

## Silicon Image 3512 & seagate ST3120026AS in 2.4.27-rc2

**Source:** <http://linux.derkeiler.com/Mailing-Lists/Kernel/2004-06/6906.html>

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**Date:** 06/29/04

Date: Tue, 29 Jun 2004 08:09:00 +0200

To: Jeff Garzik <[jgarzik@pobox.com](mailto:jgarzik@pobox.com)>

Hi Jeff,

I have sil3512 controller and 2x Seagate ST3120026AS (yes, with mod15 problem...) discs. When i try some writes to disc sata\_sil driver hangs.

Nothing oops or something like this only following messages:

ata1: DMA timeout, stat 0x4

ata2: DMA timeout, stat 0x4

I tried add this discs to sil\_blacklist with SIL\_QUIRK\_MOD15WRITE, tried your try4 patch and nothing helps.

Any ideas?

Best Regards,

Dave

Linux version 2.4.27-rc2 (dave@tiger) (gcc version 3.3.4 (Debian)) #1 Po Ä en 28 15:51:50 CEST 2004

BIOS-provided physical RAM map:

BIOS-e820: 0000000000000000 - 000000000009fc00 (usable)

BIOS-e820: 000000000009fc00 - 00000000000a0000 (reserved)

BIOS-e820: 00000000000f0000 - 0000000000100000 (reserved)

BIOS-e820: 0000000000100000 - 0000000007fff0000 (usable)

BIOS-e820: 0000000007fff0000 - 0000000007fff3000 (ACPI NVS)

BIOS-e820: 0000000007fff3000 - 0000000080000000 (ACPI data)

BIOS-e820: 00000000fec00000 - 00000000fec01000 (reserved)

BIOS-e820: 00000000fee00000 - 00000000fee01000 (reserved)

BIOS-e820: 00000000fff00000 - 0000000100000000 (reserved)

Warning only 896MB will be used.

Use a HIGHMEM enabled kernel.

896MB LOWMEM available.

found SMP MP-table at 000f5300

hm, page 000f5000 reserved twice.

hm, page 000f6000 reserved twice.

hm, page 000f0000 reserved twice.

hm, page 000f1000 reserved twice.

On node 0 totalpages: 229376

zone(0): 4096 pages.

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zone(1): 225280 pages.
zone(2): 0 pages.
Intel MultiProcessor Specification v1.4
  Virtual Wire compatibility mode.
OEM ID: OEM00000 Product ID: PROD00000000 APIC at: 0xFEE00000
Processor #0 Pentium(tm) Pro APIC version 17
I/O APIC #2 Version 17 at 0xFEC00000.
Enabling APIC mode: Flat. Using 1 I/O APICs
Processors: 1
Kernel command line: BOOT_IMAGE=/kernels/satabare.i/bzImage initrd=rescue.img load_ramdisk=1
prompt_ramdisk=0 ramdisk_size=83000 ro root=/dev/ram SLACK_KERNEL=satabare.i
Initializing CPU#0
Detected 1797.297 MHz processor.
Console: colour VGA+ 80x25
Calibrating delay loop... 3578.26 BogomIPS
Memory: 868552k/917504k available (1950k kernel code, 48564k reserved, 614k data, 144k init, 0k
highmem)
Dentry cache hash table entries: 131072 (order: 8, 1048576 bytes)
Inode cache hash table entries: 65536 (order: 7, 524288 bytes)
Mount cache hash table entries: 512 (order: 0, 4096 bytes)
Buffer cache hash table entries: 65536 (order: 6, 262144 bytes)
Page-cache hash table entries: 262144 (order: 8, 1048576 bytes)
CPU: L1 I Cache: 64K (64 bytes/line), D cache 64K (64 bytes/line)
CPU: L2 Cache: 256K (64 bytes/line)
CPU: After generic, caps: 0383fbff c1c3fbff 00000000 00000000
CPU: Common caps: 0383fbff c1c3fbff 00000000 00000000
CPU: AMD Athlon(tm) XP 2200+ stepping 01
Enabling fast FPU save and restore... done.
Enabling unmasked SIMD FPU exception support... done.
Checking 'hlt' instruction... OK.
POSIX conformance testing by UNIFIX
enabled ExtINT on CPU#0
ESR value before enabling vector: 00000000
ESR value after enabling vector: 00000000
ENABLING IO-APIC IRQs
Setting 2 in the phys_id_present_map
...changing IO-APIC physical APIC ID to 2 ... ok.
init IO-APIC IRQs
IO-APIC (apicid-pin) 2-0, 2-9, 2-16, 2-17, 2-18, 2-20, 2-21, 2-22, 2-23 not connected.
..TIMER: vector=0x31 pin1=2 pin2=0
..MP-BIOS bug: 8254 timer not connected to IO-APIC
...trying to set up timer (IRQ0) through the 8259A ...
..... (found pin 0) ...works.
number of MP IRQ sources: 16.
number of IO-APIC #2 registers: 24.
testing the IO APIC.....

IO APIC #2.....
.... register #00: 02000000
..... : physical APIC id: 02
..... : Delivery Type: 0
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..... : LTS : 0
.... register #01: 00170011
..... : max redirection entries: 0017
..... : PRQ implemented: 0
..... : IO APIC version: 0011
.... register #02: 00000000
..... : arbitration: 00
.... IRQ redirection table:
NR Log Phy Mask Trig IRR Pol Stat Dest Deli Vect:
00 001 01 0 0 0 0 0 1 1 31
01 001 01 0 0 0 0 0 1 1 39
02 000 00 1 0 0 0 0 0 0 00
03 001 01 0 0 0 0 0 1 1 41
04 001 01 0 0 0 0 0 1 1 49
05 001 01 0 0 0 0 0 1 1 51
06 001 01 0 0 0 0 0 1 1 59
07 001 01 0 0 0 0 0 1 1 61
08 001 01 0 0 0 0 0 1 1 69
09 000 00 1 0 0 0 0 0 0 00
0a 001 01 0 0 0 0 0 1 1 71
0b 001 01 0 0 0 0 0 1 1 79
0c 001 01 0 0 0 0 0 1 1 81
0d 001 01 0 0 0 0 0 1 1 89
0e 001 01 0 0 0 0 0 1 1 91
0f 001 01 0 0 0 0 0 1 1 99
10 000 00 1 0 0 0 0 0 0 00
11 000 00 1 0 0 0 0 0 0 00
12 000 00 1 0 0 0 0 0 0 00
13 001 01 1 1 0 1 0 1 1 A1
14 000 00 1 0 0 0 0 0 0 00
15 000 00 1 0 0 0 0 0 0 00
16 000 00 1 0 0 0 0 0 0 00
17 000 00 1 0 0 0 0 0 0 00
IRQ to pin mappings:
IRQ0 -> 0:0
IRQ1 -> 0:1
IRQ3 -> 0:3
IRQ4 -> 0:4
IRQ5 -> 0:5
IRQ6 -> 0:6
IRQ7 -> 0:7
IRQ8 -> 0:8
IRQ10 -> 0:10
IRQ11 -> 0:11
IRQ12 -> 0:12
IRQ13 -> 0:13
IRQ14 -> 0:14
IRQ15 -> 0:15
IRQ19 -> 0:19
..... done.
Using local APIC timer interrupts.
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calibrating APIC timer ...
..... CPU clock speed is 1797.3075 MHz.
..... host bus clock speed is 266.2676 MHz.
cpu: 0, clocks: 2662676, slice: 1331338
CPU0<T0:2662672,T1:1331328,D:6,S:1331338,C:2662676>
mtrr: v1.40 (20010327) Richard Gooch (rgooch@atnf.csiro.au)
mtrr: detected mtrr type: Intel
PCI: PCI BIOS revision 2.10 entry at 0xfaf70, last bus=2
PCI: Using configuration type 1
PCI: Probing PCI hardware
PCI: Probing PCI hardware (bus 00)
PCI: nForce2 C1 Halt Disconnect fixup
PCI: Discovered primary peer bus ff [IRQ]
PCI: Using IRQ router default [10de/01e0] at 00:00.0
PCI->APIC IRQ transform: (B2,I0,P0) -> 19
Linux NET4.0 for Linux 2.4
Based upon Swansea University Computer Society NET3.039
Initializing RT netlink socket
Starting kswapd
VFS: Disk quotas v1.6.5.1
Journalled Block Device driver loaded
pty: 512 Unix98 ptys configured
Serial driver version 5.05c (2001-07-08) with HUB-6 MANY_PORTS MULTIPORT SHARE_IRQ
SERIAL_PCI enabled
ttyS00 at 0x03f8 (irq = 4) is a 16550A
ttyS01 at 0x02f8 (irq = 3) is a 16550A
Real Time Clock Driver v1.10f
Floppy drive(s): fd0 is 1.44M
FDC 0 is a post-1991 82077
RAMDISK driver initialized: 16 RAM disks of 83000K size 1024 blocksize
loop: loaded (max 8 devices)
Uniform Multi-Platform E-IDE driver Revision: 7.00beta4-2.4
ide: Assuming 33MHz system bus speed for PIO modes; override with idebus=xx
NFORCE2: IDE controller at PCI slot 00:09.0
NFORCE2: chipset revision 162
NFORCE2: not 100% native mode: will probe irqs later
ide: Assuming 33MHz system bus speed for PIO modes; override with idebus=xx
NFORCE2: 00:09.0 (rev a2) UDMA133 controller
   ide0: BM-DMA at 0xf000-0xf007, BIOS settings: hda:DMA, hdb:DMA
   ide1: BM-DMA at 0xf008-0xf00f, BIOS settings: hdc:DMA, hdd:DMA
hda: ATAPI-CD ROM-DRIVE-52MAX, ATAPI CD/DVD-ROM drive
ide0 at 0x1f0-0x1f7,0x3f6 on irq 14
hda: attached ide-cdrom driver.
hda: ATAPI 52X CD-ROM drive, 128kB Cache, UDMA(33)
Uniform CD-ROM driver Revision: 3.12
SCSI subsystem driver Revision: 1.00
kmod: failed to exec /sbin/modprobe -s -k scsi_hostadapter, errno = 2
kmod: failed to exec /sbin/modprobe -s -k scsi_hostadapter, errno = 2
kmod: failed to exec /sbin/modprobe -s -k scsi_hostadapter, errno = 2
md: linear personality registered as nr 1
md: raid0 personality registered as nr 2
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md: raid1 personality registered as nr 3
md: raid5 personality registered as nr 4
raid5: measuring checksumming speed
 8regs : 2744.800 MB/sec
32regs : 1846.800 MB/sec
pIII_sse : 5102.400 MB/sec
pII_mmx : 4213.200 MB/sec
p5_mmx : 5405.600 MB/sec
raid5: using function: pIII_sse (5102.400 MB/sec)
md: md driver 0.90.0 MAX_MD_DEVS=256, MD_SB_DISKS=27
md: Autodetecting RAID arrays.
md: autorun ...
md: ... autorun DONE.
LVM version 1.0.8(17/11/2003)
Initializing Cryptographic API
NET4: Linux TCP/IP 1.0 for NET4.0
IP Protocols: ICMP, UDP, TCP, IGMP
IP: routing cache hash table of 8192 buckets, 64Kbytes
TCP: Hash tables configured (established 262144 bind 65536)
Linux IP multicast router 0.06 plus PIM-SM
NET4: Unix domain sockets 1.0/SMP for Linux NET4.0.
RAMDISK: Compressed image found at block 0
Freeing initrd memory: 35644k freed
VFS: Mounted root (ext2 filesystem) readonly.
Freeing unused kernel memory: 144k freed
Linux agpgart interface v0.99 (c) Jeff Hartmann
agpgart: Maximum main memory to use for agp memory: 816M
agpgart: Detected NVIDIA nForce2 chipset
agpgart: AGP aperture is 64M @ 0xd8000000
scsi0 : SCSI host adapter emulation for IDE ATAPI devices
ohci1394: $Rev: 1045 $ Ben Collins <bcollins@debian.org>
ohci1394_0: OHCI-1394 1.1 (PCI): IRQ=[10] MMIO=[df005000-df0057ff] Max Packet=[2048]
r8169 Gigabit Ethernet driver 1.2 loaded
eth0: Identified chip type is 'RTL8169s/8110s'.
eth0: RTL8169 at 0xf8875000, 00:0d:61:71:11:4b, IRQ 10
eth0: Auto-negotiation Enabled.
eth0: 100Mbps Full-duplex operation.
usb.c: registered new driver usbdevfs
usb.c: registered new driver hub
PCI: Setting latency timer of device 00:02.2 to 64
ehci_hcd 00:02.2: nVidia Corporation nForce2 USB Controller
ehci_hcd 00:02.2: irq 11, pci mem f888e000
usb.c: new USB bus registered, assigned bus number 1
PCI: cache line size of 64 is not supported by device 00:02.2
ehci_hcd 00:02.2: USB 2.0 enabled, EHCI 1.00, driver 2003-Dec-29/2.4
hub.c: USB hub found
hub.c: 6 ports detected
PCI: Setting latency timer of device 00:02.0 to 64
usb-ohci.c: USB OHCI at membase 0xf8896000, IRQ 5
usb-ohci.c: usb-00:02.0, nVidia Corporation nForce2 USB Controller
usb.c: new USB bus registered, assigned bus number 2
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ieee1394: Host added: ID:BUS[0-00:1023] GUID[000d61000061eac5]
hub.c: USB hub found
hub.c: 3 ports detected
PCI: Setting latency timer of device 00:02.1 to 64
usb-ohci.c: USB OHCI at membase 0xf8898000, IRQ 10
usb-ohci.c: usb-00:02.1, nVidia Corporation nForce2 USB Controller (#2)
usb.c: new USB bus registered, assigned bus number 3
hub.c: USB hub found
hub.c: 3 ports detected
uhci.c: USB Universal Host Controller Interface driver v1.1
usb-uhci.c: $Revision: 1.275 $ time 16:10:39 Jun 28 2004
usb-uhci.c: High bandwidth mode enabled
usb-uhci.c: v1.275:USB Universal Host Controller Interface driver
driver for Silicon Image(tm) Medley(tm) hardware version 0.0.1: No raid array found
libata version 1.02 loaded.
sata_sil version 0.54
ata1: SATA max UDMA/100 cmd 0xF88A4080 ctl 0xF88A408A bmdma 0xF88A4000 irq 11
ata2: SATA max UDMA/100 cmd 0xF88A40C0 ctl 0xF88A40CA bmdma 0xF88A4008 irq 11
ata1: dev 0 cfg 49:2f00 82:346b 83:7d01 84:4003 85:3469 86:3c01 87:4003 88:207f
ata1: dev 0 ATA, max UDMA/133, 234441648 sectors: lba48
ata1: dev 0 configured for UDMA/100
ata2: dev 0 cfg 49:2f00 82:346b 83:7d01 84:4003 85:3469 86:3c01 87:4003 88:207f
ata2: dev 0 ATA, max UDMA/133, 234441648 sectors: lba48
ata2: dev 0 configured for UDMA/100
scsi1 : sata_sil
scsi2 : sata_sil
Vendor: ATA Model: ST3120026AS Rev: 3.18
Type: Direct-Access ANSI SCSI revision: 05
Vendor: ATA Model: ST3120026AS Rev: 3.18
Type: Direct-Access ANSI SCSI revision: 05
Attached scsi disk sda at scsi1, channel 0, id 0, lun 0
Attached scsi disk sdb at scsi2, channel 0, id 0, lun 0
SCSI device sda: 234441648 512-byte hdwr sectors (120034 MB)
Partition check:
sda: sda1 sda2 < sda5 > sda3 sda4
SCSI device sdb: 234441648 512-byte hdwr sectors (120034 MB)
sdb: sdb1 sdb2 < sdb5 > sdb3 sdb4
SGI XFS with no debug enabled
SGI XFS Quota Management subsystem
XFS mounting filesystem sd(8,1)
Starting XFS recovery on filesystem: sd(8,1) (dev: sd(8,1))
Ending XFS recovery on filesystem: sd(8,1) (dev: sd(8,1))
XFS mounting filesystem sd(8,17)
Starting XFS recovery on filesystem: sd(8,17) (dev: sd(8,17))
Ending XFS recovery on filesystem: sd(8,17) (dev: sd(8,17))
XFS mounting filesystem sd(8,5)
Starting XFS recovery on filesystem: sd(8,5) (dev: sd(8,5))
Ending XFS recovery on filesystem: sd(8,5) (dev: sd(8,5))
XFS mounting filesystem sd(8,21)
Starting XFS recovery on filesystem: sd(8,21) (dev: sd(8,21))
Ending XFS recovery on filesystem: sd(8,21) (dev: sd(8,21))
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