

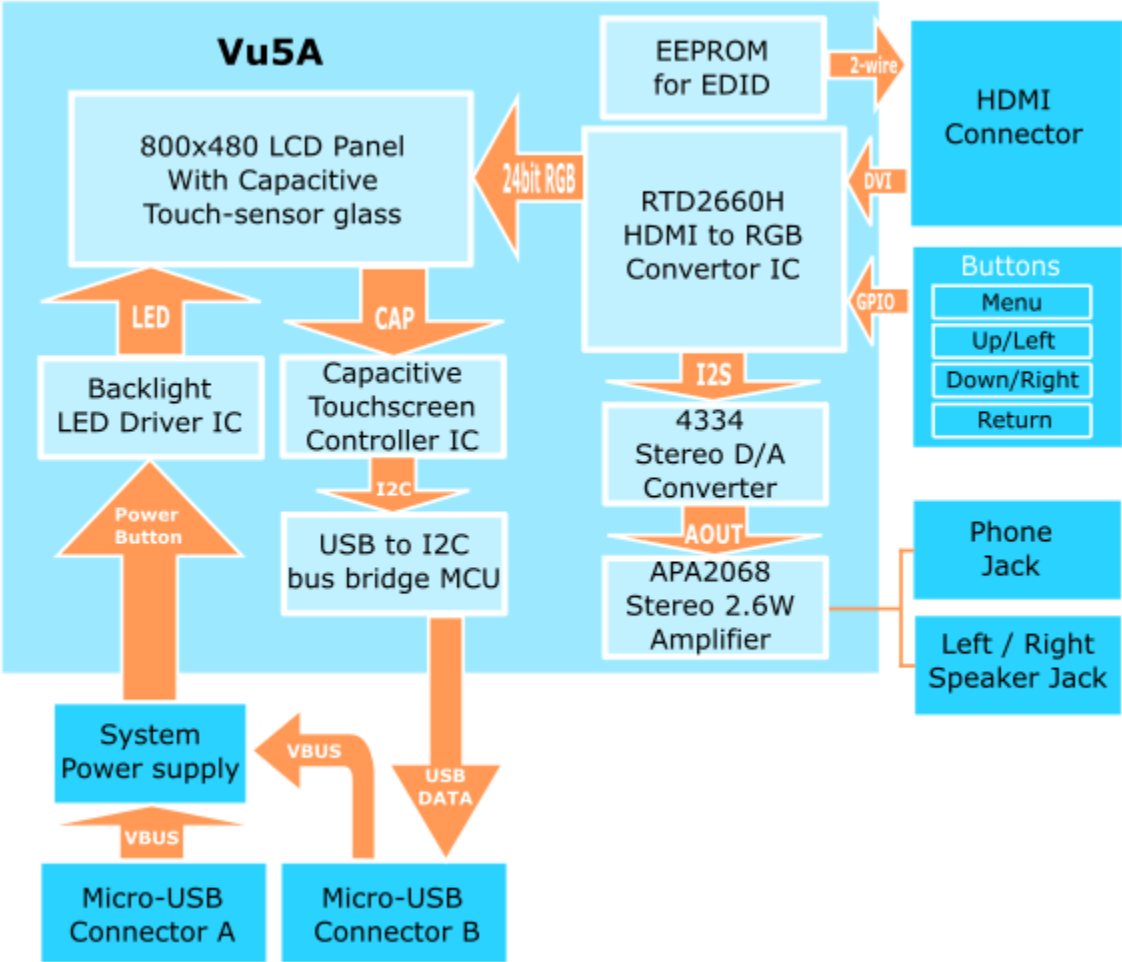
ODROID-VU-5-A

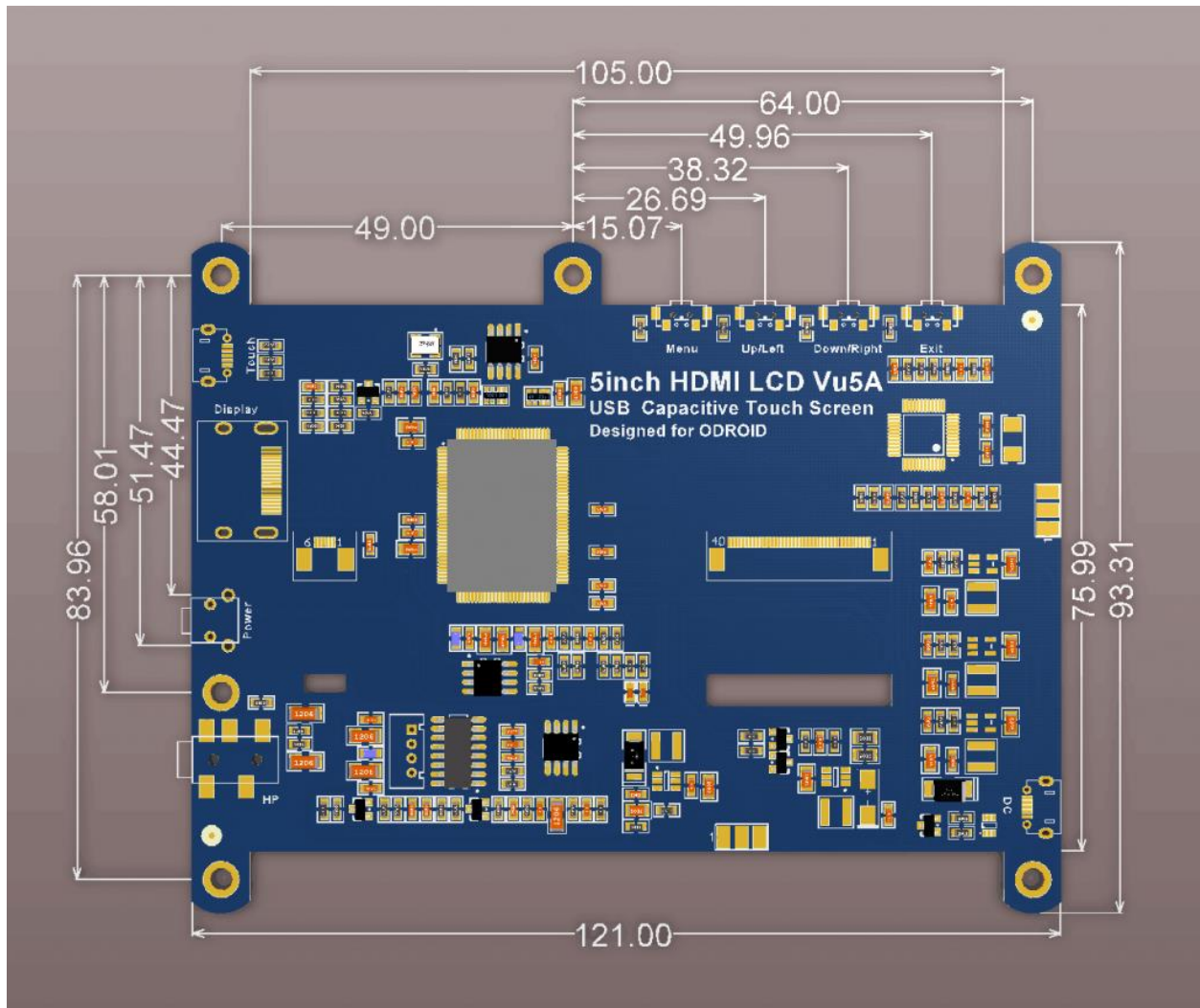


Specifications

- 5-inch TFT-LCD
- **800 x 480 pixels** hardware resolution, configurable by software (up to 1920×1080)
- 5 finger capacitive touch input (USB ID **16B4:0705**)
- Power consumption : 500 mA / 5 Volt
- Power on/off tact switch
- 3.5mm audio jack and differential L/R speaker port to support HDMI audio output
- OSD menu supports with buttons for power management, brightness/contrast/volume adjustment, etc.
- Viewing angle (in degree) : Left 70, Right 70, Up 70, Down 50
- Screen Dimensions : 121 x 93.31 x 15 mm Including switch and connectors)
- Viewable screen size : 108 x 64 mm (active area)

Diagram & Physical Dimensions



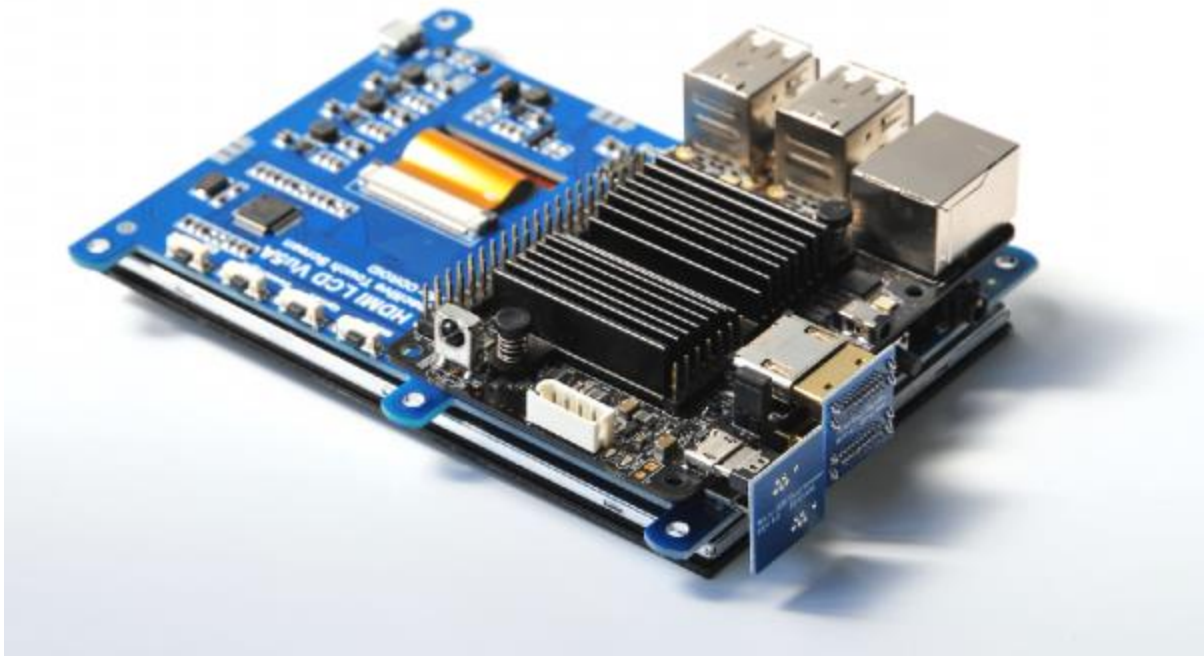


Assembly

You can easily attach the C2 / C1+ board onto the backside of the LCD screen in order to create a fully integrated system.

Also it's available to connect XU4 / C2 / C1+ using a micro-USB cable and a HDMI cable described in Option 2.

Option 1



With this option, there is few space between C2/C1+ board and VU5A to connect a speaker.

So, when you use the speaker with VU5A, we recommend Option 2.

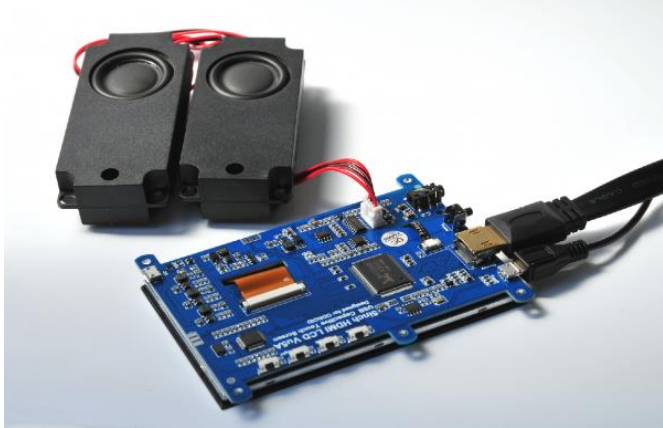
Option 2



Audio Features

With VU5A, you can enjoy sound with a stereo speaker or an audio earjack.

Please note that the speaker output turns off when an earjack is plugged in.



Software Setting - Ubuntu

```
sudo vim /media/boot/boot.ini
```

- [ODROID-XU4](#)
- [ODROID-N2/C4](#)

- [ODROID-C2](#)
- [ODROID-C1/C1+/Co](#)

Auto Detection

With the version **4.14.32-128 (Apr 20, 2018)** or higher version, XU4 automatically detects the resolution of VU5A as 800×480 with HDMI without any change of boot.ini.

VU5A model provides HDMI functionality, so you don't need modify boot.ini to switch into DVI as you do with VU5.

```
# --- HDMI / DVI Mode Selection ---
# -----
# - HDMI Mode
setenv vout "hdmi"
# - DVI Mode (disables sound over HDMI as per DVI compat)
# setenv vout "dvi"
```

Manual Setting

If you use the lower version than **4.14.32-128**, boot.ini modification is required as following.

Please uncomment **videoconfig** line for 800×480 and make sure **vout** option as **hdmi**.

```
# --- Screen Configuration for HDMI --- #
# -----
# 800x480 without monitor data using generic information
setenv videoconfig "drm_kms_helper.edid_firmware=edid/800x480.bin"

# --- HDMI / DVI Mode Selection ---
# -----
# - HDMI Mode
setenv vout "hdmi"
# - DVI Mode (disables sound over HDMI as per DVI compat)
# setenv vout "dvi"
```

Software Setting - Android

To use VU5A on Android, you have to change resolution of Android to **800x480p60hz**.

Basically, you can change the resolution through **ODROID Utility** apps. In ODROID Utility, you can find **ODROID-VU5/7** Option from resolution list.

And we also provide manual changing methods.

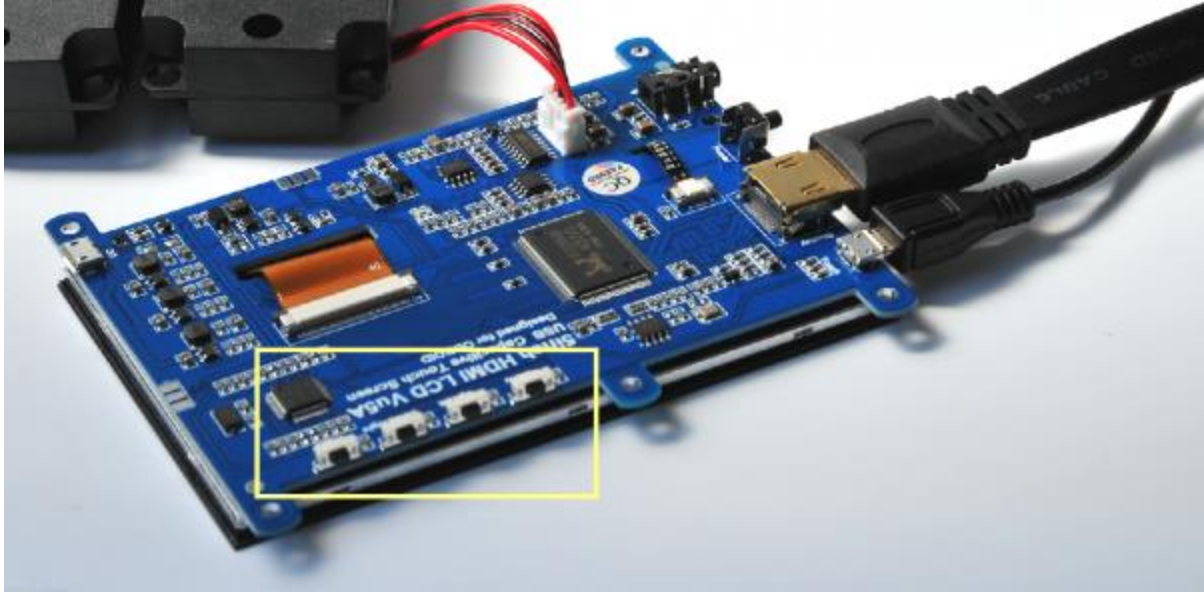
- [ODROID-XU4](#)
- [ODROID-N2/C4](#)
- [ODROID-C2](#)
- [ODROID-C1+](#)

```
setenv fb_x_res "800"  
setenv fb_y_res "480"  
setenv hdmi_phy_res "800x480p60hz"
```

OSD Setting Menu

You can find four menu buttons on the upper side of VU5A.

- Menu : To open the menu when using the menu and can be served as Confirm
- Up/Left : Direction key
- Down/Right : Direction key
- Return : To return the upper menu tree and exit the menu



Here is the menu description.

Color	Brightness	Adjust the brightness, 0 ~ 100 (max), default 50
	Contrast	Adjust the contrast, 0 ~ 100 (max), default 50
	Saturation	Adjust the saturation, 0 ~ 100 (max), default 50
OSD	Language	English only
	H Position	Adjust the horizontal position
	V Position	Adjust the vertical position
	OSD Timeout	Adjust the menu display time, Off and 0~60 in 5 unit step, default 10
	Transparent	Adjust the menu transparent, Off and 0 ~ 7 (most transparent), default off
Function	Reset	Reset to default

	Display Ratio	Set display ration, 16:9, 4:3 and Auto, default 16:9
Sound	Volume	Adjust the volume, 0 ~ 100 (max), default 50

Known issues.

1. The display shows noise on the screen in the boot process and power-down process because there is no off-sync filter circuit.
2. On the C1+, there will be after-image or noise when the system turns off if you use the OTG port.
To fix this issue, you must remove(de-solder) the R94 from the C1+ PCB.
If you have the C1+ PCB Rev 0.4 2015/09/30, just remove a JUMPER on J8.
3. There is no backlight control except for the slide switch. So software can't adjust the brightness neither turn on-off the backlight.

First booting will generate the boot.ini file automatically.

You can edit the boot.ini on your PC if you connect the SD/eMMC card after first booting(self-installation process). Change the **vout mode to "HDMI"**.