Archives 2005

Gentoo : Ivman et /media/

Si comme moi, ivman vous irrite à chaque fois qu'il monte vos périphériques (USB / CD-Rom...) dans /media/, il suffit de modifier la configuration de HAL :

```
vi /usr/share/hal/fdi/90defaultpolicy/storage-policy.fdi
```

Et on remplace la ligne :

```
<merge key="storage.policy.default.mount_root" type="string">/media</merge>
```

Par :

```
<merge key="storage.policy.default.mount_root" type="string">/mnt</merge>
```

Enfin, il suffira de redémarrer le service HAL :

```
/etc/init.d/hald restart
```

Gentoo : Problème AuthDaemond

Si vous avez des messages d'erreur du type après avoir redémarré un service (sshd, courier-imap...) :

```
Cannot add provide 'authdaemond', as a service with the same name exists!
```

C'est que sous Gentoo Linux, le service **authdaemond** est maintenant fourni par le service **courier-authlib**. Pour cela, il faut supprimer les traces de l'ancien service authdaemond :

```
/etc/init.d/authdaemond stop
rc-update del authdaemond default
rm /etc/init.d/authdaemond
/etc/init.d/courier-authlib stop
/etc/init.d/courier-authlib zap
/etc/init.d/courier-authlib start
```

Normalement, ces messages devraient disparaître 😎

Gentoo : Ati Remote Wonder 2 (paquetage)

Installation

Le package lirc 0.71 étant sorti en **testing** sur la Gentoo Linux, on va pouvoir enfin utiliser le package officiel pour supporter la télécommande Ati Remote Wonder 2.

Note : Pour ceux/celles qui utilise une Fedora, il y a ce poste sur le blog de llaumgui.

Penser à déclarer (si besoin) le package lirc dans la liste des packages en testing (/etc/portage/package.keywords), pour un AMD64 :

```
echo "app-misc/lirc ~amd64" >> /etc/portage/package.keywords
```

Enfin, lançons la compilation de lirc avec le support atiusb

```
LIRC_OPTS="--with-driver=atiusb" emerge lirc
```

Éditez le fichier /etc/conf.d/lircd et vérifier que vous avez la ligne :

```
LIRCD_OPTS="-d /dev/lirc0"
```

Chargez le module lirc_atiusb en mémoire :

```
modprobe lirc_atiusb
```

Vérifiez la présence des périphériques lirc et le bon chargement du module (lsmod + log):

```
ls -l /dev/lirc*
crw-rw---- 1 root root 61, 0 avr 29 08:55 /dev/lirc0
srw-r--r-- 1 root root 0 avr 29 08:54 /dev/lircd
prw-r--r-- 1 root root 0 avr 16 08:54 /dev/lircm
```

Dans le cas ou le device lirc0 n'existe pas, créez alors un lien :

```
ln -s /dev/lirc /dev/lirc0
tail -f /var/log/messages
```

```
Apr 29 08:54:21 nimbus-serveur lircd-0.7.1[8356]: lircd(atiusb) ready
```

Note : Pensez à rajouter le chargement automatique du module au démarrage

```
echo "lirc_atiusb" >> /etc/modules.autoload.d/kernel-2.6
```

Configuration

```
/usr/local/bin/irrecord /etc/lircd.conf
```

Définissez les touches qui vous intéresse comme indiqué par irrecord... Puis lancez le service lircd

```
/etc/init.d/lircd start
```

Testons la configuration que vous venez de saisir :

```
irw
```

Et jouez avec la télécommande : vous devriez voir apparaître les touches que vous avez définit juste avant. On pourra aussi demander à exécuter ce service lors du démarrage du serveur, par exemple pour la Gentoo Linux :

```
rc-update add lircd default
```

Et voilà, il ne vous reste qu'a configurer les applications qui vous intéresse pour qu'elles utilisent lirc, et vos pourrez jouer avec votre télécommande H/F ! (Par exemple pour le Media Center Freevo)

Gentoo : Ati Remote Wonder 2 (Compilation)

Cible :

- Gentoo Linux

La télécommande **ATI Remote Wonder 2** est diffusé en France sous le nom **Remote Bob Control 2** produit par **Sapphire**. Il s'agit d'une télécommande H/F. Je vais donc présenter le paramétrage de cette télécommande sous GNU/Linux (kernel 2.6), par l'intermédiaire du logiciel libre LIRC et son utilisation sous le Media Center Freevo.

Tout d'abord, sachez que cette télécommande est supportée depuis peu par LIRC, dans sa **version 0.71**. Pour ce qui me concerne, à l'époque (Début Avril 2005) j'avais dut utiliser un snapshot CVS. La seule fonctionnalité que je n'ai pas testée c'est la gestion de la souris sous X avec le mini joystick sur la télécommande .

Compilation de Lirc

Tout d'abord, vous aurez besoin des sources de votre kernel actuel (pour ma part, je l'ai testé avec un kernel 2.6.11), récupérez la dernière version stable.

```
wget http://switch.dl.sourceforge.net/sourceforge/lirc/lirc-0.7.1.tar.bz2
```

Placez vous dans un dossier de votre choix...

```
tar -jxvf lirc-0.7.1.tar.bz2
cd lirc-0.7.1
./configure
```

Un menu en mode texte se lance (tiens ca c'est une des évolutions de la version 0.71 il me semble...) qui va nous permettre de configurer simplement le support de note télécommande :

- (1)Driver configuration

        - (8) USB device
            - (1) ATI / Nvidia X10 I & II RF remote
- (2)Software configuration
    - (X) Compile tools for X-windows
    - (X) Use syslog-d instead of own log-file
- (3)Save configuration & run configure

Puis on va compiler et lancer le module lirc

```
make
make install
modprobe lirc_atiusb
```

Si vous regarder le syslog, vous devriez voir les lignes suivantes, qui prouveront que le module s'est bien lancé :

```
Apr 16 08:55:40 nimbus-serveur lirc_dev: IR Remote Control driver
registered, at major 61
Apr 16 08:55:40 nimbus-serveur lirc_atiusb: USB remote driver for LIRC v0.4
Apr 16 08:55:40 nimbus-serveur lirc_atiusb: Paul Miller
<pmiller9@users.sourceforge.net>
Apr 16 08:55:40 nimbus-serveur lirc_dev: lirc_register_plugin: sample_rate:
0
Apr 16 08:55:40 nimbus-serveur lirc_atiusb[2]: on usb2:2
Apr 16 08:55:40 nimbus-serveur usbcore: registered new driver lirc_atiusb
```

On vérifie que les devices ont bien été crée

```
ls -l /dev/ | grep lirc
```

Dans le cas ou le device lirc0 n'existe pas, créez alors un lien :

```
ln -s /dev/lirc /dev/lirc0
```

Pour ma part, j'ai bien eut tout les devices de bien crée :

```
crw-r--r-- 1 root root 61, 0 avr 16 08:54 lirc
crw-rw---- 1 root root 61, 0 avr 16 08:55 lirc0
prw-r--r-- 1 root root 0 avr 16 08:54 lircd
prw-r--r-- 1 root root 0 avr 16 08:54 lircm
```

Pour tester le fonctionnement, on utilisera irw avec un fichier de configuration vite fait :

```
/usr/local/bin/irrecord /root/ati-test.conf
```

On définira la touche power par exemple :

```
Hold down an arbitrary button.
.....................................................................
....
```

```
Found gap length: 123992
Now enter the names for the buttons.

 Please enter the name for the next button (press <ENTER> to finish
recording)
POWER

Now hold down button "POWER".
```

Enfin, on appuiera sur ENTER pour signaler la fin de la configuration.

Note : A la fin de cette config, j'ai eu le message d'erreur “/usr/local/bin/irrecord: could not reset hardware.”, mais c'est sans conséquence apparemment. Lançons le service lircd, mais pas encore en tant que service, pour vérifier son fonctionnement avec notre fichier de conf de test :

```
/usr/local/sbin/lircd -n --device /dev/lirc0 /root/ati-test.conf
```

```
Apr 16 09:03:14 nimbus-serveur lircd-0.7.1pre4[3156]: lircd(atiusb) ready
```

Lancez irw :

```
/usr/local/bin/irw
```

Note : Au lancement de irw, regarder le terminal dans lequel on a lancé lircd. On devrait voir :

```
lircd-0.7.1pre4[4002]: accepted new client on /dev/lircd
```

En appuyant sur POWER, on devrait voir affiché :

```
00000000020c0000 00 POWER ati-test.conf
00000000020c0000 00 POWER ati-test.conf
00000000020c0000 01 POWER ati-test.conf
```

C'est que c'est bon signe et que l'on suppose que la télécommande fonctionne correctement !

Configuration de Lirc

```
mkdir /root/ati-remote
/usr/local/bin/irrecord /root/ati-remote/ati-remote-wonder-2.conf
```

Définissez les touches qui vous intéresse comme précédemment... On va pouvoir relancer lircd en tant que service avec le bon fichier de configuration :

```
/usr/local/sbin/lircd --device /dev/lirc0 /root/ati-remote/ati-remote-
wonder-2.conf
```

On pourra aussi demander à exécuter cette commande lors du démarrage du serveur, par exemple pour la Gentoo Linux :

```
vi /etc/conf.d/local.start
```

Voilà ! Jusqu'à là, on n'a pas définit d'application pour utiliser cette télécommande. Pour ma part, je m'en sert avec le logiciel d'interface multimédia Freevo. Je vais donc détailler vite fait cette partie la configuration qui faut appliquer à freevo pour utiliser la télécommande.

Interaction Freevo

Assurez vous d'avoir déjà installé le package **pylirc**

```
emerge -p pylirc
```

Créez un fichier lircrc (voir la syntaxe détaillé sur la page du projet freevo)

```
vi /etc/freevo/lircrc
```

Voir le contenu de mon fichier de référence par exemple. Pour vérifier votre fichier de conf freevo :

```
/usr/local/bin/ircat --config=/etc/freevo/lircrc freevo
```

Et voilà, il ne vous reste qu'a relancer freevo, et vos pourrez jouer avec votre télécommande H/F !

Gentoo : Underclocker une carte NVIDIA

Il ne s'agit pas que d'underclocker la carte vidéo, il s'agit surtout de vérifier l'impact sur la température de fonctionnement de mon barebone Shuttle SN85G4 V2. Pour cela, je vais m'armer de l'utilitaire nvclock et utiliser mes graphs de température que je génère avec les rrdtools.

Tout d'abord, commençons par récupérer nvclock, en version CVS (car pour moi, la version 0.7 compilé pour l'architecture Amd64, me génère des "segmentation fault")

```
mkdir cvs
cd cvs
cvs -d:pserver:anonymous@cvs.sourceforge.net:/cvsroot/nvclock login
```

On laisse le mot de passe vide, puisqu'on utilise l'accès anonymous de cvs.

```
cvs -z3 -d:pserver:anonymous@cvs.sourceforge.net:/cvsroot/nvclock co nvclock
```

Enfin, on va configurer les options de compilation, sachant que ni les interfaces graphique ne m'intéresse, ni le nvcontrol.

```
cd nvclock/
sh autogen.sh
./configure --disable-gtk --disable-qt --disable-nvcontrol
make
```

1 seconde plus-tard... :)

```
cd src/
./nvclock -i
```

Voilà, on devrait avoir normalement un affichage détaillé des caractéristiques de fonctionnement de votre carte graphique Nvidia (une MSI FX5200 refroidit par dissipateur passif uniquement pour ce qui me concerne). Donc, ma FX 5200 de chez MSI à une fréquence de fonctionnement de 200MHz pour le GPU et de 405 MHz pour la mémoire (quel gachi pour un serveur, sachant que son unique intérêt est sa qualité d'affichage qui est plus que correct). Ce que je reproche à cette carte, c'est de chauffer abusivement... enfin, oui, bon c'est normal aussi, vue ces caractéristiques. Donc, mon but est de tenter de limiter la température en baissant la fréquence du GPU et de la mémoire de moitié :

Avant : GPU à 200MHz et Mémoire à 405 MHz

```
./nvclock -f -n 200 -m 405
```

Après : GPU à 100MHz et Mémoire à 200 MHz (~-50%)

```
./nvclock -n 100 -m 200
```

Voilà, sachant que la température à l'intérieur du barbebone a une certaine inertie, j’attends 1 à 2h avant que de refaire mes relevés de température.

- Le serveur au repos, dans pièce à 23°C :
- Le **CPU** passe 43°C à 41.5°C
- Le **boîtier/carte mère** passe de 48°C à 46.5°C
- **L'alimentation** passe de 44°C à 43°C

Bref, un gain de 1 à 2°C maximum, ce qui n'est pas une révolution, mais c'est toujours ça de gagné, surtout lorsque l'été arrivera... D'un point de vu performance, je peux toujours regarder les vidéos/DVD dans de bonne condition. Il est peut être possible de diminuer encore les fréquences de fonctionnement.

Gentoo : Shuttle SN85G4 v2

Généralités

Les fonctionnalités du barebone Shuttle SN85G4 et SN85G4 V2 pour AMD Athlon 64 sont plutôt bien gérée par le kernel 2.6 (enfin, disons 2.6.8, pour les versions antérieur, je ne sais pas). La seule fonctionnalité que je ne prend pas en compte (car je n'ai pas la place de la laisser dans le serveur) est le lecteur de carte mémoire. Je n'ai donc aucune idée si cela est supporté ou non par le kernel.

Grosso modo, lors de la compilation du kernel 2.6, sachez que vous avez :

- **Contrôleur IDE** : Nvidia/Nforce
- **Contrôleur SATA** : Nvidia / Sillicon Image 3512 (Logiquement, seul le support du SI 3512 devrait suffire... A vérifier)
- **Carte son intégré** : Intel i8x0 / Nforce Audio (Réellement, il s'agit un chip Intel)

- **Capteur de température (Hardware Sensors)** : ITE IT87xx and compatibles. Pour le bus de donnée, on pourra utiliser le ISA Bus ou le SMB Bus (Nvidia Nforce2). Préférez le ISA Bus (Il semble plus performant).
- **Firewire (IEEE 1394)** : VIA Technologies IEEE (OHCI-1394 support)
- **USB 1.0, 1.1, 2.0** : nVidia Corporation nForce3 (OHCI & EHCI)

Compilation du Kernel

Pour la Gentoo Linux, la méthode de compilation du kernel devrait ressembler à :

```
emerge sys-kernel/gentoo-dev-sources
cd /usr/src/linux
```

Si vous avez sauvegardé la configuration de votre précédent kernel, et que votre ancienne configuration vous convenait, il peut être judicieux de la réimporter, ne serait ce que pour gagner du temps et pour faire moins d'erreur. Par exemple :

```
cp /boot/config-2.6.14 /usr/src/linux/.config
```

Pour configurer les options de votre kernel, en mode texte :

```
make menuconfig
```

Configuration détaillée du kernel :

kernel-linux-2.6.14-sn85g4v2.txt

```
#
# Automatically generated make config: don't edit
# Linux kernel version: 2.6.14-gentoo-r5
# Tue Jan  3 08:47:53 2006
#
CONFIG_X86_64=y
CONFIG_64BIT=y
CONFIG_X86=y
CONFIG_SEMAPHORE_SLEEPERS=y
CONFIG_MMU=y
CONFIG_RWSEM_GENERIC_SPINLOCK=y
CONFIG_GENERIC_CALIBRATE_DELAY=y
CONFIG_X86_CMPXCHG=y
CONFIG_EARLY_PRINTK=y
CONFIG_GENERIC_ISA_DMA=y
CONFIG_GENERIC_IOMAP=y
CONFIG_ARCH_MAY_HAVE_PC_FDC=y

#
# Code maturity level options
#
CONFIG_EXPERIMENTAL=y
```

```
CONFIG_CLEAN_COMPILE=y
CONFIG_BROKEN_ON_SMP=y
CONFIG_LOCK_KERNEL=y
CONFIG_INIT_ENV_ARG_LIMIT=32

#
# General setup
#
CONFIG_LOCALVERSION="-Nimbus"
CONFIG_LOCALVERSION_AUTO=y
CONFIG_SWAP=y
CONFIG_SYSVIPC=y
CONFIG_POSIX_MQUEUE=y
# CONFIG_BSD_PROCESS_ACCT is not set
CONFIG_SYSCTL=y
# CONFIG_AUDIT is not set
CONFIG_HOTPLUG=y
CONFIG_KOBJECT_UEVENT=y
CONFIG_IKCONFIG=y
CONFIG_IKCONFIG_PROC=y
CONFIG_INITRAMFS_SOURCE=""
# CONFIG_EMBEDDED is not set
CONFIG_KALLSYMS=y
# CONFIG_KALLSYMS_EXTRA_PASS is not set
CONFIG_PRINTK=y
CONFIG_BUG=y
CONFIG_BASE_FULL=y
CONFIG_FUTEX=y
CONFIG_EPOLL=y
CONFIG_SHMEM=y
CONFIG_CC_ALIGN_FUNCTIONS=0
CONFIG_CC_ALIGN_LABELS=0
CONFIG_CC_ALIGN_LOOPS=0
CONFIG_CC_ALIGN_JUMPS=0
# CONFIG_TINY_SHMEM is not set
CONFIG_BASE_SMALL=0

#
# Loadable module support
#
CONFIG_MODULES=y
CONFIG_MODULE_UNLOAD=y
CONFIG_MODULE_FORCE_UNLOAD=y
CONFIG_OBSOLETE_MODPARM=y
# CONFIG_MODVERSIONS is not set
# CONFIG_MODULE_SRCVERSION_ALL is not set
# CONFIG_KMOD is not set

#
# Processor type and features
#
```

```
CONFIG_MK8=y
# CONFIG_MPSC is not set
# CONFIG_GENERIC_CPU is not set
CONFIG_X86_L1_CACHE_BYTES=64
CONFIG_X86_L1_CACHE_SHIFT=6
CONFIG_X86_TSC=y
CONFIG_X86_GOOD_APIC=y
# CONFIG_MICROCODE is not set
CONFIG_X86_MSR=y
CONFIG_X86_CPUID=y
CONFIG_X86_IO_APIC=y
CONFIG_X86_LOCAL_APIC=y
CONFIG_MTRR=y
# CONFIG_SMP is not set
# CONFIG_PREEMPT_NONE is not set
# CONFIG_PREEMPT_VOLUNTARY is not set
CONFIG_PREEMPT=y
CONFIG_PREEMPT_BKL=y
# CONFIG_NUMA is not set
CONFIG_ARCH_FLATMEM_ENABLE=y
CONFIG_SELECT_MEMORY_MODEL=y
CONFIG_FLATMEM_MANUAL=y
# CONFIG_DISCONTIGMEM_MANUAL is not set
# CONFIG_SPARSEMEM_MANUAL is not set
CONFIG_FLATMEM=y
CONFIG_FLAT_NODE_MEM_MAP=y
# CONFIG_SPARSEMEM_STATIC is not set
CONFIG_HAVE_ARCH_EARLY_PFN_TO_NID=y
CONFIG_HPET_TIMER=y
CONFIG_X86_PM_TIMER=y
# CONFIG_GART_IOMMU is not set
CONFIG_DUMMY_IOMMU=y
CONFIG_X86_MCE=y
# CONFIG_X86_MCE_INTEL is not set
CONFIG_PHYSICAL_START=0x100000
# CONFIG_KEXEC is not set
CONFIG_SECCOMP=y
# CONFIG_HZ_100 is not set
CONFIG_HZ_250=y
# CONFIG_HZ_1000 is not set
CONFIG_HZ=250
CONFIG_GENERIC_HARDIRQS=y
CONFIG_GENERIC_IRQ_PROBE=y
CONFIG_ISA_DMA_API=y

#
# Power management options
#
CONFIG_PM=y
# CONFIG_PM_DEBUG is not set
# CONFIG_SOFTWARE_SUSPEND is not set
```

```
#
# ACPI (Advanced Configuration and Power Interface) Support
#
CONFIG_ACPI=y
# CONFIG_ACPI_SLEEP is not set
# CONFIG_ACPI_AC is not set
# CONFIG_ACPI_BATTERY is not set
CONFIG_ACPI_BUTTON=y
CONFIG_ACPI_VIDEO=y
# CONFIG_ACPI_HOTKEY is not set
CONFIG_ACPI_FAN=y
CONFIG_ACPI_PROCESSOR=y
CONFIG_ACPI_THERMAL=y
# CONFIG_ACPI_ASUS is not set
# CONFIG_ACPI_IBM is not set
# CONFIG_ACPI_TOSHIBA is not set
CONFIG_ACPI_BLACKLIST_YEAR=0
# CONFIG_ACPI_DEBUG is not set
CONFIG_ACPI_EC=y
CONFIG_ACPI_POWER=y
CONFIG_ACPI_SYSTEM=y
# CONFIG_ACPI_CONTAINER is not set

#
# CPU Frequency scaling
#
CONFIG_CPU_FREQ=y
CONFIG_CPU_FREQ_TABLE=y
# CONFIG_CPU_FREQ_DEBUG is not set
CONFIG_CPU_FREQ_STAT=y
# CONFIG_CPU_FREQ_STAT_DETAILS is not set
CONFIG_CPU_FREQ_DEFAULT_GOV_PERFORMANCE=y
# CONFIG_CPU_FREQ_DEFAULT_GOV_USERSPACE is not set
CONFIG_CPU_FREQ_GOV_PERFORMANCE=y
# CONFIG_CPU_FREQ_GOV_POWERSAVE is not set
# CONFIG_CPU_FREQ_GOV_USERSPACE is not set
CONFIG_CPU_FREQ_GOV_ONDEMAND=y
# CONFIG_CPU_FREQ_GOV_CONSERVATIVE is not set

#
# CPUFreq processor drivers
#
CONFIG_X86_POWERNOW_K8=y
CONFIG_X86_POWERNOW_K8_ACPI=y
# CONFIG_X86_SPEEDSTEP_CENTRINO is not set
# CONFIG_X86_ACPI_CPUFREQ is not set

#
# shared options
#
# CONFIG_X86_ACPI_CPUFREQ_PROC_INTF is not set
```

```
# CONFIG_X86_SPEEDSTEP_LIB is not set

#
# Bus options (PCI etc.)
#
CONFIG_PCI=y
CONFIG_PCI_DIRECT=y
CONFIG_PCI_MMCONFIG=y
# CONFIG_UNORDERED_IO is not set
# CONFIG_PCIEPORTBUS is not set
# CONFIG_PCI_MSI is not set
# CONFIG_PCI_LEGACY_PROC is not set

#
# PCCARD (PCMCIA/CardBus) support
#
# CONFIG_PCCARD is not set

#
# PCI Hotplug Support
#
# CONFIG_HOTPLUG_PCI is not set

#
# Executable file formats / Emulations
#
CONFIG_BINFMT_ELF=y
# CONFIG_BINFMT_MISC is not set
CONFIG_IA32_EMULATION=y
CONFIG_IA32_AOUT=y
CONFIG_COMPAT=y
CONFIG_SYSVIPC_COMPAT=y
CONFIG_UID16=y

#
# Networking
#
CONFIG_NET=y

#
# Networking options
#
CONFIG_PACKET=y
# CONFIG_PACKET_MMAP is not set
CONFIG_UNIX=y
# CONFIG_NET_KEY is not set
CONFIG_INET=y
CONFIG_IP_MULTICAST=y
# CONFIG_IP_ADVANCED_ROUTER is not set
CONFIG_IP_FIB_HASH=y
# CONFIG_IP_PNP is not set
```

```
# CONFIG_NET_IPIP is not set
# CONFIG_NET_IPGRE is not set
# CONFIG_IP_MROUTE is not set
# CONFIG_ARPD is not set
# CONFIG_SYN_COOKIES is not set
# CONFIG_INET_AH is not set
# CONFIG_INET_ESP is not set
# CONFIG_INET_IPCOMP is not set
# CONFIG_INET_TUNNEL is not set
CONFIG_INET_DIAG=y
CONFIG_INET_TCP_DIAG=y
# CONFIG_TCP_CONG_ADVANCED is not set
CONFIG_TCP_CONG_BIC=y

#
# IP: Virtual Server Configuration
#
# CONFIG_IP_VS is not set
# CONFIG_IPV6 is not set
CONFIG_NETFILTER=y
# CONFIG_NETFILTER_DEBUG is not set
# CONFIG_NETFILTER_NETLINK is not set

#
# IP: Netfilter Configuration
#
CONFIG_IP_NF_CONNTRACK=m
# CONFIG_IP_NF_CT_ACCT is not set
# CONFIG_IP_NF_CONNTRACK_MARK is not set
# CONFIG_IP_NF_CONNTRACK_EVENTS is not set
# CONFIG_IP_NF_CT_PROTO_SCTP is not set
CONFIG_IP_NF_FTP=m
CONFIG_IP_NF_IRC=m
# CONFIG_IP_NF_NETBIOS_NS is not set
CONFIG_IP_NF_TFTP=m
# CONFIG_IP_NF_AMANDA is not set
# CONFIG_IP_NF_PPTP is not set
# CONFIG_IP_NF_QUEUE is not set
CONFIG_IP_NF_IPTABLES=m
CONFIG_IP_NF_MATCH_LIMIT=m
CONFIG_IP_NF_MATCH_IPRANGE=m
CONFIG_IP_NF_MATCH_MAC=m
CONFIG_IP_NF_MATCH_PKTTYPE=m
CONFIG_IP_NF_MATCH_MARK=m
CONFIG_IP_NF_MATCH_MULTIPORT=m
CONFIG_IP_NF_MATCH_TOS=m
CONFIG_IP_NF_MATCH_RECENT=m
CONFIG_IP_NF_MATCH_ECN=m
CONFIG_IP_NF_MATCH_DSCP=m
CONFIG_IP_NF_MATCH_AH_ESP=m
CONFIG_IP_NF_MATCH_LENGTH=m
```

```
CONFIG_IP_NF_MATCH_TTL=m
CONFIG_IP_NF_MATCH_TCPMSS=m
CONFIG_IP_NF_MATCH_HELPER=m
CONFIG_IP_NF_MATCH_STATE=m
CONFIG_IP_NF_MATCH_CONNTRACK=m
CONFIG_IP_NF_MATCH_OWNER=m
CONFIG_IP_NF_MATCH_ADDRTYPE=m
CONFIG_IP_NF_MATCH_REALM=m
CONFIG_IP_NF_MATCH_SCTP=m
# CONFIG_IP_NF_MATCH_DCCP is not set
CONFIG_IP_NF_MATCH_COMMENT=m
CONFIG_IP_NF_MATCH_HASHLIMIT=m
# CONFIG_IP_NF_MATCH_STRING is not set
CONFIG_IP_NF_FILTER=m
CONFIG_IP_NF_TARGET_REJECT=m
CONFIG_IP_NF_TARGET_LOG=m
CONFIG_IP_NF_TARGET_ULOG=m
CONFIG_IP_NF_TARGET_TCPMSS=m
# CONFIG_IP_NF_TARGET_NFQUEUE is not set
CONFIG_IP_NF_NAT=m
CONFIG_IP_NF_NAT_NEEDED=y
CONFIG_IP_NF_TARGET_MASQUERADE=m
CONFIG_IP_NF_TARGET_REDIRECT=m
CONFIG_IP_NF_TARGET_NETMAP=m
CONFIG_IP_NF_TARGET_SAME=m
# CONFIG_IP_NF_NAT_SNMP_BASIC is not set
CONFIG_IP_NF_NAT_IRC=m
CONFIG_IP_NF_NAT_FTP=m
CONFIG_IP_NF_NAT_TFTP=m
CONFIG_IP_NF_MANGLE=m
CONFIG_IP_NF_TARGET_TOS=m
CONFIG_IP_NF_TARGET_ECN=m
CONFIG_IP_NF_TARGET_DSCP=m
CONFIG_IP_NF_TARGET_MARK=m
CONFIG_IP_NF_TARGET_CLASSIFY=m
# CONFIG_IP_NF_TARGET_TTL is not set
# CONFIG_IP_NF_RAW is not set
CONFIG_IP_NF_ARPTABLES=m
# CONFIG_IP_NF_ARPFILTER is not set
# CONFIG_IP_NF_ARP_MANGLE is not set

#
# DCCP Configuration (EXPERIMENTAL)
#
# CONFIG_IP_DCCP is not set

#
# SCTP Configuration (EXPERIMENTAL)
#
# CONFIG_IP_SCTP is not set
# CONFIG_ATM is not set
```

```
# CONFIG_BRIDGE is not set
# CONFIG_VLAN_8021Q is not set
# CONFIG_DECNET is not set
# CONFIG_LLC2 is not set
# CONFIG_IPX is not set
# CONFIG_ATALK is not set
# CONFIG_X25 is not set
# CONFIG_LAPB is not set
# CONFIG_NET_DIVERT is not set
# CONFIG_ECONET is not set
# CONFIG_WAN_ROUTER is not set
# CONFIG_NET_SCHED is not set
CONFIG_NET_CLS_ROUTE=y

#
# Network testing
#
# CONFIG_NET_PKTGEN is not set
# CONFIG_HAMRADIO is not set
# CONFIG_IRDA is not set
# CONFIG_BT is not set
# CONFIG_IEEE80211 is not set

#
# Device Drivers
#

#
# Generic Driver Options
#
CONFIG_STANDALONE=y
CONFIG_PREVENT_FIRMWARE_BUILD=y
# CONFIG_FW_LOADER is not set

#
# Connector - unified userspace <-> kernelspace linker
#
# CONFIG_CONNECTOR is not set

#
# Memory Technology Devices (MTD)
#
# CONFIG_MTD is not set

#
# Parallel port support
#
CONFIG_PARPORT=y
# CONFIG_PARPORT_PC is not set
# CONFIG_PARPORT_GSC is not set
CONFIG_PARPORT_1284=y
```

```
#
# Plug and Play support
#
CONFIG_PNP=y
# CONFIG_PNP_DEBUG is not set

#
# Protocols
#
CONFIG_PNPACPI=y

#
# Block devices
#
CONFIG_BLK_DEV_FD=y
# CONFIG_PARIDE is not set
# CONFIG_BLK_CPQ_DA is not set
# CONFIG_BLK_CPQ_CISS_DA is not set
# CONFIG_BLK_DEV_DAC960 is not set
# CONFIG_BLK_DEV_UMEM is not set
# CONFIG_BLK_DEV_COW_COMMON is not set
CONFIG_BLK_DEV_LOOP=y
# CONFIG_BLK_DEV_CRYPTOLOOP is not set
# CONFIG_BLK_DEV_NBD is not set
# CONFIG_BLK_DEV_SX8 is not set
CONFIG_BLK_DEV_UB=y
# CONFIG_BLK_DEV_RAM is not set
CONFIG_BLK_DEV_RAM_COUNT=16
# CONFIG_LBD is not set
# CONFIG_CDROM_PKTCDVD is not set

#
# IO Schedulers
#
CONFIG_IOSCHED_NOOP=y
CONFIG_IOSCHED_AS=y
CONFIG_IOSCHED_DEADLINE=y
CONFIG_IOSCHED_CFQ=y
# CONFIG_ATA_OVER_ETH is not set

#
# ATA/ATAPI/MFM/RLL support
#
CONFIG_IDE=y
CONFIG_BLK_DEV_IDE=y

#
# Please see Documentation/ide.txt for help/info on IDE drives
#
# CONFIG_BLK_DEV_IDE_SATA is not set
# CONFIG_BLK_DEV_HD_IDE is not set
```

```
CONFIG_BLK_DEV_IDEDISK=y
CONFIG_IDEDISK_MULTI_MODE=y
CONFIG_BLK_DEV_IDECD=y
# CONFIG_BLK_DEV_IDETAPE is not set
# CONFIG_BLK_DEV_IDEFLOPPY is not set
# CONFIG_BLK_DEV_IDESCSI is not set
# CONFIG_IDE_TASK_IOCTL is not set

#
# IDE chipset support/bugfixes
#
# CONFIG_IDE_GENERIC is not set
# CONFIG_BLK_DEV_CMD640 is not set
# CONFIG_BLK_DEV_IDEPNP is not set
CONFIG_BLK_DEV_IDEPCI=y
# CONFIG_IDEPCI_SHARE_IRQ is not set
# CONFIG_BLK_DEV_OFFBOARD is not set
# CONFIG_BLK_DEV_GENERIC is not set
# CONFIG_BLK_DEV_OPTI621 is not set
# CONFIG_BLK_DEV_RZ1000 is not set
CONFIG_BLK_DEV_IDEDMA_PCI=y
# CONFIG_BLK_DEV_IDEDMA_FORCED is not set
CONFIG_IDEDMA_PCI_AUTO=y
# CONFIG_IDEDMA_ONLYDISK is not set
# CONFIG_BLK_DEV_AEC62XX is not set
# CONFIG_BLK_DEV_ALI15X3 is not set
CONFIG_BLK_DEV_AMD74XX=y
# CONFIG_BLK_DEV_ATIIXP is not set
# CONFIG_BLK_DEV_CMD64X is not set
# CONFIG_BLK_DEV_TRIFLEX is not set
# CONFIG_BLK_DEV_CY82C693 is not set
# CONFIG_BLK_DEV_CS5520 is not set
# CONFIG_BLK_DEV_CS5530 is not set
# CONFIG_BLK_DEV_HPT34X is not set
# CONFIG_BLK_DEV_HPT366 is not set
# CONFIG_BLK_DEV_SC1200 is not set
# CONFIG_BLK_DEV_PIIX is not set
# CONFIG_BLK_DEV_IT821X is not set
# CONFIG_BLK_DEV_NS87415 is not set
# CONFIG_BLK_DEV_PDC202XX_OLD is not set
# CONFIG_BLK_DEV_PDC202XX_NEW is not set
# CONFIG_BLK_DEV_SVWKS is not set
# CONFIG_BLK_DEV_SIIMAGE is not set
# CONFIG_BLK_DEV_SIS5513 is not set
# CONFIG_BLK_DEV_SLC90E66 is not set
# CONFIG_BLK_DEV_TRM290 is not set
# CONFIG_BLK_DEV_VIA82CXXX is not set
# CONFIG_IDE_ARM is not set
CONFIG_BLK_DEV_IDEDMA=y
# CONFIG_IDEDMA_IVB is not set
CONFIG_IDEDMA_AUTO=y
```

```
# CONFIG_BLK_DEV_HD is not set

#
# SCSI device support
#
# CONFIG_RAID_ATTRS is not set
CONFIG_SCSI=y
CONFIG_SCSI_PROC_FS=y

#
# SCSI support type (disk, tape, CD-ROM)
#
CONFIG_BLK_DEV_SD=y
# CONFIG_CHR_DEV_ST is not set
# CONFIG_CHR_DEV_OSST is not set
# CONFIG_BLK_DEV_SR is not set
# CONFIG_CHR_DEV_SG is not set
# CONFIG_CHR_DEV_SCH is not set

#
# Some SCSI devices (e.g. CD jukebox) support multiple LUNs
#
# CONFIG_SCSI_MULTI_LUN is not set
# CONFIG_SCSI_CONSTANTS is not set
# CONFIG_SCSI_LOGGING is not set

#
# SCSI Transport Attributes
#
# CONFIG_SCSI_SPI_ATTRS is not set
# CONFIG_SCSI_FC_ATTRS is not set
# CONFIG_SCSI_ISCSI_ATTRS is not set
# CONFIG_SCSI_SAS_ATTRS is not set

#
# SCSI low-level drivers
#
# CONFIG_BLK_DEV_3W_XXXX_RAID is not set
# CONFIG_SCSI_3W_9XXX is not set
# CONFIG_SCSI_ACARD is not set
# CONFIG_SCSI_AACRAID is not set
# CONFIG_SCSI_AIC7XXX is not set
# CONFIG_SCSI_AIC7XXX_OLD is not set
# CONFIG_SCSI_AIC79XX is not set
# CONFIG_MEGARAID_NEWGEN is not set
# CONFIG_MEGARAID_LEGACY is not set
# CONFIG_MEGARAID_SAS is not set
CONFIG_SCSI_SATA=y
# CONFIG_SCSI_SATA_AHCI is not set
# CONFIG_SCSI_SATA_SVW is not set
# CONFIG_SCSI_ATA_PIIX is not set
```

```
# CONFIG_SCSI_SATA_MV is not set
CONFIG_SCSI_SATA_NV=y
# CONFIG_SCSI_SATA_PROMISE is not set
# CONFIG_SCSI_SATA_QSTOR is not set
# CONFIG_SCSI_SATA_SX4 is not set
CONFIG_SCSI_SATA_SIL=y
# CONFIG_SCSI_SATA_SIS is not set
# CONFIG_SCSI_SATA_ULI is not set
# CONFIG_SCSI_SATA_VIA is not set
# CONFIG_SCSI_SATA_VITESSE is not set
# CONFIG_SCSI_BUSLOGIC is not set
# CONFIG_SCSI_DMX3191D is not set
# CONFIG_SCSI_EATA is not set
# CONFIG_SCSI_FUTURE_DOMAIN is not set
# CONFIG_SCSI_GDTH is not set
# CONFIG_SCSI_IPS is not set
# CONFIG_SCSI_INITIO is not set
# CONFIG_SCSI_INIA100 is not set
# CONFIG_SCSI_PPA is not set
# CONFIG_SCSI_IMM is not set
# CONFIG_SCSI_SYM53C8XX_2 is not set
# CONFIG_SCSI_IPR is not set
# CONFIG_SCSI_QLOGIC_FC is not set
# CONFIG_SCSI_QLOGIC_1280 is not set
CONFIG_SCSI_QLA2XXX=y
# CONFIG_SCSI_QLA21XX is not set
# CONFIG_SCSI_QLA22XX is not set
# CONFIG_SCSI_QLA2300 is not set
# CONFIG_SCSI_QLA2322 is not set
# CONFIG_SCSI_QLA6312 is not set
# CONFIG_SCSI_QLA24XX is not set
# CONFIG_SCSI_LPFC is not set
# CONFIG_SCSI_DC395x is not set
# CONFIG_SCSI_DC390T is not set
# CONFIG_SCSI_DEBUG is not set

#
# Multi-device support (RAID and LVM)
#
CONFIG_MD=y
CONFIG_BLK_DEV_MD=y
# CONFIG_MD_LINEAR is not set
# CONFIG_MD_RAID0 is not set
CONFIG_MD_RAID1=y
# CONFIG_MD_RAID10 is not set
# CONFIG_MD_RAID5 is not set
# CONFIG_MD_RAID6 is not set
# CONFIG_MD_MULTIPATH is not set
# CONFIG_MD_FAULTY is not set
# CONFIG_BLK_DEV_DM is not set
```

```
#
# Fusion MPT device support
#
# CONFIG_FUSION is not set
# CONFIG_FUSION_SPI is not set
# CONFIG_FUSION_FC is not set
# CONFIG_FUSION_SAS is not set

#
# IEEE 1394 (FireWire) support
#
CONFIG_IEEE1394=y

#
# Subsystem Options
#
# CONFIG_IEEE1394_VERBOSEDEBUG is not set
# CONFIG_IEEE1394_OUI_DB is not set
# CONFIG_IEEE1394_EXTRA_CONFIG_ROMS is not set
# CONFIG_IEEE1394_EXPORT_FULL_API is not set

#
# Device Drivers
#
# CONFIG_IEEE1394_PCILYNX is not set
CONFIG_IEEE1394_OHCI1394=y

#
# Protocol Drivers
#
CONFIG_IEEE1394_VIDEO1394=y
CONFIG_IEEE1394_SBP2=y
# CONFIG_IEEE1394_SBP2_PHYS_DMA is not set
# CONFIG_IEEE1394_ETH1394 is not set
# CONFIG_IEEE1394_DV1394 is not set
# CONFIG_IEEE1394_RAWIO is not set
# CONFIG_IEEE1394_CMP is not set

#
# I2O device support
#
# CONFIG_I2O is not set

#
# Network device support
#
CONFIG_NETDEVICES=y
# CONFIG_DUMMY is not set
# CONFIG_BONDING is not set
# CONFIG_EQUALIZER is not set
# CONFIG_TUN is not set
```

```
# CONFIG_NET_SB1000 is not set

#
# ARCnet devices
#
# CONFIG_ARCNET is not set

#
# PHY device support
#
# CONFIG_PHYLIB is not set

#
# Ethernet (10 or 100Mbit)
#
CONFIG_NET_ETHERNET=y
CONFIG_MII=y
# CONFIG_HAPPYMEAL is not set
# CONFIG_SUNGEM is not set
# CONFIG_CASSINI is not set
# CONFIG_NET_VENDOR_3COM is not set

#
# Tulip family network device support
#
# CONFIG_NET_TULIP is not set
# CONFIG_HP100 is not set
CONFIG_NET_PCI=y
# CONFIG_PCNET32 is not set
# CONFIG_AMD8111_ETH is not set
# CONFIG_ADAPTEC_STARFIRE is not set
# CONFIG_B44 is not set
CONFIG_FORCEDETH=y
# CONFIG_DGRS is not set
# CONFIG_EEPRO100 is not set
# CONFIG_E100 is not set
# CONFIG_FEALNX is not set
# CONFIG_NATSEMI is not set
# CONFIG_NE2K_PCI is not set
# CONFIG_8139CP is not set
CONFIG_8139TOO=m
CONFIG_8139TOO_PIO=y
# CONFIG_8139TOO_TUNE_TWISTER is not set
# CONFIG_8139TOO_8129 is not set
# CONFIG_8139_OLD_RX_RESET is not set
# CONFIG_SIS900 is not set
# CONFIG_EPIC100 is not set
# CONFIG_SUNDANCE is not set
# CONFIG_VIA_RHINE is not set
# CONFIG_NET_POCKET is not set
```

```
#
# Ethernet (1000 Mbit)
#
# CONFIG_ACENIC is not set
# CONFIG_DL2K is not set
# CONFIG_E1000 is not set
# CONFIG_NS83820 is not set
# CONFIG_HAMACHI is not set
# CONFIG_YELLOWFIN is not set
# CONFIG_R8169 is not set
# CONFIG_SIS190 is not set
# CONFIG_SKGE is not set
# CONFIG_SK98LIN is not set
# CONFIG_VIA_VELOCITY is not set
# CONFIG_TIGON3 is not set
# CONFIG_BNX2 is not set

#
# Ethernet (10000 Mbit)
#
# CONFIG_CHELSIO_T1 is not set
# CONFIG_IXGB is not set
# CONFIG_S2IO is not set

#
# Token Ring devices
#
# CONFIG_TR is not set

#
# Wireless LAN (non-hamradio)
#
# CONFIG_NET_RADIO is not set

#
# Wan interfaces
#
# CONFIG_WAN is not set
# CONFIG_FDDI is not set
# CONFIG_HIPPI is not set
# CONFIG_PLIP is not set
# CONFIG_PPP is not set
# CONFIG_SLIP is not set
# CONFIG_NET_FC is not set
# CONFIG_SHAPER is not set
# CONFIG_NETCONSOLE is not set
# CONFIG_NETPOLL is not set
# CONFIG_NET_POLL_CONTROLLER is not set

#
# ISDN subsystem
```

```
#
# CONFIG_ISDN is not set

#
# Telephony Support
#
# CONFIG_PHONE is not set

#
# Input device support
#
CONFIG_INPUT=y

#
# Userland interfaces
#
CONFIG_INPUT_MOUSEDEV=y
CONFIG_INPUT_MOUSEDEV_PSAUX=y
CONFIG_INPUT_MOUSEDEV_SCREEN_X=1024
CONFIG_INPUT_MOUSEDEV_SCREEN_Y=768
# CONFIG_INPUT_JOYDEV is not set
# CONFIG_INPUT_TSDEV is not set
CONFIG_INPUT_EVDEV=y
# CONFIG_INPUT_EVBUG is not set

#
# Input Device Drivers
#
CONFIG_INPUT_KEYBOARD=y
CONFIG_KEYBOARD_ATKBD=y
# CONFIG_KEYBOARD_SUNKBD is not set
# CONFIG_KEYBOARD_LKKBD is not set
# CONFIG_KEYBOARD_XTKBD is not set
# CONFIG_KEYBOARD_NEWTON is not set
CONFIG_INPUT_MOUSE=y
CONFIG_MOUSE_PS2=y
# CONFIG_MOUSE_SERIAL is not set
# CONFIG_MOUSE_VSXXXAA is not set
# CONFIG_INPUT_JOYSTICK is not set
# CONFIG_INPUT_TOUCHSCREEN is not set
CONFIG_INPUT_MISC=y
CONFIG_INPUT_PCSPKR=m
# CONFIG_INPUT_UINPUT is not set

#
# Hardware I/O ports
#
CONFIG_SERIO=y
CONFIG_SERIO_I8042=y
# CONFIG_SERIO_SERPORT is not set
# CONFIG_SERIO_CT82C710 is not set
```

```
# CONFIG_SERIO_PARKBD is not set
# CONFIG_SERIO_PCIPS2 is not set
CONFIG_SERIO_LIBPS2=y
# CONFIG_SERIO_RAW is not set
# CONFIG_GAMEPORT is not set

#
# Character devices
#
CONFIG_VT=y
CONFIG_VT_CONSOLE=y
CONFIG_HW_CONSOLE=y
# CONFIG_SERIAL_NONSTANDARD is not set

#
# Serial drivers
#
CONFIG_SERIAL_8250=y
CONFIG_SERIAL_8250_CONSOLE=y
# CONFIG_SERIAL_8250_ACPI is not set
CONFIG_SERIAL_8250_NR_UARTS=4
# CONFIG_SERIAL_8250_EXTENDED is not set

#
# Non-8250 serial port support
#
CONFIG_SERIAL_CORE=y
CONFIG_SERIAL_CORE_CONSOLE=y
# CONFIG_SERIAL_JSM is not set
CONFIG_UNIX98_PTYS=y
CONFIG_LEGACY_PTYS=y
CONFIG_LEGACY_PTY_COUNT=256
# CONFIG_PRINTER is not set
# CONFIG_PPDEV is not set
# CONFIG_TIPAR is not set

#
# IPMI
#
# CONFIG_IPMI_HANDLER is not set

#
# Watchdog Cards
#
# CONFIG_WATCHDOG is not set
# CONFIG_HW_RANDOM is not set
# CONFIG_NVRAM is not set
# CONFIG_RTC is not set
CONFIG_GEN_RTC=y
CONFIG_GEN_RTC_X=y
# CONFIG_R3964 is not set
```

```
# CONFIG_APPLICOM is not set

#
# Ftape, the floppy tape device driver
#
# CONFIG_FTAPE is not set
CONFIG_AGP=y
# CONFIG_AGP_AMD64 is not set
# CONFIG_AGP_INTEL is not set
# CONFIG_DRM is not set
# CONFIG_MWAVE is not set
# CONFIG_RAW_DRIVER is not set
# CONFIG_HPET is not set
# CONFIG_HANGCHECK_TIMER is not set

#
# TPM devices
#
# CONFIG_TCG_TPM is not set

#
# I2C support
#
CONFIG_I2C=y
CONFIG_I2C_CHARDEV=y

#
# I2C Algorithms
#
# CONFIG_I2C_ALGOBIT is not set
# CONFIG_I2C_ALGOPCF is not set
# CONFIG_I2C_ALGOPCA is not set

#
# I2C Hardware Bus support
#
# CONFIG_I2C_ALI1535 is not set
# CONFIG_I2C_ALI1563 is not set
# CONFIG_I2C_ALI15X3 is not set
# CONFIG_I2C_AMD756 is not set
# CONFIG_I2C_AMD8111 is not set
# CONFIG_I2C_I801 is not set
# CONFIG_I2C_I810 is not set
# CONFIG_I2C_PIIX4 is not set
CONFIG_I2C_ISA=m
CONFIG_I2C_NFORCE2=m
# CONFIG_I2C_PARPORT is not set
# CONFIG_I2C_PARPORT_LIGHT is not set
# CONFIG_I2C_PROSAVAGE is not set
# CONFIG_I2C_SAVAGE4 is not set
# CONFIG_SCx200_ACB is not set
```

```
# CONFIG_I2C_SIS5595 is not set
# CONFIG_I2C_SIS630 is not set
# CONFIG_I2C_SIS96X is not set
# CONFIG_I2C_STUB is not set
# CONFIG_I2C_VIA is not set
# CONFIG_I2C_VIAPRO is not set
# CONFIG_I2C_VOODOO3 is not set
# CONFIG_I2C_PCA_ISA is not set

#
# Miscellaneous I2C Chip support
#
# CONFIG_SENSORS_DS1337 is not set
# CONFIG_SENSORS_DS1374 is not set
CONFIG_SENSORS_EEPROM=m
# CONFIG_SENSORS_PCF8574 is not set
# CONFIG_SENSORS_PCA9539 is not set
# CONFIG_SENSORS_PCF8591 is not set
# CONFIG_SENSORS_RTC8564 is not set
# CONFIG_SENSORS_MAX6875 is not set
# CONFIG_I2C_DEBUG_CORE is not set
# CONFIG_I2C_DEBUG_ALGO is not set
# CONFIG_I2C_DEBUG_BUS is not set
# CONFIG_I2C_DEBUG_CHIP is not set

#
# Dallas's 1-wire bus
#
# CONFIG_W1 is not set

#
# Hardware Monitoring support
#
CONFIG_HWMON=y
CONFIG_HWMON_VID=m
# CONFIG_SENSORS_ADM1021 is not set
# CONFIG_SENSORS_ADM1025 is not set
# CONFIG_SENSORS_ADM1026 is not set
# CONFIG_SENSORS_ADM1031 is not set
# CONFIG_SENSORS_ADM9240 is not set
# CONFIG_SENSORS_ASB100 is not set
# CONFIG_SENSORS_ATXP1 is not set
# CONFIG_SENSORS_DS1621 is not set
# CONFIG_SENSORS_FSCHER is not set
# CONFIG_SENSORS_FSCPOS is not set
# CONFIG_SENSORS_GL518SM is not set
# CONFIG_SENSORS_GL520SM is not set
CONFIG_SENSORS_IT87=m
# CONFIG_SENSORS_LM63 is not set
# CONFIG_SENSORS_LM75 is not set
# CONFIG_SENSORS_LM77 is not set
```

```
# CONFIG_SENSORS_LM78 is not set
# CONFIG_SENSORS_LM80 is not set
# CONFIG_SENSORS_LM83 is not set
# CONFIG_SENSORS_LM85 is not set
# CONFIG_SENSORS_LM87 is not set
# CONFIG_SENSORS_LM90 is not set
# CONFIG_SENSORS_LM92 is not set
# CONFIG_SENSORS_MAX1619 is not set
# CONFIG_SENSORS_PC87360 is not set
# CONFIG_SENSORS_SIS5595 is not set
# CONFIG_SENSORS_SMSC47M1 is not set
# CONFIG_SENSORS_SMSC47B397 is not set
# CONFIG_SENSORS_VIA686A is not set
# CONFIG_SENSORS_W83781D is not set
# CONFIG_SENSORS_W83792D is not set
# CONFIG_SENSORS_W83L785TS is not set
# CONFIG_SENSORS_W83627HF is not set
# CONFIG_SENSORS_W83627EHF is not set
# CONFIG_SENSORS_HDAPS is not set
# CONFIG_HWMON_DEBUG_CHIP is not set

#
# Misc devices
#
# CONFIG_IBM_ASM is not set

#
# Multimedia Capabilities Port drivers
#

#
# Multimedia devices
#
# CONFIG_VIDEO_DEV is not set

#
# Digital Video Broadcasting Devices
#
# CONFIG_DVB is not set

#
# Graphics support
#
# CONFIG_FB is not set
# CONFIG_VIDEO_SELECT is not set

#
# Console display driver support
#
CONFIG_VGA_CONSOLE=y
CONFIG_DUMMY_CONSOLE=y
```

```
#
# Speakup console speech
#
# CONFIG_SPEAKUP is not set
CONFIG_SPEAKUP_DEFAULT="none"

#
# Sound
#
CONFIG_SOUND=y

#
# Advanced Linux Sound Architecture
#
CONFIG_SND=y
CONFIG_SND_TIMER=y
CONFIG_SND_PCM=y
CONFIG_SND_SEQUENCER=y
# CONFIG_SND_SEQ_DUMMY is not set
CONFIG_SND_OSSEMUL=y
CONFIG_SND_MIXER_OSS=y
CONFIG_SND_PCM_OSS=y
CONFIG_SND_SEQUENCER_OSS=y
# CONFIG_SND_VERBOSE_PRINTK is not set
# CONFIG_SND_DEBUG is not set

#
# Generic devices
#
# CONFIG_SND_DUMMY is not set
# CONFIG_SND_VIRMIDI is not set
# CONFIG_SND_MTPAV is not set
# CONFIG_SND_SERIAL_U16550 is not set
# CONFIG_SND_MPU401 is not set
CONFIG_SND_AC97_CODEC=y
CONFIG_SND_AC97_BUS=y

#
# PCI devices
#
# CONFIG_SND_ALI5451 is not set
# CONFIG_SND_ATIIXP is not set
# CONFIG_SND_ATIIXP_MODEM is not set
# CONFIG_SND_AU8810 is not set
# CONFIG_SND_AU8820 is not set
# CONFIG_SND_AU8830 is not set
# CONFIG_SND_AZT3328 is not set
# CONFIG_SND_BT87X is not set
# CONFIG_SND_CS46XX is not set
# CONFIG_SND_CS4281 is not set
# CONFIG_SND_EMU10K1 is not set
```

```
# CONFIG_SND_EMU10K1X is not set
# CONFIG_SND_CA0106 is not set
# CONFIG_SND_KORG1212 is not set
# CONFIG_SND_MIXART is not set
# CONFIG_SND_NM256 is not set
# CONFIG_SND_RME32 is not set
# CONFIG_SND_RME96 is not set
# CONFIG_SND_RME9652 is not set
# CONFIG_SND_HDSP is not set
# CONFIG_SND_HDSPM is not set
# CONFIG_SND_TRIDENT is not set
# CONFIG_SND_YMFPCI is not set
# CONFIG_SND_AD1889 is not set
# CONFIG_SND_ALS4000 is not set
# CONFIG_SND_CMIPCI is not set
# CONFIG_SND_ENS1370 is not set
# CONFIG_SND_ENS1371 is not set
# CONFIG_SND_ES1938 is not set
# CONFIG_SND_ES1968 is not set
# CONFIG_SND_MAESTRO3 is not set
# CONFIG_SND_FM801 is not set
# CONFIG_SND_ICE1712 is not set
# CONFIG_SND_ICE1724 is not set
CONFIG_SND_INTEL8X0=y
# CONFIG_SND_INTEL8X0M is not set
# CONFIG_SND_SONICVIBES is not set
# CONFIG_SND_VIA82XX is not set
# CONFIG_SND_VIA82XX_MODEM is not set
# CONFIG_SND_VX222 is not set
# CONFIG_SND_HDA_INTEL is not set

#
# USB devices
#
# CONFIG_SND_USB_AUDIO is not set
# CONFIG_SND_USB_USX2Y is not set

#
# Open Sound System
#
# CONFIG_SOUND_PRIME is not set

#
# USB support
#
CONFIG_USB_ARCH_HAS_HCD=y
CONFIG_USB_ARCH_HAS_OHCI=y
CONFIG_USB=y
# CONFIG_USB_DEBUG is not set

#
```

```
# Miscellaneous USB options
#
CONFIG_USB_DEVICEFS=y
# CONFIG_USB_BANDWIDTH is not set
# CONFIG_USB_DYNAMIC_MINORS is not set
# CONFIG_USB_SUSPEND is not set
# CONFIG_USB_OTG is not set

#
# USB Host Controller Drivers
#
CONFIG_USB_EHCI_HCD=y
# CONFIG_USB_EHCI_SPLIT_ISO is not set
# CONFIG_USB_EHCI_ROOT_HUB_TT is not set
# CONFIG_USB_ISP116X_HCD is not set
CONFIG_USB_OHCI_HCD=y
# CONFIG_USB_OHCI_BIG_ENDIAN is not set
CONFIG_USB_OHCI_LITTLE_ENDIAN=y
CONFIG_USB_UHCI_HCD=y
# CONFIG_USB_SL811_HCD is not set

#
# USB Device Class drivers
#
# CONFIG_OBSOLETE_OSS_USB_DRIVER is not set
# CONFIG_USB_BLUETOOTH_TTY is not set
CONFIG_USB_ACM=y
CONFIG_USB_PRINTER=y

#
# NOTE: USB_STORAGE enables SCSI, and 'SCSI disk support' may also be
needed; see USB_STORAGE Help for more information
#
CONFIG_USB_STORAGE=y
# CONFIG_USB_STORAGE_DEBUG is not set
# CONFIG_USB_STORAGE_DATAFAB is not set
# CONFIG_USB_STORAGE_FREECOM is not set
# CONFIG_USB_STORAGE_ISD200 is not set
# CONFIG_USB_STORAGE_DPCM is not set
# CONFIG_USB_STORAGE_USBAT is not set
# CONFIG_USB_STORAGE_SDDR09 is not set
# CONFIG_USB_STORAGE_SDDR55 is not set
# CONFIG_USB_STORAGE_JUMPSHOT is not set
# CONFIG_USB_STORAGE_ONETOUCH is not set

#
# USB Input Devices
#
CONFIG_USB_HID=y
CONFIG_USB_HIDINPUT=y
# CONFIG_HID_FF is not set
```

```
# CONFIG_USB_HIDDEV is not set
# CONFIG_USB_AIPTEK is not set
# CONFIG_USB_WACOM is not set
# CONFIG_USB_ACECAD is not set
# CONFIG_USB_KBTAB is not set
# CONFIG_USB_POWERMATE is not set
# CONFIG_USB_MTOUCH is not set
# CONFIG_USB_ITMTOUCH is not set
# CONFIG_USB_EGALAX is not set
# CONFIG_USB_YEALINK is not set
# CONFIG_USB_XPAD is not set
# CONFIG_USB_ATI_REMOTE is not set
# CONFIG_USB_KEYSPAN_REMOTE is not set
# CONFIG_USB_APPLETOUCH is not set

#
# USB Imaging devices
#
# CONFIG_USB_MDC800 is not set
# CONFIG_USB_MICROTEK is not set

#
# USB Multimedia devices
#
# CONFIG_USB_DABUSB is not set

#
# Video4Linux support is needed for USB Multimedia device support
#

#
# USB Network Adapters
#
# CONFIG_USB_CATC is not set
# CONFIG_USB_KAWETH is not set
# CONFIG_USB_PEGASUS is not set
# CONFIG_USB_RTL8150 is not set
# CONFIG_USB_USBNET is not set
# CONFIG_USB_MON is not set

#
# USB port drivers
#
# CONFIG_USB_USS720 is not set

#
# USB Serial Converter support
#
# CONFIG_USB_SERIAL is not set

#
```

```
# USB Miscellaneous drivers
#
# CONFIG_USB_EMI62 is not set
# CONFIG_USB_EMI26 is not set
# CONFIG_USB_AUERSWALD is not set
# CONFIG_USB_RIO500 is not set
# CONFIG_USB_LEGOTOWER is not set
# CONFIG_USB_LCD is not set
# CONFIG_USB_LED is not set
# CONFIG_USB_CYTHERM is not set
# CONFIG_USB_PHIDGETKIT is not set
# CONFIG_USB_PHIDGETSERVO is not set
# CONFIG_USB_IDMOUSE is not set
# CONFIG_USB_SISUSBVGA is not set
# CONFIG_USB_LD is not set
# CONFIG_USB_TEST is not set

#
# USB DSL modem support
#

#
# USB Gadget Support
#
# CONFIG_USB_GADGET is not set

#
# MMC/SD Card support
#
# CONFIG_MMC is not set

#
# InfiniBand support
#
# CONFIG_INFINIBAND is not set

#
# SN Devices
#

#
# Firmware Drivers
#
# CONFIG_EDD is not set
# CONFIG_DELL_RBU is not set
CONFIG_DCDBAS=m

#
# File systems
#
CONFIG_EXT2_FS=y
```

```
CONFIG_EXT2_FS_XATTR=y
CONFIG_EXT2_FS_POSIX_ACL=y
# CONFIG_EXT2_FS_SECURITY is not set
# CONFIG_EXT2_FS_XIP is not set
CONFIG_EXT3_FS=y
CONFIG_EXT3_FS_XATTR=y
CONFIG_EXT3_FS_POSIX_ACL=y
# CONFIG_EXT3_FS_SECURITY is not set
CONFIG_JBD=y
# CONFIG_JBD_DEBUG is not set
CONFIG_FS_MBCACHE=y
CONFIG_REISERFS_FS=y
# CONFIG_REISERFS_CHECK is not set
# CONFIG_REISERFS_PROC_INFO is not set
CONFIG_REISERFS_FS_XATTR=y
CONFIG_REISERFS_FS_POSIX_ACL=y
# CONFIG_REISERFS_FS_SECURITY is not set
# CONFIG_JFS_FS is not set
CONFIG_FS_POSIX_ACL=y
# CONFIG_XFS_FS is not set
# CONFIG_MINIX_FS is not set
# CONFIG_ROMFS_FS is not set
CONFIG_INOTIFY=y
# CONFIG_QUOTA is not set
CONFIG_DNOTIFY=y
# CONFIG_AUTOFS_FS is not set
CONFIG_AUTOFS4_FS=y
# CONFIG_FUSE_FS is not set

#
# CD-ROM/DVD Filesystems
#
CONFIG_ISO9660_FS=y
CONFIG_JOLIET=y
CONFIG_ZISOFS=y
CONFIG_ZISOFS_FS=y
CONFIG_UDF_FS=y
CONFIG_UDF_NLS=y

#
# DOS/FAT/NT Filesystems
#
CONFIG_FAT_FS=y
CONFIG_MSDOS_FS=y
CONFIG_VFAT_FS=y
CONFIG_FAT_DEFAULT_CODEPAGE=850
CONFIG_FAT_DEFAULT_IOCHARSET="iso8859-15"
# CONFIG_NTFS_FS is not set

#
# Pseudo filesystems
```

```
#
CONFIG_PROC_FS=y
CONFIG_PROC_KCORE=y
CONFIG_SYSFS=y
CONFIG_TMPFS=y
CONFIG_HUGETLBFS=y
CONFIG_HUGETLB_PAGE=y
CONFIG_RAMFS=y
# CONFIG_RELAYFS_FS is not set

#
# Miscellaneous filesystems
#
# CONFIG_ADFS_FS is not set
# CONFIG_AFFS_FS is not set
# CONFIG_HFS_FS is not set
# CONFIG_HFSPLUS_FS is not set
# CONFIG_BEFS_FS is not set
# CONFIG_BFS_FS is not set
# CONFIG_EFS_FS is not set
# CONFIG_CRAMFS is not set
# CONFIG_SQUASHFS is not set
# CONFIG_VXFS_FS is not set
# CONFIG_HPFS_FS is not set
# CONFIG_QNX4FS_FS is not set
# CONFIG_SYSV_FS is not set
# CONFIG_UFS_FS is not set

#
# Network File Systems
#
# CONFIG_NFS_FS is not set
# CONFIG_NFSD is not set
CONFIG_SMB_FS=m
CONFIG_SMB_NLS_DEFAULT=y
CONFIG_SMB_NLS_REMOTE="iso8859-15"
CONFIG_CIFS=m
# CONFIG_CIFS_STATS is not set
# CONFIG_CIFS_XATTR is not set
# CONFIG_CIFS_EXPERIMENTAL is not set
# CONFIG_NCP_FS is not set
# CONFIG_CODA_FS is not set
# CONFIG_AFS_FS is not set
# CONFIG_9P_FS is not set

#
# Partition Types
#
# CONFIG_PARTITION_ADVANCED is not set
CONFIG_MSDOS_PARTITION=y
```

```
#
# Native Language Support
#
CONFIG_NLS=y
CONFIG_NLS_DEFAULT="iso8859-15"
CONFIG_NLS_CODEPAGE_437=m
# CONFIG_NLS_CODEPAGE_737 is not set
# CONFIG_NLS_CODEPAGE_775 is not set
CONFIG_NLS_CODEPAGE_850=m
# CONFIG_NLS_CODEPAGE_852 is not set
# CONFIG_NLS_CODEPAGE_855 is not set
# CONFIG_NLS_CODEPAGE_857 is not set
# CONFIG_NLS_CODEPAGE_860 is not set
# CONFIG_NLS_CODEPAGE_861 is not set
# CONFIG_NLS_CODEPAGE_862 is not set
# CONFIG_NLS_CODEPAGE_863 is not set
# CONFIG_NLS_CODEPAGE_864 is not set
# CONFIG_NLS_CODEPAGE_865 is not set
# CONFIG_NLS_CODEPAGE_866 is not set
# CONFIG_NLS_CODEPAGE_869 is not set
# CONFIG_NLS_CODEPAGE_936 is not set
# CONFIG_NLS_CODEPAGE_950 is not set
# CONFIG_NLS_CODEPAGE_932 is not set
# CONFIG_NLS_CODEPAGE_949 is not set
# CONFIG_NLS_CODEPAGE_874 is not set
# CONFIG_NLS_ISO8859_8 is not set
# CONFIG_NLS_CODEPAGE_1250 is not set
# CONFIG_NLS_CODEPAGE_1251 is not set
# CONFIG_NLS_ASCII is not set
CONFIG_NLS_ISO8859_1=m
# CONFIG_NLS_ISO8859_2 is not set
# CONFIG_NLS_ISO8859_3 is not set
# CONFIG_NLS_ISO8859_4 is not set
# CONFIG_NLS_ISO8859_5 is not set
# CONFIG_NLS_ISO8859_6 is not set
# CONFIG_NLS_ISO8859_7 is not set
# CONFIG_NLS_ISO8859_9 is not set
# CONFIG_NLS_ISO8859_13 is not set
# CONFIG_NLS_ISO8859_14 is not set
CONFIG_NLS_ISO8859_15=m
# CONFIG_NLS_KOI8_R is not set
# CONFIG_NLS_KOI8_U is not set
CONFIG_NLS_UTF8=m

#
# Profiling support
#
# CONFIG_PROFILING is not set

#
# Kernel hacking
```

```
#
# CONFIG_PRINTK_TIME is not set
# CONFIG_DEBUG_KERNEL is not set
CONFIG_LOG_BUF_SHIFT=14

#
# Security options
#
# CONFIG_KEYS is not set
# CONFIG_SECURITY is not set

#
# Cryptographic options
#
CONFIG_CRYPTO=y
# CONFIG_CRYPTO_HMAC is not set
CONFIG_CRYPTO_NULL=y
# CONFIG_CRYPTO_MD4 is not set
CONFIG_CRYPTO_MD5=y
CONFIG_CRYPTO_SHA1=y
CONFIG_CRYPTO_SHA256=y
CONFIG_CRYPTO_SHA512=y
# CONFIG_CRYPTO_WP512 is not set
# CONFIG_CRYPTO_TGR192 is not set
CONFIG_CRYPTO_DES=y
CONFIG_CRYPTO_BLOWFISH=y
# CONFIG_CRYPTO_TWOFISH is not set
# CONFIG_CRYPTO_SERPENT is not set
# CONFIG_CRYPTO_AES_X86_64 is not set
# CONFIG_CRYPTO_CAST5 is not set
# CONFIG_CRYPTO_CAST6 is not set
# CONFIG_CRYPTO_TEA is not set
# CONFIG_CRYPTO_ARC4 is not set
# CONFIG_CRYPTO_KHAZAD is not set
# CONFIG_CRYPTO_ANUBIS is not set
CONFIG_CRYPTO_DEFLATE=y
# CONFIG_CRYPTO_MICHAEL_MIC is not set
CONFIG_CRYPTO_CRC32C=y
# CONFIG_CRYPTO_TEST is not set

#
# Hardware crypto devices
#

#
# Library routines
#
CONFIG_CRC_CCITT=y
# CONFIG_CRC16 is not set
CONFIG_CRC32=y
CONFIG_LIBCRC32C=y
```

```
CONFIG_ZLIB_INFLATE=y
CONFIG_ZLIB_DEFLATE=y
```

Montez votre boot si le montage n'est pas automatique :

```
mount /boot/
cp /usr/src/linux/.config /boot/config-2.6.14
make && make modules_install
cp /usr/src/linux/arch/x86_64/boot/bzImage /boot/bzImage.kernel-2.6.14
```

Si vous avez des modules à compiler, tel que pour Lirc avec le support de Ati USB:

```
LIRC_OPTS="--with-driver=atiusb" emerge lirc
```

Ou bien encore, pour les pilotes nvidia :

```
emerge nvidia-kernel
```

Ou pour la gestion des capteurs de température / tension :

```
emerge lm_sensors
```

Ou pour la gestion HAL :

```
emerge hal
```

Si vous avez des modules à charger au démarrage du kernel :

```
vi /etc/modules.autoload.d/kernel-2.6
```

Rajoutez les modules nécéssaire et mettez à jour la config :

```
modules-update
```

Puis modifiez votre boot : Dans le cas de lilo :

```
vi /etc/lilo.conf
lilo
```

Dans le cas de Grub :

```
vi /boot/grub/grub.conf
```

Et enfin, on reboot :)

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