



## [Guide] Add HDEF/Clover

### For Realtek ALC AppleHDA

Clover supports ML Realtek ALC AppleHDA.kext Audio ID Injection; no kext, dsdt or ssdt enabler required. <http://sourceforge.net/projects/cloverefiboot/>

#### **audio\_ALCInjection**

toleda/audio\_ALCInjection

#### **Requirements**

1. OS X versions supported:
  1. Mountain Lion/10.8.4 and newer
  2. Mavericks/10.9 or newer
2. Realtek ALC, one of the following Device\_ID - Codec Name
  1. 10ec0885 - ALC885/ALC889a
  2. 10ec0887 - ALC887/ALC888b
  3. 10ec0888 - ALC888/ALC888s
  4. 10ec0889 - ALC889
  5. 10ec0892 - ALC892
  6. 10ec0899 - ALC898
  7. 10ec0900 - ALC1150 - 10.8.5 or newer
3. Supported Audio-IDs (Audio\_ID = layout-id)
  1. Audio\_ID: 1 - 5/6 port Realtek ALC onboard audio and HD5K/AMD/Nvidia HDMI audio
  2. Audio\_ID: 2 - 3 port Realtek ALC onboard audio and HD5K/AMD/Nvidia HDMI audio
  3. Audio\_ID: 3 - 3/5/6 port Realtek ALC onboard audio and HD3K/HD4K/AMD/Nvidia HDMI audio
  4. Audio\_IDs: 1 and 2 support analog 5.1 surround sound, 3 does not
  5. Audio\_IDs: 1, 2 and 3 require HDMI audio dsdt edits/ssdts for HDMI audio
4. Clover\_v1597 or newer

#### **Remove Enabler (if installed)**

1. Remove any audio enablers
  1. kexts, S/L/E/HDAEnabler1.kext, HDAEnabler8--.kext, ALC8xxHDA.kext, etc.
  2. dsdt, remove dsdt/HDEF/layout-id
  3. ssdt, remove ssdt/HDEF/layout-id

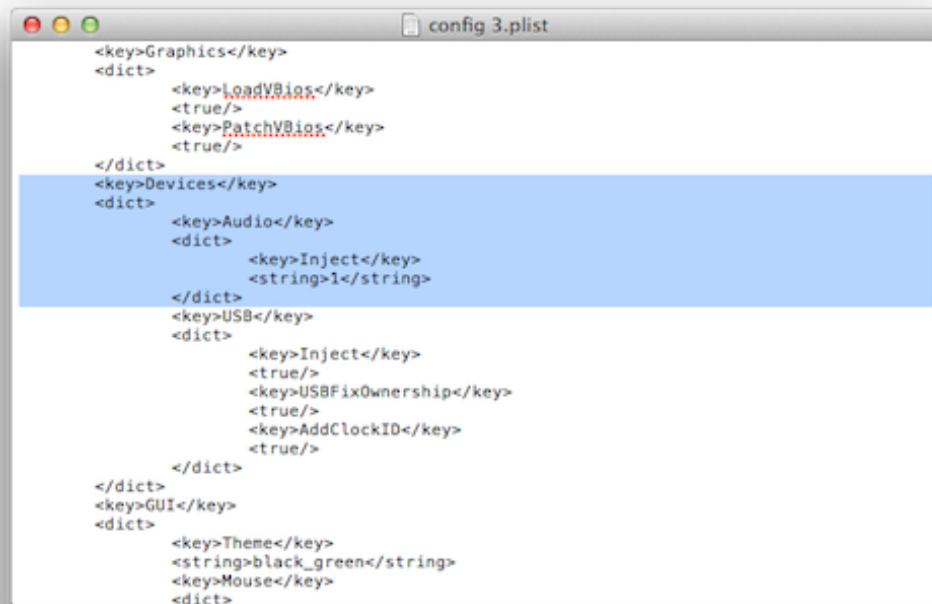
#### **Tools**

1. IORegistryExplorer (use IOReg\_v2.1: [https://github.com/toleda/audio\\_ALCInjection/blob/master/IORegistryExplorer\\_v2.1.zip](https://github.com/toleda/audio_ALCInjection/blob/master/IORegistryExplorer_v2.1.zip))

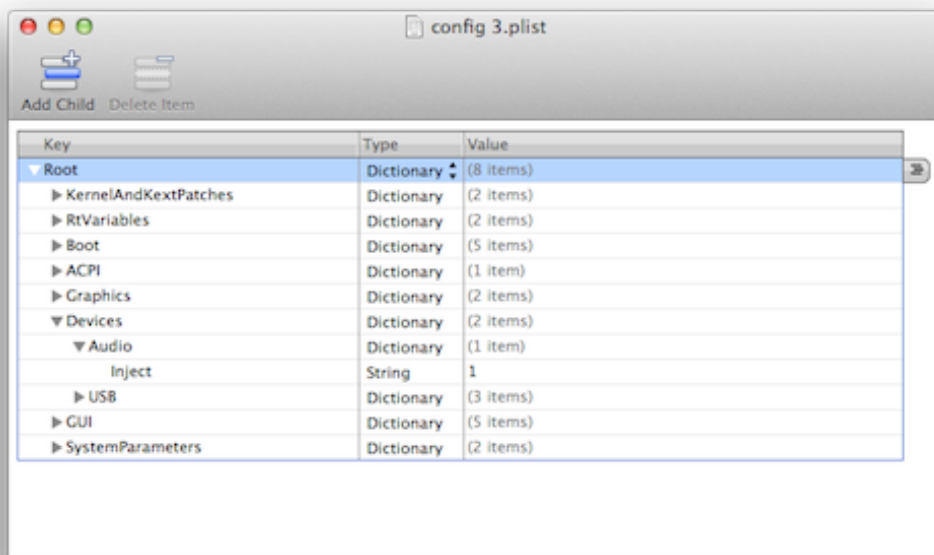
## Clover\_v2000+

### Edit config.plist (EFI/CLOVER/config.plist or EFI/CLOVER/OEM/ProductName/config.plist)

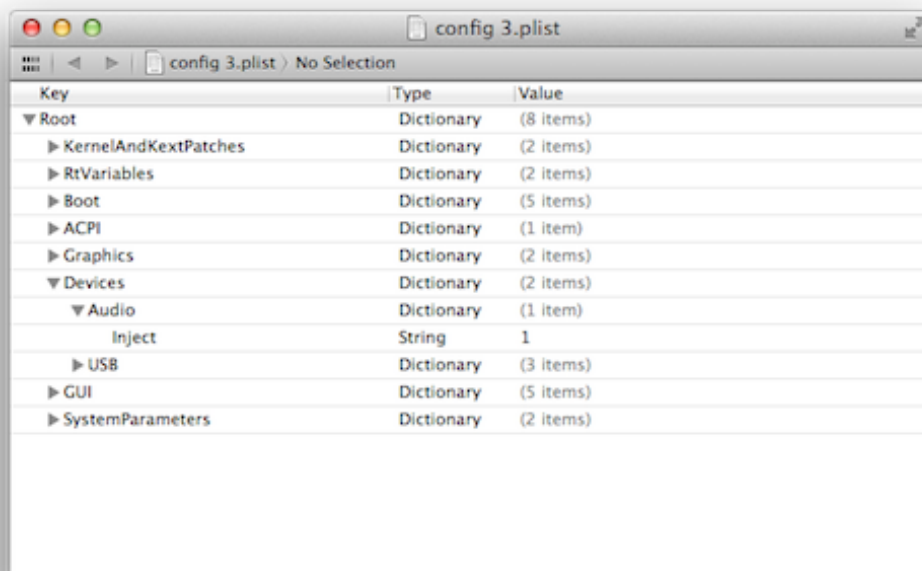
1. Determine Devices/Audio/Inject (from supported Audio\_IDs above)
  1. Audio\_ID = 1, Audio/Inject=1
  2. Audio\_ID = 2, Audio/Inject=2
  3. Audio\_ID = 3, Audio/Inject=3
2. Add config.plist/DevicesAudio/Inject/1, 2 or 3
3. Save
  1. TextEdit/config.plist



2. Property List Editor/config.plist



### 3. Xcode/config.plist



### Clover (prior to v2000)

#### Edit config.plist (Clover/EFI/config.plist or Clover/EFI/OEM/ProductName/config.plist)

- Determine HDAInjection (from supported Audio\_IDs above)
  - Audio\_ID = 1, HDAInjection=1
  - Audio\_ID = 2, HDAInjection=2
  - Audio\_ID = 3, HDAInjection=3
- Add config.plist/PCI/HDAInjectionHDAInjection/1, 2 or 3
- Save

### Verification

1. Restart
2. IORegistryExplorer
  1. Search: HDEF
  2. Locate: layout-id (right pane, scroll down)
  3. Verify:
    - <01 00 00 00> or
    - <02 00 00 00>

### Troubleshooting

1. Realtek ALC AppleHDA Capabilities.pdf
2. Post to <http://www.insanelymac.com/forum/topic/290796-realtek-alc-applehda-audio-injection/>
3. Post to <http://www.tonymacx86.com/audio/76309-mountain-lion-multibeast-no-audio-solutions-problem-reporting.html>

Credits:

VCH888; [ALC889A, Gigabyte \(Intel\): now having a working front mic - Page 38 - Sound - InsanelyMac Forum](#)