

Development

Let's get start to develop on BPI-W2, see amazing things happen. Old page : [Getting Started with BPI-W2](#)

Basic Development

Prepare to develop

- Prepare 8G/above TF card, USB-Serial interface, PC with Ubuntu System
- Using your USB-Serial Connect debug console on W2

Load your first image on W2

```
1.You could download latest image from our forum

2.Install bpi-tools on your system
* apt-get install pv
* curl -sL https://github.com/BPI-SINOVOIP/bpi-tools/raw/master/bpi-tools
| sudo -E bash

3.After you download the image, insert your TF card into your Ubuntu
* Execute "bpi-copy xxx.img /dev/sdx" to install image on your TF card.

4.After step 3, then you can insert your TF card into W2, and press power
button setup W2.
```

Build your own image on W2

How to make a SD card with bootloader

there are two ways to boot w2, controlled by SW4

- 0 boot from emmc.
- 1 boot from SPI + SD card.

After power on, there are 3 steps must be done before loading kernel,(Normally they all are called bootloader):

- step 1: CPU init - the code is inside CPU;
- step 2: init the flash device on which we boot from; (normally it's called preloader)
- step 3: u-boot;

RTD1296 supports booting from eMMC and SPI flash, so if we want to boot W2 from SD card, (that means we put u-boot on the SD card.) the second step code must be written to SPI flash, normally it's done in factory before the board sending out, and the code is fixed and provided by RTK without source. We need not care about it, it does a simple job.

In fact, if the board will boot from eMMC, the second code must be written to eMMC first too, remember that we introduced how to do it with u-boot together on other pages. Normally it's also been done in factory.

The u-boot for eMMC and SD card are different, normally eMMC u-boot 's name is **dvrboot.exe.bin**, and u-boot for SD card name is **u-boot.bin**.

Write u-boot to SD card

The u-boot file for booting from SD card is

here: https://drive.google.com/drive/folders/17ShSHLOvxeYA6tI9HQXOAb3O7RjqfD_6?usp=sharing

- step 1: build a SD card system according:

2.1.3.2.1 How to make and run the 64-bit ubuntu 16.04 on SD card 2018-4-28

- step 2: boot up the board with eMMC and press 'Esc' key to let board stays on u-boot prompt;
- step 3: using tftp to get u-boot.bin file from network;

```
tftp 0x1500000 u-boot.bin
```

- step4: using sd command to write it to SD card:

```
sd write 0x1500000 0x50 0x3f0
```

- forum pthread

<http://forum.banana-pi.org/t/how-to-make-a-sd-card-with-bootloader/5767>

Ubuntu

How to make and run the 64-bit ubuntu 16.04 on SD card 2018-4-28

1.Requirement :

- 1.A PC with ubuntu as the host;
- 2.A banana Pi W2 board;
- 3.A SD card;

- 4. Downloaded latest ubuntu base tar file (ubuntu-base-16.04.4-base-arm64.tar.gz) from url:

<http://cdimage.ubuntu.com/ubuntu-base/releases/16.04/release/> 17

- 5. Hardware configuration file, u-boot binary file, kernel image file and audio file, which can be downloaded from:

https://drive.google.com/file/d/1LX4FwXcSzkul4BUPEVxbUyeG_UYwlkwY/view?usp=sharing 17

oRTD1296_hwsetting_BOOT_4DDR4_4Gb_s1866_padding.bin – hardware config

odvrboot.exe.bin – u-boot binary

oulmage – kernel image

obluecore.audio – audio and video firmware for RTK1296

2. Write the bootloader to the Banana Pi W2 flash:

Banana Pi W2 board can boot from EMMC flash or SPI flash on the board, the difference is the location of the bootloader, so if you will not participate in the development of u-boot, this will not matter to you. So here is how to write bootloader to EMMC.

Normally the W2 board you got had been programmed in the factory, but if the version of the bootloader isn't the latest one, I recommend you to program it by yourself again. The latest version of bootloader is available on the Banana Pi website.

Requirement:

- 1. A windows PC runs serial terminal tool like hypertrm. (I recommend using "hypertrm", because other tools sometimes fail to transmit data);
- 2. Latest version u-boot binary file from Banana Pi website (dvrboot.exe.bin);
- 3. A hardware configuration binary file for W2 (RTD1296_hwsetting_BOOT_4DDR4_4Gb_s1866_padding.bin);

Steps:

- 1. Connect the serial port between the host and the board correctly, run the terminal software and set up the relevant parameters (115200, 8N1, none);
- 2. Press "ctrl+q" then to power on the board, and when the screen appears 'd/g/r ', it can be released;
- 3. Input "h" and send hardware configuration binary files (RTD1296_hwsetting_BOOT_4DDR4_4Gb_s1866_padding.bin) in Y-modem mode on the terminal side.
- 4. Wait for the transfer to complete, then input below in console:

```
s98007058
01500000
```

- 5. Input "d" and send u-boot binary files (dvrboot.exe.bin) in Y-modem mode on the terminal side.

- 6.Wait for the transmission to complete. Enter “g” then the u-boot will be programed to the EMMC automatically.

3.Make a ubuntu root file system for W2 on a ubuntu PC.

Ubuntu has the version for arm64 architecture, it’s suitable for the Banana Pi W2, most of packages built by ubuntu for arm64 can run on the W2 board.

Requirement:

- 1.A PC runs linux (recommend ubuntu)
- 2.The latest version of ubuntu tar file for arm64 (ubuntu-base-16.04.4-base-arm64.tar.gz) is downloaded from ubuntu website: <http://cdimage.ubuntu.com/ubuntu-base/releases/16.04/release/> 17

Steps: (on the host) :

- 1.mkdir rootfs
- 2.su root
- 3.tar zxvf ubuntu-base-16.04.4-base-arm64.tar.gz -C rootfs
- 4.write a shell script file, please copy below contents to the file ch-mount.sh (vi ch-mount.sh and copy):

```
#!/bin/bash
function mnt() {
    echo "MOUNTING"
    sudo mount -t proc /proc ${2}proc
    sudo mount -t sysfs /sys ${2}sys
    sudo mount -o bind /dev ${2}dev
    sudo mount -o bind /dev/pts ${2}dev/pts
    sudo chroot ${2}
}
function umnt() {
    echo "UNMOUNTING"
    sudo umount ${2}proc
    sudo umount ${2}sys
    sudo umount ${2}dev/pts
    sudo umount ${2}dev
}
if [ "$1" == "-m" ] && [ -n "$2" ] ;
then
    mnt $1 $2
elif [ "$1" == "-u" ] && [ -n "$2" ];
then
    umnt $1 $2
else
```

```

echo ""
echo "Either 1'st, 2'nd or both parameters were missing"
echo ""
echo "1'st parameter can be one of these: -m(mount) OR -
u(umount)"
echo "2'nd parameter is the full path of rootfs
directory(with trailing '/')"
echo ""
echo "For example: ch-mount -m /media/sdcard/"
echo ""
echo 1st parameter : ${1}
echo 2nd parameter : ${2}
fi

```

- 5.apt-get install qemu-user-static
- 6.cp /usr/bin/qemu-aarch64-static rootfs/usr/bin
- 7.cp -b /etc/resolv.conf rootfs/etc/
- 8./ch-mount.sh -m rootfs/
- 9.apt-get install iputils-ping
- 10.apt-get install udev
- 11.apt-get install net-tools
- 12.Modify the root password by running: "passwd root"
- 13.exit
- 14./ch-mount.sh -u rootfs/

Until now, the ubuntu file system have been built successfully on the host, next we will write it to the SD card.

4.Write the system to the SD card (on the host) :

Requirement:

- 1.A SD card;
- 2.Device tree binary file downloaded from Banana Pi website: bpi-w2.dtb;
- 3.Kernel image file downloaded from Banana Pi website: ulmage;
- 4.Video and Audio firmware file downloaded from Banana Pi website: bluecore.audio;

Steps:

- 1.Using fdisk tool to create two partitions in SD card: format the first partition as FAT32, and the second partition as ext4; It's recommended that the first partition size should not be less than 100M;
- 2.Copy the three files: bpi-w2.dtb, ulmage, bluecore.audio to the first partition;
- 3.Copy the all files in root filesystem which just built by us to the second partition using root privilege:

```
cp -a rootfs/* /media/xxx/sdxx/  
sync
```

- 4.Eject the SD card and insert it to the W2 board, after power on the board, you can see the ubuntu is running now.
- 5.Set up network and get packages by using apt-get from ubuntu repository

Steps:

- 1.Log in with root and the password was set by yourself;
- 2.Ifconfig eth0 or eth1: ifconfig eth1 192.168.2.231
- 3.Add default gateway to let the board can reach internet: route add default gw 192.168.2.1
- 4.Add a DNS: echo 'nameserver 8.8.8.8' >> /etc/resolv.conf
- 5.apt-get update
- 6.then you can fetch and install any packages from ubuntu by using apt-get.

6.Furthermore :

Some functions are not available on the W2 now, because the kernel is not fully functional, we are working hard to make it more and more complete, please follow our official website update.

PDF format file download

<http://forum.banana-pi.org/uploads/default/original/2X/c/c6dc409abc249c57a4cb2b7aedaddec6b80a9026.pdf>

Ubuntu 16.04 Install and run Node.js and http-server

- insltall Node.js

After running Ubuntu 16.04, it's easy to install packages on the W2. Please follow below steps to install node.js:

1. apt-get install nodejs
2. apt-get install npm
3. npm install -g http-server
4. make a link to nodejs: cd /usr/bin/; ln -sf nodejs node

then Node.js is ready on your system.

OpenWrt

Burn OpenWRT with Linux kernel 4.4

1.About this release

This release is for banana pi W2 board to run OpenWRT, you will know how to burn and run OpenWRT on W2.

2. Burn OpenWRT on W2 steps :

The Bootloader of OpenWRT is u-boot64, there are two ways to burn it on W2 EMMC.

A. Use RTK MP_Tool burn uboot on W2 :

1) You need these files and tool :

- MP_Tool
- RTD1296_hwsetting_BOOT_4DDR4_4Gb_s1866.config (hardware configuration file)
- dvrboot.exe.bin (u-boot binary file)

2) Connect W2 debug console to windows PC, and run MP_Tool :

- Set your console parameters
- Choose config file and uboot file
- Choose "LK option"
- Click Write button and then power on W2, and waiting for response "OK"

B. Use hypertrm burn uboot on W2 :

1) You need these files and tool :

- hypertrm
- RTD1296_hwsetting_BOOT_4DDR4_4Gb_s1866_padding.bin (hardware configuration binary file)
- dvrboot.exe.bin (u-boot binary file)

2) Connect W2 debug console to windows PC :

- Run hypertrm , config console parameters right
- Holding on press “ctrl + q” and power on board, after the screen show “d/g/r”, then loose “ctrl + q”
- Input “h”, use Y-modem way to send “RTD1296_hwsetting_BOOT_4DDR4_4Gb_s1866_padding.bin” to W2 board
- After finish transferred, input these parameters :

```
::s98007058  
::01500000
```

- Input “d”, and send u-boot binary file
- after finish transferred, input “g” to burn u-boot file on W2 EMMC

After succeed to burn u-boot on W2, then install OpenWRT on W2.

1) You need these tools and files :

- U disk
- install.img

2) Burn OpenWRT on W2 steps :

- Format U disk as FAT32 filesystem
- Copy install.img to U disk root directory
- Decompress install.img to get four files :

```
emmc.uImage  
rescue.root.emmc.cpio.gz_pad.img  
bluecore.audio  
rescue.emmc.dtb
```

- Plug U disk to W2 USB3.0 interface, holding press “Esc” button to power on W2 board
- Then W2 board will go into u-boot console
- Input these commands step by step :

```
setenv bootargs "earlycon=uart8250,mmio32,0x98007800  
console=ttyS0,115200 loglevel=7  
  
init=/etc/init root=/dev/mmcblk0p1 rootfstype=squashfs  
rootwait"  
save
```



```
go ru
```

- Waiting for OpenWRT burning, after finished, W2 will reboot and go into OpenWRT system.

3. Image & Tools link :

Baidu Drive : <https://pan.baidu.com/s/1Rs9F46wNJibORaeCfVh4wg> PinCode : 1w4w

Google Drive :

<https://drive.google.com/file/d/10kfP142Jw0sA92uwalYZt7CeXcDKelO1/view?usp=sharing>

4. BPI-W2 run OpenWRT video :

<https://youtu.be/eTaRy8Jnfpk>

Resources

Source code

- Linux 4.9.x Source code on github: <https://github.com/BPI-SINOVOIP/BPI-W2-bsp>
- HDMI-IN sample code: https://drive.google.com/open?id=17RXX_-mrZh2N6NgyVY6ofKs-NNC48bAM
- BPI-W2 Android 7 source code : <https://github.com/BPI-SINOVOIP/BPI-1296-Android7>
- BPI-W2 Android 6 source code : <https://github.com/BPI-SINOVOIP/BPI-1296-Android6>

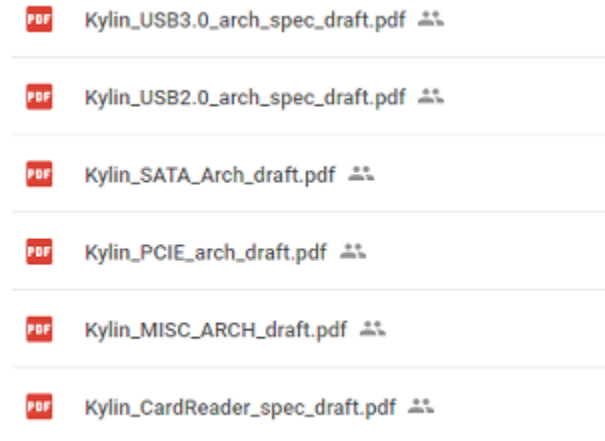
Documents

- BPI-W2 hardware schematic diagram :

google drive: https://drive.google.com/file/d/1Xn7-nlY0kVJacnRh_EpuS5Fw92_b6qqu/view?usp=sharing

baidu cloud:<https://pan.baidu.com/s/1z2FgGpWY4nPGvocx8ymmew> pinocode: r5tv

- BPI-W2 DXF file
download :https://drive.google.com/file/d/1JDVRxcXdSi8cnX32plBmyrTiKiWDK_ev/view?usp=sharing
- BPI-W2 Realtek 1296 documents download link



google drive :<https://drive.google.com/file/d/1PLIU5d0INA2U6Er5unEC7-FpnAmkSh7x/view?usp=sharing>

baidu cloud :<https://pan.baidu.com/s/1geV5JNl>

- SATA-RSM-C052-X22XX spec
 - download
link: <https://drive.google.com/file/d/0B4PAo2nW2KfncWNYV1I5MkpiQTQ/view?usp=sharing>
- [Banana Pi BPI-W2 CE FCC RoHS Certification](#)
- Banana Pi BPI-W2 play video with openwrt (kernel 4.9.119):<https://www.youtube.com/watch?v=ZQxxMRzK84Q&feature=youtu.be>

Amazon AWS Greengrass

Banana Pi BPI-W2 passed Amazon AWS

Greengrass:<https://devices.amazonaws.com/detail/a3G0h000000OvNJEAO/Banana-Pi-BPI-W2>

Image Release

All image link: <https://drive.google.com/drive/folders/1xBxYgKM40GrBa-qfgPDD-cRrUhWBo34u>

Android

- 2020-07-23 update

Android 7.1, kernel 4.1

[Android Normal Version](#): Normal android image without hwnat and openwrt enabled

[Android Router Version](#): Router mode android image with hwnat and openwrt enabled, ethernet and wifi network must be configured in Openwrt system(Settings->More->Openwrt Settings). The port with bar code label is wan port and br-lan ip is 172.16.1.1.

[Android ATV version](#): ATV version android image without hwnat and openwrt enabled. Click the right button to show the navigation bar if you use mouse for testing.

Android 6.0, kernel 4.1

[Android 6.0 image](#) is only support normal android build without second ethernet port enabled. Android 6.0 is no longer maintained and this is the final release.

[How to install Android Image](#)

- 2019-8-16 update This release is for banana pi W2 board, and it is based on Android 6.0 & 7.1 Operation system with kernel 4.1

Android 6.0

Features Map: http://wiki.banana-pi.org/W2_Image_Map#Android_6.0_HDMI

Google Drive : <https://drive.google.com/open?id=1cblHB2rKnDOZmhxbHL79k3QIYfAHOdBe>

Baidu Drive : <https://pan.baidu.com/s/1Zdl4Y7B-u7kp8XguGXFkuQ> (PinCode : 8noz)

MD5 : 1a90335d798863e31f99c1fae615c43c

Android 7.1

Features Map: http://wiki.banana-pi.org/W2_Image_Map#Android_7.1_HDMI

Google Drive : https://drive.google.com/open?id=1j1n10Wh9jE7TCDMutwLifPavt_PJ-5x3

Baidu Drive : <https://pan.baidu.com/s/12MkYp0oQ9cUN2N8J3WrHrg> (PinCode : 2cyy)

MD5 : 713ddd26e6f2c085c464442e058cf390

Forum pthread: <http://forum.banana-pi.org/t/bpi-w2-new-image-android-6-0-7-1-for-emmc-20190816/9728>

- 2019-01-14 update : BPI-W2 Android7 new image support google GMS

baidu drive: https://pan.baidu.com/s/1_aT1jHrOJdeEeGa6J1EYA

google drive: <https://drive.google.com/open?id=1KhvanoNNZYI16vYatYCqWsnKS2Wyl37L>

forum pthread : <http://forum.banana-pi.org/t/bpi-w2-android7-new-image-support-gms-20190114/7688>

- 2019-05-09 update, This release is for banana pi W2 board which is based on RTD1296, Android 6.0 Operation system with kernel 4.1.17.

BPI-W2 Android 6.0 Features Map :http://wiki.banana-pi.org/W2_Image_Map#Android_6.0_HDMI

Google Drive : <https://drive.google.com/open?id=1h3XhbmY1SQpzDOKCY3hqPoHJJdkghuY>

Baidu Drive : <https://pan.baidu.com/s/13CNmfW5ZlSmzgrDLp6mptg> (PinCode : m8qt)

MD5 : 30226f82f85b88b7c345affa202268eb

Forum pthread:<http://forum.banana-pi.org/t/bpi-w2-new-image-release-android-6-0-2019-05-09/9207>

OpenWRT

- 2019-10-04 update Banana Pi BPI-W2 (RTD1296) new image : Openwrt Lede with Kernel 4.9

download link: <https://drive.google.com/drive/folders/1p5tk6-8E498lIDBYnabZHJtsEosUufnr>

forum pthread : <http://forum.banana-pi.org/t/banana-pi-bpi-w2-rtd1296-new-image-openwrt-lede-with-kernel-4-9/10013>

- Image Link: Linux kernel 4.4
 - Baidu Drive : <https://pan.baidu.com/s/1Rs9F46wNJibORaeCfVh4wg> PinCode : 1w4w
 - Google Drive :
<https://drive.google.com/file/d/10kfP142Jw0sA92uwalYZt7CeXcDKelO1/view?usp=sharing>
 - Forum thread:
 - <http://forum.banana-pi.org/t/bpi-w2-new-image-burn-openwrt-with-linux-kernel-4-4-2018-4-25/5510>

Ubuntu

- 2019-6-18 update, This release is for banana pi M4 & W2 board, and it is based on Ubuntu Mate 18.04 & Ubuntu Server 16.04 Operation system with kernel 4.9.119.

BPI-M4/BPI-W2 Ubuntu Mate 18.04

Features Map: http://wiki.banana-pi.org/M4_Image_Map#Ubuntu_18.04_Mate

Google Drive : https://drive.google.com/open?id=1nPI2dy_KCW4h5korQdvi0iyMHIDyxIPq

Baidu Drive : https://pan.baidu.com/s/1tB_QZ6zgmKiYstcZwn51gg (PinCode : edrc)

MD5 : 7409b48a46e0bbc2d0ae2e70a49bfb36

BPI-M4/BPI-W2 Ubuntu Server 16.04

Features Map: http://wiki.banana-pi.org/M4_Image_Map#Ubuntu_18.04_Mate

Google Drive : <https://drive.google.com/open?id=1G4915FPOU4pDzbl0TCFH8wWXUGmNdlkF>

Baidu Drive : <https://pan.baidu.com/s/1lkG6gyzn-KPbvrEhf6Q85w> (PinCode : 5jbo)

MD5 : 328706256bec238df50f9bd6ab8dfd1b

Issue: if HDMI doesn't display, please try "ctrl + alt + F1" to change terminal then "ctrl + alt + F7" change to desktop display.

Forum pthread:<http://forum.banana-pi.org/t/bpi-m4-demo-image-release-ubuntu-mate-18-04-ubuntu-server-16-04-2019-06-18/9362>

- 2018-09-17 update. This release is for banana pi W2 board which is based on realtek RTD1296, and it is based on Ubuntu 18.04 operation system with kernel 4.9.119.
- Image Link:

W2 Features Map: http://wiki.banana-pi.org/W2_Image_Map

Baidu Drive : https://pan.baidu.com/s/1iLOa1MOgtSqY6dVsQ_SyQg

Google Drive : https://drive.google.com/open?id=1PQO9tA4w_wJvDIz64xJrXzSNS1g4GSIB

- Forum thread: <http://forum.banana-pi.org/t/bananapi-w2-ubuntu-18-04-new-image-release-2018-09-17/6790>
 - <http://forum.banana-pi.org/t/bpi-w2-new-image-how-to-make-and-run-the-64-bit-ubuntu-16-04-on-sd-card-2018-4-28/5546>

Debian

- 2019-08-13 update BPI-M4/BPI-W2 Debian10 Buster Desktop New Demo Image ,This release is for banana pi M4 and W2 board, and it is based on Debian 10 Operation system with kernel 4.9. Debian 10 buster desktop(32bit)

Features Map: http://wiki.banana-pi.org/M4_Image_Map#Debian_10_buster

Google Drive : <https://drive.google.com/open?id=1rVrZStsw2PINBhIx CzOLOtYLBtoECmEk>

Baidu Drive : <https://pan.baidu.com/s/1WcrBkxm5OyBLedCBwaUz6Q> (PinCode : e6m3)

MD5 : 300b37cdfa092d72dceddd4f33825b40

Forum Pthread:<http://forum.banana-pi.org/t/bpi-m4-bpi-w2-debian10-buster-desktop-new-demo-image-20190813/9712>

FAQ

Issue: if HDMI doesn't display, please try "ctrl + alt + F1" to change terminal then "ctrl + alt + F7" change to desktop display.

SW2: switch to 0, if insert SD, SD start ; if doesn't insert SD, EMMC start.

- 2019-08-06 update, BPI-M4/BPI-W2 Debian 10 Buster Lite Demo Image ,This release is for banana pi M4 and W2 board, and it is based on Debian 10 Operation system with kernel 4.9.

Debian 10 buster AArch64 (64bit)

Features Map: http://wiki.banana-pi.org/M4_Image_Map#Debian_10_buster

Google Drive : <https://drive.google.com/open?id=1QyZX5AGUpEV2OZMXz3qkB8riXROXHdx3>

Baidu Drive : <https://pan.baidu.com/s/1CGxGUI8rt06tHwfk134Seg> (Pincode:7rcz)

MD5 : 5a8b1eb36b782fdd742ba746c645593d

Debian 10 buster (32bit)

Features Map: http://wiki.banana-pi.org/M4_Image_Map#Debian_10_buster

Google Drive : https://drive.google.com/open?id=1WJIKTMPAipYnDFqIPi_dmR76oobuO5Wd

Baidu Drive : https://pan.baidu.com/s/1ITtcMTWqE0jG_1PWGtWSqw (Pincode:gny6)

MD5 : a59f2e6a298237a08bb523b53372d937

FAQ

For more info, please see here:

BPI-M4: http://wiki.banana-pi.org/Getting_Started_with_M4

BPI-W2: http://wiki.banana-pi.org/Getting_Started_with_W2

- 2018-09-18 update. This release is for banana pi W2 board which is based on realtek RTD1296, and it is based on Debian 9 operation system with kernel 4.9.119.
- image Link:

W2 Features Map: http://wiki.banana-pi.org/W2_Image_Map#Debian_9

Baidu Drive : https://pan.baidu.com/s/1bmTektF0ufRL9_FOpdoO2w

Google Drive : <https://drive.google.com/open?id=1z1l56qX7BhsD44ha4lGDBhi-ZqwCjoC>

Forum thread: <http://forum.banana-pi.org/t/banana-pi-bpi-w2-new-image-debian-9-linux-image-release-2018-09-18/6797>

Raspbian

- 2019-6-19 update, This release is for banana pi M4 & W2 board, and it is based on Raspbian 9.8 stretch & AArch64 Linux Mate & AArch Linux Lite Operation system with kernel 4.9.119.

Features Map: http://wiki.banana-pi.org/M4_Image_Map#Raspbian_9.8_stretch

Google Drive : https://drive.google.com/open?id=15cypBk4NKLOX8uD3Mffc_Sx05j39xCW

Baidu Drive : https://pan.baidu.com/s/1gwD5ok9XLLQa0InU_-b7EA (PinCode : uuqn)

MD5 : a397a9c4d078c2841f0c243c573dc9a8

FAQ

Issue: if HDMI doesn't display, please try "ctrl + alt + F1" to change terminal then "ctrl + alt + F7" change to desktop display.

SW2: switch to 0, if insert SD, SD start ; if doesn't insert SD, EMMC start.

Forum pthread:<http://forum.banana-pi.org/t/bpi-m4-bpi-w2-demo-image-release-raspbian-9-8-stretch-aarch64-linux-mate-aarch64-linux-lite-2019-06-19/9370>

- 2018-09-17 update ,This release is for banana pi W2 board which is based on realtek RTD1296, and it is based on Raspbian 9.4 operation system with kernel 4.9.119.

BPI-W2 Features Map: http://wiki.banana-pi.org/W2_Image_Map#Raspbian_9.4

Baidu Drive : <https://pan.baidu.com/s/1aL5ZsHIRwM-1rvnZDiR3EA>

Google Drive : <https://drive.google.com/open?id=11-WbfJK0jNVgutg9UVKfillJtfHXi-9j>

Forum pthread : <http://forum.banana-pi.org/t/banana-pi-bpi-w2-new-image-raspbian-9-4-new-image-release-2018-09-17/6824>

AArch Linux

- .2019-6-19 update,This release is for banana pi M4 & W2 board, and it is based on AArch64 Linux Mate & AArch linux liteOperation system with kernel 4.9.119.

Fetures Map:

Google Drive : https://drive.google.com/open?id=1fsk5S4zQfo3tl97Nty_QA1uAEqgB63YK

Baidu Drive : <https://pan.baidu.com/s/1GvGsfs7t018EoRlv-au1GA> (PinCode : o496)

MD5 : d284b2326a36d2d9039fb8d7e20e2600

- AArch64 Linux Lite

Fetures Map:

Google Drive : https://drive.google.com/open?id=17V49oBoJZ18MKjSHD_LKjf1Z7qEokYn7

Baidu Drive : https://pan.baidu.com/s/1WivDWZHu_GnWOxhVOjoqIQ (PinCode : uhcg)

MD5 : 53bb6f8d00f8708dab96bc865eaddc5e

FAQ

Issue: if HDMI doesn't display, please try "ctrl + alt + F1" to change terminal then "ctrl + alt + F7" change to desktop display.

SW2: switch to 0, if insert SD, SD start ; if doesn't insert SD, EMMC start.

Forum pthread:<http://forum.banana-pi.org/t/bpi-m4-bpi-w2-demo-image-release-raspbian-9-8-stretch-aarch64-linux-mate-aarch64-linux-lite-2019-06-19/9370>

OpenSUSE

- 2018-09-25 update, This release is for banana pi W2 board which is based on realtek RTD1296, and it is based on OpenSUSE operation system with kernel 4.9.119.

BPI-W2 Features Map: http://wiki.banana-pi.org/W2_Image_Map

Baidu Drive : https://pan.baidu.com/s/1UZI-UFUgPhCPaFHBB9_GA

Google Drive: https://drive.google.com/open?id=1j_486I9v2VuPXslWYk9OImOIPMxcxZGs

Forum pthread: <http://forum.banana-pi.org/t/bananapi-bpi-w2-new-image-opensuse-release-2018-09-25/6851>

Kali Linux

- 2018-09-25 update, This release is for banana pi W2 board which is based on realtek RTD1296, and it is based on Kali operation system with kernel 4.9.119.

BPI-W2 Features Map: http://wiki.banana-pi.org/W2_Image_Map

Baidu Drive : https://pan.baidu.com/s/1eslUG_xlHHSgwHk_Lq_bVw

Google Drive : <https://drive.google.com/open?id=1QQXs-YjZtwOfEEc73wfNtLy67ZZwVai7>

Forum pthread: <http://forum.banana-pi.org/t/bananapi-bpi-w2-new-image-kali-rolling-release-2018-09-25/6855>

RPiTC

- 2018-09-03 update :RPiTCv3_1.12-demo-bpi-w2-beta with Linux kernel 4.9.119
- image download:

google drive: <https://drive.google.com/open?id=1sWjMuKncqDDsb3cGmg22oJs-U2fZjOv0>

baidu cloud: <https://pan.baidu.com/s/1sd9hoOwyfAxWIGroDMOj4A>

more abot RPiTC : <http://rpitc.blogspot.com/>

Forum pthread: <http://forum.banana-pi.org/t/bpi-w2-new-iamge-rpitcv3-1-12-demo-bpi-w2-beta-2018-09-03/6686>

FAQ

- 1. Now we support to **use bpi-copy to burn image to sd card**, before this, we need to update our spi rom code, please watch the attachment to update your W2 spi rom code.
- SPI ROM Tool :

Baidu Drive : https://pan.baidu.com/s/1017nmgw6ZVb5_NgLdZ54HQ

Google Drive: https://drive.google.com/open?id=1pg4MDKZiOKhyERB5xNGjTynhFWjXN_jm

- SPI ROM Image :

Baidu Drive : <https://pan.baidu.com/s/1rpfpWK8eoOdPhKwyWoR2Tw>

Google Drive: <https://drive.google.com/open?id=1Ziz436kDL0kdojECB5bejVd9krzKp0z9>

- How-To Update W2 SPI ROM :

Baidu Drive : https://pan.baidu.com/s/1CZdY_4yFk5r5MSxoog9uOg

Google Drive: <https://drive.google.com/open?id=1kXal5eYJ4cNLnhfr4rTwUVrENbMc1q-E>