

[PATCH] ALSA: lx6464es: add error handling for pci_ioremap_bar

5 messages

Zhouyang Jia <jiazhouyang09@gmail.com>

Cc: Zhouyang Jia <jiazhouyang09@gmail.com>, Jaroslav Kysela <perex@perex.cz>, Takashi Iwai <tiwai@suse.com>, Bhumika Goyal <bhumirks@gmail.com>, alsa-devel@alsa-project.org, linux-kernel@vger.kernel.org

Mon, Jun 11, 2018 at 11:23 PM

When pci_ioremap_bar fails, the lack of error-handling code may cause unexpected results.

This patch adds error-handling code after calling pci_ioremap_bar.

Signed-off-by: Zhouyang Jia <jiazhouyang09@gmail.com>

```
---
sound/pci/lx6464es/lx6464es.c | 4 ++++
1 file changed, 4 insertions(+)
```

```
diff --git a/sound/pci/lx6464es/lx6464es.c b/sound/pci/lx6464es/lx6464es.c
index 9655b08..6157b6d 100644
--- a/sound/pci/lx6464es/lx6464es.c
+++ b/sound/pci/lx6464es/lx6464es.c
@@ -1016,6 +1016,10 @@ static int snd_lx6464es_create(struct snd_card *card,

/* dsp port */
chip->port_dsp_bar = pci_ioremap_bar(pci, 2);
+ if (!chip->port_dsp_bar) {
+     dev_err(card->dev, "cannot remap PCI memory region\n");
+     goto request_irq_failed;
+ }

err = request_threaded_irq(pci->irq, lx_interrupt, lx_threaded_irq,
IRQF_SHARED, KBUILD_MODNAME, chip);
--
2.7.4
```

Takashi Iwai <tiwai@suse.de>

To: Zhouyang Jia <jiazhouyang09@gmail.com>

Cc: alsa-devel@alsa-project.org, Bhumika Goyal <bhumirks@gmail.com>, Jaroslav Kysela <perex@perex.cz>, linux-kernel@vger.kernel.org

Tue, Jun 12, 2018 at 2:45 AM

On Tue, 12 Jun 2018 05:23:14 +0200, Zhouyang Jia wrote:

>
> When pci_ioremap_bar fails, the lack of error-handling code may
> cause unexpected results.
>
> This patch adds error-handling code after calling pci_ioremap_bar.
>
> Signed-off-by: Zhouyang Jia <jiazhouyang09@gmail.com>

This patch makes no sense, sorry. The whole lx6464es error handling there is buggy. We need to fix it more properly.

And, you must have noticed a bad smell in that change before submitting this. Basically, using the same goto label for the error handling of the next step is already fishy. In this case, you'd have to unmap at the error path after this point. If you can use the same label, it means that the unmap is missing -- already something wrong.

thanks,

Takashi

[Quoted text hidden]

Zhouyang Jia <jiazhouyang09@gmail.com>

To: Takashi Iwai <tiwai@suse.de>

Thu, Jun 14, 2018 at 1:09 AM

Hi,

Thanks for your kind reply. I'll fix this in v2.

Best,
Zhouyang

[Quoted text hidden]

Zhouyang Jia <jiazhouyang09@gmail.com>

Cc: Zhouyang Jia <jiazhouyang09@gmail.com>, Jaroslav Kysela <perex@perex.cz>, Takashi Iwai <tiwai@suse.com>, Bhumika Goyal <bhumirks@gmail.com>, alsa-devel@alsa-project.org, linux-kernel@vger.kernel.org

Thu, Jun 14, 2018 at 9:51 AM

When pci_ioremap_bar fails, the lack of error-handling code may cause unexpected results.

This patch adds error-handling code after calling pci_ioremap_bar.

Signed-off-by: Zhouyang Jia <jiazhouyang09@gmail.com>

```
---
v1->v2:
- Add new goto label.
---
sound/pci/lx6464es/lx6464es.c | 7 +++++++
1 file changed, 7 insertions(+)
```

```
diff --git a/sound/pci/lx6464es/lx6464es.c b/sound/pci/lx6464es/lx6464es.c
index 9655b08..6c85f13 100644
--- a/sound/pci/lx6464es/lx6464es.c
+++ b/sound/pci/lx6464es/lx6464es.c
@@ -1016,6 +1016,10 @@ static int snd_lx6464es_create(struct snd_card *card,

/* dsp port */
chip->port_dsp_bar = pci_ioremap_bar(pci, 2);
+ if (!chip->port_dsp_bar) {
+     dev_err(card->dev, "cannot remap PCI memory region\n");
+     goto remap_pci_failed;
+ }

err = request_threaded_irq(pci->irq, lx_interrupt, lx_threaded_irq,
IRQF_SHARED, KBUILD_MODNAME, chip);
@@ -1055,6 +1059,9 @@ static int snd_lx6464es_create(struct snd_card *card,
free_irq(pci->irq, chip);

request_irq_failed:
+ iounmap(chip->port_dsp_bar);
+
+remap_pci_failed:
+     pci_release_regions(pci);

request_regions_failed:
--
2.7.4
```

Takashi Iwai <tiwai@suse.de>

To: Zhouyang Jia <jiazhouyang09@gmail.com>

Cc: alsa-devel@alsa-project.org, Bhumika Goyal <bhumirks@gmail.com>, Jaroslav Kysela <perex@perex.cz>, linux-kernel@vger.kernel.org

Thu, Jun 14, 2018 at 12:01 PM

On Thu, 14 Jun 2018 15:51:46 +0200, Zhouyang Jia wrote:

>
> When pci_ioremap_bar fails, the lack of error-handling code may
> cause unexpected results.
>
> This patch adds error-handling code after calling pci_ioremap_bar.
>
> Signed-off-by: Zhouyang Jia <jiazhouyang09@gmail.com>

> ---
> v1->v2:
> - Add new goto label.

Applied, thanks.

Takashi