

# **SC60** Android Burning User Guide

**Smart LTE Module Series**

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## About the Document

### History

Revision	Date	Author	Description
1.0	2017-10-12	Hank HAN	Initial

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# 1 Introduction

This document provides instructions on Android burning for Quectel SC60 module. It mainly includes how to download the entire SC60 Android images with QFIL tool and how to burn different Android images with Fastboot.

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## 2 Download Images with QFIL Tool

This chapter mainly introduces how to download the entire SC60 Android images with QFIL Tool.

1. First, please make sure that QPST (Qualcomm Product Support Tool) software and USB driver have been installed on your PC.
2. Unzip the prebuilt file (*SC60\_Android\_XXX\_prebuilt\_for\_QFIL\_XXX.rar*), the package includes the following files:

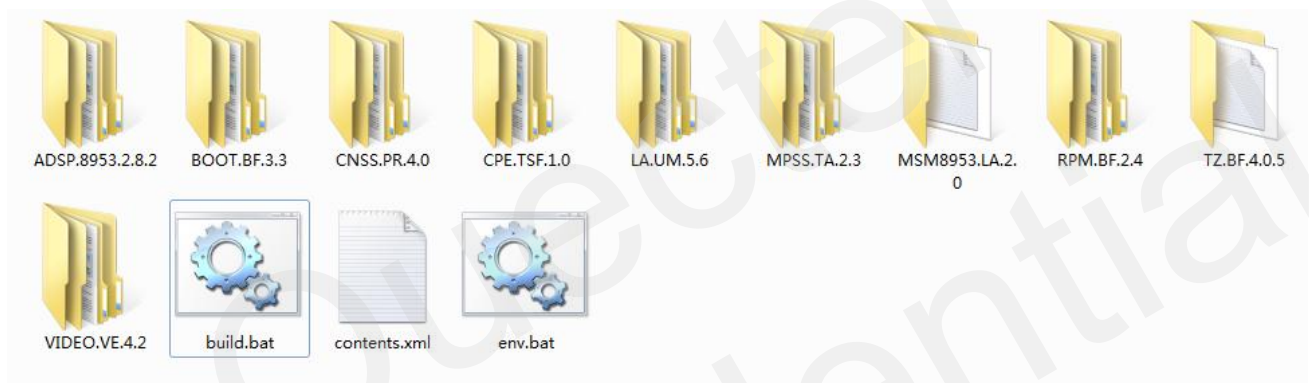


Figure 1: Files in Package

3. Install Python 2.7.6 on your PC, open the *env.bat* file, and set the environment variables "PYTHON\_PATH" and "PYTHONPATH" in the file as the name of the directory where the Python is installed.
4. Copy the following Android image files (generated by Android which is built on Ubuntu) to directory *LA.UM.5.6\Linux\android\out\target\product\msm8953\_64*.

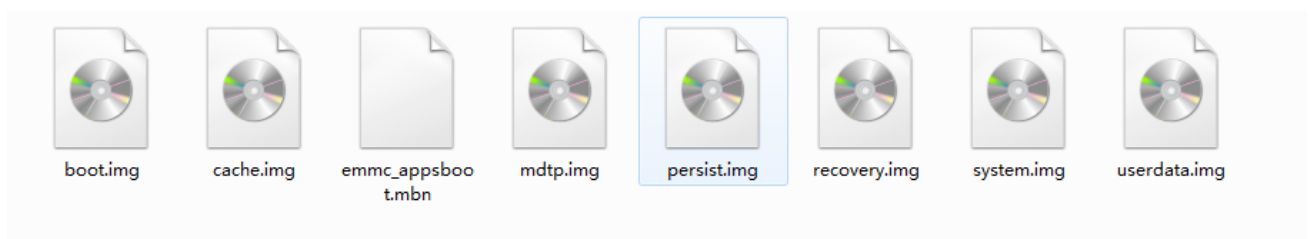


Figure 2: Android Image Files

- Run "build.bat". "SUCCESS" and "COMPLETE" will be seen if the program runs successfully, refer to **Figure 4**.

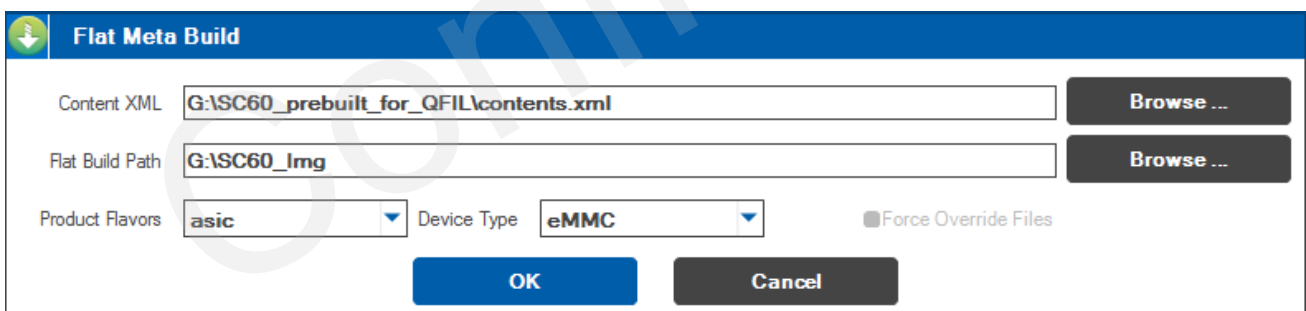
```
G:\SC60_prebuilt_for_QFIL>
G:\SC60_prebuilt_for_QFIL>
G:\SC60_prebuilt_for_QFIL>build.bat
```

Figure 3: Run "built.bat"

```
creating G:\SC60_prebuilt_for_QFIL\MSM8953.LA.2.0\common\build\bin\asic\sparse_images\userda
ta_82.img
creating G:\SC60_prebuilt_for_QFIL\MSM8953.LA.2.0\common\build\bin\asic\sparse_images\userda
ta_83.img
creating G:\SC60_prebuilt_for_QFIL\MSM8953.LA.2.0\common\build\bin\asic\sparse_images\userda
ta_84.img
Found 4 files
Backing up './../../../../rawprogram0.xml' to 'rawprogram0.xml.bak'
SUCCESS: Created "rawprogram_unsparse.xml"
[09:55:23] - update_common_info.py:===== UPDATE COMMON INFO COMPLETE=====
G:\SC60_prebuilt_for_QFIL>
```

Figure 4: Run Successfully

- Run QFIL tool, select Tool menu and choose "Flat Meta Build". Select content.xml from working directory as "Content XML" and choose a folder to store the target file in "Flat Build Path". Then Click "OK". Running status and target files (software used for downloading) are shown as **Figure 6** and **Figure 7**.



The image shows a dialog box titled "Flat Meta Build". It has a blue header bar with a green download icon and the title. Below the header, there are two input fields: "Content XML" with the value "G:\SC60\_prebuilt\_for\_QFIL\contents.xml" and "Flat Build Path" with the value "G:\SC60\_img". To the right of each input field is a "Browse ..." button. Below these fields, there are two dropdown menus: "Product Flavors" set to "asic" and "Device Type" set to "eMMC". To the right of these dropdowns is a checkbox labeled "Force Override Files" which is currently unchecked. At the bottom of the dialog are two buttons: "OK" and "Cancel".

Figure 5: Flat Meta Build



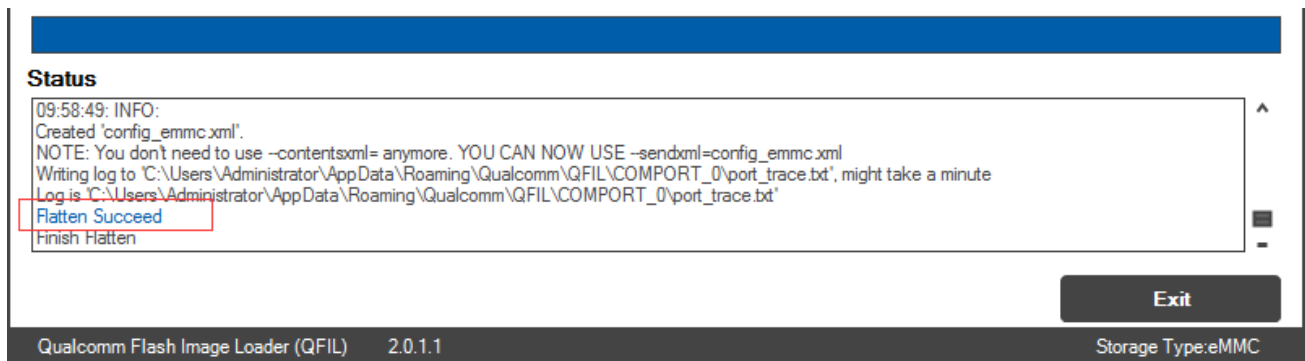


Figure 6: Running Status

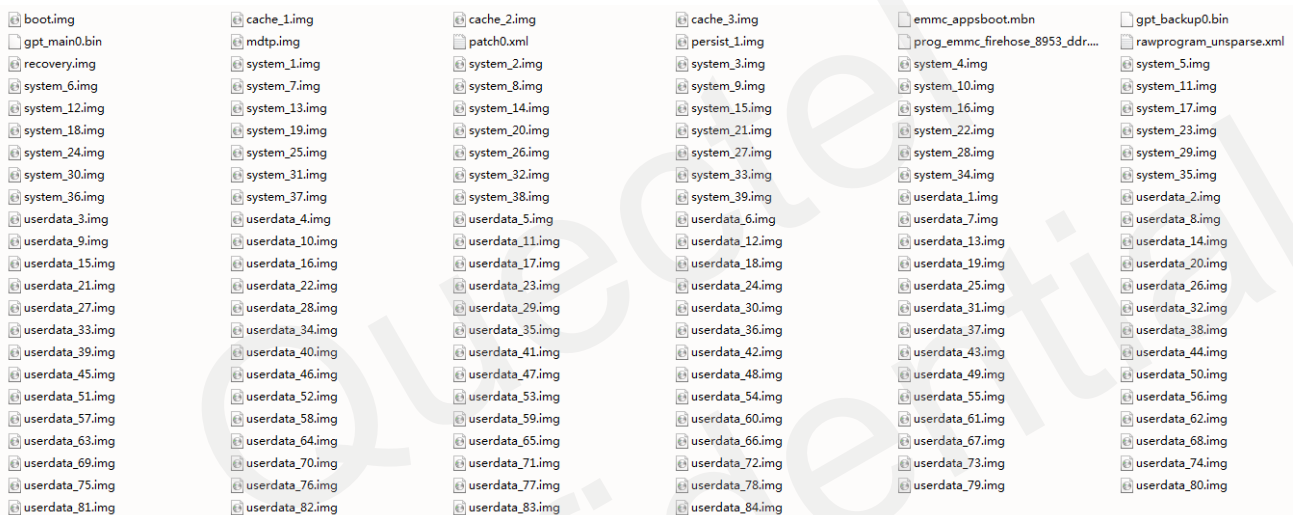


Figure 7: Target Files

- Turn on **"FORCE USB BOOT"** on Smart EVB G2, switch on the EVB and power on module. SC60 will enter into USB QDLoader 9008 status.
- Run QFIL and click **"SelectPort"** button to select port. Choose **"Flat Build"** as build type and open the programmer path to select appropriate file. Click **"Download"**.

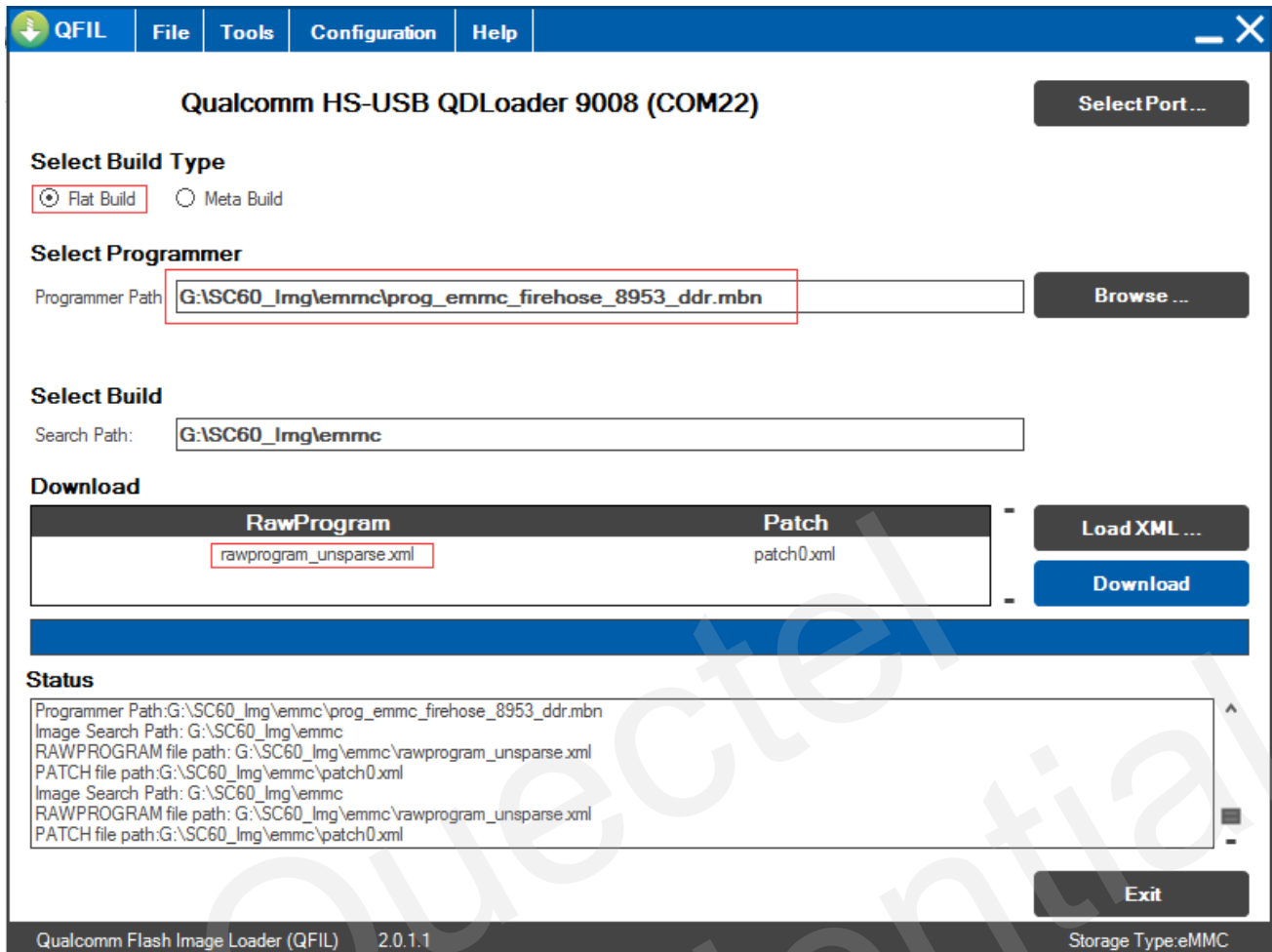


Figure 8: Download Images

If Android images are downloaded successfully, "Download Succeed" will be shown.

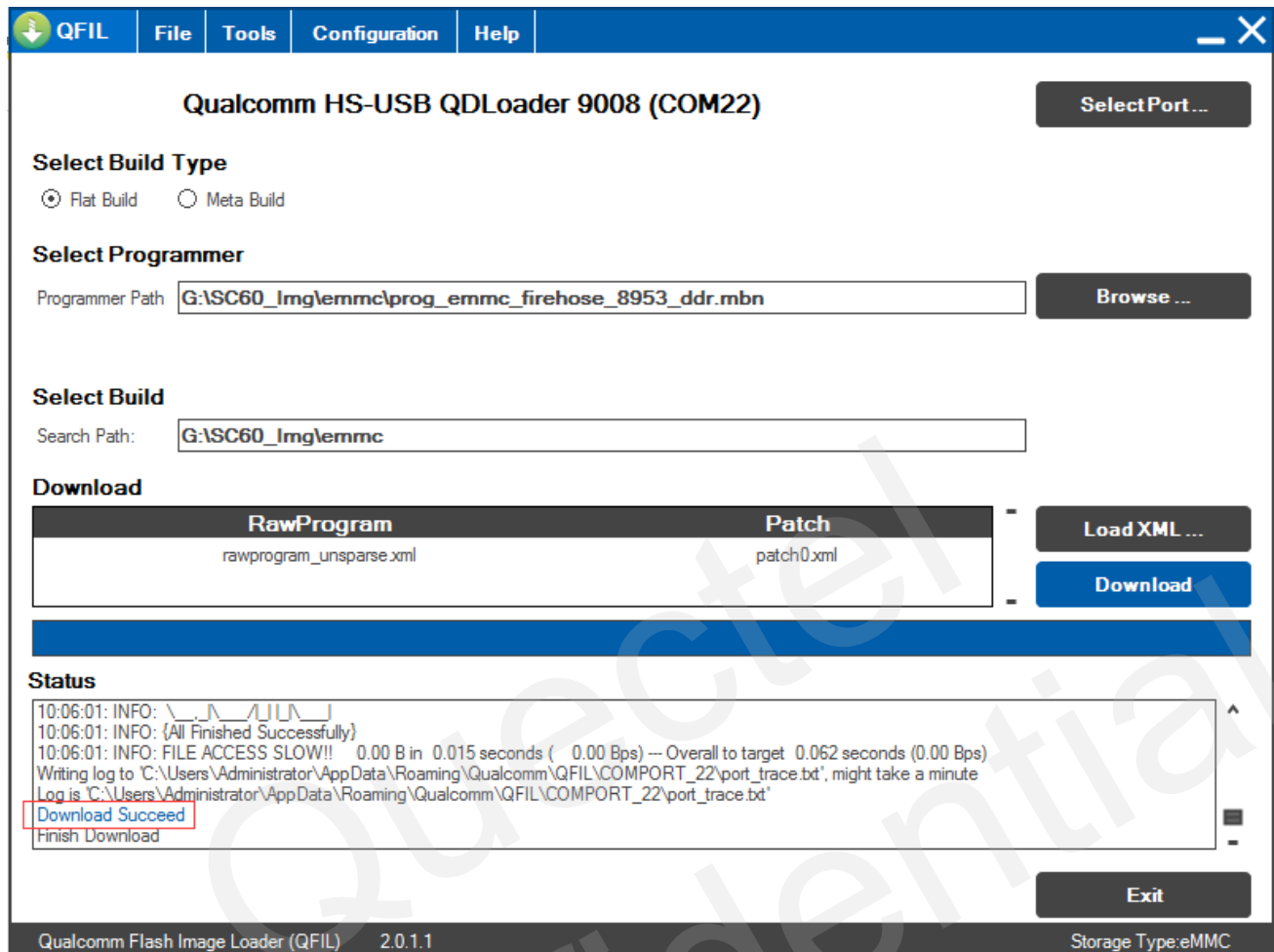


Figure 9: Download Successfully

# 3 Burn Android Images with Fastboot

During developing and debugging, Fastboot could be used for upgrading Android images. Corresponding commands are listed as below:

## 1. Burn emmc\_appsboot.mbn:

```
adb reboot bootloader  
fastboot flash aboot <path to emmc_appsboot.mbn >  
fastboot reboot
```

## 2. Burn boot.img:

```
adb reboot bootloader  
fastboot flash boot <path to boot.img>  
fastboot reboot
```

## 3. Burn system.img:

```
adb reboot bootloader  
fastboot flash system <path to system.img>  
fastboot reboot
```

## 4. Burn userdata.img:

```
adb reboot bootloader  
fastboot flash userdata <path to userdata.img>  
fastboot reboot
```

## 5. Burn recovery.img:

```
adb reboot bootloader  
fastboot flash recovery <path to recovery.img>  
fastboot reboot
```

## 4 Appendix A Reference

Table 1: Related Document

SN	Document name	Remark
[1]	Quectel_Smart_EVB_G2_User_Guide	Smart EVB G2 user guide