

# HD-Audio Codec-Specific Models

## ALC880

3stack  
    3-jack in back and a headphone out

3stack-digout  
    3-jack in back, a HP out and a SPDIF out

5stack  
    5-jack in back, 2-jack in front

5stack-digout  
    5-jack in back, 2-jack in front, a SPDIF out

6stack  
    6-jack in back, 2-jack in front

6stack-digout  
    6-jack with a SPDIF out

6stack-automute  
    6-jack with headphone jack detection

## ALC260

gpio1  
    Enable GPIO1

coef  
    Enable EAPD via COEF table

fujitsu  
    Quirk for FSC S7020

fujitsu-jwse  
    Quirk for FSC S7020 with jack modes and HP mic support

## ALC262

inv-dmic  
    Inverted internal mic workaround

fsc-h270  
    Fixups for Fujitsu-Siemens Celsius H270

fsc-s7110  
    Fixups for Fujitsu-Siemens Lifebook S7110

hp-z200  
    Fixups for HP Z200

tyan  
    Fixups for Tyan Thunder n6650W

lenovo-3000  
    Fixups for Lenovo 3000

benq  
    Fixups for Benq ED8

benq-t31  
    Fixups for Benq T31

bayleybay  
    Fixups for Intel BayleyBay

## ALC267/268

inv-dmic  
    Inverted internal mic workaround

hp-eapd  
    Disable HP EAPD on NID 0x15

spdif  
    Enable SPDIF output on NID 0x1e

## ALC22x/23x/25x/269/27x/28x/29x (and vendor-specific ALC3xxx models)

laptop-amic  
Laptops with analog-mic input

laptop-dmic  
Laptops with digital-mic input

alc269-dmic  
Enable ALC269(VA) digital mic workaround

alc271-dmic  
Enable ALC271X digital mic workaround

inv-dmic  
Inverted internal mic workaround

headset-mic  
Indicates a combined headset (headphone+mic) jack

headset-mode  
More comprehensive headset support for ALC269 & co

headset-mode-no-hp-mic  
Headset mode support without headphone mic

lenovo-dock  
Enables docking station I/O for some Lenovos

hp-gpio-led  
GPIO LED support on HP laptops

hp-dock-gpio-mic1-led  
HP dock with mic LED support

dell-headset-multi  
Headset jack, which can also be used as mic-in

dell-headset-dock  
Headset jack (without mic-in), and also dock I/O

dell-headset3  
Headset jack (without mic-in), and also dock I/O, variant 3

dell-headset4  
Headset jack (without mic-in), and also dock I/O, variant 4

alc283-dac-wcaps  
Fixups for Chromebook with ALC283

alc283-sense-combo  
Combo jack sensing on ALC283

tpt440-dock  
Pin configs for Lenovo Thinkpad Dock support

tpt440  
Lenovo Thinkpad T440s setup

tpt460  
Lenovo Thinkpad T460/560 setup

tpt470-dock  
Lenovo Thinkpad T470 dock setup

dual-codecs  
Lenovo laptops with dual codecs

alc700-ref  
Intel reference board with ALC700 codec

vaio  
Pin fixups for Sony VAIO laptops

dell-m101z  
COEF setup for Dell M101z

asus-g73jw  
Subwoofer pin fixup for ASUS G73JW

lenovo-eapd  
Inversed EAPD setup for Lenovo laptops

sony-hweq  
H/W EQ COEF setup for Sony laptops

pcm44k  
Fixed PCM 44kHz constraints (for buggy devices)

lifebook  
Dock pin fixups for Fujitsu Lifebook

lifebook-extmic  
Headset mic fixup for Fujitsu Lifebook

lifebook-hp-pin  
Headphone pin fixup for Fujitsu Lifebook

lifebook-u7x7

Lifebook U7x7 fixups  
alc269vb-amic  
ALC269VB analog mic pin fixups  
alc269vb-dmic  
ALC269VB digital mic pin fixups  
hp-mute-led-mic1  
Mute LED via Mic1 pin on HP  
hp-mute-led-mic2  
Mute LED via Mic2 pin on HP  
hp-mute-led-mic3  
Mute LED via Mic3 pin on HP  
hp-gpio-mic1  
GPIO + Mic1 pin LED on HP  
hp-line1-mic1  
Mute LED via Line1 + Mic1 pins on HP  
noshutup  
Skip shutup callback  
sony-nomic  
Headset mic fixup for Sony laptops  
aspire-headset-mic  
Headset pin fixup for Acer Aspire  
asus-x101  
ASUS X101 fixups  
acer-ao7xx  
Acer AO7xx fixups  
acer-aspire-e1  
Acer Aspire E1 fixups  
acer-ac700  
Acer AC700 fixups  
limit-mic-boost  
Limit internal mic boost on Lenovo machines  
asus-zenbook  
ASUS Zenbook fixups  
asus-zenbook-ux31a  
ASUS Zenbook UX31A fixups  
ordissimo  
Ordissimo EVE2 (or Malata PC-B1303) fixups  
asus-tx300  
ASUS TX300 fixups  
alc283-int-mic  
ALC283 COEF setup for Lenovo machines  
mono-speakers  
Subwoofer and headset fixups for Dell Inspiron  
alc290-subwoofer  
Subwoofer fixups for Dell Vostro  
thinkpad  
Binding with thinkpad\_acpi driver for Lenovo machines  
dmic-thinkpad  
thinkpad\_acpi binding + digital mic support  
alc255-acer  
ALC255 fixups on Acer machines  
alc255-asus  
ALC255 fixups on ASUS machines  
alc255-dell1  
ALC255 fixups on Dell machines  
alc255-dell2  
ALC255 fixups on Dell machines, variant 2  
alc293-dell1  
ALC293 fixups on Dell machines  
alc283-headset  
Headset pin fixups on ALC283  
aspire-v5  
Acer Aspire V5 fixups  
hp-gpio4  
GPIO and Mic1 pin mute LED fixups for HP

hp-gpio-led  
GPIO mute LEDs on HP

hp-gpio2-hotkey  
GPIO mute LED with hot key handling on HP

hp-dock-pins  
GPIO mute LEDs and dock support on HP

hp-dock-gpio-mic  
GPIO, Mic mute LED and dock support on HP

hp-9480m  
HP 9480m fixups

alc288-dell1  
ALC288 fixups on Dell machines

alc288-dell-xps13  
ALC288 fixups on Dell XPS13

dell-e7x  
Dell E7x fixups

alc293-dell  
ALC293 fixups on Dell machines

alc298-dell1  
ALC298 fixups on Dell machines

alc298-dell-aio  
ALC298 fixups on Dell AIO machines

alc275-dell-xps  
ALC275 fixups on Dell XPS models

lenovo-spkr-noise  
Workaround for speaker noise on Lenovo machines

lenovo-hotkey  
Hot-key support via Mic2 pin on Lenovo machines

dell-spkr-noise  
Workaround for speaker noise on Dell machines

alc255-dell1  
ALC255 fixups on Dell machines

alc295-disable-dac3  
Disable DAC3 routing on ALC295

alc280-hp-headset  
HP Elitebook fixups

alc221-hp-mic  
Front mic pin fixup on HP machines

alc298-spkr-volume  
Speaker pin routing workaround on ALC298

dell-inspiron-7559  
Dell Inspiron 7559 fixups

ativ-book  
Samsung Ativ book 8 fixups

alc221-hp-mic  
ALC221 headset fixups on HP machines

alc256-asus-mic  
ALC256 fixups on ASUS machines

alc256-asus-aio  
ALC256 fixups on ASUS AIO machines

alc233-eapd  
ALC233 fixups on ASUS machines

alc294-lenovo-mic  
ALC294 Mic pin fixup for Lenovo AIO machines

alc225-wyse  
Dell Wyse fixups

alc274-dell-aio  
ALC274 fixups on Dell AIO machines

alc255-dummy-lineout  
Dell Precision 3930 fixups

alc255-dell-headset  
Dell Precision 3630 fixups

alc295-hp-x360  
HP Spectre X360 fixups

alc-sense-combo

Headset button support for Chrome platform

huawei-mbx-stereo

Enable initialization verbs for Huawei MBX stereo speakers; might be risky, try this at your own risk

alc298-samsung-headphone

Samsung laptops with ALC298

alc256-samsung-headphone

Samsung laptops with ALC256

## ALC66x/67x/892

aspire

Subwoofer pin fixup for Aspire laptops

ideapad

Subwoofer pin fixup for Ideapad laptops

mario

Chromebook mario model fixup

hp-rp5800

Headphone pin fixup for HP RP5800

asus-mode1

ASUS

asus-mode2

ASUS

asus-mode3

ASUS

asus-mode4

ASUS

asus-mode5

ASUS

asus-mode6

ASUS

asus-mode7

ASUS

asus-mode8

ASUS

zotac-z68

Front HP fixup for Zotac Z68

inv-dmic

Inverted internal mic workaround

alc662-headset-multi

Dell headset jack, which can also be used as mic-in (ALC662)

dell-headset-multi

Headset jack, which can also be used as mic-in

alc662-headset

Headset mode support on ALC662

alc668-headset

Headset mode support on ALC668

bass16

Bass speaker fixup on pin 0x16

bass1a

Bass speaker fixup on pin 0x1a

automute

Auto-mute fixups for ALC668

dell-xps13

Dell XPS13 fixups

asus-nx50

ASUS Nx50 fixups

asus-nx51

ASUS Nx51 fixups

asus-g751

ASUS G751 fixups

alc891-headset

Headset mode support on ALC891

alc891-headset-multi

Dell headset jack, which can also be used as mic-in (ALC891)

acer-veriton

Acer Veriton speaker pin fixup  
asrock-mobo  
    Fix invalid 0x15 / 0x16 pins  
usi-headset  
    Headset support on USI machines  
dual-codecs  
    Lenovo laptops with dual codecs  
alc285-hp-amp-init  
    HP laptops which require speaker amplifier initialization (ALC285)

## ALC680

N/A

## ALC88x/898/1150/1220

abit-aw9d  
    Pin fixups for Abit AW9D-MAX  
lenovo-y530  
    Pin fixups for Lenovo Y530  
acer-aspire-7736  
    Fixup for Acer Aspire 7736  
asus-w90v  
    Pin fixup for ASUS W90V  
cd  
    Enable audio CD pin NID 0x1c  
no-front-hp  
    Disable front HP pin NID 0x1b  
vaio-tt  
    Pin fixup for VAIO TT  
eee1601  
    COEF setups for ASUS Eee 1601  
alc882-eapd  
    Change EAPD COEF mode on ALC882  
alc883-eapd  
    Change EAPD COEF mode on ALC883  
gpio1  
    Enable GPIO1  
gpio2  
    Enable GPIO2  
gpio3  
    Enable GPIO3  
alc889-coef  
    Setup ALC889 COEF  
asus-w2jc  
    Fixups for ASUS W2JC  
acer-aspire-4930g  
    Acer Aspire 4930G/5930G/6530G/6930G/7730G  
acer-aspire-8930g  
    Acer Aspire 8330G/6935G  
acer-aspire  
    Acer Aspire others  
macpro-gpio  
    GPIO setup for Mac Pro  
dac-route  
    Workaround for DAC routing on Acer Aspire  
mbp-vref  
    Vref setup for Macbook Pro  
imac91-vref  
    Vref setup for iMac 9,1  
mba11-vref  
    Vref setup for MacBook Air 1,1  
mba21-vref  
    Vref setup for MacBook Air 2,1  
mp11-vref

Vref setup for Mac Pro 1,1  
mp41-vref  
Vref setup for Mac Pro 4,1  
inv-dmic  
Inverted internal mic workaround  
no-primary-hp  
VAIO Z/VGC-LN51JGB workaround (for fixed speaker DAC)  
asus-bass  
Bass speaker setup for ASUS ET2700  
dual-codecs  
ALC1220 dual codecs for Gaming mobos  
clevo-p950  
Fixups for Clevo P950

## ALC861/660

N/A

## ALC861VD/660VD

N/A

## CMI9880

minimal  
3-jack in back  
min\_fp  
3-jack in back, 2-jack in front  
full  
6-jack in back, 2-jack in front  
full\_dig  
6-jack in back, 2-jack in front, SPDIF I/O  
allout  
5-jack in back, 2-jack in front, SPDIF out  
auto  
auto-config reading BIOS (default)

## AD1882 / AD1882A

3stack  
3-stack mode  
3stack-automute  
3-stack with automute front HP (default)  
6stack  
6-stack mode

## AD1884A / AD1883 / AD1984A / AD1984B

desktop 3-stack desktop (default) laptop laptop with HP jack sensing mobile mobile devices with HP jack sensing thinkpad Lenovo  
Thinkpad X300 touchsmart HP Touchsmart

## AD1884

N/A

## AD1981

basic 3-jack (default) hp HP nx6320 thinkpad Lenovo Thinkpad T60/X60/Z60 toshiba Toshiba U205

## AD1983

N/A

## AD1984

basic default configuration thinkpad Lenovo Thinkpad T61/X61 dell\_desktop Dell T3400

## AD1986A

3stack  
3-stack, shared surrounds  
laptop  
2-channel only (FSC V2060, Samsung M50)  
laptop-amic  
2-channel with built-in mic  
eapd  
Turn on EAPD constantly

## AD1988/AD1988B/AD1989A/AD1989B

6stack  
6-jack  
6stack-dig  
ditto with SPDIF  
3stack  
3-jack  
3stack-dig  
ditto with SPDIF  
laptop  
3-jack with hp-jack automute  
laptop-dig  
ditto with SPDIF  
auto  
auto-config reading BIOS (default)

## Conexant 5045

cap-mix-amp  
Fix max input level on mixer widget  
toshiba-p105  
Toshiba P105 quirk  
hp-530  
HP 530 quirk

## Conexant 5047

cap-mix-amp  
Fix max input level on mixer widget

## Conexant 5051

lenovo-x200  
Lenovo X200 quirk

## Conexant 5066

stereo-dmic  
Workaround for inverted stereo digital mic  
gpio1  
Enable GPIO1 pin  
headphone-mic-pin  
Enable headphone mic NID 0x18 without detection  
tp410  
Thinkpad T400 & co quirks  
thinkpad  
Thinkpad mute/mic LED quirk  
lemote-a1004  
Lemote A1004 quirk  
lemote-a1205



Lemote A1205 quirk  
olpc-xo OLPC XO quirk  
mute-led-eapd Mute LED control via EAPD  
hp-dock HP dock support  
mute-led-gpio Mute LED control via GPIO  
hp-mic-fix Fix for headset mic pin on HP boxes

## STAC9200

ref Reference board  
oqo OQO Model 2  
dell-d21 Dell (unknown)  
dell-d22 Dell (unknown)  
dell-d23 Dell (unknown)  
dell-m21 Dell Inspiron 630m, Dell Inspiron 640m  
dell-m22 Dell Latitude D620, Dell Latitude D820  
dell-m23 Dell XPS M1710, Dell Precision M90  
dell-m24 Dell Latitude 120L  
dell-m25 Dell Inspiron E1505n  
dell-m26 Dell Inspiron 1501  
dell-m27 Dell Inspiron E1705/9400  
gateway-m4 Gateway laptops with EAPD control  
gateway-m4-2 Gateway laptops with EAPD control  
panasonic Panasonic CF-74  
auto BIOS setup (default)

## STAC9205/9254

ref Reference board  
dell-m42 Dell (unknown)  
dell-m43 Dell Precision  
dell-m44 Dell Inspiron  
eapd Keep EAPD on (e.g. Gateway T1616)  
auto BIOS setup (default)

## STAC9220/9221

ref

	Reference board
3stack	
	D945 3stack
5stack	
	D945 5stack + SPDIF
intel-mac-v1	
	Intel Mac Type 1
intel-mac-v2	
	Intel Mac Type 2
intel-mac-v3	
	Intel Mac Type 3
intel-mac-v4	
	Intel Mac Type 4
intel-mac-v5	
	Intel Mac Type 5
intel-mac-auto	
	Intel Mac (detect type according to subsystem id)
macmini	
	Intel Mac Mini (equivalent with type 3)
macbook	
	Intel Mac Book (eq. type 5)
macbook-pro-v1	
	Intel Mac Book Pro 1st generation (eq. type 3)
macbook-pro	
	Intel Mac Book Pro 2nd generation (eq. type 3)
imac-intel	
	Intel iMac (eq. type 2)
imac-intel-20	
	Intel iMac (newer version) (eq. type 3)
ecs202	
	ECS/PC chips
dell-d81	
	Dell (unknown)
dell-d82	
	Dell (unknown)
dell-m81	
	Dell (unknown)
dell-m82	
	Dell XPS M1210
auto	
	BIOS setup (default)

## STAC9202/9250/9251

ref	Reference board, base config
ml	Some Gateway MX series laptops (NX560XL)
ml-2	Some Gateway MX series laptops (MX6453)
m2	Some Gateway MX series laptops (M255)
m2-2	Some Gateway MX series laptops
m3	Some Gateway MX series laptops
m5	Some Gateway MX series laptops (MP6954)
m6	Some Gateway NX series laptops
auto	BIOS setup (default)

## STAC9227/9228/9229/927x

ref  
Reference board

ref-no-jd  
Reference board without HP/Mic jack detection

3stack  
D965 3stack

5stack  
D965 5stack + SPDIF

5stack-no-fp  
D965 5stack without front panel

dell-3stack  
Dell Dimension E520

dell-bios  
Fixes with Dell BIOS setup

dell-bios-amic  
Fixes with Dell BIOS setup including analog mic

volknob  
Fixes with volume-knob widget 0x24

auto  
BIOS setup (default)

## STAC92HD71B\*

ref  
Reference board

dell-m4-1  
Dell desktops

dell-m4-2  
Dell desktops

dell-m4-3  
Dell desktops

hp-m4  
HP mini 1000

hp-dv5  
HP dv series

hp-hdx  
HP HDX series

hp-dv4-1222nr  
HP dv4-1222nr (with LED support)

auto  
BIOS setup (default)

## STAC92HD73\*

ref  
Reference board

no-jd  
BIOS setup but without jack-detection

intel  
Intel DG45\* mobos

dell-m6-amic  
Dell desktops/laptops with analog mics

dell-m6-dmic  
Dell desktops/laptops with digital mics

dell-m6  
Dell desktops/laptops with both type of mics

dell-eq  
Dell desktops/laptops

alienware  
Alienware M17x

asus-mobo  
Pin configs for ASUS mobo with 5.1/SPDIF out

auto  
BIOS setup (default)

## STAC92HD83\*

ref	Reference board
mic-ref	Reference board with power management for ports
dell-s14	Dell laptop
dell-vostro-3500	Dell Vostro 3500 laptop
hp-dv7-4000	HP dv-7 4000
hp_cNB11_intquad	HP CNB models with 4 speakers
hp-zephyr	HP Zephyr
hp-led	HP with broken BIOS for mute LED
hp-inv-led	HP with broken BIOS for inverted mute LED
hp-mic-led	HP with mic-mute LED
headset-jack	Dell Latitude with a 4-pin headset jack
hp-envy-bass	Pin fixup for HP Envy bass speaker (NID 0x0f)
hp-envy-ts-bass	Pin fixup for HP Envy TS bass speaker (NID 0x10)
hp-bnb13-eq	Hardware equalizer setup for HP laptops
hp-envy-ts-bass	HP Envy TS bass support
auto	BIOS setup (default)

## STAC92HD95

hp-led	LED support for HP laptops
hp-bass	Bass HPF setup for HP Spectre 13

## STAC9872

vaio	VAIO laptop without SPDIF
auto	BIOS setup (default)

## Cirrus Logic CS4206/4207

mbp53	MacBook Pro 5,3
mbp55	MacBook Pro 5,5
imac27	iMac 27 Inch
imac27_122	iMac 12,2
apple	Generic Apple quirk
mbp101	MacBookPro 10,1
mbp81	

MacBookPro 8,1  
mba42 MacBookAir 4,2  
auto BIOS setup (default)

## **Cirrus Logic CS4208**

mba6 MacBook Air 6,1 and 6,2  
gpio0 Enable GPIO 0 amp  
mbp11 MacBookPro 11,2  
macmini MacMini 7,1  
auto BIOS setup (default)

## **VIA VT17xx/VT18xx/VT20xx**

auto BIOS setup (default)