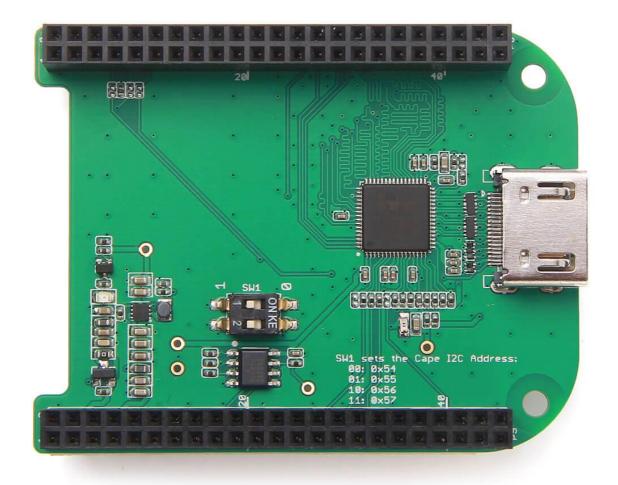
# BeagleBone Green HDMI Cape SKU: 103030034



**BeagleBone Green HDMI Cape** is a general integrated HDMI connector for expanding your BeagleBone to a rich variety of peripherals such as computer monitor, video projector, digital television, or digital audio device. This board features a standard HDMI receptacle that can be connected to a monitor with a standard HDMI-to-HDMI cable. All HD signals are supported, and the output resolution is 1280×720. It also can be used to transmit audio information. This product will make your applications based on BeagleBone board more versatile for different circumstances.

## **Features**

- Plug and play.
- Adapter to different input signal.
- 720P(1280×720) output resolution.

# **Specifications**

Parameter	Value
Input voltage	5V/3.3V

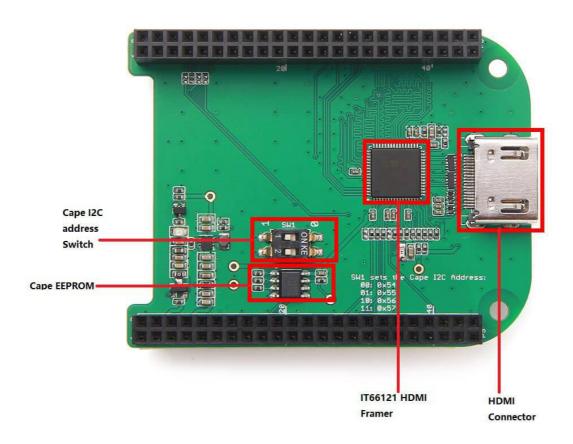
Parameter	Value
Maxium operating current	80 mA
HDMI version	Version 1.2
Maxium Output resolution	1280x720 @60Hz
Audio transmission	Available
Chip	IT66121 HDMI Framer(Datasheet)
Size	L:69mm W:58mm H:19mm
Weight	27g
Package size	L: 133mm W: 65mm H: 33mm
Gross Weight	49g

# Platforms Supported

## Application ideas

You can expand your BeagleBone to more multimedia peripherals such computer monitor, video projector, digital television, or digital audio device.

## Hardware Overview



### IT66121 HDMI Framer

• HDMI Transmitter

## **Cape I2C address Switch**

• To switch between different cape address identifier.

## **Cape EEPROM**

• EEPROM memory for this cape.

### **HDMI Connector**

## Parts list

Parts name	Quantity
BeagleBone Green HDMI Cape	1

# **Getting Started**

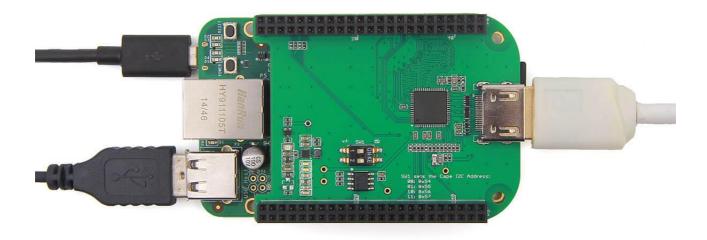
### This part will show you how to start with this product in a few steps.

## Preparations

- BeagleBone Green board × 1.
- USB cable (type A to micro type B) × 1.
- Standard HDMI cable(type A to type A) × 1.

### Hardware Connection

• Step 1. Please follow below picture to connect the hardware.



• Step 2. Plug USB cable(type C end) to your PC.

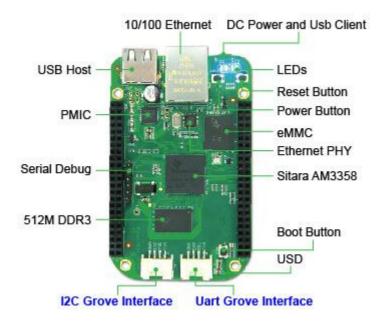
### Software

- Step 1. Please download Debian 8.10 2018-02-01 4GB SD SeeedStudio IoT image from beaglebone.org.
- Step 2. Please use the Etcher to burn images to SD cards.
- Step 3. We can see the linux command line on the screen.
- Step 4. If we want to use the graphic UI. Please follow below instructions to install lxde.

```
sudo apt-get update
sudo apt-get install lxde lxde-core lxde-icon-theme
```

### **Trouble shooting**

- 1. No BeagleBone desktop operation system is shown on the computer monitor? Try one of following steps.
  - Power down the monitor and restart it.
  - Press RESET button on BeagleBone Green board.
  - Press POWER button on BeagleBone Green board and then press it again.



- 2. The computer mouse does not work(not powered)?
  - Press RESET button on BeagleBone Green board and wait it to launch.
- 3. How disassemble BeagleBone Green HDMI Cape quickly?
  - Pull(with your hand) the end with HDMI receptacle out first, then pull the other end out. Repeat previous two steps again if it is necessary.
- 4. If the lxde Graphic keeps asking the wicd password, please follow below instructions.
  - Step 1. Please ingore it.
  - Step 2. Open the terminal, run below commands.

```
rm /etc/resolv.conf
ln -s /run/resolvconf/resolv.conf
rm /var/lib/wicd/resolv.conf.orig
ln -s /run/resolvconf/resolv.conf /var/lib/wicd/resolv.conf.orig
sudo service wicd start
sudo reboot
```

- Step 3. Please use the wicd graphic tool to connect to wifi.
- Step 4. We can use wifi, SSH tools.

### Demo

This video shows how to use BeagleBone Green HDMI Cape to surfing Internet and play audio.

## Resources

• Schematic files

# **Tech Support**

Please submit any technical issue into our forum or drop mail to techsupport@seeed.cc.