Documentation for CMI 8330 (SoundPRO)

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(Be sure to read Documentation/sound/oss/SoundPro too)

This adapter is now directly supported by the sb driver.

 The only thing you have to do is to compile the kernel sound
support as a module and to enable kernel ISAPnP support,
as shown below.

CONFIG_SOUND=m
CONFIG_SOUND_SB=m

CONFIG_PNP=y
CONFIG_ISAPNP=y

and optionally:

CONFIG_SOUND_MPU401=m

 for MPU401 support.

(I suggest you to use "make menuconfig" or "make xconfig"
 for a more comfortable configuration editing)

Then you can do

 modprobe sb

and everything will be (hopefully) configured.

You should get something similar in syslog:

sb: CMI8330 detected.
sb: CMI8330 sb base located at 0x220
sb: CMI8330 mpu base located at 0x330
sb: CMI8330 mail reports to Alessandro Zummo <azummo@ita.flashnet.it>
sb: ISAPnP reports CMI 8330 SoundPRO at i/o 0x220, irq 7, dma 1,5

The old documentation file follows for reference
purposes.

How to enable CMI 8330 (SOUNDPRO) soundchip on Linux

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[Note: The CMI 8338 is unrelated and is supported by cmpci.o]

        In order to use CMI8330 under Linux you just have to use a proper
isapnp.conf, a good isapnp and a little bit of patience. I use isapnp 1.17, but
you may get a better one I guess at
http://www.roestock.demon.co.uk/isapnptools/.

        Of course you will have to compile kernel sound support as module, as
shown below:

CONFIG_SOUND=m
CONFIG_SOUND_OSS=m
CONFIG_SOUND_SB=m
CONFIG_SOUND_ADLIB=m
CONFIG_SOUND_MPU401=m
# Mikro$chaft sound system (kinda useful here ;))
CONFIG_SOUND_MSS=m

        The /etc/isapnp.conf file will be:

<snip below>

(READPORT 0x0203)
(ISOLATE PRESERVE)
(IDENTIFY *)
(VERBOSITY 2)
(CONFLICT (IO FATAL)(IRQ FATAL)(DMA FATAL)(MEM FATAL)) # or WARNING
(VERIFYLD N)

WSS

(CONFIGURE CMI0001/16777472 (LD 0
(IO 0 (SIZE 8) (BASE 0x0530))
(IO 1 (SIZE 8) (BASE 0x0388))
(INT 0 (IRQ 7 (MODE +E)))
(DMA 0 (CHANNEL 0))
(NAME "CMI0001/16777472[0]{CMI8330/C3D Audio Adapter}")
(ACT Y)
))

MPU

(CONFIGURE CMI0001/16777472 (LD 1
(IO 0 (SIZE 2) (BASE 0x0330))
(INT 0 (IRQ 11 (MODE +E)))
(NAME "CMI0001/16777472[1]{CMI8330/C3D Audio Adapter}")
(ACT Y)
))

Joystick

```
(CONFIGURE CMI0001/16777472 (LD 2
(IO 0 (SIZE 8) (BASE 0x0200))
(NAME "CMI0001/16777472[2]{CMI8330/C3D Audio Adapter}")
(ACT Y)
))

# SoundBlaster

(CONFIGURE CMI0001/16777472 (LD 3
(IO 0 (SIZE 16) (BASE 0x0220))
(INT 0 (IRQ 5 (MODE +E)))
(DMA 0 (CHANNEL 1))
(DMA 1 (CHANNEL 5))
(NAME "CMI0001/16777472[3]{CMI8330/C3D Audio Adapter}")
(ACT Y)
))


(WAITFORKEY)
```

<end of snip>

       The module sequence is trivial:

```
/sbin/insmod soundcore
/sbin/insmod sound
/sbin/insmod uart401
# insert this first
/sbin/insmod ad1848 io=0x530 irq=7 dma=0 soundpro=1
# The sb module is an alternative to the ad1848 (Microsoft Sound System)
# Anyhow, this is full duplex and has MIDI
/sbin/insmod sb io=0x220 dma=1 dma16=5 irq=5 mpu_io=0x330
```

Alma Chao <elysian@ethereal.torsion.org> suggests the following /etc/modprobe.conf:

```
alias sound ad1848
alias synth0 opl3
options ad1848 io=0x530 irq=7 dma=0 soundpro=1
options opl3 io=0x388
```