

EXHIBIT 12

ANDROID

open source project

Home

Source

Compatibility

Tech Info

Community

About

Getting Started

Initializing the Build Environment
 Downloading the Source
 Building and Running
 Building for Devices

Navigating the Source

Platform Overview
 Branches & Releases
 Build Numbers
 Browse Source

Contributing

Life of a Patch
 Submitting Patches
 Life of a Bug
 Reporting Bugs

Reference

Version Control
 Repo Commands
 Git Resources
 Using Eclipse
 Code Style Guidelines
 FAQs

Building for devices

This page complements the main page about [Building](#) with information that is specific to individual devices.

The only supported devices are Nexus S, a.k.a. "crespo", and Nexus S 4G, a.k.a. "crespo4g". Nexus S is the recommended device to use with the Android Open-Source Project. Nexus One a.k.a. "passion" is experimental and unsupported. Android Developer Phones (ADP1 and ADP2, a.k.a. "dream" and "sapphire") are obsolete, were experimental and unsupported in froyo, and can't be used with gingerbread.

Building fastboot and adb

If you don't already have those tools, fastboot and adb can be built with the regular build system. Follow the instructions on the page about [building](#), and replace the main make command with

```
$ make fastboot adb
```

Bootting into fastboot mode

During a cold boot, the following key combinations can be used to boot into fastboot mode, which is a mode in the bootloader that can be

used to flash the devices:

Device	Keys
crespo	Press and hold <i>Volume Up</i> , then press and hold <i>Power</i>
crespo4g	Press and hold <i>Volume Up</i> , then press and hold <i>Power</i>
passion	Press and hold the trackball, then press <i>Power</i>
sapphire	Press and hold <i>Back</i> , then press <i>Power</i>
dream	Press and hold <i>Back</i> , then press <i>Power</i>

Also, on devices running froyo or later where adb is enabled, the command `adb reboot bootloader` can be used to reboot from Android directly into the bootloader with no key combinations.

Unlocking the bootloader

It's only possible to flash a custom system if the bootloader allows it.

This is the default setup on ADP1 and ADP2.

On Nexus One, Nexus S, and Nexus S 4G, the bootloader is locked by default. With the device in fastboot

