



## CoreELEC for Banana Pi [🔗](#)

These instructions explain how to install and boot CoreELEC on Banana Pi SBCs from  $\mu$ SD Card by use of a Windows PC. The instructions can easily be adapted for other Operating Systems.

### Prerequisite

**These Single Board Computers come without an Operating System pre-installed.**

**Prior to installing CoreELEC, the Android firmware has to be flashed to the SBC.**

**Instructions on how to flash the firmware are included in this document.**

### Supported Devices

- BPI-M2 Pro
- BPI-M5

### Requirements

- PC with Microsoft Windows
- Android mbox variant ui image (release 2021-05-20, Android 9.0 kernel 4.9.113)
- AML USB Burning Tool v 2.2.3.3
- Jackpal Terminal for Android

- USB Charge and Sync Cable
- USB Remote Controller (ex: MX3 Air Mouse) or other USB controlling device (keyboard, mouse)
- USB Flash Drive (for file transfer)
- µSD Card (for CoreELEC)
- Memory Card Reader

## Preparation

**CoreELEC requires the Android bootloader.**

**Please ensure Android firmware is installed prior to proceeding.**

## Software

- Download **Jackpal Terminal Emulator** for Android and copy the file to the USB Flash drive
- Download the **Android mbox variant ui image** for BPI-M5 & M2 Pro (at the time of writing release 2021-05-20, Android 9.0 with kernel 4.9.113)
- Download and install the **Amlogic USB Burning Tool**

## Flashing the Android firmware

- Extract the BPI-M5 firmware archive
- Start **Amlogic USB Burning Tool**
- Import **aml\_upgrade\_package.img** (file / import image)
- Ensure only `erase flash` and `erase bootloader` are checked and `normal erase` is selected
- Press start
- Press and hold the SW4 button



- Connect the SBC with the USB Cable to the PC
- Once the eMMC module is detected, release the SW4 button

### Upon successful completion

- Press stop
- Disconnect USB Charge and Sync Cable from PC

# CoreELEC

- Visit the **CoreELEC website**
- Select a version to download
- The **Download Helper** will pop up
- Select **Skip that and just show me all download options**
- Download the generic image (CoreELEC-Amlogic-ng.arm-xxx-Generic.img.gz)
- **Write** the downloaded image to a  $\mu$ SD Card
- Copy the device tree from the device tree folder on the  $\mu$ SD card to the root of the  $\mu$ SD Card
- Rename the device tree dtb to dtb.img

| Device     | Edition | DTB                           | SoC    |
|------------|---------|-------------------------------|--------|
| BPI-M2 Pro | 2G      | sm1_s905x3_bananapi_m2pro.dtb | S905X3 |
| BPI-M5     | 4G      | sm1_s905x3_bananapi_m5.dtb    | S905X3 |

## First boot

- Insert Remote Controller USB Adapter
- Reconnect USB Charger Cable to PC USB slot
- The SBC should boot into Android

## Install CoreELEC

Once booted into Android:

- Insert USB Flash drive with Jackpal Terminal Emulator apk
- Insert  $\mu$ SD Card with CoreELEC
- Install Jackpal Terminal Emulator
- Start Jackpal Terminal Emulator
- Type `reboot update` in the terminal and hit the enter key
- The SBC should restart from  $\mu$ SD Card and start expanding the storage partition

Allow for the CoreELEC pre-installation script to finish.

## Install CoreELEC to eMMC

For situations where it is desirable to run CoreELEC in dual boot with Android or as a stand-alone JeOS:

- **SSH** into the device and execute **ceemmc -x**

## Reboot to Android

In dual boot mode: to return to Android, choose **reboot from eMMC** from the power menu.

## Device Support

For support unrelated to CoreELEC, please refer to the **Banana Pi User Support Forums**.

## Notes

The above instructions also can be used to create a bootable USB Flash Drive.

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coreelec/bpi.txt · Last modified: 2022/11/12 18:55 by Betatester