0
cmdreg=0x0005, statreg=0x0280, cachelsz=0 (dwords)
lattimer=0x00 (0 ns), mingnt=0x00 (0 ns), maxlat=0x00 (0 ns)
intpin=a, irq=16
found-> vendor=0x8086, dev=0x244e, revid=0xc2
bus=0, slot=30, func=0

freebsd-hackers: P4 HT with SMP kernel, FreeBSD 5.2.1-p4 problem

```
class=06-04-00, hdrtype=0x01, mfdev=0
cmdreg=0x0107, statreg=0x0080, cachelsz=0 (dwords)
lattimer=0x00 (0 ns), mingnt=0x06 (1500 ns), maxlat=0x02 (500 ns)
found-> vendor=0x8086, dev=0x24d0, revid=0x02
bus=0, slot=31, func=0
class=06-01-00, hdrtype=0x00, mfdev=1
cmdreg=0x010f, statreg=0x0280, cachelsz=0 (dwords)
lattimer=0x00 (0 ns), mingnt=0x00 (0 ns), maxlat=0x00 (0 ns)
map[10]: type 4, range 32, base 00000000, size 3, enabled
map[14]: type 4, range 32, base 00000000, size 2, enabled
map[18]: type 4, range 32, base 00000000, size 3, enabled
map[1c]: type 4, range 32, base 00000000, size 2, enabled
map[20]: type 4, range 32, base 0000ffa0, size 4, enabled
found-> vendor=0x8086, dev=0x24db, revid=0x02
bus=0, slot=31, func=1
class=01-01-8a, hdrtype=0x00, mfdev=0
cmdreg=0x0005, statreg=0x0280, cachelsz=0 (dwords)
lattimer=0x00 (0 ns), mingnt=0x00 (0 ns), maxlat=0x00 (0 ns)
intpin=a, irq=255
map[10]: type 4, range 32, base 0000e800, size 3, enabled
map[14]: type 4, range 32, base 0000e400, size 2, enabled
map[18]: type 4, range 32, base 0000e000, size 3, enabled
map[1c]: type 4, range 32, base 0000dc00, size 2, enabled
map[20]: type 4, range 32, base 0000d800, size 4, enabled
pcib0: matched entry for 0.31.INTA (source )
pcib0: device is hardwired to IRQ 18
found-> vendor=0x8086, dev=0x24d1, revid=0x02
bus=0, slot=31, func=2
class=01-01-8f, hdrtype=0x00, mfdev=0
cmdreg=0x0005, statreg=0x02a0, cachelsz=0 (dwords)
lattimer=0x00 (0 ns), mingnt=0x00 (0 ns), maxlat=0x00 (0 ns)
intpin=a, irq=18
map[20]: type 4, range 32, base 0000c400, size 5, enabled
pcib0: matched entry for 0.31.INTB (source )
pcib0: device is hardwired to IRQ 17
found-> vendor=0x8086, dev=0x24d3, revid=0x02
bus=0, slot=31, func=3
class=0c-05-00, hdrtype=0x00, mfdev=0
cmdreg=0x0001, statreg=0x0280, cachelsz=0 (dwords)
lattimer=0x00 (0 ns), mingnt=0x00 (0 ns), maxlat=0x00 (0 ns)
intpin=b, irq=17
map[18]: type 1, range 32, base ffa7fc00, size 9, enabled
map[1c]: type 1, range 32, base ffa7f800, size 8, enabled
pcib0: matched entry for 0.31.INTB (source )
pcib0: device is hardwired to IRQ 17
found-> vendor=0x8086, dev=0x24d5, revid=0x02
bus=0, slot=31, func=5
class=04-01-00, hdrtype=0x00, mfdev=0
cmdreg=0x0006, statreg=0x0290, cachelsz=0 (dwords)
lattimer=0x00 (0 ns), mingnt=0x00 (0 ns), maxlat=0x00 (0 ns)
intpin=b, irq=17
```

freebsd-hackers: P4 HT with SMP kernel, FreeBSD 5.2.1-p4 problem

```
powerspec 2 supports D0 D3 current D0
agp0: <Intel 82865G (865G GMCH) SVGA controller> port 0xec00-0xec07 mem
0xffa80000-0xffafffff,0xf0000000-0xf7ffffff irq 16 at device 2.0 on pci0
agp0: detected 16252k stolen memory
agp0: aperture size is 128M
pci0: <serial bus, USB> at device 29.0 (no driver attached)
pci0: <serial bus, USB> at device 29.1 (no driver attached)
pci0: <serial bus, USB> at device 29.2 (no driver attached)
pci0: <serial bus, USB> at device 29.3 (no driver attached)
pcib1: <ACPI PCI-PCI bridge> at device 30.0 on pci0
pcib1: secondary bus 1
pcib1: subordinate bus 1
pcib1: I/O decode 0xb000-0xbfff
pcib1: memory decode 0xff800000-0xff8fffff
pcib1: prefetched decode 0xffff0000-0xfffff
---- initial configuration -----
---- before setting priority for links -----
---- before fixup boot-disabled links -----
---- after fixup boot-disabled links -----
---- arbitrated configuration -----
pci1: <ACPI PCI bus> on pcib1
pci1: physical bus=1
    map[10]: type 4, range 32, base 0000b800, size 8, enabled
    map[14]: type 1, range 32, base ff8ffc00, size 8, enabled
pcib1: matched entry for 1.5.INTA (source )
pcib1: device is hardwired to IRQ 17
found-> vendor=0x1113, dev=0x1211, revid=0x10
    bus=1, slot=5, func=0
    class=02-00-00, hdrtype=0x00, mfdev=0
    cmdreg=0x0107, statreg=0x0290, cachelsz=0 (dwords)
    lattimer=0x20 (960 ns), mingnt=0x20 (8000 ns), maxlat=0x40 (16000 ns)
    intpin=a, irq=17
    powerspec 2 supports D0 D1 D2 D3 current D0
pcib1: device r10 requested decoded I/O range 0xb800-0xb8ff
r10: <Accton MPX 5030/5038 10/100BaseTX> port 0xb800-0xb8ff mem 0xff8ffc00-0xff8ffcff irq 17 at
device 5.0 on pci1
pcib1: device r10 requested decoded I/O range 0xb800-0xb8ff
r10: Ethernet address: 00:10:b5:87:62:d3
miibus0: <MII bus> on r10
r1phy0: <RealTek internal media interface> on miibus0
r1phy0: 10baseT, 10baseT-FDX, 100baseTX, 100baseTX-FDX, auto
r10: bpf attached
isab0: <PCI-ISA bridge> at device 31.0 on pci0
isa0: <ISA bus> on isab0
atapci0: <Intel ICH5 UDMA100 controller> port 0xffa0-0xffaf,0-0x3,0-0x7,0-0x3,0-0x7 at device 31.1 on
pci0
ata0: reset tp1 mask=03 ostat0=50 ostat1=00
ata0-master: stat=0x50 err=0x01 lsb=0x00 msb=0x00
ata0-slave: stat=0x00 err=0x01 lsb=0x00 msb=0x00
ata0: reset tp2 mask=03 stat0=50 stat1=00 devices=0x1<ATA_MASTER>
ata0: at 0x1f0 irq 14 on atapci0
```

```
ata0: [MPSAFE]
ata1: reset tp1 mask=03 ostat0=50 ostat1=00
ata1-master: stat=0x00 err=0x01 lsb=0x14 msb=0xeb
ata1-slave: stat=0x00 err=0x00 lsb=0x00 msb=0x00
ata1: reset tp2 mask=03 stat0=00 stat1=00 devices=0x4<ATAPI_MASTER>
ata1: at 0x170 irq 15 on atapci0
ata1: [MPSAFE]
atapci1: <Intel ICH5 SATA150 controller> port
0xd800-0xd80f,0xdc00-0xdc03,0xe000-0xe007,0xe400-0xe403,0xe800-0xe807 irq 18 at device 31.2 on
pci0
atapci1: [MPSAFE]
ata2: reset tp1 mask=03 ostat0=7f ostat1=7f
ata2-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata2-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata2-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata2-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata2-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata2-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata2-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata2-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata2-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata2-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata2-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata2-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata2-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata2-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata2-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata2-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata2-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata2-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata2-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata2-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata2-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata2-slave: stat=0x7f err=0xff lsb=0xff msb=0xff
ata2: reset tp2 mask=00 stat0=ff stat1=ff devices=0x0
ata2: at 0xe800 on atapci1
ata2: [MPSAFE]
ata3: reset tp1 mask=03 ostat0=7f ostat1=7f
ata3-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata3-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata3-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata3-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata3-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata3-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata3-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata3-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata3-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata3-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata3-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata3-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata3-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata3-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata3-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata3-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata3-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata3-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata3-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata3-master: stat=0x7f err=0xff lsb=0xff msb=0xff
```

freebsd-hackers: P4 HT with SMP kernel, FreeBSD 5.2.1-p4 problem

```
ata3-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata3-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata3-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata3-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata3-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata3-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata3-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata3-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata3-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata3-master: stat=0x7f err=0xff lsb=0xff msb=0xff
ata3-slave: stat=0x7f err=0xff lsb=0xff msb=0xff
ata3: reset tp2 mask=00 stat0=ff stat1=ff devices=0x0
ata3: at 0xe000 on atapci1
ata3: [MPSAFE]
ichsmb0: <Intel 82801EB (ICH5) SMBus controller> port 0xc400-0xc41f irq 17 at device 31.3 on pci0
smbus0: <System Management Bus> on ichsmb0
smb0: <SMBus generic I/O> on smb0
pci0: <multimedia, audio> at device 31.5 (no driver attached)
acpi_button0: <Sleep Button> on acpi0
atkbd0: <Keyboard controller (i8042)> port 0x64,0x60 irq 1 on acpi0
atkbd0: <AT Keyboard> flags 0x1 irq 1 on atkbd0
atkbd: the current kbd controller command byte 0065
atkbd: keyboard ID 0x41ab (2)
kbd0 at atkbd0
kbd0: atkbd0, AT 101/102 (2), config:0x1, flags:0x3d0000
psm0: unable to allocate IRQ
unknown: not probed (disabled)
unknown: not probed (disabled)
sio0: irq maps: 0xe001 0xe011 0xe001 0xe001
sio0 port 0x3f8-0x3ff irq 4 on acpi0
sio0: type 16550A
unknown: not probed (disabled)
unknown: not probed (disabled)
unknown: not probed (disabled)
unknown: not probed (disabled)
unknown: not probed (disabled)
unknown: not probed (disabled)
ata: ata0 already exists; skipping it
ata: ata1 already exists; skipping it
atkbd: atkbd0 already exists; skipping it
sc: sc0 already exists; skipping it
sio: sio0 already exists; skipping it
vga: vga0 already exists; skipping it
Trying Read_Port at 203
Trying Read_Port at 243
Trying Read_Port at 283
Trying Read_Port at 2c3
Trying Read_Port at 303
Trying Read_Port at 343
```

```
Trying Read_Port at 383
Trying Read_Port at 3c3
isa_probe_children: disabling PnP devices
isa_probe_children: probing non-PnP devices
pmtimer0 on isa0
sc0: <System console> on isa0
sc0: VGA <16 virtual consoles, flags=0x200>
sc0: fb0, kbd0, terminal emulator: sc (syscons terminal)
vga0: <Generic ISA VGA> at port 0x3c0-0x3df iomem 0xa0000-0xbffff on isa0
fb0: vga0, vga, type:VGA (5), flags:0x7007f
fb0: port:0x3c0-0x3df, crtc:0x3d4, mem:0xa0000 0x20000
fb0: init mode:24, bios mode:3, current mode:24
fb0: window:0xc00b8000 size:32k gran:32k, buf:0 size:32k
VGA parameters upon power-up
50 18 10 00 00 00 03 00 02 67 5f 4f 50 82 55 81
bf 1f 00 4f 0d 0e 00 00 07 80 9c 8e 8f 28 1f 96
b9 a3 ff 00 01 02 03 04 05 14 07 38 39 3a 3b 3c
3d 3e 3f 0c 00 0f 08 00 00 00 00 00 10 0e 00 ff
VGA parameters in BIOS for mode 24
50 18 10 00 10 00 03 00 02 67 5f 4f 50 82 55 81
bf 1f 00 4f 0d 0e 00 00 00 00 9c 8e 8f 28 1f 96
b9 a3 ff 00 01 02 03 04 05 14 07 38 39 3a 3b 3c
3d 3e 3f 0c 00 0f 08 00 00 00 00 00 10 0e 00 ff
EGA/VGA parameters to be used for mode 24
50 18 10 00 10 00 03 00 02 67 5f 4f 50 82 55 81
bf 1f 00 4f 0d 0e 00 00 00 00 9c 8e 8f 28 1f 96
b9 a3 ff 00 01 02 03 04 05 14 07 38 39 3a 3b 3c
3d 3e 3f 0c 00 0f 08 00 00 00 00 00 10 0e 00 ff
adv0: not probed (disabled)
aha0: not probed (disabled)
aic0: not probed (disabled)
bt0: not probed (disabled)
cs0: not probed (disabled)
ed0: not probed (disabled)
fdc0: ready for input in output
fdc0: cmd 3 failed at out byte 1 of 3
fdc0 failed to probe at port 0x3f7,0x3f0-0x3f5 irq 6 drq 2 on isa0
fe0: not probed (disabled)
ie0: not probed (disabled)
lnc0: not probed (disabled)
pcic0 failed to probe at port 0x3e0 iomem 0xd0000 on isa0
pcic1: not probed (disabled)
ppc0 failed to probe at irq 7 on isa0
sio1: configured irq 3 not in bitmap of probed irqs 0
sio1: port may not be enabled
sio1: irq maps: 0xe001 0xe001 0xe001 0xe001
sio1: probe failed test(s): 0 1 2 4 6 7 9
sio1 failed to probe at port 0x2f8-0x2ff irq 3 on isa0
sio2: not probed (disabled)
sio3: not probed (disabled)
sn0: not probed (disabled)
```

```
vt0: not probed (disabled)
isa_probe_children: probing PnP devices
Device configuration finished.
procfs registered
Timecounter "TSC" frequency 2793198625 Hz quality -100
Timecounters tick every 10.000 msec
lo0: bpf attached
acpi_cpu0: set speed to 100.0%
acpi_cpu: throttling enabled, 8 steps (100% to 12.5%), currently 100.0%
ata0-master: pio=0x0c wdma=0x22 udma=0x45 cable=80pin
ata0-master: setting PIO4 on Intel ICH5 chip
ata0-master: setting UDMA100 on Intel ICH5 chip
GEOM: create disk ad0 dp=0xc280fe60
ad0: <WDC WD800JB-00DUA3/75.13B75> ATA-6 disk at ata0-master
ad0: 76319MB (156301488 sectors), 155061 C, 16 H, 63 S, 512 B
ad0: 16 secs/int, 1 depth queue, UDMA100
GEOM: new disk ad0
ata1-master: pio=0x0c wdma=0x22 udma=0x42 cable=40pin
ata1-master: setting PIO4 on Intel ICH5 chip
acd0: <TEAC CD-W552G/Q4S2> CDRW drive at ata1 as master
acd0: read 38167KB/s (8958KB/s) write 172KB/s (8958KB/s), 2048KB buffer, PIO4
acd0: Reads: CDR, CDRW, CDDA stream, packet
acd0: Writes: CDR, CDRW, test write, burnproof
acd0: Audio: play, 255 volume levels
acd0: Mechanism: ejectable tray, unlocked
acd0: Medium: no/blank disc
[0] f:00 typ:7 s(CHS):0/1/1 e(CHS):1023/254/63 s:63 l:71681967
[1] f:00 typ:15 s(CHS):1023/255/63 e(CHS):1023/254/63 s:71682030 l:6136830
[2] f:80 typ:165 s(CHS):1023/255/63 e(CHS):1023/254/63 s:77818860 l:78477525
[3] f:00 typ:0 s(CHS):0/0/0 e(CHS):0/0/0 s:0 l:0
GEOM: Configure ad0s1, start 32256 length 36701167104 end 36701199359
GEOM: Configure ad0s2, start 36701199360 length 3142056960 end 39843256319
GEOM: Configure ad0s3, start 39843256320 length 40180492800 end 80023749119
MBREXT Slice 5 on ad0s2:
[0] f:00 typ:11 s(CHS):1023/1/1 e(CHS):1023/254/63 s:63 l:6136767
[1] f:00 typ:0 s(CHS):0/0/0 e(CHS):0/0/0 s:0 l:0
GEOM: Configure ad0s5, start 32256 length 3142024704 end 3142056959
GEOM: Configure ad0s3a, start 0 length 39643512832 end 39643512831
GEOM: Configure ad0s3b, start 39643512832 length 536979968 end 40180492799
GEOM: Configure ad0s3c, start 0 length 40180492800 end 40180492799
(probe0:ata0:0:0:0): error 22
(probe0:ata0:0:0:0): Unretryable Error
(probe1:ata0:0:1:0): error 22
(probe1:ata0:0:1:0): Unretryable Error
(probe4:ata2:0:0:0): error 22
(probe4:ata2:0:0:0): Unretryable Error
(probe5:ata2:0:1:0): error 22
(probe5:ata2:0:1:0): Unretryable Error
(probe6:ata3:0:0:0): error 22
(probe6:ata3:0:0:0): Unretryable Error
(probe7:ata3:0:1:0): error 22
```

```
(probe7:ata3:0:1:0): Unretryable Error
(probe0:ata0:0:0:0): error 22
(probe0:ata0:0:0:0): Unretryable Error
(probe1:ata0:0:1:0): error 22
(probe1:ata0:0:1:0): Unretryable Error
(probe4:ata2:0:0:0): error 22
(probe4:ata2:0:0:0): Unretryable Error
(probe5:ata2:0:1:0): error 22
(probe5:ata2:0:1:0): Unretryable Error
(probe6:ata3:0:0:0): error 22
(probe6:ata3:0:0:0): Unretryable Error
(probe7:ata3:0:1:0): error 22
(probe7:ata3:0:1:0): Unretryable Error
(probe3:ata1:0:1:0): error 22
(probe3:ata1:0:1:0): Unretryable Error
(probe3:ata1:0:1:0): error 22
(probe3:ata1:0:1:0): Unretryable Error
(probe2:ata1:0:0:0): Retrying Command
(probe2:ata1:0:0:0): error 22
(probe2:ata1:0:0:0): Unretryable Error
(probe2:ata1:0:0:0): Retrying Command
(probe2:ata1:0:0:0): error 22
(probe2:ata1:0:0:0): Unretryable Error
GEOM: create disk cd0 dp=0xc27f0600
pass0 at ata1 bus 0 target 0 lun 0
pass0: <TEAC CD-W552G Q4S2> Removable CD-ROM SCSI-0 device
pass0: 16.000MB/s transfers
(cd0:ata1:0:0:0): Retrying Command
GEOM: new disk cd0
SMP: AP CPU #1 Launched!
cpu1 AP:
  ID: 0x01000000 VER: 0x00050014 LDR: 0x02000000 DFR: 0x0fffffff
  lint0: 0x00010700 lint1: 0x00010400 TPR: 0x00000000 SVR: 0x000001ff
ioapic0: routing intpin 1 (IRQ 1) to cluster 0
ioapic0: routing intpin 4 (IRQ 4) to cluster 0
ioapic0: routing intpin 8 (IRQ 8) to cluster 0
ioapic0: routing intpin 9 (IRQ 9) to cluster 0
ioapic0: routing intpin 13 (IRQ 13) to cluster 0
ioapic0: routing intpin 14 (IRQ 14) to cluster 0
ioapic0: routing intpin 15 (IRQ 15) to cluster 0
ioapic0: routing intpin 17 (IRQ 17) to cluster 0
ioapic0: routing intpin 18 (IRQ 18) to cluster 0
(cd0:ata1:0:0:0): error 6
(cd0:ata1:0:0:0): Unretryable Error
cd0 at ata1 bus 0 target 0 lun 0
cd0: <TEAC CD-W552G Q4S2> Removable CD-ROM SCSI-0 device
cd0: 16.000MB/s transfers
cd0: Attempt to query device size failed: NOT READY, Medium not present
(cd0:ata1:0:0:0): Retrying Command
(cd0:ata1:0:0:0): error 6
(cd0:ata1:0:0:0): Unretryable Error
```

```
(cd0:ata1:0:0:0): Retrying Command
(cd0:ata1:0:0:0): error 6
(cd0:ata1:0:0:0): Unretryable Error
Mounting root from ufs:/dev/ad0s3a
WARNING: / was not properly dismounted
/: mount pending error: blocks 24 files 6
start_init: trying /sbin/init
pcm0: <Intel ICH5 (82801EB)> mem 0xffa7f800-0xffa7f8ff,0xffa7fc00-0xffa7fdff irq 17 at device 31.5 on
pci0
pcm0: <Analog Devices AD1985 AC97 Codec (id = 0x41445375)>
pcm0: Codec features headphone, 20 bit DAC, 5 bit master volume, no 3D Stereo Enhancement
pcm0: Primary codec extended features variable rate PCM, double rate PCM, reserved 1, center DAC,
surround DAC, LFE DAC, AMAP
pcm0: sndbuf_setmap 331000, 4000; 0xd64eb000 -> 331000
pcm0: sndbuf_setmap 350000, 4000; 0xd64ef000 -> 350000
pcm0: measured ac97 link rate at 47998 Hz, will use 48000 Hz
rl0: promiscuous mode enabled
pflog0: bpf attached
pflog: $Name: VERSION_2_03 $
pfsync0: bpf attached
pfsync: $Name: VERSION_2_03 $
in6_ifattach: pflog0 is not multicast capable, IPv6 not enabled
in6_ifattach: pfsync0 is not multicast capable, IPv6 not enabled
pflog0: promiscuous mode enabled
pf: $Name: VERSION_2_03 $
rl0: promiscuous mode disabled
```

-
- application/pgp-signature attachment: OpenPGP digital signature