

6.1 Using the default profile configuration and compile kernel

To facilitate the users to compile a file of exactly the same CD burning kernel, we focused on different LCD output separately the corresponding kernel configuration files:

config_mini2440_w35 - for horizontal screen 3.5" LCD (panel identified as W35) of the kernel configuration files

config_mini2440_x35 - for Sony 3.5" LCD kernel configuration files

config_mini2440_t35 - for TPO 3.5" LCD kernel configuration files

config_mini2440_l80 - for Sharp 8" LCD (or compatible) kernel configuration files

config_mini2440_n35 - for NEC 3.5" LCD kernel configuration files

config_mini2440_n43 - for NEC 4.3" LCD kernel configuration files

config_mini2440_a70 - for 7" LCD kernel configuration files

config_mini2440_vga1024x768 - for VGA output display (resolution 1024x768) module kernel configuration files

In the kernel directory you can use the "ls" command to see of their existence:

```

root@tom:/opt/FriendlyARM/mini2440/linux-2.6.32.2
File Edit View Terminal Tabs Help
linux-2.6.32.2/drivers/firewire/core-topology.c
linux-2.6.32.2/drivers/firewire/core-cdev.c
linux-2.6.32.2/drivers/firewire/Kconfig
linux-2.6.32.2/drivers/firewire/sbp2.c
linux-2.6.32.2/drivers/firewire/core.h
linux-2.6.32.2/drivers/firewire/core-iso.c
linux-2.6.32.2/drivers/firewire/ohci.c
linux-2.6.32.2/drivers/firewire/core-device.c
linux-2.6.32.2/drivers/clocksource/
linux-2.6.32.2/drivers/clocksource/sh_tmu.c
linux-2.6.32.2/drivers/clocksource/Makefile
linux-2.6.32.2/drivers/clocksource/sh_cmt.c
linux-2.6.32.2/drivers/clocksource/scx200_hrt.c
linux-2.6.32.2/drivers/clocksource/acpi_pm.c
linux-2.6.32.2/drivers/clocksource/cyclone.c
linux-2.6.32.2/drivers/clocksource/sh_mtu2.c
linux-2.6.32.2/drivers/clocksource/tcb_clksrc.c
[root@tom mini2440]#
[root@tom mini2440]#
[root@tom mini2440]# ls
linux-2.6.32.2
[root@tom mini2440]# cd linux-2.6.32.2/
[root@tom linux-2.6.32.2]# ls
arch          config_mini2440_t35  Documentation  init           MAINTAINERS  REPORTING-
block        config_mini2440_vga1024x768  drivers        ipc           Makefile     samples
config_mini2440_a70  COPYING             firmware      Kbuild       mm           scripts
config_mini2440_l80  CREDITS            fs            kernel       net          security
config_mini2440_n35  crypto             include       lib          README      sound
[root@tom linux-2.6.32.2]#

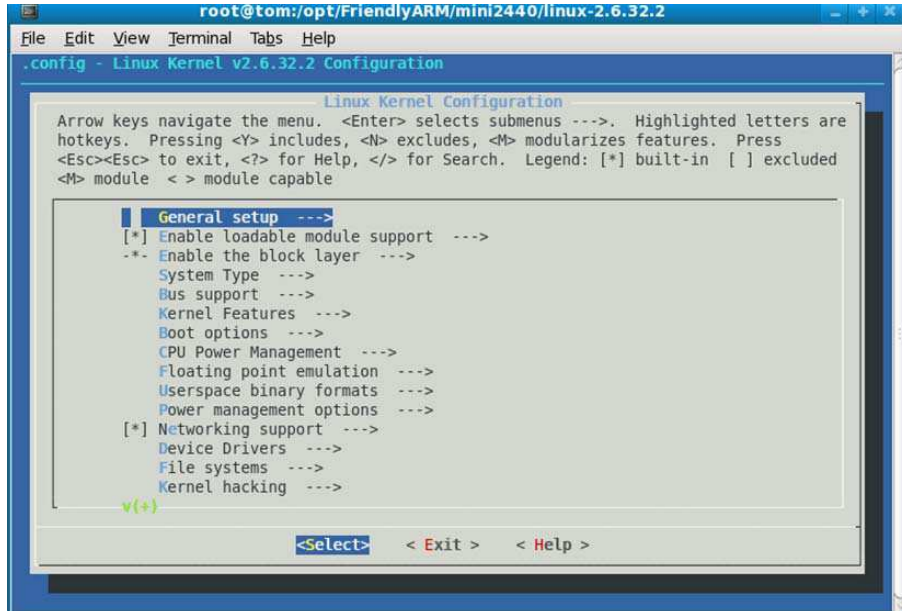
```

Use the following command to set the default configuration file ".config" for w35.

```
#cp config_mini2440_w35 .config
```

Note: then there is a "." at the beginning of the "config"

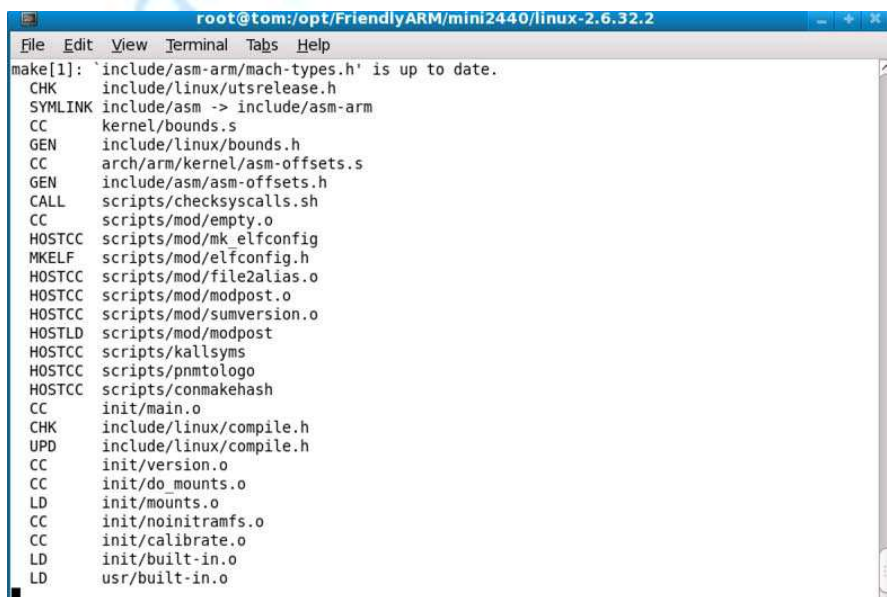
Then run "make menuconfig", the kernel interface for configuration shown.



Then do not make any changes, in the main menu select <Exit> out, do so in order to generate the appropriate configuration header file.

Enter the following command to compile kernel:

```
#make zImage
```



After compile, in “/arch/arm/boot” directory generate the Linux kernel image file: zImage

```

root@tom:/opt/FriendlyARM/mini2440/linux-2.6.32.2
File Edit View Terminal Tabs Help
MODPOST vmlinux.o
GEN .version
CHK include/linux/compile.h
UPD include/linux/compile.h
CC init/version.o
LD init/built-in.o
LD .tmp_vmlinux1
KSYM .tmp_kallsyms1.S
AS .tmp_kallsyms1.o
LD .tmp_vmlinux2
KSYM .tmp_kallsyms2.S
AS .tmp_kallsyms2.o
LD vmlinux
SYSMAP System.map
SYSMAP .tmp_System.map
OBJCOPY arch/arm/boot/Image
Kernel: arch/arm/boot/Image is ready
AS arch/arm/boot/compressed/head.o
GZIP arch/arm/boot/compressed/piggy.gz
AS arch/arm/boot/compressed/piggy.o
CC arch/arm/boot/compressed/misc.o
LD arch/arm/boot/compressed/vmlinux
OBJCOPY arch/arm/boot/zImage
Kernel: arch/arm/boot/zImage is ready
[root@tom linux-2.6.32.2]# ls arch/arm/boot/zImage
arch/arm/boot/zImage
[root@tom linux-2.6.32.2]# ls arch/arm/boot/zImage -l
-rwxr-xr-x 1 root root 2517028 2010-01-08 12:53 arch/arm/boot/zImage
[root@tom linux-2.6.32.2]#

```

You can use the method described in the chapter 3 to download the zImage to the development board test.

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