

[PATCH] cmpci.c fixes for joystick initialization in 2.4.27

Source: <http://linux.derkeiler.com/Mailing-Lists/Kernel/2004-10/10261.html>

From: Michele Debandi (mk71a_at_myrealbox.com)

Date: 10/31/04

Date: Sun, 31 Oct 2004 12:01:53 +0100 (CET)
To: ChenLi Tien <cltien@cmedia.com.tw>

Hello,

I hope you are the current maintainer of cmpci module on 2.4 series kernel.

I have an integrated CM8738 sound chip on my Asus P4B533 motherboard.
The lspci -v output is:

```
02:03.0 Multimedia audio controller: C-Media Electronics Inc CM8738 (rev 10)
  Subsystem: Asustek Computer, Inc.: Unknown device 80e2
  Flags: bus master, stepping, medium devsel, latency 32, IRQ 21
  I/O ports at b800 [size=256]
  Capabilities: [c0] Power Management version 2
```

With the cmpci.c driver the joystick will not work. MSDOS initialization sets the joystick port at the address 0x201, and windows driver uses also this port. The cmpci driver initializes instead the port 0x200, and on my chipset at that address there is nothing. So I modified the driver modules to use the port 0x201 but maintaining the 8-port allocation of the original driver.

This is tested and seems to work on a standard PC/XT style 2-axis/2-button joystick.

Below there is the diff file.

Greetings

Mike

```
--- drivers/sound/cmpci.c.ORIG Tue Oct 26 20:55:08 2004
+++ drivers/sound/cmpci.c Tue Oct 26 21:01:23 2004
@@ -3354,7 +3354,7 @@
 #endif
     s->iosynth = fmio;
     s->iomidi = mpuiio;
- s->gameport.io = 0x200;
```

Linux-Kernel: [PATCH] cmpci.c fixes for joystick initialization in 2.4.27

```
+ s->gameport.io = 0x201; /*use standard DOS io port */
    s->status = 0;
    /* range check */
    if (speakers < 2)
@@ -3443,7 +3443,8 @@
#endif
    /* enable joystick */
    if (joystick) {
- if (s->gameport.io && !request_region(s->gameport.io, CM_EXTENT_GAME, "cmpci GAME")) {
+ /* need to use port 0x201, but the extent starts at 0x200??? */
+ if (s->gameport.io && !request_region((s->gameport.io) - 1, CM_EXTENT_GAME, "cmpci GAME")) {
        printk(KERN_ERR "cmpci: gameport io ports in use\n");
        s->gameport.io = 0;
    } else
@@ -3549,8 +3550,13 @@
        s->max_channels = 2;
    }
    /* register gameport */
- if (joystick)
+ if (joystick) {
        gameport_register_port(&s->gameport);
+ /* better write some more info */
+ printk(KERN_INFO "gameport%d: CMPCI at %#x", s->gameport.number, s->gameport.io);
+ printk(" size %d", CM_EXTENT_GAME);
+ printk(" speed %d kHz\n", s->gameport.speed);
+ }
        /* store it in the driver field */
        pci_set_drvdata(pdev, s);
        /* put it into driver list */
@@ -3576,7 +3582,7 @@
        free_irq(s->irq, s);
err_irq:
    if (s->gameport.io)
- release_region(s->gameport.io, CM_EXTENT_GAME);
+ release_region((s->gameport.io)-1, CM_EXTENT_GAME);
#ifdef CONFIG_SOUND_CMPCI_FM
    if (s->iosynth) release_region(s->iosynth, CM_EXTENT_SYNT);
#endif
@@ -3612,7 +3618,7 @@

    if (s->gameport.io) {
        gameport_unregister_port(&s->gameport);
- release_region(s->gameport.io, CM_EXTENT_GAME);
+ release_region((s->gameport.io)-1, CM_EXTENT_GAME);
    }
    release_region(s->iobase, CM_EXTENT_CODEC);
#ifdef CONFIG_SOUND_CMPCI_MIDI
```

-
To unsubscribe from this list: send the line "unsubscribe linux-kernel" in the body of a message to majordomo@vger.kernel.org

Linux–Kernel: [PATCH] cmpci.c fixes for joystick initialization in 2.4.27

More majordomo info at <http://vger.kernel.org/majordomo–info.html>

Please read the FAQ at <http://www.tux.org/lkml/>