

[PATCH] i386: Fix usage of -mtune when X86_GENERIC=y or CONFIG_MCORE2=y

Source: <http://linux.derkeiler.com/Mailing-Lists/Kernel/2007-02/msg10201.html>

- *From:* Lasse Collin <lasse.collin@xxxxxxxxxxx>
 - *Date:* Wed, 28 Feb 2007 22:17:21 +0200
-

Two fixes to arch/i386/Makefile.cpu:

1) When X86_GENERIC=y is set, use -mtune=i686 if \$(CC) doesn't support -mtune=generic. GCC 4.1.2 and earlier don't support -mtune=generic. When building a generic kernel for a distro that runs on i586 and better, it is nice to use -march=i586 -mtune=i686 instead of plain -march=i586.

2) Use \$(call tune) instead of hardcoded -mtune when CONFIG_MCORE2=y. This makes it possible to have CONFIG_MCORE2=y when using GCC 3.3, which uses -mcpu instead of -mtune. Also dropped fallback to -mtune=generic and -mtune=i686, because -march=i686 already implies -mtune=i686.

The patch is against 2.6.20, but Makefile.cpu hasn't changed recently.

```
--- linux-2.6.20/arch/i386/Makefile.cpu.orig 2007-02-04 20:44:54.000000000 +0200
+++ linux-2.6.20/arch/i386/Makefile.cpu 2007-02-28 21:22:47.000000000 +0200
@@ -4,9 +4,9 @@
#-mtune exists since gcc 3.4
HAS_MTUNE := $(call cc-option-yn, -mtune=i386)
ifeq ($(HAS_MTUNE),y)
-tune = $(call cc-option,-mtune=$(1),)
+tune = $(call cc-option,-mtune=$(1),$(2))
else
-tune = $(call cc-option,-mcpu=$(1),)
+tune = $(call cc-option,-mcpu=$(1),$(2))
endif

align := $(cc-option-align)
@@ -32,7 +32,7 @@
cflags-$(CONFIG_MWINCHIP3D) += $(call cc-option,-march=winchip2,-march=i586)
cflags-$(CONFIG_MCYRIXIII) += $(call cc-option,-march=c3,-march=i486) $(align)-functions=0
$(align)-jumps=0 $(align)-loops=0
cflags-$(CONFIG_MVIAC3_2) += $(call cc-option,-march=c3-2,-march=i686)
-cflags-$(CONFIG_MCORE2) += -march=i686 $(call cc-option,-mtune=core2,$(call
cc-option,-mtune=generic,-mtune=i686))
+cflags-$(CONFIG_MCORE2) += -march=i686 $(call tune,core2)
```

[PATCH] i386: Fix usage of -mtune when X86_GENERIC=y or CONFIG_MCORE2=y

```
# AMD Elan support
cflags-$(CONFIG_X86_ELAN) += -march=i486
@@ -42,5 +42,5 @@

# add at the end to overwrite eventual tuning options from earlier
# cpu entries
-cflags-$(CONFIG_X86_GENERIC) += $(call tune,generic)
+cflags-$(CONFIG_X86_GENERIC) += $(call tune,generic,$(call tune,i686))
```

—
Lasse Collin | IRC: Larhzu @ IRCnet & Freenode

—
To unsubscribe from this list: send the line "unsubscribe linux-kernel" in
the body of a message to majordomo@xxxxxxxxxxxxxxxxx
More majordomo info at <http://vger.kernel.org/majordomo-info.html>
Please read the FAQ at <http://www.tux.org/lkml/>