

Install Ubuntu 7.10 on My Lenovo F31A

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<http://brucebot.blogbus.com/logs/14826957.html>

Abstract

This documents record some thing details of my Lenovo F31A when install Ubuntu 7.10.I am happy now, all the hardware are working well.

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1.Introduction

I purchased a Lenovo F31A laptop days ago, it is a great laptop except the pre-installed OS VISTA, I really do not like it. As I have some experience to use ubuntu on the PC, so I decide to install the Ubuntu 7.10 to the laptop. And the installation is very easy, just download the iso file from ubuntu homepage and burn it to a CD-ROM, then use this CD to boot laptop, follow the normal way to install ubuntu. It can easily automatically detect almost all the hardware and install the driver to them, except two hardware, the wireless card driver and the sound driver.

WIRELESS

- 1.Download a software named [bcm43xx-fwcuter_20060108-6build1_i386.deb](#) and install it. Here <http://linuxwireless.org/en/users/Drivers/b43> you will find more details about b43.
- 2.Click the icon on the right above panel---Restricted Drivers, and enable the firmware for broadcom 43xx chipset family, then it will pop-up a window ask you to select the firmware to download, pls choose the second one which is http://xeye.de/down/wl_apsta.o, after finishing the download, ubuntu will automatically install the firmware.

SOUND

I have tested all the alsa driver version, and some patches, which still have no effect to drive my sound card. Finally I found this article <http://ubuntuforums.org/showpost.php?p=3768914&postcount=60> which help me to solve my sound card issue, so now I can listen music and watch movies under my new laptop now.

2.Summary

Hardware component	Status under Ubuntu 7.10	Notes
Intel(R) Pentium(R) Dual CPU T2330 @ 1.60GHz	Works	
13.3" WXGA TFT(1280X800)	Works	
nVidia GeForce 8400M GS(128MB)	Works	
1GB RAM	Works	
160GB HDD(WDC WD1600BEVS-2)	Works	

DVD±RW(DVD RW AD-7640A)	Works	
NetLink BCM5906M Fast Ethernet PCI Express	Works	
BCM94311MCG wlan mini-PCI	Works	
82801H (ICH8 Family) HD Audio Controller	Works	OSS
Memory Card Reader	Not test	
Internal 56K modem	Not test	
Lenovo EasyCamera	Not test	
Bluetooth	Works	

3.Computer Details

lspci -v --Detected PCI devices

00:00.0 Host bridge: Intel Corporation Mobile PM965/GM965/GL960 Memory Controller Hub (rev 03)

Subsystem: Lenovo Unknown device 39f1
Flags: bus master, fast devsel, latency 0
Capabilities: <access denied>

00:01.0 PCI bridge: Intel Corporation Mobile PM965/GM965/GL960 PCI Express Root Port (rev 03) (prog-if 00 [Normal decode])

Flags: bus master, fast devsel, latency 0
Bus: primary=00, secondary=01, subordinate=01, sec-latency=0
I/O behind bridge: 00002000-00002fff
Memory behind bridge: f8000000-faffffff
Prefetchable memory behind bridge: 00000000d0000000-00000000dfffffff
Capabilities: <access denied>

00:1a.0 USB Controller: Intel Corporation 82801H (ICH8 Family) USB UHCI Controller #4 (rev 03) (prog-if 00 [UHCI])

Subsystem: Lenovo Unknown device 39ff
Flags: bus master, medium devsel, latency 0, IRQ 16
I/O ports at 1800 [size=32]

00:1a.1 USB Controller: Intel Corporation 82801H (ICH8 Family) USB UHCI Controller #5 (rev 03) (prog-if 00 [UHCI])

Subsystem: Lenovo Unknown device 4000
Flags: bus master, medium devsel, latency 0, IRQ 22
I/O ports at 1820 [size=32]

00:1a.7 USB Controller: Intel Corporation 82801H (ICH8 Family) USB2 EHCI Controller #2 (rev 03) (prog-if 20 [EHCI])

Subsystem: Lenovo Unknown device 4001
Flags: bus master, medium devsel, latency 0, IRQ 20
Memory at fb504000 (32-bit, non-prefetchable) [size=1K]
Capabilities: <access denied>

00:1b.0 Audio device: Intel Corporation 82801H (ICH8 Family) HD Audio Controller (rev 03)

Subsystem: Lenovo Unknown device 4010
Flags: bus master, fast devsel, latency 0, IRQ 23
Memory at fb500000 (64-bit, non-prefetchable) [size=16K]

Capabilities: <access denied>

00:1c.0 PCI bridge: Intel Corporation 82801H (ICH8 Family) PCI Express Port 1 (rev 03) (prog-if 00 [Normal decode])

Flags: bus master, fast devsel, latency 0

Bus: primary=00, secondary=02, subordinate=03, sec-latency=0

Memory behind bridge: fb100000-fb1fffff

Capabilities: <access denied>

00:1c.1 PCI bridge: Intel Corporation 82801H (ICH8 Family) PCI Express Port 2 (rev 03) (prog-if 00 [Normal decode])

Flags: bus master, fast devsel, latency 0

Bus: primary=00, secondary=04, subordinate=05, sec-latency=0

I/O behind bridge: 00003000-00003fff

Memory behind bridge: f4000000-f7ffffff

Prefetchable memory behind bridge: 00000000f0000000-00000000f3ffffff

Capabilities: <access denied>

00:1c.5 PCI bridge: Intel Corporation 82801H (ICH8 Family) PCI Express Port 6 (rev 03) (prog-if 00 [Normal decode])

Flags: bus master, fast devsel, latency 0

Bus: primary=00, secondary=06, subordinate=06, sec-latency=0

Memory behind bridge: fb000000-fb0fffff

Capabilities: <access denied>

00:1d.0 USB Controller: Intel Corporation 82801H (ICH8 Family) USB UHCI Controller #1 (rev 03) (prog-if 00 [UHCI])

Subsystem: Lenovo Unknown device 39fb

Flags: bus master, medium devsel, latency 0, IRQ 21

I/O ports at 1840 [size=32]

00:1d.1 USB Controller: Intel Corporation 82801H (ICH8 Family) USB UHCI Controller #2 (rev 03) (prog-if 00 [UHCI])

Subsystem: Lenovo Unknown device 39fc

Flags: bus master, medium devsel, latency 0, IRQ 18

I/O ports at 1860 [size=32]

00:1d.2 USB Controller: Intel Corporation 82801H (ICH8 Family) USB UHCI Controller #3 (rev 03) (prog-if 00 [UHCI])

Subsystem: Lenovo Unknown device 39fd

Flags: bus master, medium devsel, latency 0, IRQ 20

I/O ports at 1880 [size=32]

00:1d.7 USB Controller: Intel Corporation 82801H (ICH8 Family) USB2 EHCI Controller #1 (rev 03) (prog-if 20 [EHCI])

Subsystem: Lenovo Unknown device 39fe

Flags: bus master, medium devsel, latency 0, IRQ 21

Memory at fb504400 (32-bit, non-prefetchable) [size=1K]

Capabilities: <access denied>

00:1e.0 PCI bridge: Intel Corporation 82801 Mobile PCI Bridge (rev f3) (prog-if 01 [Subtractive decode])

Flags: bus master, fast devsel, latency 0

Bus: primary=00, secondary=07, subordinate=07, sec-latency=32

Memory behind bridge: fb200000-fb2fffff

Capabilities: <access denied>

00:1f.0 ISA bridge: Intel Corporation 82801HEM (ICH8M) LPC Interface Controller (rev 03)
Subsystem: Lenovo Unknown device 39f7
Flags: bus master, medium devsel, latency 0
Capabilities: <access denied>

00:1f.1 IDE interface: Intel Corporation 82801HBM/HEM (ICH8M/ICH8M-E) IDE Controller (rev 03) (prog-if 8a [Master SecP PriP])
Subsystem: Lenovo Unknown device 39f8
Flags: bus master, medium devsel, latency 0, IRQ 18
I/O ports at 01f0 [size=8]
I/O ports at 03f4 [size=1]
I/O ports at 0170 [size=8]
I/O ports at 0374 [size=1]
I/O ports at 18a0 [size=16]

00:1f.2 IDE interface: Intel Corporation 82801HBM/HEM (ICH8M/ICH8M-E) SATA IDE Controller (rev 03) (prog-if 8f [Master SecP SecO PriP PriO])
Subsystem: Lenovo Unknown device 39f9
Flags: bus master, 66MHz, medium devsel, latency 0, IRQ 18
I/O ports at 18f8 [size=8]
I/O ports at 18cc [size=4]
I/O ports at 18f0 [size=8]
I/O ports at 18c8 [size=4]
I/O ports at 18e0 [size=16]
I/O ports at 18d0 [size=16]
Capabilities: <access denied>

00:1f.3 SMBus: Intel Corporation 82801H (ICH8 Family) SMBus Controller (rev 03)
Subsystem: Lenovo Unknown device 39fa
Flags: medium devsel, IRQ 10
Memory at 50000000 (32-bit, non-prefetchable) [size=256]
I/O ports at 1c00 [size=32]

01:00.0 VGA compatible controller: nVidia Corporation GeForce 8400M GS (rev a1) (prog-if 00 [VGA])
Subsystem: Lenovo Unknown device 400c
Flags: bus master, fast devsel, latency 0, IRQ 16
Memory at fa000000 (32-bit, non-prefetchable) [size=16M]
Memory at d0000000 (64-bit, prefetchable) [size=256M]
Memory at f8000000 (64-bit, non-prefetchable) [size=32M]
I/O ports at 2000 [size=128]
Capabilities: <access denied>

02:00.0 Network controller: Broadcom Corporation BCM94311MCG wlan mini-PCI (rev 01)
Subsystem: Broadcom Corporation Unknown device 0465
Flags: bus master, fast devsel, latency 0, IRQ 16
Memory at fb100000 (32-bit, non-prefetchable) [size=16K]
Capabilities: <access denied>

06:00.0 Ethernet controller: Broadcom Corporation NetLink BCM5906M Fast Ethernet PCI Express (rev 02)
Subsystem: Lenovo Unknown device 4006
Flags: bus master, fast devsel, latency 0, IRQ 17

Memory at fb000000 (64-bit, non-prefetchable) [size=64K]
Capabilities: <access denied>

07:09.0 FireWire (IEEE 1394): Ricoh Co Ltd R5C832 IEEE 1394 Controller (rev 05) (prog-if 10 [OHCI])

Subsystem: Lenovo Unknown device 400f
Flags: bus master, medium devsel, latency 32, IRQ 19
Memory at fb200000 (32-bit, non-prefetchable) [size=2K]
Capabilities: <access denied>

cat /proc/acpi/battery/BAT1/info--Battery information

present: yes
design capacity: 5616 mAh
last full capacity: 5964 mAh
battery technology: rechargeable
design voltage: 10800 mV
design capacity warning: 561 mAh
design capacity low: 168 mAh
capacity granularity 1: 10 mAh
capacity granularity 2: 25 mAh
model number: LTY-TL020Q
serial number:
battery type: LION
OEM info: LGC

cat /proc/cpuinfo --Processor information

processor : 0
vendor_id : GenuineIntel
cpu family : 6
model : 15
model name : Intel(R) Pentium(R) Dual CPU T2330 @ 1.60GHz
stepping : 13
cpu MHz : 800.000
cache size : 1024 KB
physical id : 0
siblings : 2
core id : 0
cpu cores : 2
fdiv_bug : no
hlt_bug : no
f00f_bug : no
coma_bug : no
fpu : yes
fpu_exception : yes
cpuid level : 10
wp : yes
flags : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush
dts acpi mmx fxsr sse sse2 ss ht tm pbe nx lm constant_tsc pni monitor ds_cpl est tm2 ssse3
cx16 xtpr lahf_lm
bogomips : 3196.62
clflush size : 64

processor : 1
vendor_id : GenuineIntel
cpu family : 6

model : 15
model name : Intel(R) Pentium(R) Dual CPU T2330 @ 1.60GHz
stepping : 13
cpu MHz : 800.000
cache size : 1024 KB
physical id : 0
siblings : 2
core id : 1
cpu cores : 2
fdiv_bug : no
hlt_bug : no
f00f_bug : no
coma_bug : no
fpu : yes
fpu_exception : yes
cpuid level : 10
wp : yes
flags : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush
dts acpi mmx fxsr sse sse2 ss ht tm pbe nx lm constant_tsc pni monitor ds_cpl est tm2 ssse3
cx16 xtptr lahf_lm
bogomips : 3192.37
clflush size : 64

cat /proc/meminfo --Memory information

MemTotal: 1034432 kB
MemFree: 83572 kB
Buffers: 27236 kB
Cached: 542704 kB
SwapCached: 1264 kB
Active: 673436 kB
Inactive: 224844 kB
HighTotal: 129856 kB
HighFree: 236 kB
LowTotal: 904576 kB
LowFree: 83336 kB
SwapTotal: 2931820 kB
SwapFree: 2897092 kB
Dirty: 52 kB
Writeback: 0 kB
AnonPages: 326976 kB
Mapped: 155572 kB
Slab: 26588 kB
SReclaimable: 14752 kB
SUnreclaim: 11836 kB
PageTables: 3024 kB
NFS_Unstable: 0 kB
Bounce: 0 kB
CommitLimit: 3449036 kB
Committed_AS: 879036 kB
VmallocTotal: 114680 kB
VmallocUsed: 46956 kB
VmallocChunk: 65012 kB

dmesg—Kernel Message

[0.000000] Linux version 2.6.22-14-generic (buldd@terranova) (gcc version 4.1.3 20070929

(prerelease) (Ubuntu 4.1.2-16ubuntu2)) #1 SMP Tue Dec 18 08:02:57 UTC 2007 (Ubuntu 2.6.22-14.47-generic)

```
[ 0.000000] BIOS-provided physical RAM map:
[ 0.000000] BIOS-e820: 0000000000000000 - 000000000009f800 (usable)
[ 0.000000] BIOS-e820: 000000000009f800 - 00000000000a0000 (reserved)
[ 0.000000] BIOS-e820: 00000000000dc000 - 00000000000100000 (reserved)
[ 0.000000] BIOS-e820: 00000000000100000 - 000000000003fed0000 (usable)
[ 0.000000] BIOS-e820: 000000000003fed0000 - 000000000003fee3000 (ACPI NVS)
[ 0.000000] BIOS-e820: 000000000003fee3000 - 0000000000040000000 (reserved)
[ 0.000000] BIOS-e820: 00000000000e0000000 - 00000000000f0000000 (reserved)
[ 0.000000] BIOS-e820: 00000000000fec00000 - 00000000000fec10000 (reserved)
[ 0.000000] BIOS-e820: 00000000000fed00000 - 00000000000fed00400 (reserved)
[ 0.000000] BIOS-e820: 00000000000fed14000 - 00000000000fed1a000 (reserved)
[ 0.000000] BIOS-e820: 00000000000fed1c000 - 00000000000fed90000 (reserved)
[ 0.000000] BIOS-e820: 00000000000fee00000 - 00000000000fee01000 (reserved)
[ 0.000000] BIOS-e820: 00000000000ff000000 - 00000000000100000000 (reserved)
[ 0.000000] 126MB HIGHMEM available.
[ 0.000000] 896MB LOWMEM available.
[ 0.000000] found SMP MP-table at 000f76c0
[ 0.000000] Entering add_active_range(0, 0, 261840) 0 entries of 256 used
[ 0.000000] Zone PFN ranges:
[ 0.000000]   DMA          0 -> 4096
[ 0.000000]   Normal      4096 -> 229376
[ 0.000000]   HighMem    229376 -> 261840
[ 0.000000] early_node_map[1] active PFN ranges
[ 0.000000]   0:          0 -> 261840
[ 0.000000] On node 0 totalpages: 261840
[ 0.000000]   DMA zone: 32 pages used for memmap
[ 0.000000]   DMA zone: 0 pages reserved
[ 0.000000]   DMA zone: 4064 pages, LIFO batch:0
[ 0.000000]   Normal zone: 1760 pages used for memmap
[ 0.000000]   Normal zone: 223520 pages, LIFO batch:31
[ 0.000000]   HighMem zone: 253 pages used for memmap
[ 0.000000]   HighMem zone: 32211 pages, LIFO batch:7
[ 0.000000] DMI 2.4 present.
[ 0.000000] ACPI: RSDP signature @ 0xC00F75E0 checksum 0
[ 0.000000] ACPI: RSDP 000F75E0, 0024 (r2 PTLTD )
[ 0.000000] ACPI: XSDT 3FED7C1E, 0084 (r1 LENOVO CB-01 6040000 LTP 0)
[ 0.000000] ACPI: FACP 3FEDFBD2, 00F4 (r3 LENOVO CB-01 6040000 ALAN 1)
[ 0.000000] ACPI: DSDT 3FED8E2A, 6D34 (r2 LENOVO CB-01 6040000 INTL 20050624)
[ 0.000000] ACPI: FACS 3FEE2FC0, 0040
[ 0.000000] ACPI: APIC 3FEDFCC6, 0068 (r1 LENOVO CB-01 6040000 LOHR 5A)
[ 0.000000] ACPI: HPET 3FEDFD2E, 0038 (r1 LENOVO CB-01 6040000 LOHR 5A)
[ 0.000000] ACPI: MCFG 3FEDFD66, 003C (r1 LENOVO CB-01 6040000 LOHR 5A)
[ 0.000000] ACPI: TCPA 3FEDFDA2, 0032 (r1 LENOVO CB-01 6040000 5A52)
[ 0.000000] ACPI: TMOR 3FEDFDD4, 0026 (r1 LENOVO CB-01 6040000 PTL 3)
[ 0.000000] ACPI: APIC 3FEDFDFA, 0068 (r1 LENOVO CB-01 6040000 LTP 0)
[ 0.000000] ACPI: BOOT 3FEDFE62, 0028 (r1 LENOVO CB-01 6040000 LTP 1)
[ 0.000000] ACPI: SLIC 3FEDFE8A, 0176 (r1 LENOVO CB-01 6040000 LTP 0)
[ 0.000000] ACPI: SSDT 3FED822E, 025F (r1 PmRef Cpu0Tst 3000 INTL 20050624)
[ 0.000000] ACPI: SSDT 3FED8188, 00A6 (r1 PmRef Cpu1Tst 3000 INTL 20050624)
[ 0.000000] ACPI: SSDT 3FED7CA2, 04E6 (r1 PmRef CpuPm 3000 INTL 20050624)
[ 0.000000] ACPI: BIOS bug: multiple APIC/MADT found, using 0
[ 0.000000] ACPI: If "acpi_apic_instance=2" works better, notify linux-acpi@vger.kernel.org
[ 0.000000] ACPI: PM-Timer IO Port: 0x1008
```

```
[ 0.000000] ACPI: Local APIC address 0xfee00000
[ 0.000000] ACPI: LAPIC (acpi_id[0x00] lapic_id[0x00] enabled)
[ 0.000000] Processor #0 6:15 APIC version 20
[ 0.000000] ACPI: LAPIC (acpi_id[0x01] lapic_id[0x01] enabled)
[ 0.000000] Processor #1 6:15 APIC version 20
[ 0.000000] ACPI: LAPIC_NMI (acpi_id[0x00] high edge lint[0x1])
[ 0.000000] ACPI: LAPIC_NMI (acpi_id[0x01] high edge lint[0x1])
[ 0.000000] ACPI: IOAPIC (id[0x01] address[0xfec00000] gsi_base[0])
[ 0.000000] IOAPIC[0]: apic_id 1, version 32, address 0xfec00000, GSI 0-23
[ 0.000000] ACPI: INT_SRC_OVR (bus 0 bus_irq 0 global_irq 2 dfl dfl)
[ 0.000000] ACPI: INT_SRC_OVR (bus 0 bus_irq 9 global_irq 9 high level)
[ 0.000000] ACPI: IRQ0 used by override.
[ 0.000000] ACPI: IRQ2 used by override.
[ 0.000000] ACPI: IRQ9 used by override.
[ 0.000000] Enabling APIC mode: Flat. Using 1 I/O APICs
[ 0.000000] ACPI: HPET id: 0x8086a201 base: 0xfed00000
[ 0.000000] Using ACPI (MADT) for SMP configuration information
[ 0.000000] Allocating PCI resources starting at 50000000 (gap: 40000000:a0000000)
[ 0.000000] Built 1 zonelists. Total pages: 259795
[ 0.000000] Kernel command line: root=UUID=77dff989-6ce3-4e18-a3a8-52769bcf82f5 ro
quiet splash
[ 0.000000] mapped APIC to fffd000 (fee00000)
[ 0.000000] mapped IOAPIC to fffc000 (fec00000)
[ 0.000000] Enabling fast FPU save and restore... done.
[ 0.000000] Enabling unmasked SIMD FPU exception support... done.
[ 0.000000] Initializing CPU#0
[ 0.000000] PID hash table entries: 4096 (order: 12, 16384 bytes)
[ 0.000000] Detected 1596.392 MHz processor.
[ 15.391667] Console: colour VGA+ 80x25
[ 15.392014] Dentry cache hash table entries: 131072 (order: 7, 524288 bytes)
[ 15.392332] Inode-cache hash table entries: 65536 (order: 6, 262144 bytes)
[ 15.420094] Memory: 1026732k/1047360k available (2015k kernel code, 19968k reserved,
916k data, 364k init, 129856k highmem)
[ 15.420104] virtual kernel memory layout:
[ 15.420105]   fixmap : 0xffff4d000 - 0xfffff0000 ( 712 kB)
[ 15.420106]   pkmap : 0xff8000000 - 0xffc000000 (4096 kB)
[ 15.420108]   vmalloc : 0xf88000000 - 0xff7fe0000 ( 111 MB)
[ 15.420109]   lowmem : 0xc00000000 - 0xf80000000 ( 896 MB)
[ 15.420110]   .init : 0xc03e30000 - 0xc043e0000 ( 364 kB)
[ 15.420111]   .data : 0xc02f7de6 - 0xc03dce84 ( 916 kB)
[ 15.420112]   .text : 0xc01000000 - 0xc02f7de6 (2015 kB)
[ 15.420115] Checking if this processor honours the WP bit even in supervisor mode... Ok.
[ 15.420157] SLUB: Genslabs=22, HWalign=64, Order=0-1, MinObjects=4, CPUs=2, Nodes=1
[ 15.420318] hpet0: at MMIO 0xfed00000, IRQs 2, 8, 0
[ 15.420323] hpet0: 3 64-bit timers, 14318180 Hz
[ 15.501280] Calibrating delay using timer specific routine.. 3196.62 BogoMIPS (lpj=6393241)
[ 15.501305] Security Framework v1.0.0 initialized
[ 15.501313] SELinux: Disabled at boot.
[ 15.501325] Mount-cache hash table entries: 512
[ 15.501469] CPU: After generic identify, caps: bfebfbff 20100000 00000000 00000000
0000e39d 00000000 00000001
[ 15.501478] monitor/mwait feature present.
[ 15.501480] using mwait in idle threads.
[ 15.501485] CPU: L1 I cache: 32K, L1 D cache: 32K
[ 15.501487] CPU: L2 cache: 1024K
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[ 15.501490] CPU: Physical Processor ID: 0
[ 15.501492] CPU: Processor Core ID: 0
[ 15.501494] CPU: After all inits, caps: bfebfbff 20100000 00000000 00003940 0000e39d
00000000 00000001
[ 15.501506] Compat vDSO mapped to fffe000.
[ 15.501520] Checking 'hlt' instruction... OK.
[ 15.517384] SMP alternatives: switching to UP code
[ 15.517855] Early unpacking initramfs... done
[ 15.863413] ACPI: Core revision 20070126
[ 15.863468] ACPI: Looking for DSDT in initramfs... error, file /DSDT.aml not found.
[ 15.870624] CPU0: Intel(R) Pentium(R) Dual CPU T2330 @ 1.60GHz stepping 0d
[ 15.870641] SMP alternatives: switching to SMP code
[ 15.870740] Booting processor 1/1 eip 3000
[ 15.880872] Initializing CPU#1
[ 15.960890] Calibrating delay using timer specific routine.. 3192.37 BogoMIPS (lpj=6384756)
[ 15.960897] CPU: After generic identify, caps: bfebfbff 20100000 00000000 00000000
0000e39d 00000000 00000001
[ 15.960902] monitor/mwait feature present.
[ 15.960905] CPU: L1 I cache: 32K, L1 D cache: 32K
[ 15.960907] CPU: L2 cache: 1024K
[ 15.960909] CPU: Physical Processor ID: 0
[ 15.960911] CPU: Processor Core ID: 1
[ 15.960912] CPU: After all inits, caps: bfebfbff 20100000 00000000 00003940 0000e39d
00000000 00000001
[ 15.961372] CPU1: Intel(R) Pentium(R) Dual CPU T2330 @ 1.60GHz stepping 0d
[ 15.961398] Total of 2 processors activated (6388.99 BogoMIPS).
[ 15.961602] ENABLING IO-APIC IRQs
[ 15.961837] ..TIMER: vector=0x31 apic1=0 pin1=2 apic2=-1 pin2=-1
[ 16.108869] checking TSC synchronization [CPU#0 -> CPU#1]: passed.
[ 16.128871] Brought up 2 CPUs
[ 16.240755] migration_cost=43
[ 16.240893] Booting paravirtualized kernel on bare hardware
[ 16.240987] Time: 10:38:22 Date: 01/01/108
[ 16.241007] NET: Registered protocol family 16
[ 16.241089] EISA bus registered
[ 16.241094] ACPI: bus type pci registered
[ 16.241541] PCI: PCI BIOS revision 3.00 entry at 0xfde21, last bus=7
[ 16.241544] PCI: Using configuration type 1
[ 16.241545] Setting up standard PCI resources
[ 16.244167] ACPI: EC: Look up EC in DSDT
[ 16.245039] ACPI: EC: GPE=0x17, ports=0x66, 0x62
[ 16.256572] ACPI: System BIOS is requesting _OSI(Linux)
[ 16.256575] ACPI: Please test with "acpi_osi=!Linux"
[ 16.256576] Please send dmidecode to linux-acpi@vger.kernel.org
[ 16.257568] ACPI: Interpreter enabled
[ 16.257572] ACPI: (supports S0 S3 S4 S5)
[ 16.257590] ACPI: Using IOAPIC for interrupt routing
[ 16.265734] ACPI: EC: GPE=0x17, ports=0x66, 0x62
[ 16.265781] ACPI: PCI Root Bridge [PCI0] (0000:00)
[ 16.265807] PCI: Probing PCI hardware (bus 00)
[ 16.270409] PCI: Transparent bridge - 0000:00:1e.0
[ 16.270601] ACPI: PCI Interrupt Routing Table [_SB_.PCI0._PRT]
[ 16.270927] ACPI: PCI Interrupt Routing Table [_SB_.PCI0.PEGP._PRT]
[ 16.271077] ACPI: PCI Interrupt Routing Table [_SB_.PCI0.RP01._PRT]
[ 16.271222] ACPI: PCI Interrupt Routing Table [_SB_.PCI0.RP02._PRT]
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[16.461708] ACPI: PCI Interrupt 0000:00:1c.5[B] -> GSI 16 (level, low) -> IRQ 16
[16.461719] PCI: Setting latency timer of device 0000:00:1c.5 to 64
[16.461752] PCI: Setting latency timer of device 0000:00:1e.0 to 64
[16.461765] NET: Registered protocol family 2
[16.512428] IP route cache hash table entries: 32768 (order: 5, 131072 bytes)
[16.512520] TCP established hash table entries: 131072 (order: 8, 1572864 bytes)
[16.513439] TCP bind hash table entries: 65536 (order: 7, 524288 bytes)
[16.513829] TCP: Hash tables configured (established 131072 bind 65536)
[16.513832] TCP reno registered
[16.528550] checking if image is initramfs... it is
[17.207970] Freeing initrd memory: 7060k freed
[17.208104] Simple Boot Flag at 0x36 set to 0x1
[17.208577] audit: initializing netlink socket (disabled)
[17.208594] audit(1201862302.388:1): initialized
[17.208690] highmem bounce pool size: 64 pages
[17.210605] VFS: Disk quotas dquot_6.5.1
[17.210659] Dquot-cache hash table entries: 1024 (order 0, 4096 bytes)
[17.210752] io scheduler noop registered
[17.210754] io scheduler anticipatory registered
[17.210756] io scheduler deadline registered
[17.210770] io scheduler cfq registered (default)
[17.210963] Boot video device is 0000:01:00.0
[17.211056] PCI: Setting latency timer of device 0000:00:01.0 to 64
[17.211102] assign_interrupt_mode Found MSI capability
[17.211105] Allocate Port Service[0000:00:01.0:pcie00]
[17.211138] Allocate Port Service[0000:00:01.0:pcie02]
[17.211238] PCI: Setting latency timer of device 0000:00:1c.0 to 64
[17.211370] assign_interrupt_mode Found MSI capability
[17.211373] Allocate Port Service[0000:00:1c.0:pcie00]
[17.211406] Allocate Port Service[0000:00:1c.0:pcie02]
[17.211594] PCI: Setting latency timer of device 0000:00:1c.1 to 64
[17.211735] assign_interrupt_mode Found MSI capability
[17.211737] Allocate Port Service[0000:00:1c.1:pcie00]
[17.211767] Allocate Port Service[0000:00:1c.1:pcie02]
[17.211974] PCI: Setting latency timer of device 0000:00:1c.5 to 64
[17.212108] assign_interrupt_mode Found MSI capability
[17.212110] Allocate Port Service[0000:00:1c.5:pcie00]
[17.212142] Allocate Port Service[0000:00:1c.5:pcie02]
[17.212390] isapnp: Scanning for PnP cards...
[17.569368] isapnp: No Plug & Play device found
[17.591140] Real Time Clock Driver v1.12ac
[17.591383] hpet_resources: 0xfed00000 is busy
[17.591419] Serial: 8250/16550 driver \$Revision: 1.90 \$ 4 ports, IRQ sharing enabled
[17.592606] RAMDISK driver initialized: 16 RAM disks of 65536K size 1024 blocksize
[17.592729] input: Macintosh mouse button emulation as /class/input/input0
[17.592813] PNP: PS/2 Controller [PNP0303:PS2K,PNP0f13:PS2M] at 0x60,0x64 irq 1,12
[17.599898] i8042.c: Detected active multiplexing controller, rev 1.1.
[17.601373] serio: i8042 KBD port at 0x60,0x64 irq 1
[17.601378] serio: i8042 AUX0 port at 0x60,0x64 irq 12
[17.601381] serio: i8042 AUX1 port at 0x60,0x64 irq 12
[17.601384] serio: i8042 AUX2 port at 0x60,0x64 irq 12
[17.601387] serio: i8042 AUX3 port at 0x60,0x64 irq 12
[17.601520] mice: PS/2 mouse device common for all mice
[17.601651] EISA: Probing bus 0 at eisa.0
[17.601665] Cannot allocate resource for EISA slot 1

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[ 17.601669] Cannot allocate resource for EISA slot 2
[ 17.601671] Cannot allocate resource for EISA slot 3
[ 17.601706] EISA: Detected 0 cards.
[ 17.601900] TCP cubic registered
[ 17.601916] NET: Registered protocol family 1
[ 17.601941] Using IPI No-Shortcut mode
[ 17.602121] Magic number: 12:687:627
[ 17.602422] Freeing unused kernel memory: 364k freed
[ 17.651850] input: AT Translated Set 2 keyboard as /class/input/input1
[ 18.823373] AppArmor: AppArmor initialized<5>audit(1201862303.888:2): type=1505
info="AppArmor initialized" pid=1255
[ 18.833201] fuse init (API version 7.8)
[ 18.839224] Failure registering capabilities with primary security module.
[ 18.875311] ACPI: SSDT 3FED8B1B, 0247 (r1 PmRef Cpu0Ist 3000 INTL 20050624)
[ 18.875567] ACPI: SSDT 3FED848D, 0609 (r1 PmRef Cpu0Cst 3001 INTL 20050624)
[ 18.876207] Monitor-Mwait will be used to enter C-1 state
[ 18.876210] Monitor-Mwait will be used to enter C-2 state
[ 18.876212] Monitor-Mwait will be used to enter C-3 state
[ 18.876218] ACPI: CPU0 (power states: C1[C1] C2[C2] C3[C3])
[ 18.876222] ACPI: Processor [CPU0] (supports 8 throttling states)
[ 18.876468] ACPI: SSDT 3FED8D62, 00C8 (r1 PmRef Cpu1Ist 3000 INTL 20050624)
[ 18.876698] ACPI: SSDT 3FED8A96, 0085 (r1 PmRef Cpu1Cst 3000 INTL 20050624)
[ 18.902642] ACPI: CPU1 (power states: C1[C1] C2[C2] C3[C3])
[ 18.902654] ACPI: Processor [CPU1] (supports 8 throttling states)
[ 3.372000] Marking TSC unstable due to: possible TSC halt in C2.
[ 3.372000] ACPI: Thermal Zone [TZ00] (40 C)
[ 3.376000] Time: hpet clocksource has been installed.
[ 3.936000] usbcore: registered new interface driver usbfs
[ 3.936000] usbcore: registered new interface driver hub
[ 3.936000] usbcore: registered new device driver usb
[ 3.976000] SCSI subsystem initialized
[ 3.980000] libata version 2.21 loaded.
[ 3.984000] ata_piix 0000:00:1f.1: version 2.11
[ 3.984000] ACPI: PCI Interrupt 0000:00:1f.1[A] -> GSI 19 (level, low) -> IRQ 18
[ 3.984000] PCI: Setting latency timer of device 0000:00:1f.1 to 64
[ 3.984000] scsi0 : ata_piix
[ 3.984000] scsi1 : ata_piix
[ 3.984000] ata1: PATA max UDMA/100 cmd 0x000101f0 ctl 0x000103f6 bmdma 0x000118a0
irq 14
[ 3.984000] ata2: PATA max UDMA/100 cmd 0x00010170 ctl 0x00010376 bmdma 0x000118a8
irq 15
[ 4.032000] USB Universal Host Controller Interface driver v3.0
[ 4.304000] ata1.00: ATAPI: Optiarc DVD RW AD-7640A, J802, max UDMA/33
[ 4.480000] ata1.00: configured for UDMA/33
[ 4.500000] Clocksource tsc unstable (delta = -388193362 ns)
[ 4.648000] scsi 0:0:0:0: CD-ROM Optiarc DVD RW AD-7640A J802 PQ: 0 ANSI: 5
[ 4.648000] ata_piix 0000:00:1f.2: MAP [ P0 P2 P1 P3 ]
[ 4.804000] ACPI: PCI Interrupt 0000:00:1f.2[B] -> GSI 19 (level, low) -> IRQ 18
[ 4.804000] PCI: Setting latency timer of device 0000:00:1f.2 to 64
[ 4.804000] scsi2 : ata_piix
[ 4.804000] scsi3 : ata_piix
[ 4.804000] ata3: SATA max UDMA/133 cmd 0x000118f8 ctl 0x000118ce bmdma 0x000118e0
irq 18
[ 4.804000] ata4: SATA max UDMA/133 cmd 0x000118f0 ctl 0x000118ca bmdma 0x000118e8
irq 18
```

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[ 5.032000] ata3.00: ATA-7: WDC WD1600BEVS-22RST0, 04.01G04, max UDMA/133
[ 5.032000] ata3.00: 312581808 sectors, multi 16: LBA48 NCQ (depth 0/32)
[ 5.048000] ata3.00: configured for UDMA/133
[ 5.216000] scsi 2:0:0:0: Direct-Access ATA WDC WD1600BEVS-2 04.0 PQ: 0 ANSI: 5
[ 5.216000] ACPI: PCI Interrupt 0000:07:09.0[A] -> GSI 20 (level, low) -> IRQ 19
[ 5.272000] ohci1394: fw-host0: OHCI-1394 1.1 (PCI): IRQ=[19] MMIO=[fb200000-fb2007ff]
Max Packet=[2048] IR/IT contexts=[4/4]
[ 5.272000] sd 2:0:0:0: [sda] 312581808 512-byte hardware sectors (160042 MB)
[ 5.272000] sd 2:0:0:0: [sda] Write Protect is off
[ 5.272000] sd 2:0:0:0: [sda] Mode Sense: 00 3a 00 00
[ 5.272000] sd 2:0:0:0: [sda] Write cache: enabled, read cache: enabled, doesn't support DPO
or FUA
[ 5.272000] sd 2:0:0:0: [sda] 312581808 512-byte hardware sectors (160042 MB)
[ 5.272000] sd 2:0:0:0: [sda] Write Protect is off
[ 5.272000] sd 2:0:0:0: [sda] Mode Sense: 00 3a 00 00
[ 5.272000] sd 2:0:0:0: [sda] Write cache: enabled, read cache: enabled, doesn't support DPO
or FUA
[ 5.272000] sda:<6>ACPI: PCI Interrupt 0000:00:1a.7[C] -> GSI 18 (level, low) -> IRQ 20
[ 5.276000] PCI: Setting latency timer of device 0000:00:1a.7 to 64
[ 5.276000] ehci_hcd 0000:00:1a.7: EHCI Host Controller
[ 5.276000] ehci_hcd 0000:00:1a.7: new USB bus registered, assigned bus number 1
[ 5.276000] ehci_hcd 0000:00:1a.7: debug port 1
[ 5.276000] PCI: cache line size of 32 is not supported by device 0000:00:1a.7
[ 5.276000] ehci_hcd 0000:00:1a.7: irq 20, io mem 0xfb504000
[ 5.280000] ehci_hcd 0000:00:1a.7: USB 2.0 started, EHCI 1.00, driver 10 Dec 2004
[ 5.280000] usb usb1: configuration #1 chosen from 1 choice
[ 5.280000] hub 1-0:1.0: USB hub found
[ 5.280000] hub 1-0:1.0: 4 ports detected
[ 5.280000] sda1 sda2 sda3 sda4
[ 5.284000] sd 2:0:0:0: [sda] Attached SCSI disk
[ 5.288000] sr 0:0:0:0: Attached scsi generic sg0 type 5
[ 5.288000] sd 2:0:0:0: Attached scsi generic sg1 type 0
[ 5.300000] sr0: scsi3-mmc drive: 24x/24x writer dvd-ram cd/rw xa/form2 cdda tray
[ 5.300000] Uniform CD-ROM driver Revision: 3.20
[ 5.300000] sr 0:0:0:0: Attached scsi CD-ROM sr0
[ 5.384000] ACPI: PCI Interrupt 0000:00:1d.7[A] -> GSI 23 (level, low) -> IRQ 21
[ 5.384000] PCI: Setting latency timer of device 0000:00:1d.7 to 64
[ 5.384000] ehci_hcd 0000:00:1d.7: EHCI Host Controller
[ 5.384000] ehci_hcd 0000:00:1d.7: new USB bus registered, assigned bus number 2
[ 5.384000] ehci_hcd 0000:00:1d.7: debug port 1
[ 5.384000] PCI: cache line size of 32 is not supported by device 0000:00:1d.7
[ 5.384000] ehci_hcd 0000:00:1d.7: irq 21, io mem 0xfb504400
[ 5.388000] ehci_hcd 0000:00:1d.7: USB 2.0 started, EHCI 1.00, driver 10 Dec 2004
[ 5.388000] usb usb2: configuration #1 chosen from 1 choice
[ 5.388000] hub 2-0:1.0: USB hub found
[ 5.388000] hub 2-0:1.0: 6 ports detected
[ 5.492000] ACPI: PCI Interrupt 0000:00:1a.0[A] -> GSI 16 (level, low) -> IRQ 16
[ 5.492000] PCI: Setting latency timer of device 0000:00:1a.0 to 64
[ 5.492000] uhci_hcd 0000:00:1a.0: UHCI Host Controller
[ 5.492000] uhci_hcd 0000:00:1a.0: new USB bus registered, assigned bus number 3
[ 5.492000] uhci_hcd 0000:00:1a.0: irq 16, io base 0x00001800
[ 5.492000] usb usb3: configuration #1 chosen from 1 choice
[ 5.492000] hub 3-0:1.0: USB hub found
[ 5.492000] hub 3-0:1.0: 2 ports detected
[ 5.596000] ACPI: PCI Interrupt 0000:00:1a.1[B] -> GSI 21 (level, low) -> IRQ 22
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[ 5.596000] PCI: Setting latency timer of device 0000:00:1a.1 to 64
[ 5.596000] uhci_hcd 0000:00:1a.1: UHCI Host Controller
[ 5.596000] uhci_hcd 0000:00:1a.1: new USB bus registered, assigned bus number 4
[ 5.596000] uhci_hcd 0000:00:1a.1: irq 22, io base 0x00001820
[ 5.596000] usb usb4: configuration #1 chosen from 1 choice
[ 5.596000] hub 4-0:1.0: USB hub found
[ 5.596000] hub 4-0:1.0: 2 ports detected
[ 5.700000] ACPI: PCI Interrupt 0000:00:1d.0[A] -> GSI 23 (level, low) -> IRQ 21
[ 5.700000] PCI: Setting latency timer of device 0000:00:1d.0 to 64
[ 5.700000] uhci_hcd 0000:00:1d.0: UHCI Host Controller
[ 5.700000] uhci_hcd 0000:00:1d.0: new USB bus registered, assigned bus number 5
[ 5.700000] uhci_hcd 0000:00:1d.0: irq 21, io base 0x00001840
[ 5.700000] usb usb5: configuration #1 chosen from 1 choice
[ 5.700000] hub 5-0:1.0: USB hub found
[ 5.700000] hub 5-0:1.0: 2 ports detected
[ 5.708000] Attempting manual resume
[ 5.708000] swsusp: Resume From Partition 8:1
[ 5.708000] PM: Checking swsusp image.
[ 5.708000] PM: Resume from disk failed.
[ 5.736000] usb 2-4: new high speed USB device using ehci_hcd and address 2
[ 5.768000] kjournald starting. Commit interval 5 seconds
[ 5.768000] EXT3-fs: mounted filesystem with ordered data mode.
[ 5.804000] ACPI: PCI Interrupt 0000:00:1d.1[B] -> GSI 19 (level, low) -> IRQ 18
[ 5.804000] PCI: Setting latency timer of device 0000:00:1d.1 to 64
[ 5.804000] uhci_hcd 0000:00:1d.1: UHCI Host Controller
[ 5.804000] uhci_hcd 0000:00:1d.1: new USB bus registered, assigned bus number 6
[ 5.804000] uhci_hcd 0000:00:1d.1: irq 18, io base 0x00001860
[ 5.804000] usb usb6: configuration #1 chosen from 1 choice
[ 5.804000] hub 6-0:1.0: USB hub found
[ 5.804000] hub 6-0:1.0: 2 ports detected
[ 5.880000] usb 2-4: configuration #1 chosen from 1 choice
[ 5.908000] ACPI: PCI Interrupt 0000:00:1d.2[C] -> GSI 18 (level, low) -> IRQ 20
[ 5.908000] PCI: Setting latency timer of device 0000:00:1d.2 to 64
[ 5.908000] uhci_hcd 0000:00:1d.2: UHCI Host Controller
[ 5.908000] uhci_hcd 0000:00:1d.2: new USB bus registered, assigned bus number 7
[ 5.908000] uhci_hcd 0000:00:1d.2: irq 20, io base 0x00001880
[ 5.908000] usb usb7: configuration #1 chosen from 1 choice
[ 5.908000] hub 7-0:1.0: USB hub found
[ 5.908000] hub 7-0:1.0: 2 ports detected
[ 6.012000] tg3.c:v3.77 (May 31, 2007)
[ 6.012000] ACPI: PCI Interrupt 0000:06:00.0[A] -> GSI 17 (level, low) -> IRQ 17
[ 6.012000] PCI: Setting latency timer of device 0000:06:00.0 to 64
[ 6.336000] eth0: Tigon3 [partno(BCM95906) rev c002 PHY(5906)] (PCI Express) 10/100Base-
TX Ethernet 00:1b:24:d3:d9:08
[ 6.336000] eth0: RXcsums[1] LinkChgREG[0] MIirq[0] ASF[0] WireSpeed[0] TSOcap[1]
[ 6.336000] eth0: dma_rwctrl[76180000] dma_mask[64-bit]
[ 6.556000] ieee1394: Host added: ID:BUS[0-00:1023] GUID[001b240000857f7c]
[ 11.244000] PM: Writing back config space on device 0000:06:00.0 at offset c (was 3d090000,
writing 0)
[ 11.360000] NET: Registered protocol family 10
[ 11.360000] lo: Disabled Privacy Extensions
[ 11.360000] ADDRCONF(NETDEV_UP): eth0: link is not ready
[ 11.360000] tg3: eth0: Link is up at 100 Mbps, full duplex.
[ 11.360000] tg3: eth0: Flow control is on for TX and on for RX.
[ 11.360000] ADDRCONF(NETDEV_CHANGE): eth0: link becomes ready
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[ 11.428000] Linux agpgart interface v0.102 (c) Dave Jones
[ 11.480000] snd_hda_intel: Unknown symbol snd_ctl_add
[ 11.480000] snd_hda_intel: Unknown symbol snd_pcm_new
[ 11.484000] snd_hda_intel: Unknown symbol snd_pcm_limit_hw_rates
[ 11.484000] snd_hda_intel: Unknown symbol snd_card_register
[ 11.484000] snd_hda_intel: Unknown symbol snd_card_free
[ 11.484000] snd_hda_intel: Unknown symbol snd_pcm_lib_preallocate_pages_for_all
[ 11.484000] snd_hda_intel: Unknown symbol snd_card_proc_new
[ 11.484000] snd_hda_intel: Unknown symbol snd_ctl_find_id
[ 11.484000] snd_hda_intel: Unknown symbol snd_dma_free_pages
[ 11.484000] snd_hda_intel: Unknown symbol snd_ctl_new1
[ 11.484000] snd_hda_intel: Unknown symbol snd_component_add
[ 11.484000] snd_hda_intel: Unknown symbol snd_card_new
[ 11.484000] snd_hda_intel: Unknown symbol snd_iprintf
[ 11.484000] snd_hda_intel: Unknown symbol snd_pcm_lib_malloc_pages
[ 11.484000] snd_hda_intel: Unknown symbol snd_pcm_lib_ioctl
[ 11.484000] snd_hda_intel: Unknown symbol snd_pcm_lib_free_pages
[ 11.484000] snd_hda_intel: Unknown symbol snd_ctl_elem_read
[ 11.484000] snd_hda_intel: Unknown symbol snd_ctl_elem_write
[ 11.484000] snd_hda_intel: Unknown symbol snd_pcm_set_ops
[ 11.484000] snd_hda_intel: Unknown symbol snd_pcm_hw_constraint_list
[ 11.484000] snd_hda_intel: Unknown symbol snd_device_new
[ 11.484000] snd_hda_intel: Unknown symbol snd_pcm_suspend_all
[ 11.484000] snd_hda_intel: Unknown symbol snd_card_disconnect
[ 11.484000] snd_hda_intel: Unknown symbol snd_pcm_hw_constraint_integer
[ 11.484000] snd_hda_intel: Unknown symbol snd_pci_quirk_lookup
[ 11.484000] snd_hda_intel: Unknown symbol snd_dma_alloc_pages
[ 11.484000] snd_hda_intel: Unknown symbol snd_pcm_period_elapsed
[ 11.484000] snd_hda_intel: Unknown symbol snd_pcm_hw_constraint_step
[ 11.484000] snd_hda_intel: Unknown symbol snd_pcm_format_width
[ 11.516000] pci_hotplug: PCI Hot Plug PCI Core version: 0.5
[ 11.520000] shpchp: Standard Hot Plug PCI Controller Driver version: 0.4
[ 11.528000] sdhci: Secure Digital Host Controller Interface driver
[ 11.528000] sdhci: Copyright(c) Pierre Ossman
[ 11.528000] sdhci: SDHCI controller found at 0000:07:09.1 [1180:0822] (rev 22)
[ 11.528000] ACPI: PCI Interrupt 0000:07:09.1[B] -> GSI 21 (level, low) -> IRQ 22
[ 11.528000] mmc0: SDHCI at 0xfb200800 irq 22 DMA
[ 11.708000] ieee80211_crypt: registered algorithm 'NULL'
[ 11.724000] ieee80211: 802.11 data/management/control stack, git-1.1.13
[ 11.724000] ieee80211: Copyright (C) 2004-2005 Intel Corporation
<jkretreno@linux.intel.com>
[ 11.792000] Linux video capture interface: v2.00
[ 11.816000] nvidia: module license 'NVIDIA' taints kernel.
[ 12.068000] ACPI: PCI Interrupt 0000:01:00.0[A] -> GSI 16 (level, low) -> IRQ 16
[ 12.068000] PCI: Setting latency timer of device 0000:01:00.0 to 64
[ 12.068000] NVRM: loading NVIDIA UNIX x86 Kernel Module 100.14.19 Wed Sep 12 14:12:24
PDT 2007
[ 12.152000] uvcvideo: Found UVC 1.00 device Lenovo EasyCamera (064e:a111)
[ 12.152000] usbcore: registered new interface driver uvcvideo
[ 12.152000] USB Video Class driver (v0.1.0)
[ 12.168000] bcm43xx driver
[ 12.168000] ACPI: PCI Interrupt 0000:02:00.0[A] -> GSI 16 (level, low) -> IRQ 16
[ 12.168000] PCI: Setting latency timer of device 0000:02:00.0 to 64
[ 12.372000] Synaptics Touchpad, model: 1, fw: 5.10, id: 0x258eb1, caps: 0xa04713/0x0
[ 12.432000] input: SynPS/2 Synaptics TouchPad as /class/input/input2
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[12.704000] lp: driver loaded but no devices found
[12.776000] Adding 2931820k swap on /dev/sda1. Priority:-1 extents:1 across:2931820k
[13.256000] EXT3 FS on sda2, internal journal
[14.240000] kjournald starting. Commit interval 5 seconds
[14.240000] EXT3 FS on sda4, internal journal
[14.240000] EXT3-fs: mounted filesystem with ordered data mode.
[14.260000] kjournald starting. Commit interval 5 seconds
[14.260000] EXT3 FS on sda3, internal journal
[14.260000] EXT3-fs: mounted filesystem with ordered data mode.
[15.168000] No dock devices found.
[15.620000] ACPI: Battery Slot [BAT1] (battery present)
[15.724000] input: Power Button (FF) as /class/input/input3
[15.724000] ACPI: Power Button (FF) [PWRF]
[15.724000] input: Lid Switch as /class/input/input4
[15.724000] ACPI: Lid Switch [LID]
[15.736000] input: Power Button (CM) as /class/input/input5
[15.736000] ACPI: Power Button (CM) [PWRB]
[15.740000] input: Sleep Button (CM) as /class/input/input6
[15.740000] ACPI: Sleep Button (CM) [SLPB]
[16.008000] ACPI: AC Adapter [ACAD] (on-line)
[16.020000] ACPI: Video Device [VGA] (multi-head: yes rom: no post: no)
[16.024000] ACPI: Video Device [GFX0] (multi-head: yes rom: no post: no)
[16.240000] usb 5-1: new low speed USB device using uhci_hcd and address 2
[16.416000] usb 5-1: configuration #1 chosen from 1 choice
[16.476000] usbcore: registered new interface driver hiddev
[16.488000] input: USB Optical Mouse as /class/input/input7
[16.488000] input: USB HID v1.11 Mouse [USB Optical Mouse] on usb-0000:00:1d.0-1
[16.488000] usbcore: registered new interface driver usbhid
[16.488000] /build/builddd/linux-source-2.6.22-2.6.22/drivers/hid/usbhid/hid-core.c: v2.6:USB
HID core driver
[17.316000] ppdev: user-space parallel port driver
[17.560000] audit(1201862322.499:3): type=1503 operation="inode_permission"
requested_mask="a" denied_mask="a" name="/dev/tty" pid=4883 profile="/usr/sbin/cupsd"
[17.596000] apm: BIOS not found.
[18.288000] ADDRCONF(NETDEV_UP): eth1: link is not ready
[19.032000] hdaudio: no version for "oss_register_device" found: kernel tainted.
[19.036000] ACPI: PCI Interrupt 0000:00:1b.0[A] -> GSI 22 (level, low) -> IRQ 23
[19.052000] hdaudio: Unknown HDA codec 0x10573055
[19.104000] usbcore: registered new interface driver ossusb
[19.472000] vboxdrv: Trying to deactivate the NMI watchdog permanently...
[19.472000] vboxdrv: Successfully done.
[19.940000] Failure registering capabilities with primary security module.
[20.468000] Bluetooth: Core ver 2.11
[20.472000] NET: Registered protocol family 31
[20.472000] Bluetooth: HCI device and connection manager initialized
[20.472000] Bluetooth: HCI socket layer initialized
[20.532000] Bluetooth: L2CAP ver 2.8
[20.532000] Bluetooth: L2CAP socket layer initialized
[20.672000] Bluetooth: RFCOMM socket layer initialized
[20.672000] Bluetooth: RFCOMM TTY layer initialized
[20.672000] Bluetooth: RFCOMM ver 1.8
[22.028000] eth0: no IPv6 routers present
[164.944000] ADDRCONF(NETDEV_UP): eth1: link is not ready
[165.104000] ADDRCONF(NETDEV_UP): eth0: link is not ready
[167.036000] ADDRCONF(NETDEV_UP): eth1: link is not ready

[167.208000] ADDRCONF(NETDEV_UP): eth0: link is not ready
[169.260000] tg3: eth0: Link is up at 100 Mbps, full duplex.
[169.260000] tg3: eth0: Flow control is on for TX and on for RX.
[169.264000] ADDRCONF(NETDEV_CHANGE): eth0: link becomes ready
[171.512000] NET: Registered protocol family 17
[186.324000] eth0: no IPv6 routers present
[227.160000] SoftMAC: Authentication timed out with 00:1a:70:e5:2f:92
[255.704000] ADDRCONF(NETDEV_UP): eth1: link is not ready
[298.588000] ADDRCONF(NETDEV_UP): eth1: link is not ready
[306.668000] eth0: no IPv6 routers present
[359.004000] SoftMAC: Authentication timed out with 00:1a:70:e5:2f:92
[516.468000] usb 2-3: new high speed USB device using ehci_hcd and address 4
[516.604000] usb 2-3: configuration #1 chosen from 1 choice
[516.692000] usbcore: registered new interface driver libusual
[516.724000] Uniform Multi-Platform E-IDE driver Revision: 7.00alpha2
[516.724000] ide: Assuming 33MHz system bus speed for PIO modes; override with idebus=xx
[516.732000] Initializing USB Mass Storage driver...
[516.732000] scsi4 : SCSI emulation for USB Mass Storage devices
[516.732000] usb-storage: device found at 4
[516.732000] usb-storage: waiting for device to settle before scanning
[516.732000] usbcore: registered new interface driver usb-storage
[516.732000] USB Mass Storage support registered.
[521.732000] usb-storage: device scan complete
[521.732000] scsi 4:0:0:0: Direct-Access SanDisk Cruzer Crossfire 2.0 PQ: 0 ANSI: 2
[521.732000] sd 4:0:0:0: [sdb] 4012467 512-byte hardware sectors (2054 MB)
[521.736000] sd 4:0:0:0: [sdb] Write Protect is off
[521.736000] sd 4:0:0:0: [sdb] Mode Sense: 03 00 00 00
[521.736000] sd 4:0:0:0: [sdb] Assuming drive cache: write through
[521.736000] sd 4:0:0:0: [sdb] 4012467 512-byte hardware sectors (2054 MB)
[521.736000] sd 4:0:0:0: [sdb] Write Protect is off
[521.736000] sd 4:0:0:0: [sdb] Mode Sense: 03 00 00 00
[521.736000] sd 4:0:0:0: [sdb] Assuming drive cache: write through
[521.736000] sdb: sdb1
[521.736000] sd 4:0:0:0: [sdb] Attached SCSI removable disk
[521.740000] sd 4:0:0:0: Attached scsi generic sg2 type 0
[3202.748000] cdrom: This disc doesn't have any tracks I recognize!
[3434.796000] UDF-fs: No VRS found
[3570.500000] usb 2-3: USB disconnect, address 4
[4066.292000] usb 2-3: new high speed USB device using ehci_hcd and address 5
[4066.428000] usb 2-3: configuration #1 chosen from 1 choice
[4066.428000] scsi5 : SCSI emulation for USB Mass Storage devices
[4066.428000] usb-storage: device found at 5
[4066.428000] usb-storage: waiting for device to settle before scanning
[4071.428000] usb-storage: device scan complete
[4071.428000] scsi 5:0:0:0: Direct-Access SanDisk Cruzer Crossfire 2.0 PQ: 0 ANSI: 2
[4071.432000] sd 5:0:0:0: [sdb] 4012467 512-byte hardware sectors (2054 MB)
[4071.432000] sd 5:0:0:0: [sdb] Write Protect is off
[4071.432000] sd 5:0:0:0: [sdb] Mode Sense: 03 00 00 00
[4071.432000] sd 5:0:0:0: [sdb] Assuming drive cache: write through
[4071.436000] sd 5:0:0:0: [sdb] 4012467 512-byte hardware sectors (2054 MB)
[4071.436000] sd 5:0:0:0: [sdb] Write Protect is off
[4071.436000] sd 5:0:0:0: [sdb] Mode Sense: 03 00 00 00
[4071.436000] sd 5:0:0:0: [sdb] Assuming drive cache: write through
[4071.436000] sdb: sdb1
[4071.436000] sd 5:0:0:0: [sdb] Attached SCSI removable disk

```

[ 4071.436000] sd 5:0:0:0: Attached scsi generic sg2 type 0
[ 5344.956000] usb 2-3: USB disconnect, address 5
[ 7219.556000] ADDRCONF(NETDEV_CHANGE): eth1: link becomes ready
[ 7229.908000] eth1: no IPv6 routers present

```

lsmod—Loaded kernel modules

Module	Size	Used by
isofs	36412	0
udf	87204	0
nls_iso8859_1	5120	0
nls_cp437	6784	0
vfat	14080	0
fat	54300	1 vfat
usb_storage	73024	0
ide_core	116804	1 usb_storage
libusual	18448	1 usb_storage
af_packet	24840	2
rfcomm	42136	2
l2cap	26240	11 rfcomm
bluetooth	57060	4 rfcomm,l2cap
vboxdrv	61104	0
vmix	14132	1
ossusb	56072	1
hdaudio	106592	1
osscore	565812	5 vmix,ossusb,hdaudio
ppdev	10244	0
usbhid	29536	0
hid	28928	1 usbhid
acpi_cpufreq	10568	2
cpufreq_ondemand	9612	1
cpufreq_stats	7232	0
cpufreq_userspace	5280	0
freq_table	5792	3 acpi_cpufreq,cpufreq_ondemand,cpufreq_stats
cpufreq_powersave	2688	0
cpufreq_conservative	8072	0
sbs	19592	0
video	18060	8
ac	6148	0
button	8976	0
container	5504	0
battery	11012	0
dock	10656	0
sbp2	24072	0
parport_pc	37412	0
lp	12580	0
parport	37448	3 ppdev,parport_pc,lp
joydev	11328	0
bcm43xx	127336	0
uvcvideo	48644	0
ieee80211softmac	31360	1 bcm43xx
compat_ioctl32	2304	1 uvcvideo
nvidia	6221648	36
videodev	29312	1 uvcvideo
v4l1_compat	15364	2 uvcvideo,videodev
v4l2_common	18432	2 uvcvideo,videodev

```

i2c_core          26112 1 nvidia
ieee80211         35656 2 bcm43xx,ieee80211softmac
ieee80211_crypt   7040 1 ieee80211
serio_raw         8068 0
sdhci             18828 0
shpchp           34580 0
pci_hotplug      32704 1 shpchp
psmouse          39952 0
mmc_core         28420 1 sdhci
intel_agp        25620 0
agpgart          35016 2 nvidia,intel_agp
ipv6             273892 12
evdev            11136 6
ext3             133896 3
jbd              60456 1 ext3
mbcache          9732 1 ext3
sg               36764 0
sr_mod           17828 0
cdrom            37536 1 sr_mod
sd_mod           30336 5
ata_generic      8452 0
uhci_hcd         26640 0
tg3              110980 0
ehci_hcd         36492 0
ohci1394         36528 0
ieee1394         96312 2 sbp2,ohci1394
ata_piix         17540 4
libata           125168 2 ata_generic,ata_piix
scsi_mod         147084 6 usb_storage,sbp2,sg,sr_mod,sd_mod,libata
usbcore          138632 8 usb_storage,libusual,ossusb,usbhid,uvccvideo,uhci_hcd,ehci_hcd
thermal          14344 0
processor        32072 2 acpi_cpufreq,thermal
fan              5764 0
fuse             47124 1
apparmor         40728 0
commoncap        8320 1 apparmor

```

cat /etc/X11/xorg.conf ---X.org configuration file

```

# xorg.conf (xorg X Window System server configuration file)
#
# This file was generated by dexconf, the Debian X Configuration tool, using
# values from the debconf database.
#
# Edit this file with caution, and see the xorg.conf manual page.
# (Type "man xorg.conf" at the shell prompt.)
#
# This file is automatically updated on xserver-xorg package upgrades *only*
# if it has not been modified since the last upgrade of the xserver-xorg
# package.
#
# If you have edited this file but would like it to be automatically updated
# again, run the following command:
# sudo dpkg-reconfigure -phigh xserver-xorg

```

Section "Files"
EndSection

Section "InputDevice"
Identifier "Generic Keyboard"
Driver "kbd"
Option "CoreKeyboard"
Option "XkbRules" "xorg"
Option "XkbModel" "pc105"
Option "XkbLayout" "us"
Option "XkbVariant" "intl"
Option "XkbOptions" "lv3:ralt_switch"
EndSection

Section "InputDevice"
Identifier "Configured Mouse"
Driver "mouse"
Option "CorePointer"
Option "Device" "/dev/input/mice"
Option "Protocol" "ImPS/2"
Option "ZAxisMapping" "4 5"
Option "Emulate3Buttons" "true"
EndSection

Section "InputDevice"
Identifier "Synaptics Touchpad"
Driver "synaptics"
Option "SendCoreEvents" "true"
Option "Device" "/dev/psaux"
Option "Protocol" "auto-dev"
Option "HorizEdgeScroll" "0"
EndSection

Section "InputDevice"
Driver "wacom"
Identifier "stylus"
Option "Device" "/dev/input/wacom"
Option "Type" "stylus"
Option "ForceDevice" "ISDV4"# Tablet PC ONLY
EndSection

Section "InputDevice"
Driver "wacom"
Identifier "eraser"
Option "Device" "/dev/input/wacom"
Option "Type" "eraser"
Option "ForceDevice" "ISDV4"# Tablet PC ONLY
EndSection

Section "InputDevice"
Driver "wacom"
Identifier "cursor"
Option "Device" "/dev/input/wacom"
Option "Type" "cursor"
Option "ForceDevice" "ISDV4"# Tablet PC ONLY

EndSection

Section "Device"

Identifier "nVidia Corporation G80 [GeForce 8400M GS]"
Driver "nvidia"
Busid "PCI:1:0:0"
Option "AddARGBVisuals" "True"
Option "AddARGBGLXVisuals" "True"
Option "NoLogo" "True"

EndSection

Section "Monitor"

Identifier "Generic Monitor"
Option "DPMS"
Horizsync 28-64
Vertrefresh 43-60

EndSection

Section "Screen"

Identifier "Default Screen"
Device "nVidia Corporation G80 [GeForce 8400M GS]"
Monitor "Generic Monitor"
Defaultdepth 24
SubSection "Display"
Modes "1280x1280"
EndSubSection

EndSection

Section "ServerLayout"

Identifier "Default Layout"
screen "Default Screen"
Inputdevice "Generic Keyboard"
Inputdevice "Configured Mouse"

Uncomment if you have a wacom tablet
InputDevice "stylus" "SendCoreEvents"
InputDevice "cursor" "SendCoreEvents"
InputDevice "eraser" "SendCoreEvents"
Inputdevice "Synaptics Touchpad"

EndSection

Section "Module"

Load "glx"

EndSection

glxgears

11877 frames in 5.0 seconds = 2375.323 FPS
11987 frames in 5.0 seconds = 2396.846 FPS
11998 frames in 5.0 seconds = 2399.182 FPS
12066 frames in 5.0 seconds = 2413.029 FPS
11939 frames in 5.0 seconds = 2387.735 FPS
12055 frames in 5.0 seconds = 2410.964 FPS
12071 frames in 5.0 seconds = 2414.164 FPS
12079 frames in 5.0 seconds = 2415.642 FPS
12062 frames in 5.0 seconds = 2412.360 FPS

12113 frames in 5.0 seconds = 2422.503 FPS
12096 frames in 5.0 seconds = 2419.188 FPS
12093 frames in 5.0 seconds = 2418.570 FPS
11699 frames in 5.0 seconds = 2339.797 FPS