

# **OpenCore**

Reference Manual (0.5.6.7)

[2020.03.04]

#### 7. Quirks

Type: plist dict Failsafe: None

Description: Apply individual firmware quirks described in Quirks Properties section below.

# 11.3 Audio Properties

#### 1. AudioCodec

Type: plist integer Failsafe: <a href="mailto:empty-string">empty string</a>0

**Description**: Codec address on the specified audio controller for audio support.

Normally this contains first audio codec address on the builtin analog audio controller (HDEF). Audio codec addresses, e.g. 2, can be found in the debug log (marked in bold):

OCAU: 1/3 PciRoot(0x0)/Pci(0x1,0x0)/Pci(0x0,0x1)/VenMsg(<redacted>,00000000) (4 outputs)

OCAU: 2/3 PciRoot(0x0)/Pci(0x3,0x0)/VenMsg(<redacted>,00000000) (1 outputs)
OCAU: 3/3 PciRoot(0x0)/Pci(0x1B,0x0)/VenMsg(<redacted>,02000000) (7 outputs)

As an alternative this value can be obtained from  ${\tt IOHDACodecDevice}$  class in  ${\tt I/O}$  Registry containing it in  ${\tt IOHDACodecAddress}$  field.

#### 2. AudioDevice

Type: plist string Failsafe: Oempty string

**Description**: Device path of the specified audio controller for audio support.

Normally this contains builtin analog audio controller (HDEF) device path, e.g. PciRoot(0x0)/Pci(0x1b,0x0). The list of recognised audio controllers can be found in the debug log (marked in bold):

OCAU: 1/3 PciRoot(0x0)/Pci(0x1,0x0)/Pci(0x0,0x1)/VenMsg(<redacted>,00000000) (4 outputs)

OCAU: 2/3 PciRoot(0x0)/Pci(0x3,0x0)/VenMsg(<redacted>,00000000) (1 outputs)
OCAU: 3/3 PciRoot(0x0)/Pci(0x1B,0x0)/VenMsg(<redacted>,02000000) (7 outputs)

As an alternative gfxutil -f HDEF command can be used in macOS. Specifying empty device path will result in the first available audio controller to be used.

## 3. AudioOut

Type: plist integer

Failsafe: 0

**Description**: Index of the output port of the specified codec starting from 0.

Normally this contains the index of the green out of the builtin analog audio controller (HDEF). The number of output nodes (N) in the debug log (marked in bold):

OCAU: 1/3 PciRoot(0x0)/Pci(0x1,0x0)/Pci(0x0,0x1)/VenMsg(<redacted>,00000000) (4 outputs)

OCAU: 2/3 PciRoot(0x0)/Pci(0x3,0x0)/VenMsg(<redacted>,00000000) (1 outputs)
OCAU: 3/3 PciRoot(0x0)/Pci(0x1B,0x0)/VenMsg(<redacted>,02000000) (7 outputs)

The quickest way to find the right port is to bruteforce the values from 0 to N - 1.

## 4. AudioSupport

 $\mathbf{Type}:$  plist boolean

Failsafe: false

**Description**: Activate audio support by connecting to a backend driver.

Enabling this setting routes audio playback from builtin protocols to a dedicated audio port (AudioOut) of the specified codec (AudioCodec) located on the audio controller (AudioDevice).

#### 5. MinimumVolume

Type: plist integer

Failsafe: 0

**Description**: Minimal heard volume level from 0 to 100.