AvalonMiner 树莓派配置教程

AvalonMiner Raspberry Pi Configuration Guide

简介

我们通过使用烧录有 AvalonMiner 设备管理程序的树莓派作为控制器，使用户能够通过控制器中管理程序的图形界面，来同时对多台 AvalonMiner 6.0 或 AvalonMiner 6.01 进行管理和调试。

本教程将简要的说明，如何把 AvalonMiner 设备管理程序烧录进树莓派的存储卡中来完成控制器的初步制作，然后再把控制器配置到可使用的状态。

Summary

We use the AvalonMiner device management program flashed onto a Raspberry Pi to be used as a controller which allows users to manage through a graphical user interface via the controller, multiple AvalonMiner 6.0 or AvalonMiner 6.01 devices. This makes managing and debugging multiple Avalon units much easier.

This brief tutorial explains how to load the AvalonMiner Device Manager into the memory card of a Raspberry Pi to complete the initial setup of the controller, and then set the controller configuration to a usable state.

烧录 AvalonMiner 设备管理程序

Flash AvalonMiner Device Manager

准备工作

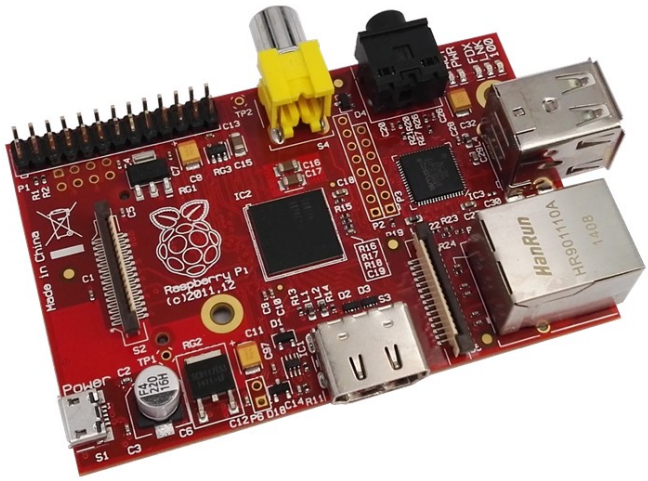
Ready to Work

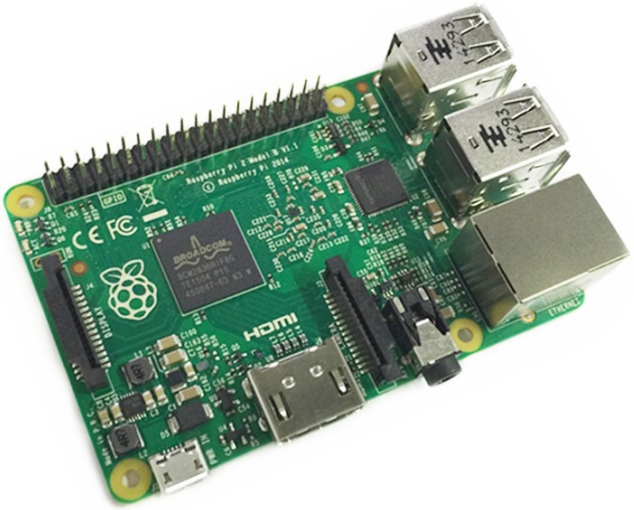
您需要准备以下物品和程序才能开始烧录。

You need the following items to begin.

1. 一个 Raspberry Pi，AvalonMiner 设备管理程序支持以下型号的 Raspberry Pi (A Raspberry Pi, Avalon Miner Device Manager supports the following types of Raspberry Pi)：

- Raspberry Pi B
- Raspberry Pi 2B





Raspberry Pi B (2 USB ports)　　Raspberry Pi 2B (4 USB ports)

2. 一张最小容量为 4GB 存储卡，对品牌和传输速度没有要求。 (a minimum capacity of 4GB memory card from a name brand product with good transfer speed)

   请根据您选择的树莓派型号来选择存储卡的类型。(Please be select type of memory card based upon your selected Raspberry Pi model)

- Raspberry Pi B 使用 SD 卡 (Raspberry Pi B SD card)
- Raspberry Pi 2B 使用 Micro SD 卡 (Raspberry Pi 2B using a Micro SD card)

SD 卡　　Micro SD 卡

3. 一个读卡器，请根据您选择的存储卡的类型来选择读卡器的类型。如果您使用的是带有 SD 卡或者 Micro SD 卡插槽的电脑，可以不需要准备读卡器。(You need an SD card reader. Select the type of reader depending on the type of memory card you choose. If you are using a computer with an SD card or Micro SD card slot, you still might need to prepare an external reader.)

同时支持 SD 卡和 Micro SD 卡的读卡器

Supports SD card and Micro SD card reader

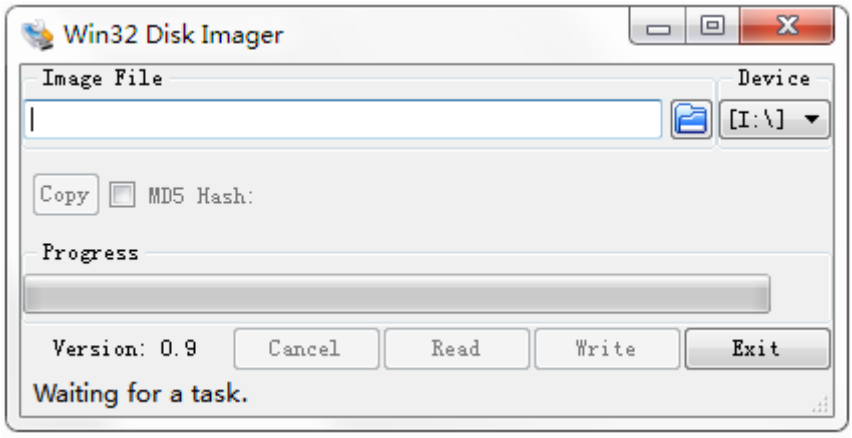
4. 一个 Raspberry Pi Frimware，请根据您的树莓派的型号来选择树莓派固件的版本。(Depending on your Raspberry Pi model, select the firmware version.)

   - Raspberry Pi 2B Firmware: https://canaan.io/downloads/software/avalon6/openwrt/latest/brcm2708/bcm2708/openwrt-brcm2708-bcm2708-sdcard-vfat-ext4.img
   - Raspberry Pi 2B Firmware: https://canaan.io/downloads/software/avalon6/openwrt/latest/brcm2708/bcm2709/openwrt-brcm2708-bcm2709-sdcard-vfat-ext4.img

5. 一台装有烧录软件的电脑，烧录软件有很多，在 Windows 系统下，我们推荐使用 Win32 disk imager。如果您是 Mac OS、Linux 或者其他系统，请自行查找烧录方法。(You need a computer equipped with some CD/Image burning software. There are many, in Windows, we recommend using the Win32 disk imager. If you are a Mac OS, Linux, or other systems, look for the best options and/or use commandline software.)

   下载地址：(Download link)

   http://www.softpedia.com/get/CD-DVD-Tools/Data-CD-DVD-Burning/Win32-Disk-Imager.shtml



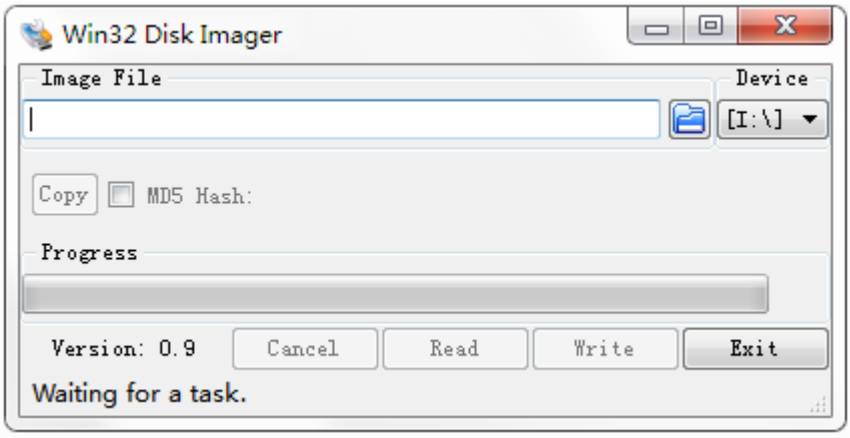
Win32 disk imager

开始烧录

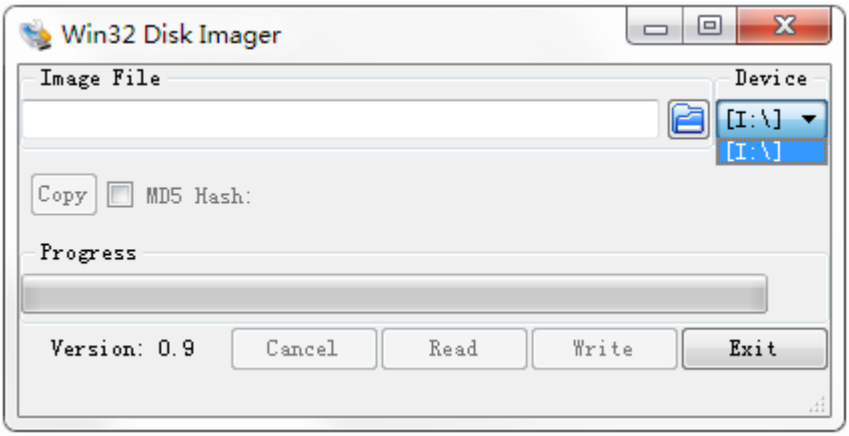
Began to burn

1. 把存储卡插进读卡器，或者您电脑自带的存储卡插槽。(Insert the memory card into the reader, or into your internal computer card reader.)
2. 把读卡器连接到电脑（如果使用电脑自带的读卡器请忽略掉这一步）。(The card reader connected to the computer (if you are using a computer that comes with a card reader, please ignore this step).)

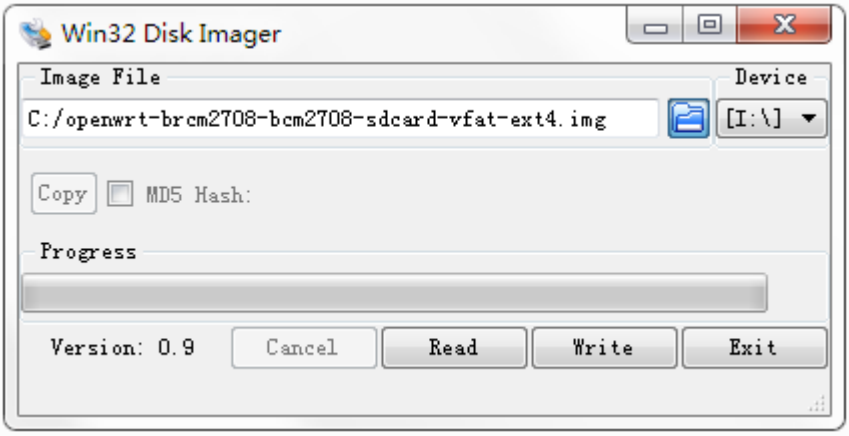
3. 打开 Win32 Disk imager。(Open Win32 Disk Imager)

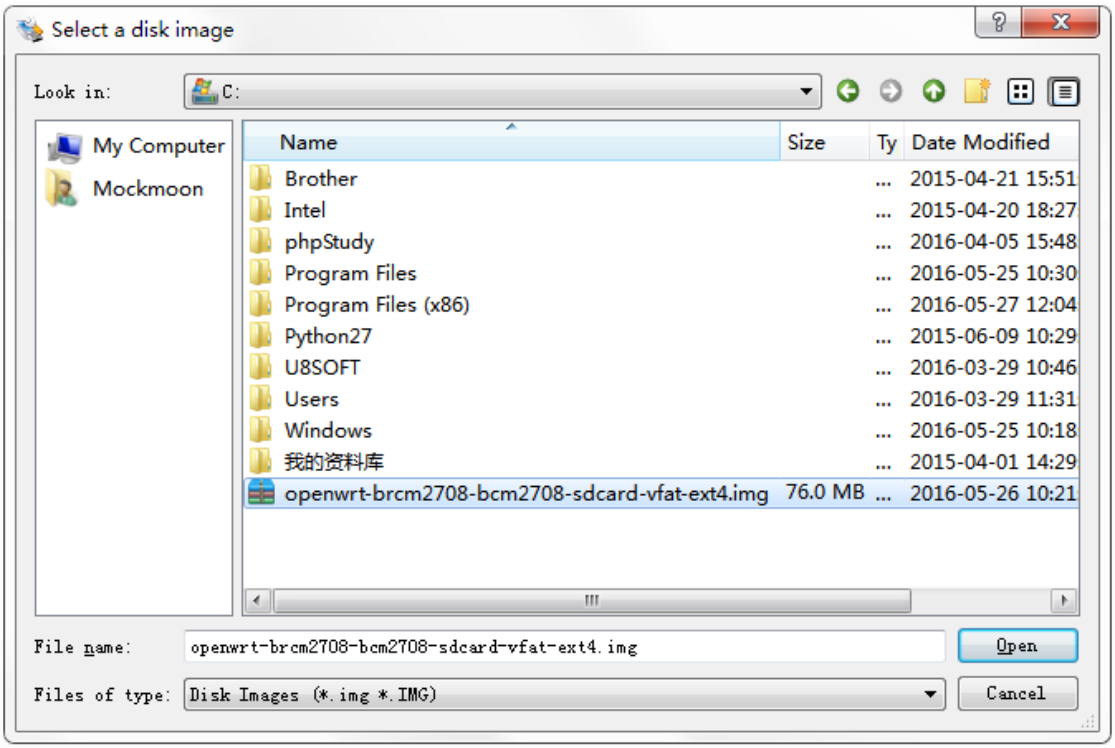


4. 选择您需要烧录的存储卡的盘符 (Select the memory card image that you need to burn.)

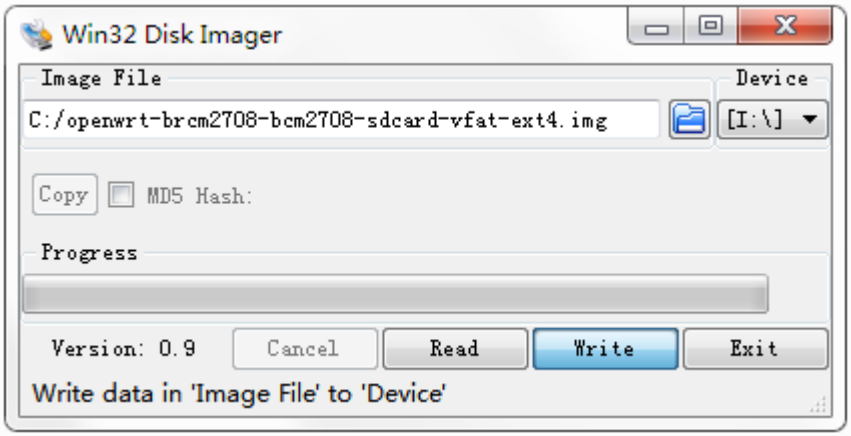


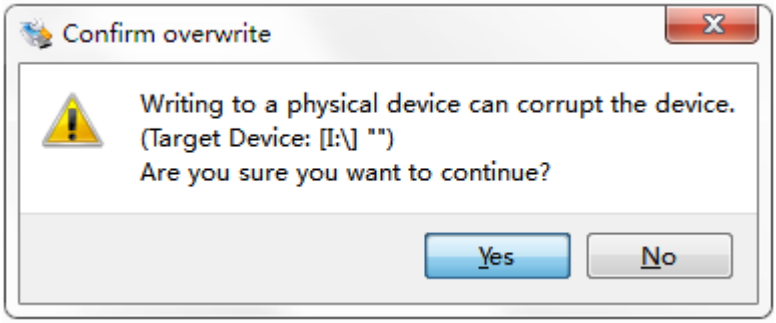
5. 找到并选择您下载的 Raspberry Pi Firmware，然后点击 Open。(Locate and select your downloaded Raspberry Pi Firmware, and then click Open.)



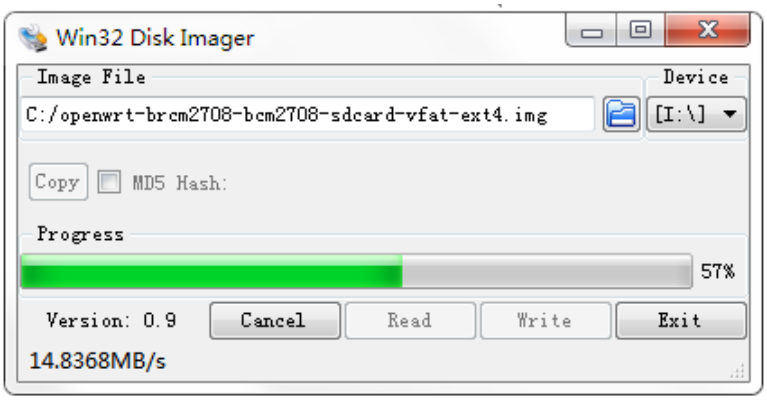


6. 点击 Write，然后点击 Yes 开始烧录。(Click Write, and then click Yes, to start writing your image.)

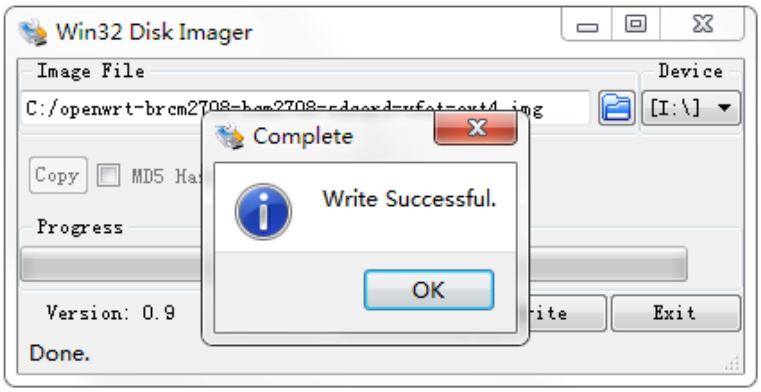




7. 等待烧录。(Wait for the process to complete.)



8. 当显示如下提示时，表示烧录成功。(When the following message is displayed, your program was successfully written.)



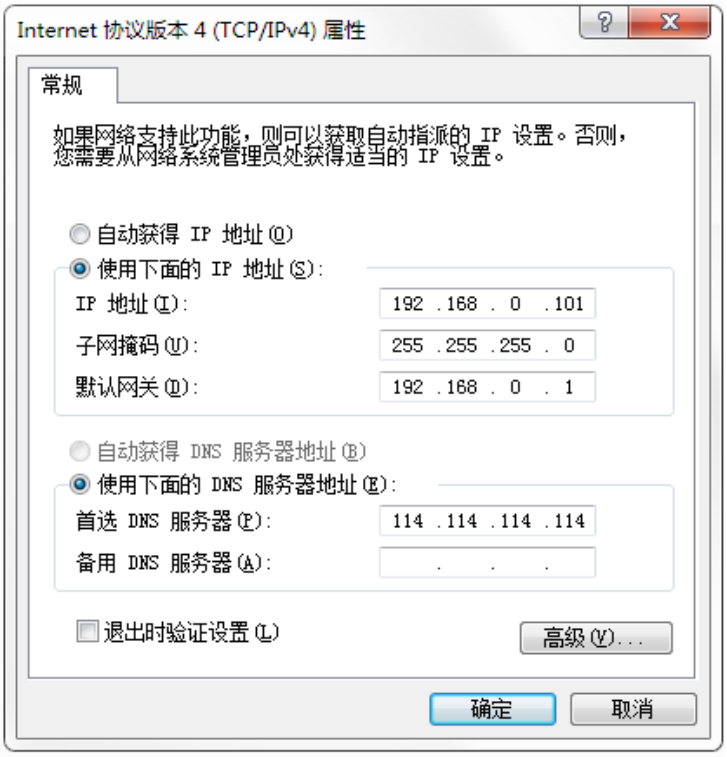
9. 把烧录好程序的存储卡插进树莓派的存储卡插槽，控制器的制作就初步完成了。(If all is well and you followed the steps, the controller is initially completed.)

配置控制器

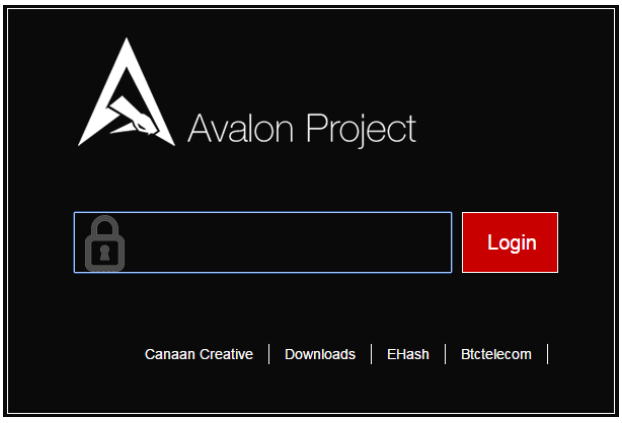
Configuration Controller

1. 给控制器通电，并且把控制器和对其进行配置的电脑连接到同一个网络下(也可以把控制器和这台电脑使用网线直接连接)。(Connect the power to the controller, and make sure the controller and computer is configured to be connected to the same network (this controller may also be connected directly to the computer using a network cable).)

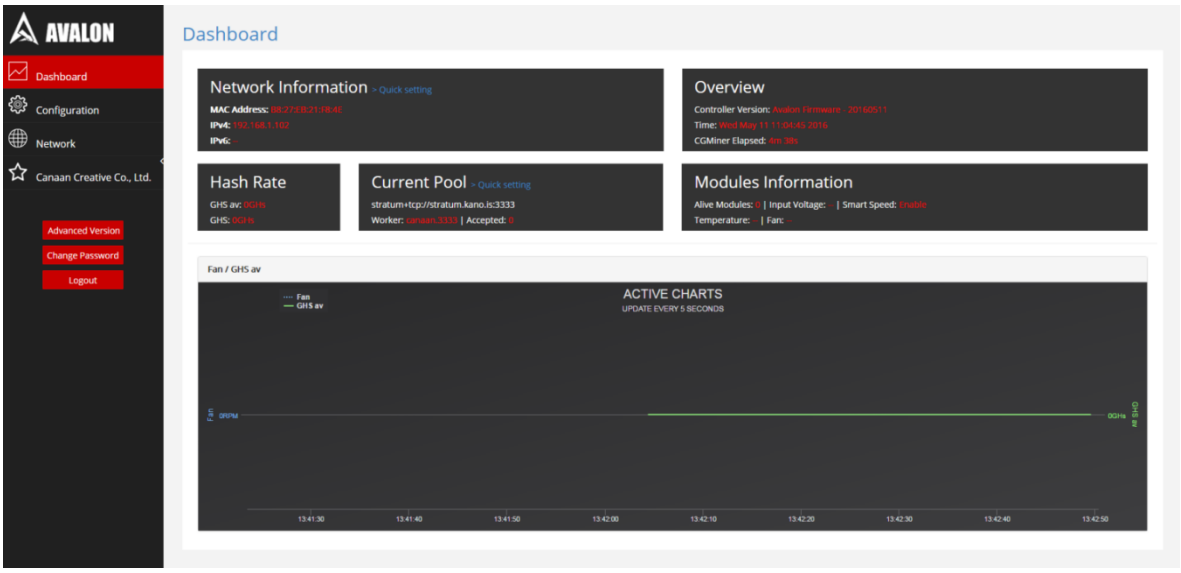
2. 控制器的默认 IP 为 192.168.0.100，我们需要把对其进行调试的电脑的 IP 地址调整到可以访问到控制器。(The default IP for the controller is 192.168.0.100. The IP address of the computer needs to be adjusted access to the controller.)



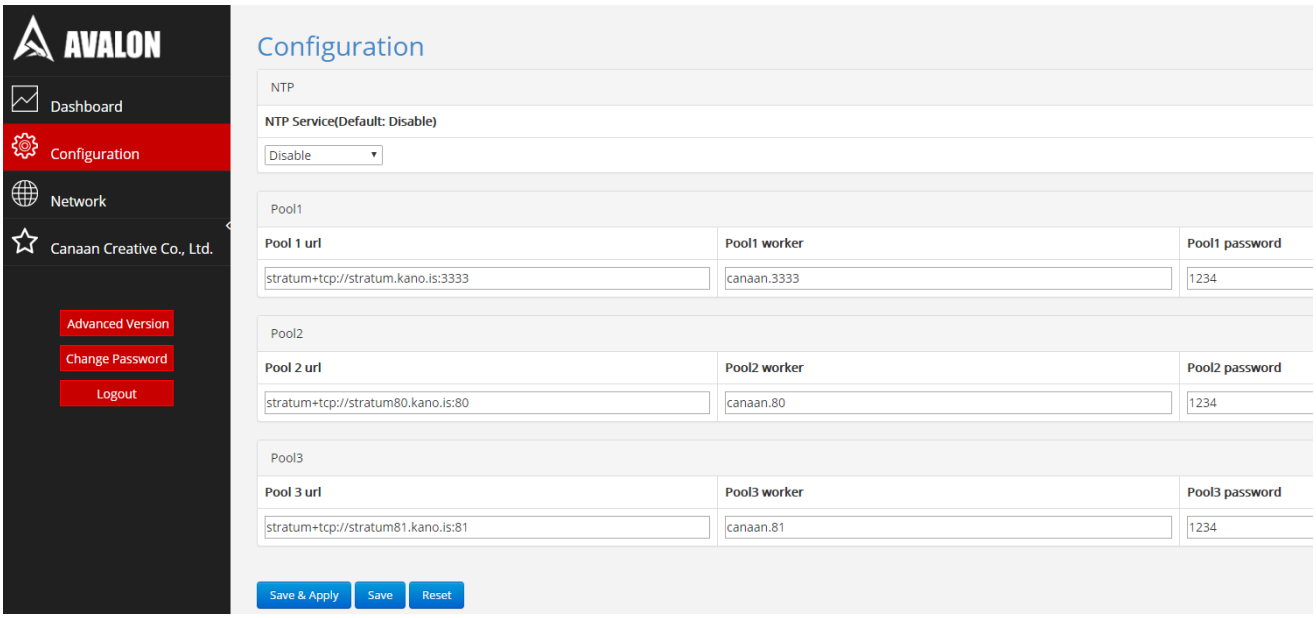
3. 使用浏览器访问 “192.168.0.100” ，您会看到如下登陆界面。(Use your browser to access "192.168.0.100", and you will see the following login screen.)



4. 由于初始没有密码，点击 Login 后就可进入总览界面。(There is ininitially no password, so you can enter after click Login Overview screen.)

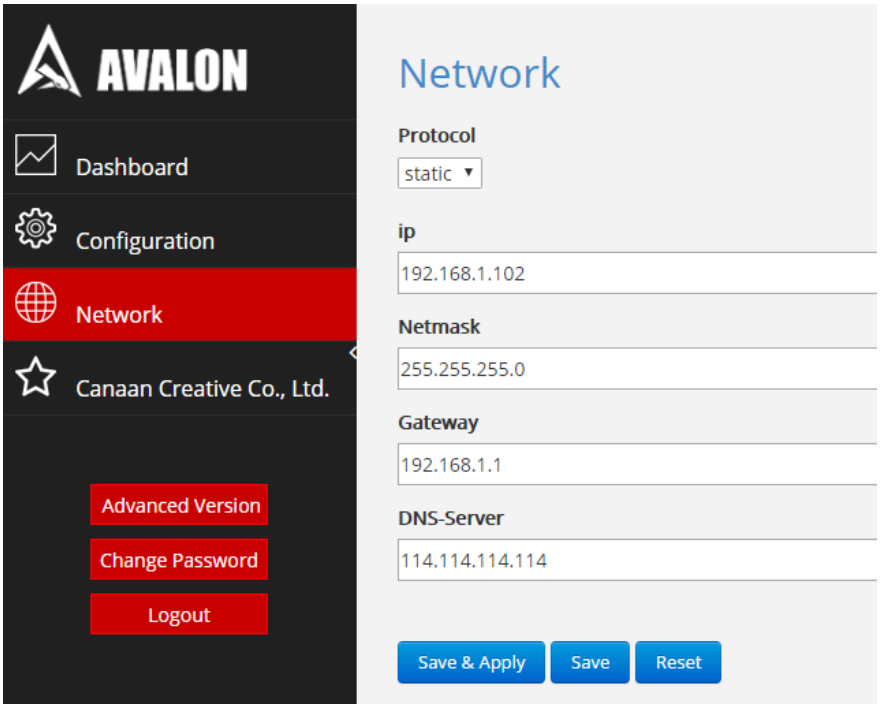


5. 您可以点击 Configuration 来配置您的矿池和矿工信息，您可以设置 3 个矿池和对应的矿工，默认执行优先级为 pool1>pool2>pool3。(You can click Configuration to configure your ore miners and see your pool information. For example, you can set up three pools and corresponding ore miners with the default execution priority pool1> pool2> pool3.)

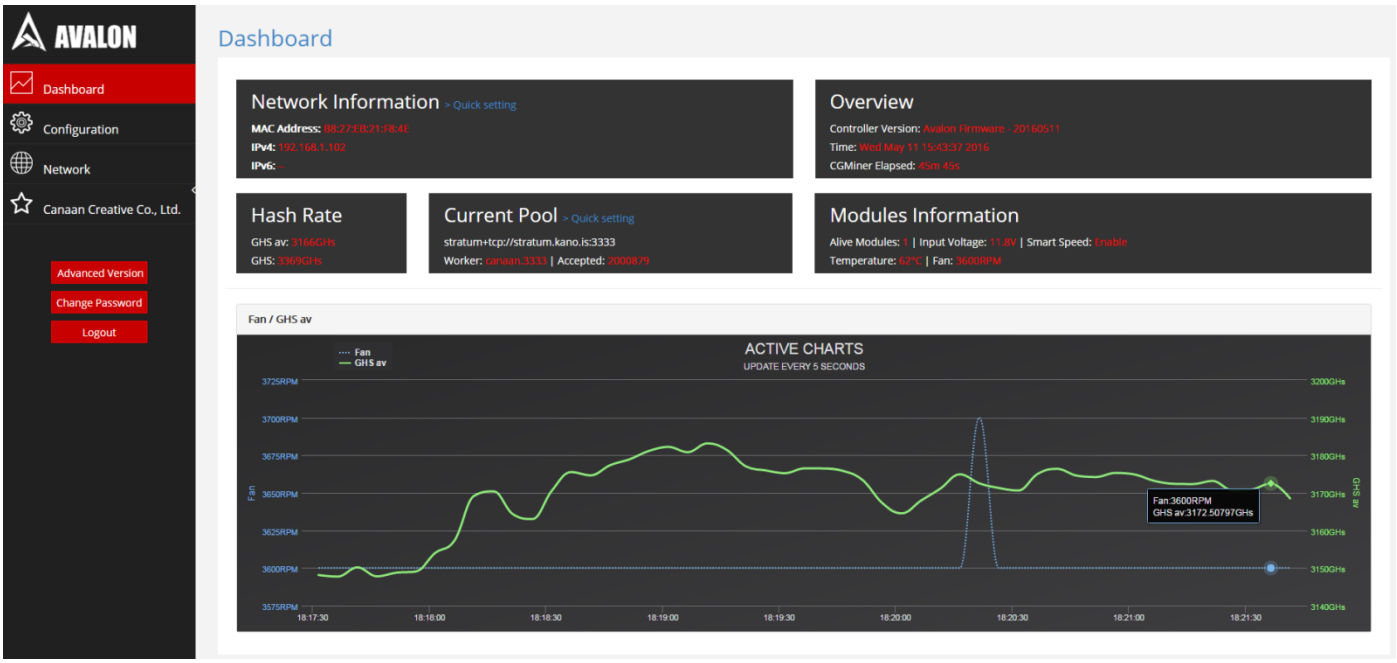


6. 如果你需要更改控制器的网络设置，请点击 Network 进行配置，点击 Sava & Apply 后请手动断电重启控制器。(If you need to change the network

settings for the controller, click on Network to configure, click Save & Apply, and then power down your unit, and manually restart the controller.)



7. 配置完成后，如果控制器能正确的连接到互联网，矿池和矿工的设置也没有问题，AvalonMiner 6.0 或者 AvalonMiner 6.01 也通过 AvalonMiner USB coverter 正确的连接到了此控制器，您将在总览页面上看到这些设备的相关信息。(After the configuration, if the controller is properly connected to the Internet, you will see mining pools and miners setup such as AvalonMiner 6.0 or AvalonMiner 6.01. As long as they are correctly connected via AvalonMiner USB converter to this controller, you will see them on the overview page and see relevant information on these devices.)


AVALON
Dashboard
Configuration
Network
Canaan Creative Co., Ltd.
Advanced Version
Change Password
Logout
Dashboard
Network Information > Quick setting
MAC Address: 88:27:EB:21:F8:4E
IPv4: 192.168.1.102
IPv6: --
Overview
Controller Version: Avalon Firmware - 20160511
Time: Wed May 11 15:43:37 2016
CGMiner Elapsed: 45m 45s
Hash Rate
GHS av: 3166GHs
GHS: 3369GHs
Current Pool > Quick setting
stratum+tcp://stratum.kano.is:3333
Worker: canaan.3333 | Accepted: 2000879
Modules Information
Alive Modules: 1 | Input Voltage: 11.8V | Smart Speed: Enable
Temperature: 62°C | Fan: 3600RPM
Fan / GHS av
ACTIVE CHARTS
UPDATE EVERY 5 SECONDS
Fan
GHS av
3725RPM
3700RPM
3675RPM
3650RPM
3625RPM
3600RPM
3575RPM
3200GHs
3190GHs
3180GHs
3170GHs
3160GHs
3150GHs
3140GHs
Fan:3600RPM
GHS av:3172.50797GHs
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