

ML\_Patched\_AppleHDA\_v2.3.0 (OS X 10.8)

### Requirements

1. Realtek ALC8xy\*, one of the following Device\_IDs:

\*See Notes below for ALC 8xy

a. 10ec0885

b. 10ec0887

c. 10ec0888

d. 10ec0889

e. 10ec0892

f. 10ec0898

2. Lion 10.8 or later -

3. dsdt w/HDEF/Layout-id is 0x01 0x00 0x00 0x00

a. For 3 port motherboard audio; dsdt w/HDEF/layout-id is 0x02 0x00 0x00 0x00

b. For HD3000 HDMI audio; dsdt w/HDEF/layout-id is 0x03 0x00 0x00 0x00

4. Chimera 1.12 or later

5. KextBeast

### Configuration

Device	Port	Location	Notes	Audio ID: 1	Audio ID: 2	Audio ID: 3
1. Mic	Pink	Rear	1 & 2 Linked	Yes	Line Out (Center/Sub)	Yes
2. Mic (LineIn)	Pink	Front	2 Mutes 1	Yes	Yes	Yes
3. LineIn	Blue	Rear		Yes	LineOut (Rear)	Yes
4. SPDIFIn	Yellow	Rear	Optional			
5. Speakers (Front)	Green	Rear	5 & 6 Linked	Yes	Yes	Yes
6. Headphones	Green	Front	6 Mutes 5	Yes	Yes	Yes
7. LineOut (Center/Sub)	Orange	Rear		Yes	Not Available	No
8. LineOut (Rear)	Black	Rear		Yes	Not Available	Yes
9. LineOut (Side)	Grey	Rear		Optional	Not Available	No
10. SPDIFOut	Orange	Rear	Stereo/DD/DTS	Yes	Yes	Yes
11. HDMI		Rear	Edits Required	AMDNvidia	AMD/Nvidia	HD3000/HD4000

### No dsdt/HDEF?

1. [EasyGuide] How to add HDEF to your dsdt (Important - Use layout-ids below)

2. Install HDAEnabler1.kext (included in Download)

### Audio ID/layout-id Table

Audio ID (dec)	LayoutID (dec)	layout-id (hex)	dsdt layout-id Injection (hex)
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1	1	1	0x01, 0x00, 0x00, 0x00
2	2	2	0x02, 0x00, 0x00, 0x00
3	3	3	0x03, 0x00, 0x00, 0x00

### dsdt/HDEF edits

```
Device (HDEF)
{
    Name (_ADR, 0x001B0000)
    Method (_PRW, 0, NotSerialized)
    {
```

```

        Return (Package (0x02)
    {
        0x0D,
        0x05
    })
}

Method (_DSM, 4, NotSerialized)
{
    Store (Package (0x04)
    {
        "layout-id",
        Buffer (0x04)
        {
            0x01, 0x00, 0x00, 0x00 /* Example, use table above for correct layout-id */
        },

        "PinConfigurations",
        Buffer (Zero) {}
    }, Local0)
    DTGP (Arg0, Arg1, Arg2, Arg3, RefOf (Local0))
    Return (Local0)
}
}

```

#### **Installation - MultiBeast (When Available)**

1. Backup S/L/E/AppleHDA.kext
2. Verify dsdt/HDEF/layout-id
3. MultiBeast - Select
  - a. System Utilites
  - b. Patched AppleHDA/ALC 8xy
  - c. If no dsdt/Enabler
4. Restart

#### **Installation - Download**

1. Backup S/L/E/AppleHDA.kext
2. Verify dsdt/HDEF/layout-id
3. Delete ALC8xxHDA, ALC8xx, 8xxHDAEnabler and any other audio enablers from S/L/E
  - a. Copy Downloads'ML\_AppleHDA/ALC 8xyAppleHDA.kext to Desktop
  - b. Run KextBeast
4. Restart

#### **Speakers**

1. Audio ID: 1 and 3, match connector color to same motherboard/case port color
2. Audio ID: 2 (3 port motherboard audio)
  - a. Plug black connector into blue motherboard port for rear speakers
  - b. Plug green connector into green motherboard port for front speakers
  - c. Plug orange connector into pink motherboard port for center/sub speakers
  - d. Front panel: Match connector color to same case port color

#### **Audio Input Level Setting**

1. Mic (Pink/Motherboard), Line In (Pink/Chassis) and Line In (Blue/Motherboard) levels are the same
2. Three Amplifiers
  - a. Source (mic, player, etc.): set volume high
  - b. OS X Input Amp (System Preferences/Sound/Input/device): set volume 50%

c. OS X Output Amp (System Preferences/Sound/Output/device, keyboard): set volume to personal preference

### **Optional Installs**

1, Configure 5.1 Surround Sound Aggregate Device (Not available with Audio ID: 387)

a. Applications/Utilities/Audio MIDI Setup

b. <http://www.tonymacx86.com/viewtopic.php?f=16&t=848>

2. Install Line In - <http://www.rogueamoeba.com/freebies/>

### **Customization**

See Customizing the Optimized Lion AppleHDA.kext

### **Notes**

1. ALC8xy can be:

a. ALC885, 889a

b. ALC887, 888b, 888s

c. ALC888, ALC 1200

d. ALC889

e. ALC892

f. ALC898

### **Kexts**

1. AppleHDA\_v2.3.0

a. Audio ID: 1

i. ALC 8xy on board

ii. HDMI audio - discrete graphics

b. Audio ID: 2 (3 port motherboard audio)

i. ALC 8xy on board

ii. HDMI audio - AMD/Nvidia discrete graphics

c. Audio ID: 3 (HD3000/HD4000 HDMI audio only)

i. ALC 8xy on board

ii. HDMI audio - HD3000/HD4000 integrated graphics

2. HDAEnabler1.kext\_v1.0.0d1 (without dsdt)

i. ALC 8xy on board

### **ALC8xy\_ML\_AppleHDA Uninstall**

1. Copy AppleHDA.kext backup to Desktop (backup from Installation, Step 1, above)

2. Run KextBeast

3. Restart

### **Troubleshooting**

1. Shutdown/Pull power cord/Press power button twice/Wait 30 seconds/Plug power in/Boot

2. System Preferences/Sound/Output - No Audio Devices

a. Delete ALC8xxHDA, ALC8xx, 8xxHDAEnabler and any other audio enablers from S/L/E

b. Verify 10ec0ALC8xy Revision 100302 or 100202 (IOReg/

AppleHDAControllerIOHDACodecDevice/IOHDACodecVendorID)

c. Reinstall correct ALC8xy\_Lion\_AppleHDA/AppleHDA.kext

3. System Preferences/Sound/Output/Audio Devices present - No Sound

a. Check Mute

b. Check Volume

c. Reinstall ALC8xy\_Lion\_AppleHDA/AppleHDA.kext

4. System Preferences/Sound/Input/Audio Devices present - No Sound

a. Check Mute

b. Check Volume

c. Reinstall ALC8xy\_Lion\_AppleHDA/AppleHDA.kext

5. Center/Sub - No sound

- a. Audio MIDI Setup/5.1 Surround Sound Aggregate Device/Configure Speakers
- b. Line In/Select Input/Select Output (5.1 Surround)/Select Pass Thru
- c. Verify Center/Sub working in Audio MIDI Setup
- 6. Internal Microphone/Line In - No sound
  - a. Audio MIDI Setup/5.1 Surround Sound Aggregate Device/Configure Speakers
  - b. Line In/Select Input/Select Output (5.1 Surround)/Select Pass Thru
  - c. Select a speaker in Audio MIDI Setup/verify test tone
- 7. Headphone static
  - a. Check green front port connection (chassis)
  - b. Check green rear port connection (motherboard)
- 8. Mic static
  - a. Check pink front port connection (chassis)
  - b. Check pink rear port connection (motherboard)