

PORT FOR SAMSUNG GALAXY S II

ABSTRACT. This document describes the steps to port B2G to Samsung Galaxy S II. It is a condensed version of the online documents at https://developer.mozilla.org/en/Mozilla/Boot_to_Gecko

This document is for the GT-i9100 variant. A workaround for the GT-i9100G variant is also mentioned.

1. PUT YOUR PHONE IN DEVELOPMENT MODE

Under Settings > Applications > Development, turn on USB debugging. Then, plug it in.

2. CREATE A LOCAL COPY OF THE ORIGINAL ANDROID OS

```
mkdir sgs2-android
cd sgs2-android
adb pull /system system
adb pull /system/vendor vendor
```

3. BUILD & FLASH THE KERNEL

```
cd B2G
make sync
```

Wait for all of the above to finish. Then:

```
export ANDROIDFS_DIR=sgs2-android
make config-galaxy-s2
# or for ICS
make config-galaxy-s2-ics
make kernel
adb reboot download          #reboot phone in download mode.
heimdall flash --kernel boot/kernel-android-galaxy-s2/arch/arm/boot/zImage
# or for ICS
heimdall flash --kernel boot/kernel-android-galaxy-s2-ics/arch/arm/boot/zImage
```

If you see an error from libusb: -3, then:

```
sudo heimdall flash --kernel boot/kernel-android-galaxy-s2/arch/arm/boot/zImage
# or for ICS
sudo heimdall flash --kernel boot/kernel-android-galaxy-s2-ics/arch/arm/boot/zImage
```

4. BACK UP THE ORIGINAL ANDROID SYSTEM ON THE PHONE

```
adb reboot recovery
```

5. BUILDING AND FLASHING B2G

```
make gonk
make flash          #device should be connected
```

Alternatively, do steps separately:

```
make
adb reboot download
make flash-only
```

(Make adb point to the one output by gonk)

6. UPDATE GAIA ALONE (IF REQD)

```
cd gaia
git pull origin master
cd ..
make install-gaia
```

7. UPDATE GECKO ALONE (IF REQD)

```
make install-gecko
make kill-b2g
```

8. WORKAROUND FOR GT-I9100G

Checkout the source code from the repo located in [git@github.com:changyihsin/B2G.git](https://github.com:changyihsin/B2G.git) and switch to branch GS2-I9100G-hacked-01. Then following below procedure to build the firmware. It is based on gingerbread version. The basic function should be worked fine with this repo. You can play music/video and wifi, but we still have problems running phone app.

Build procedure:

```
make config-galaxy-s2-i9100g
make kernel
make gonk
make
heimdall flash --kernel ./boot/kernel-android-galaxy-s2-i9100g/arch/arm/boot/zImage
make flash-only
make install-gaia
```

Reference: <https://github.com/andreasgal/B2G/issues/215>