



Firmware_Upgrade_Tool_Duplex User Guide

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0. Revision history

Revision	Date	Author	Description of change
1.00	2014-11	Vega YU	Initial
1.01	2015-02-05	Happy Peng	1. Add auto clear user data function for GV300W

1. Tool Introduction

Queclink_Firmware_Upgrade_Tool_Duplex is PC tool which can be used to upgrade firmware which provided by Queclink.

1.1 System Requirements

The tool can run in PC without install, and the operation system must be in the list below:

- ✧ Windows 95
- ✧ Windows 98
- ✧ Windows 2000
- ✧ Windows ME
- ✧ Windows XP
- ✧ Windows 7
- ✧ Windows 8

Any upgraded version of the tool will be informed in advance and provided by Queclink.

1.2 Tool Interface

1.2.1 Introduction of the UI

The Figure 1 shows the main interface of the tool.

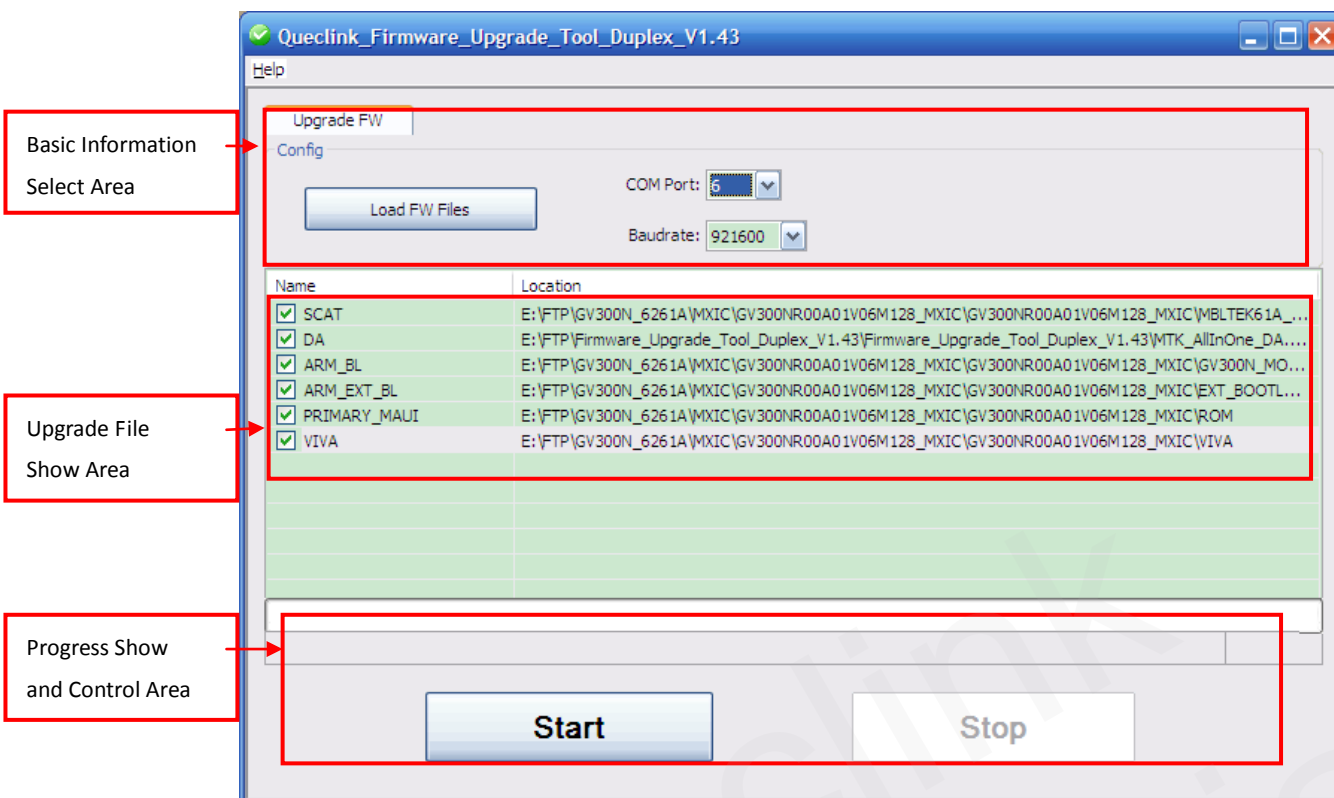


Figure 1: UI of the main interface

1.2.1.1 Basic Information Select Area

<Load FM Files>: This button used to select files to upgrade.

<COM Port>: It is the port connected device and PC.

Note: It will show three ports when connect to GV300W device, you should select the minimal port to upgrade.

<Baudrate>: It is baud rate for upgrade.

Note: Suggest 460800 or above.

1.2.1.2 Upgrade File Show Area

Show all files which be selected to upgrade.

1.2.1.3 Progress Show and Control Area

<Start>/<Stop> button:

Start and stop upgrade process.

Warning:

1. Click the **Stop** button to stop upgrading. But if the upgrade process is interrupted, there would be no valid firmware in the module. So it is strongly recommended never to stop the firmware upgrade process.

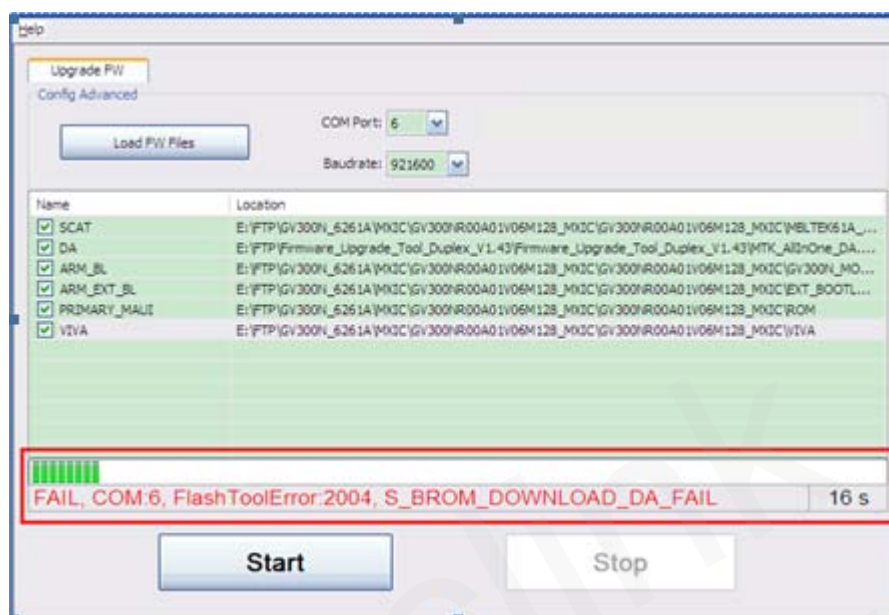


Figure 2: UI of Stop Upgrade

2. Please **DO NOT** remove download cable during downloading. This **MAY** cause the terminal abnormal when connect to the GV300W.

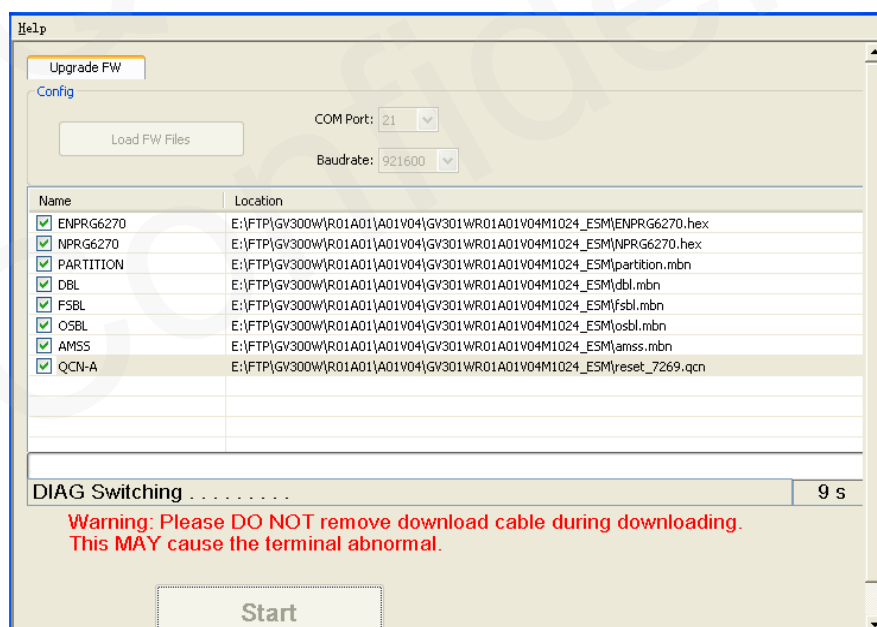


Figure 3: UI of Warning interface

<Progress Bar>:

Indicate progress of upgrading process.

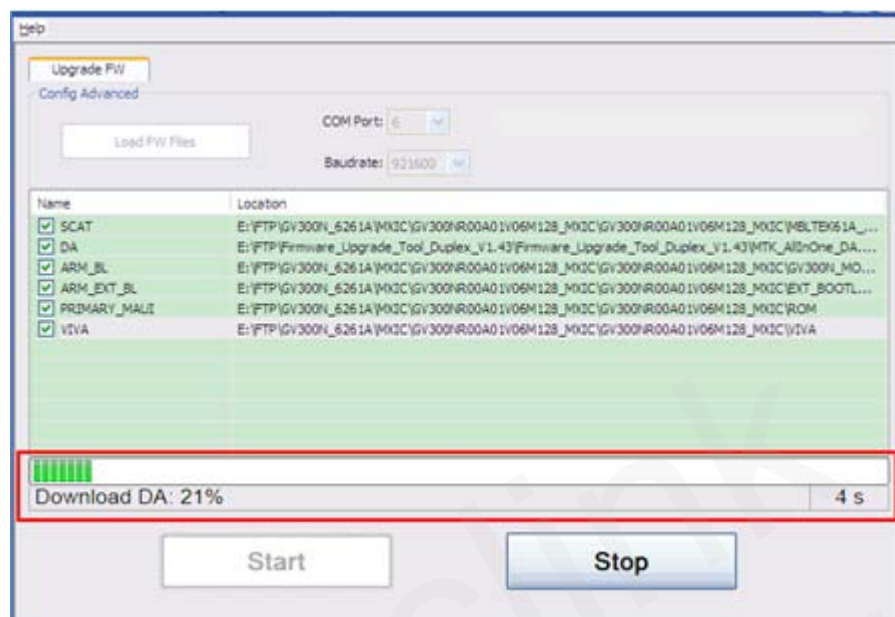


Figure 4: UI of Progress Bar

2. Upgrade Operation Instruction

2.1 Step1_Upgrade Prepare

Prepare list is as below:

NO.	Contact	Description	Remark
1	Device	Queclink production	Make sure the production type of device, like GV200 or GV300 etc.
2	Upgrade Cable	Upgrade Cable for device	Each device type has its own upgrade cable. Note: Please make sure upgrade cable always connect to PC.
3	Driver of Cable	Make sure cable can be identified by PC.	Queclink will provide cable driver installer "PL2303_Prolific_DriverInstaller.exe". But driver also would be found automatically in WIN 7 or above system after insert upgrade cable to PC.
3	Firmware File	Firmware for upgrade.	Getting from Queclink. Note: Normally we will compress the firmware file to you. But please make sure decompress this file.
4	Computer	PC for short	Please refer to Chapter 1.1 system requirements.
5	Queclink_Firmware_Upgrade_Tool_Duplex	Upgrade tool	Getting from Queclink.

2.2 Step2_Upgrade Tool Basic Setting

In this step, please make sure the upgrade cable connect to the PC first. And now, open Queclink_Firmware_Upgrade_Tool_Duplex and configure basic information in tool, including <COM Port>, <Baudrate>, and <Load FW Files>.

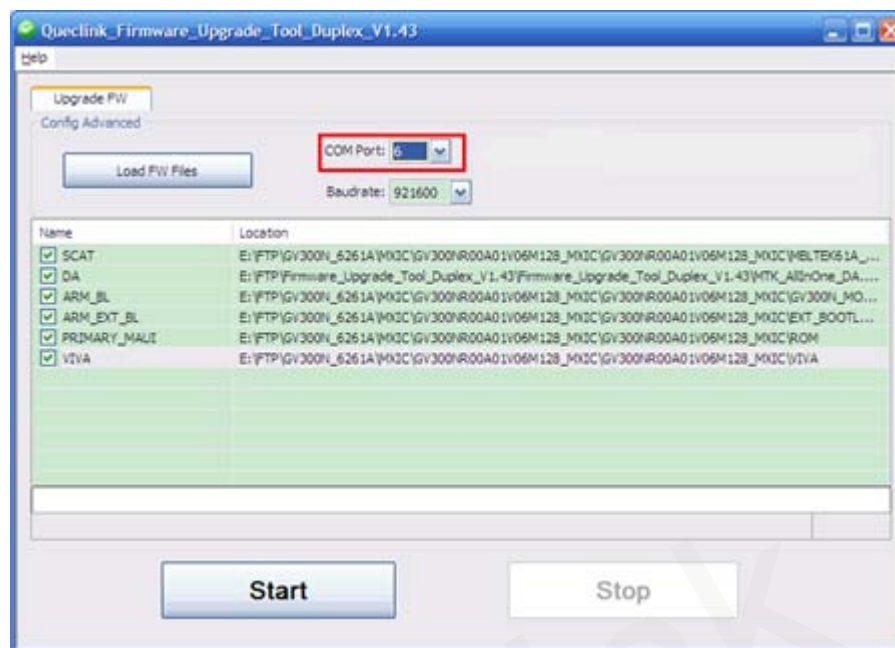


Figure 5: UI of Port

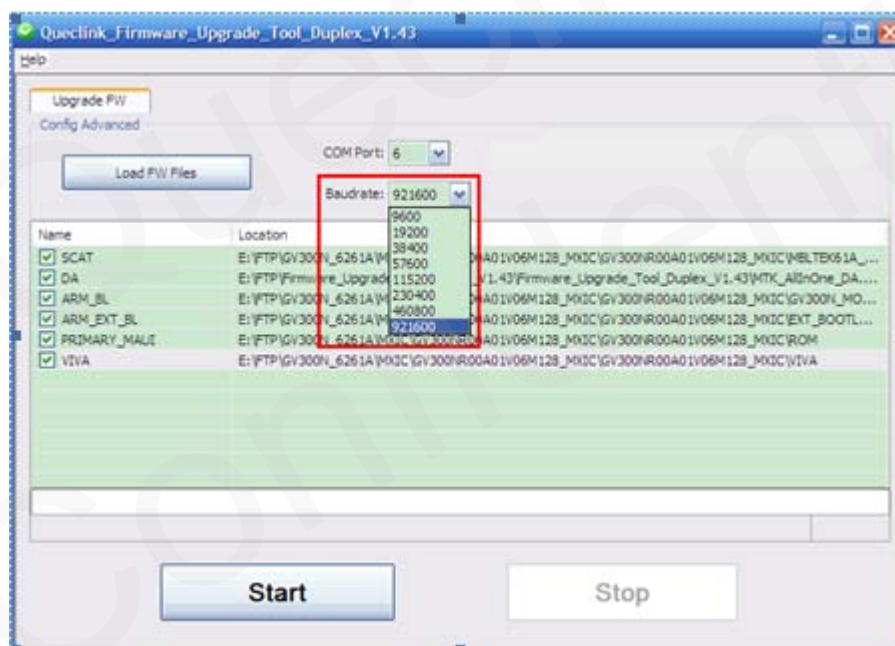


Figure 6: UI of Baudrate

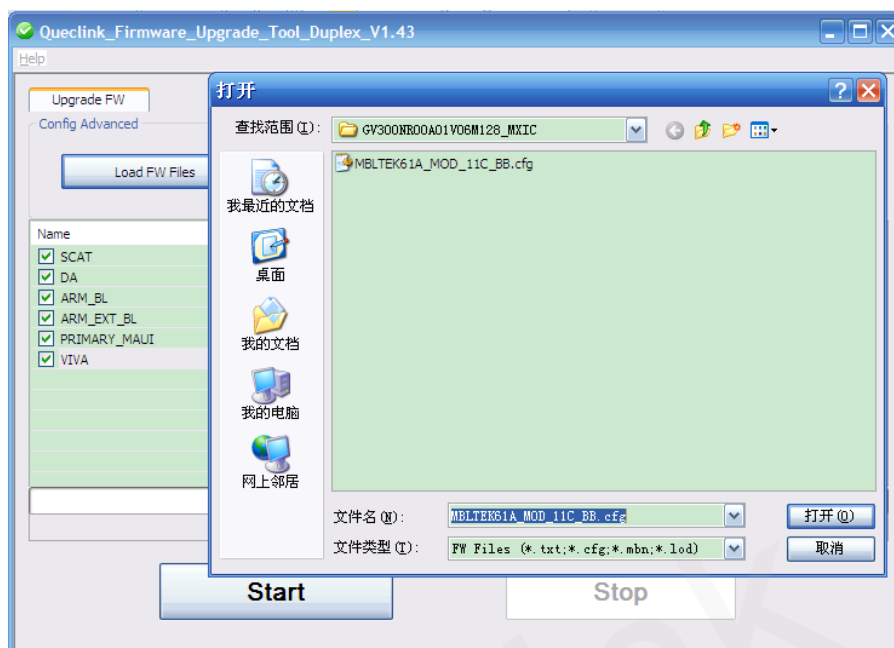


Figure 7: UI of Selecting Scatter File

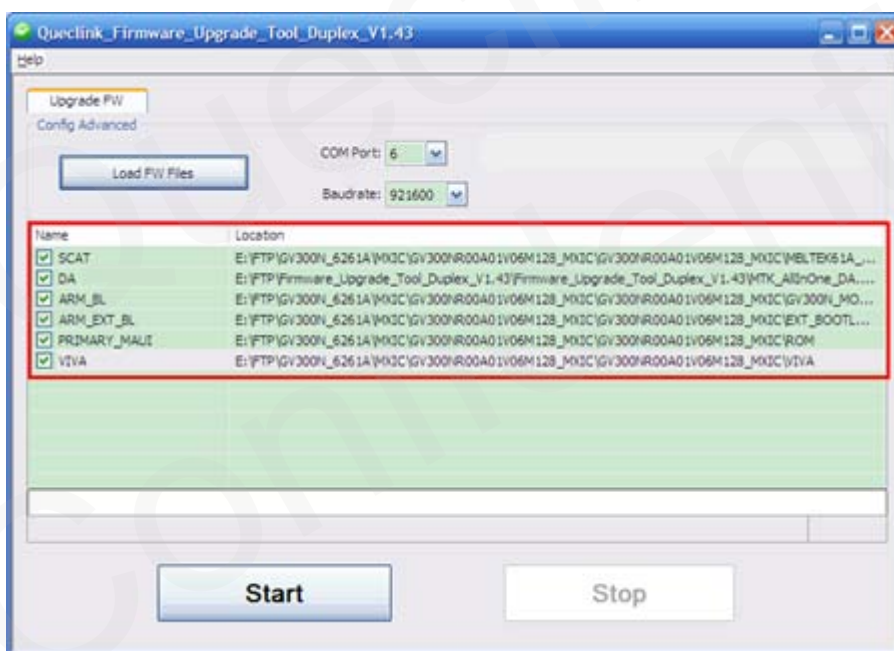


Figure 8: UI of Scatter File Selected

2.3 Step3_Power Off Device

Make sure power off device, and device does not connect to upgrade cable.

2.4 Step4_Click Start Button

Click “Start” button in QuecLink_Firmware_Upgrade_Tool_Duplex.

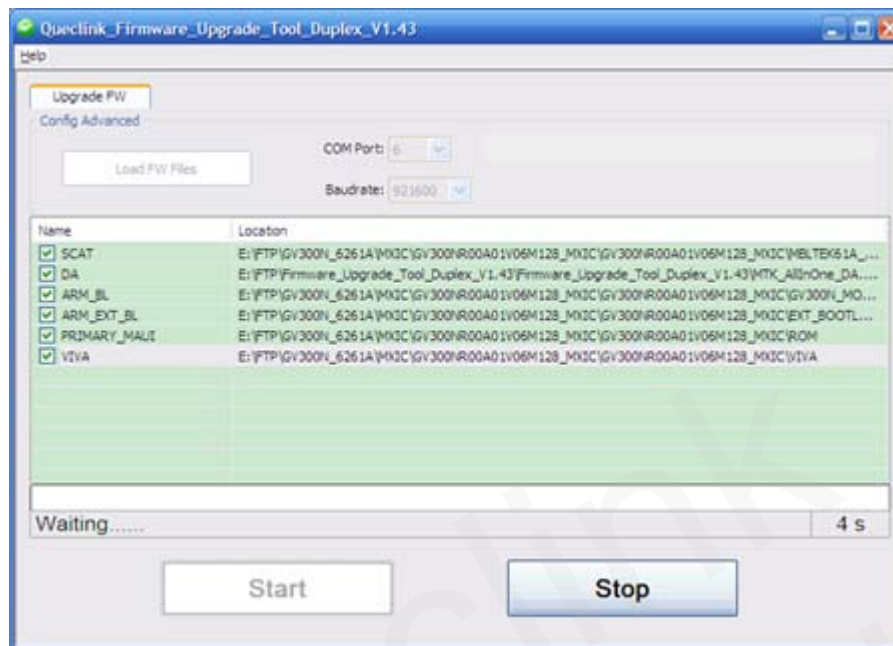


Figure 9: UI of Starting Upgrade

2.5 Step5_Connect Device to Upgrade Cable

Connect device to upgrade cable.

Note:

For GL500, it need connect device to upgrade cable, and then install battery in.

For GV300N, it needs external power supply after upgrade cable connected.

2.6 Step6_Upgrade Process

There are several steps in the progress of upgrading firmware.

- ✧ Download DA
- ✧ Download Bootloader
- ✧ Pre-Format
- ✧ Download Bin
- ✧ Enter meta mode in uart
- ✧ Boot meta in brom stage
- ✧ Init clear nv files
- ✧ Clear Nr Sys Files

Dialogue frames are shown in Figure 9, Figure 10, Figure 11, Figure 12, Figure 13, Figure 14, Figure 15, Figure 16

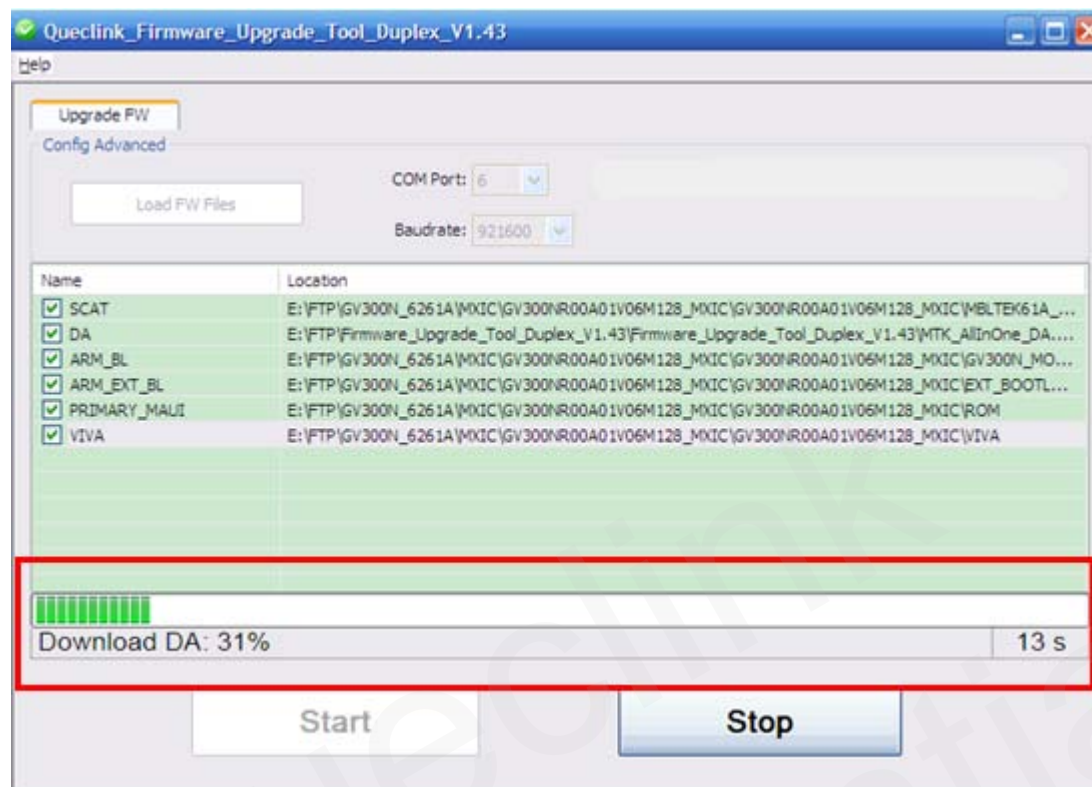


Figure 10: UI of Download DA

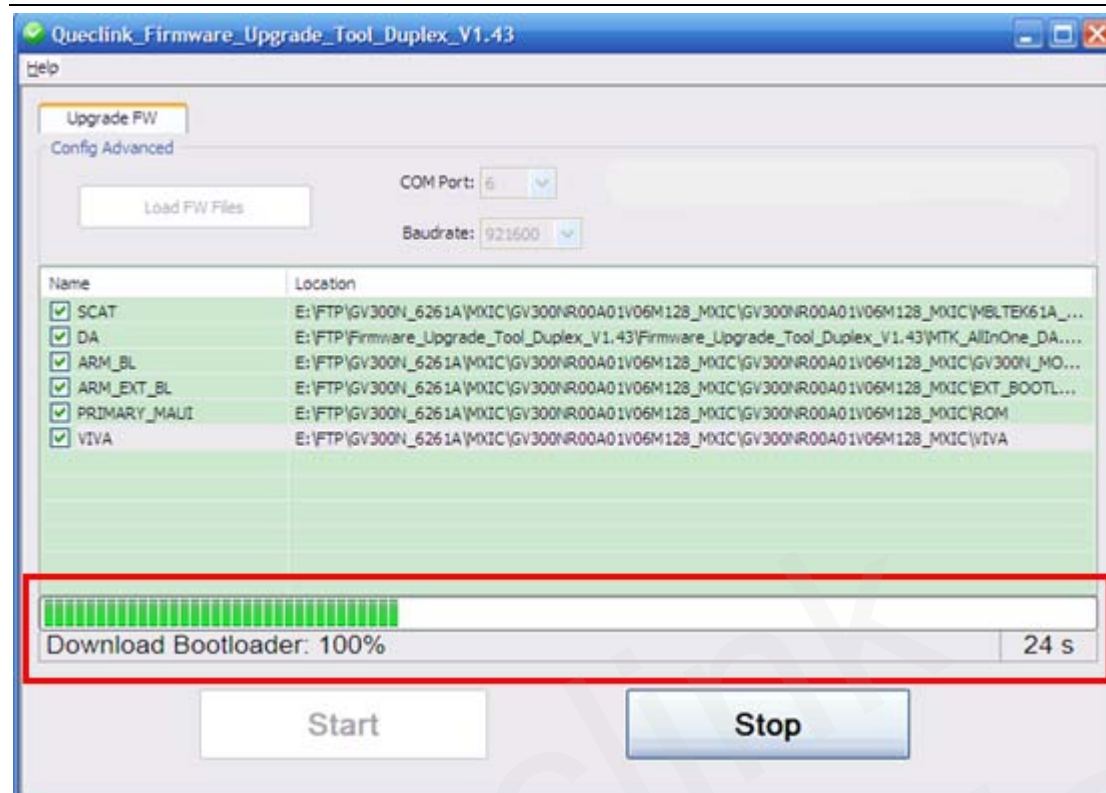


Figure 11 : UI of Download Bootloader

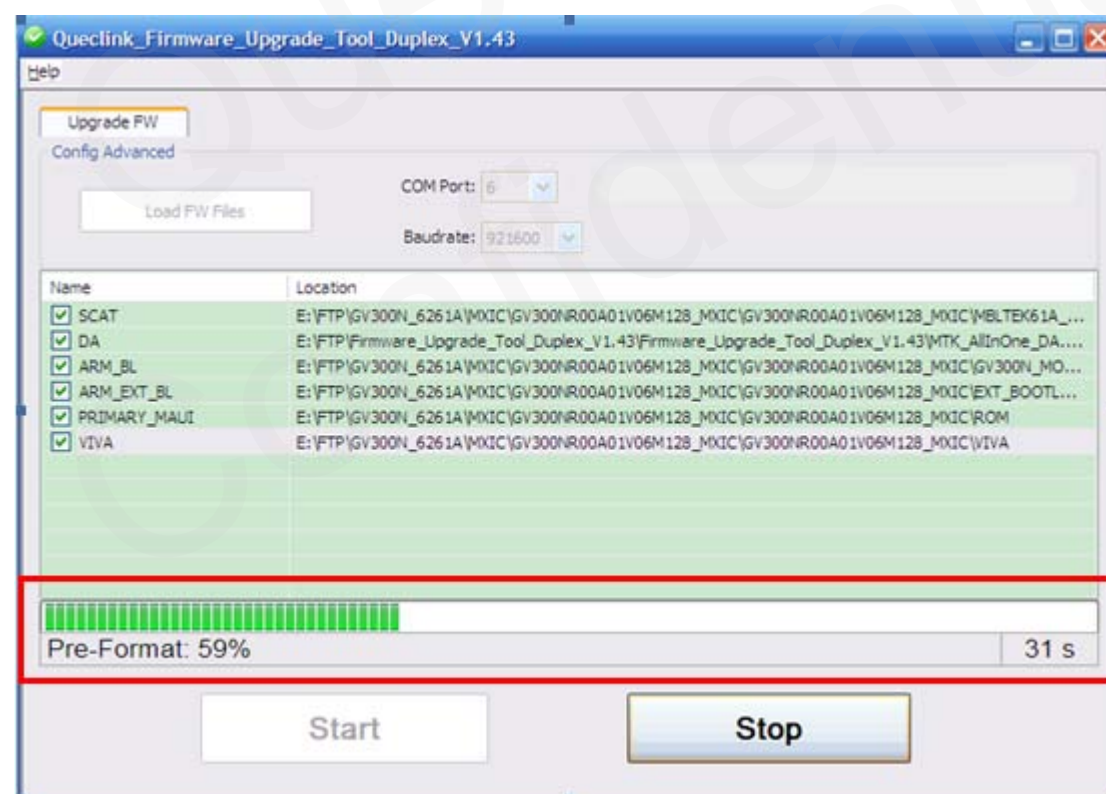


Figure 12: UI of Pre-Format

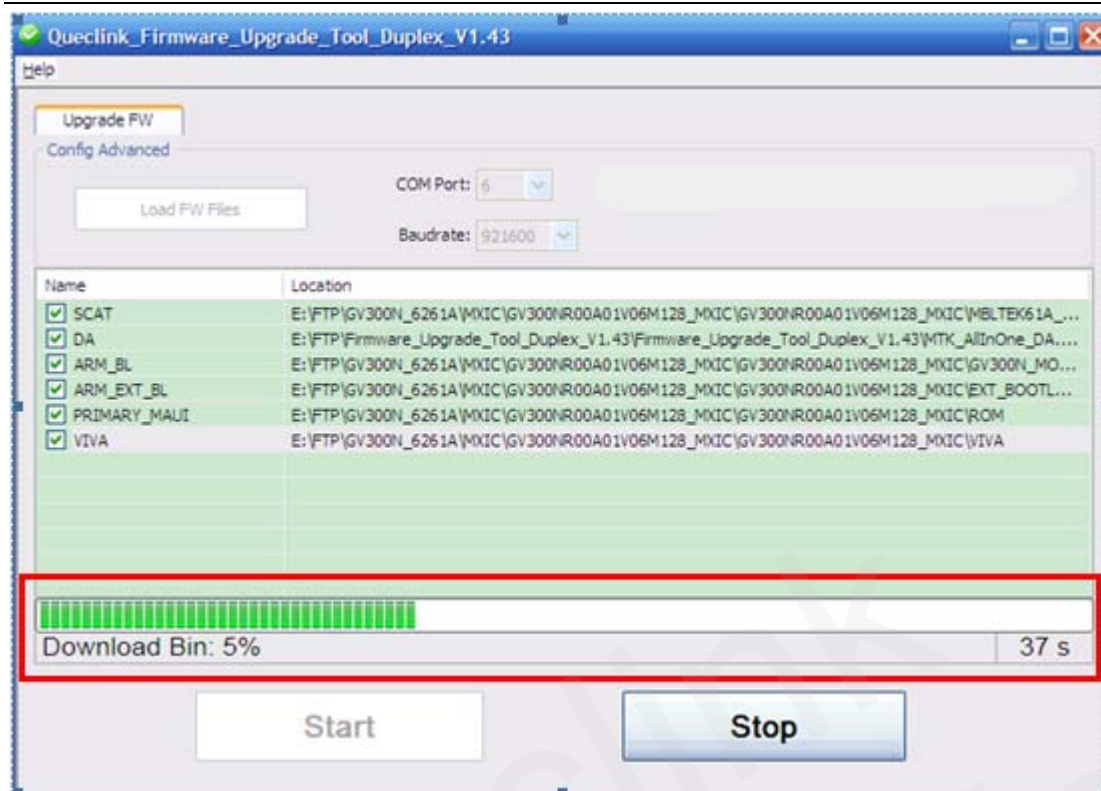


Figure 13: UI of Download Bin

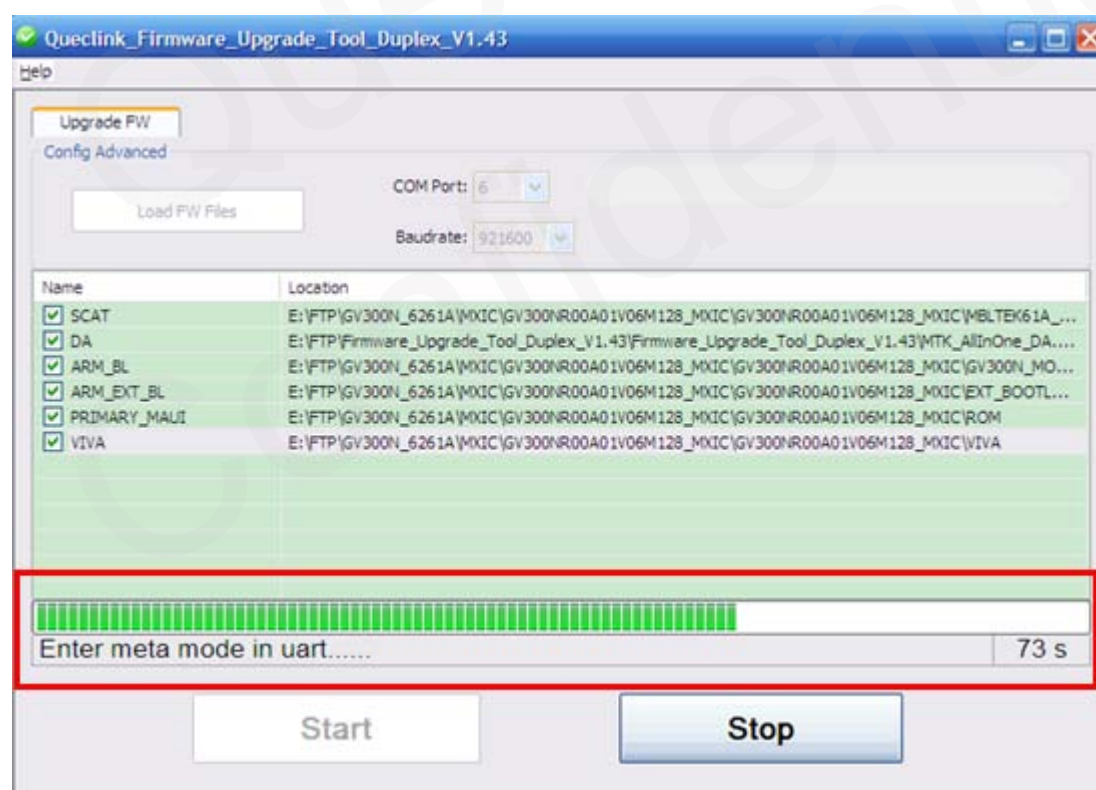


Figure 14: UI of Enter meta mode in uart

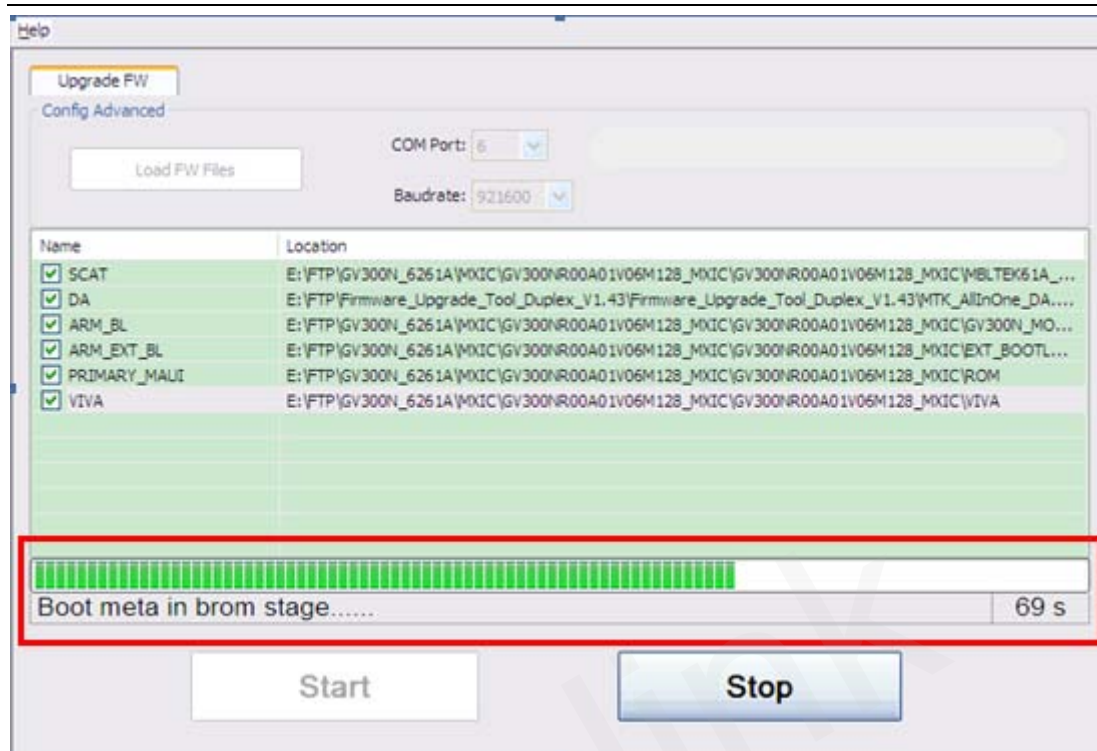


Figure 15: UI of Boot meta in brom stage

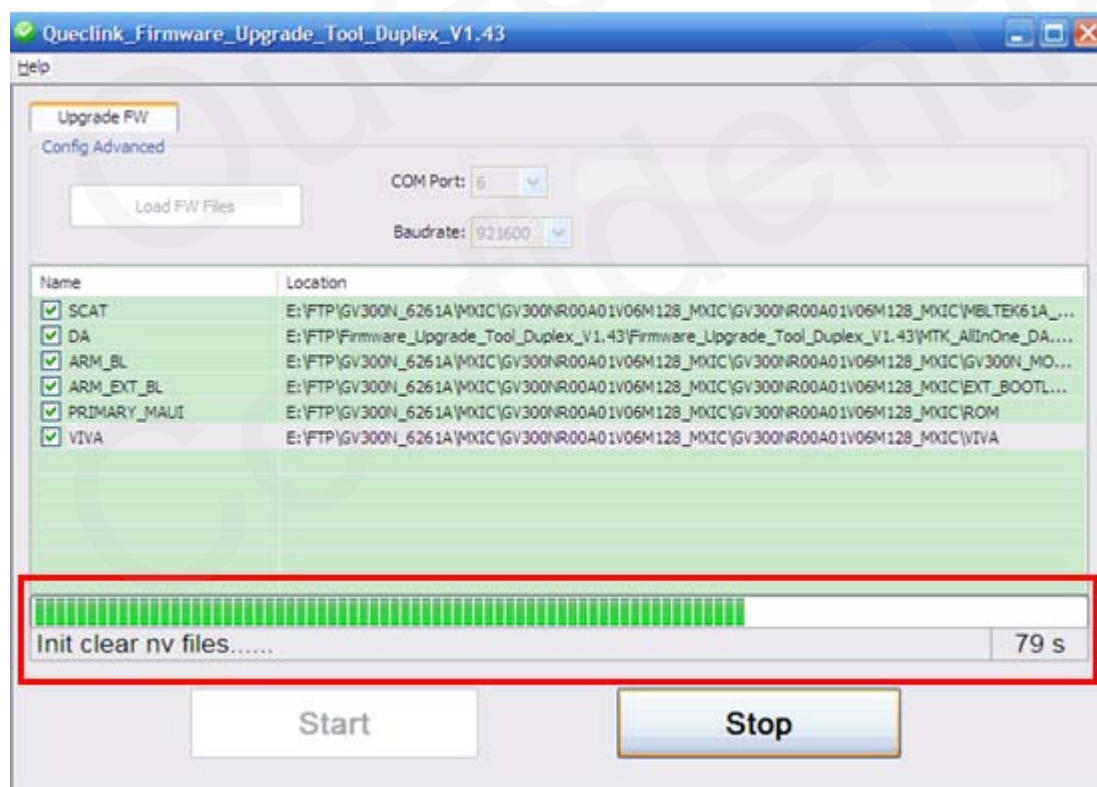


Figure 16: UI of Init clear nv files

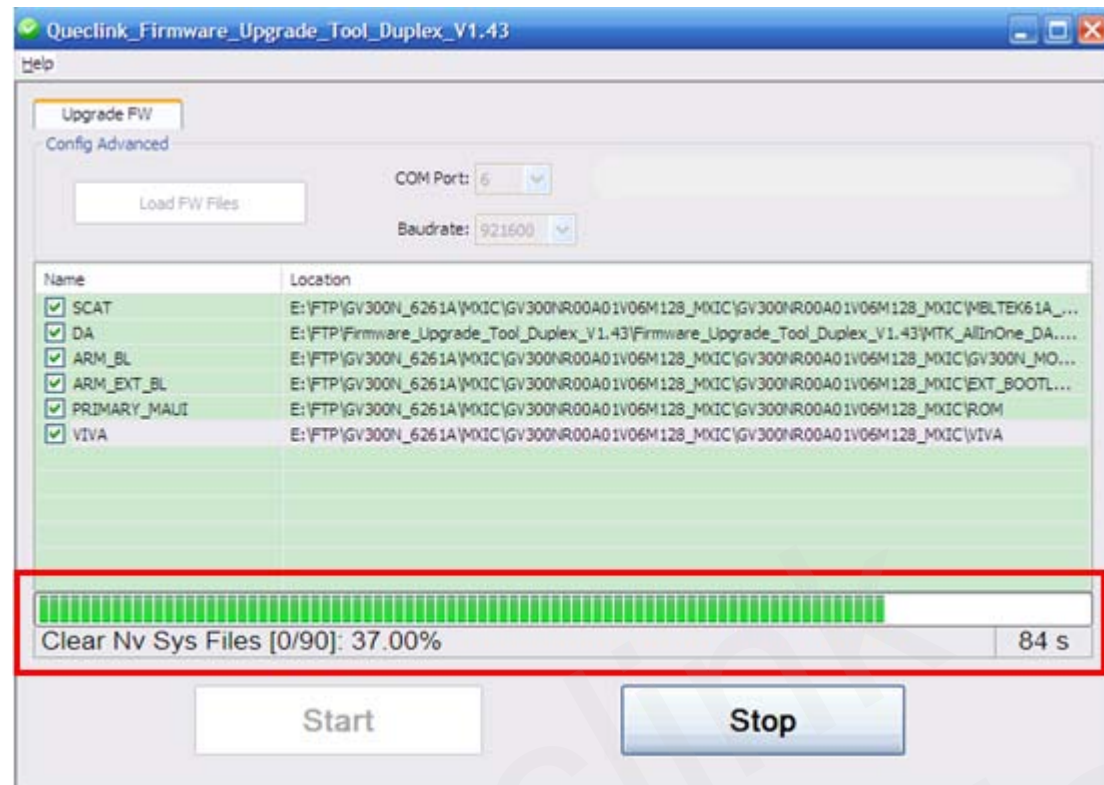


Figure 17: UI of Clear Nv Sys Files

2.7 Step7_Upgrade Accomplishment

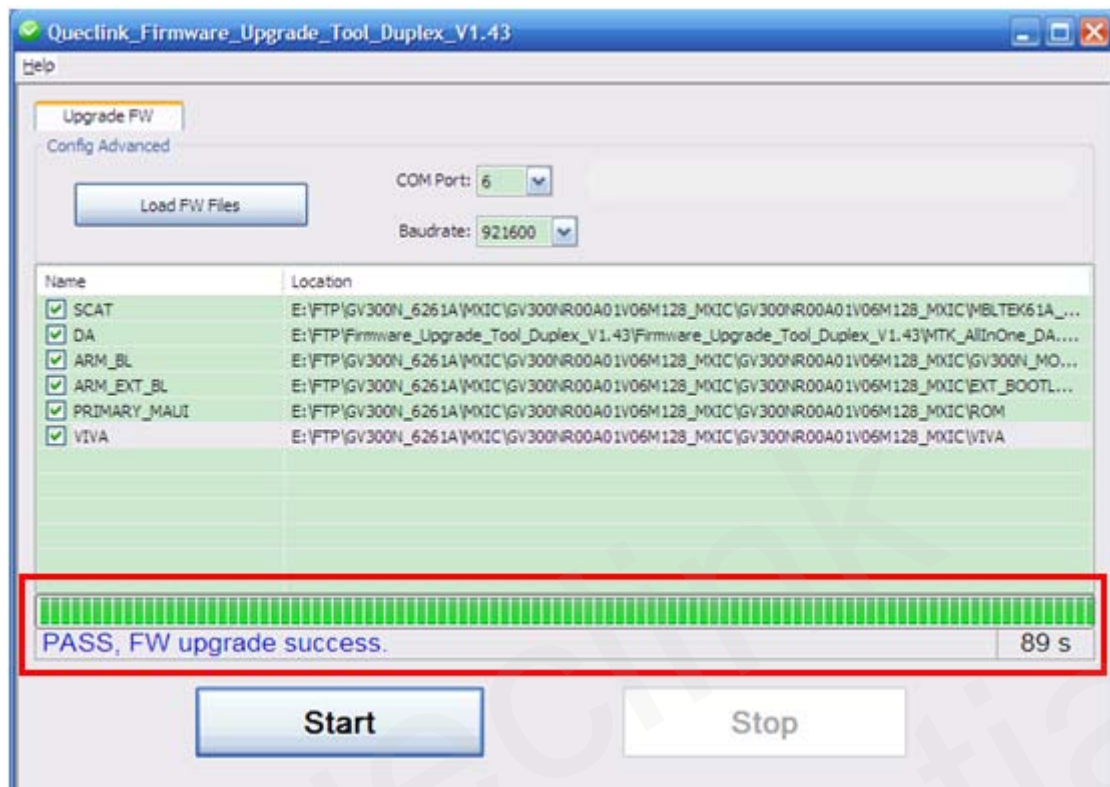


Figure 18: UI of Upgrade OK

3. FQA

3.1 COM_PORT_OPEN_FAIL

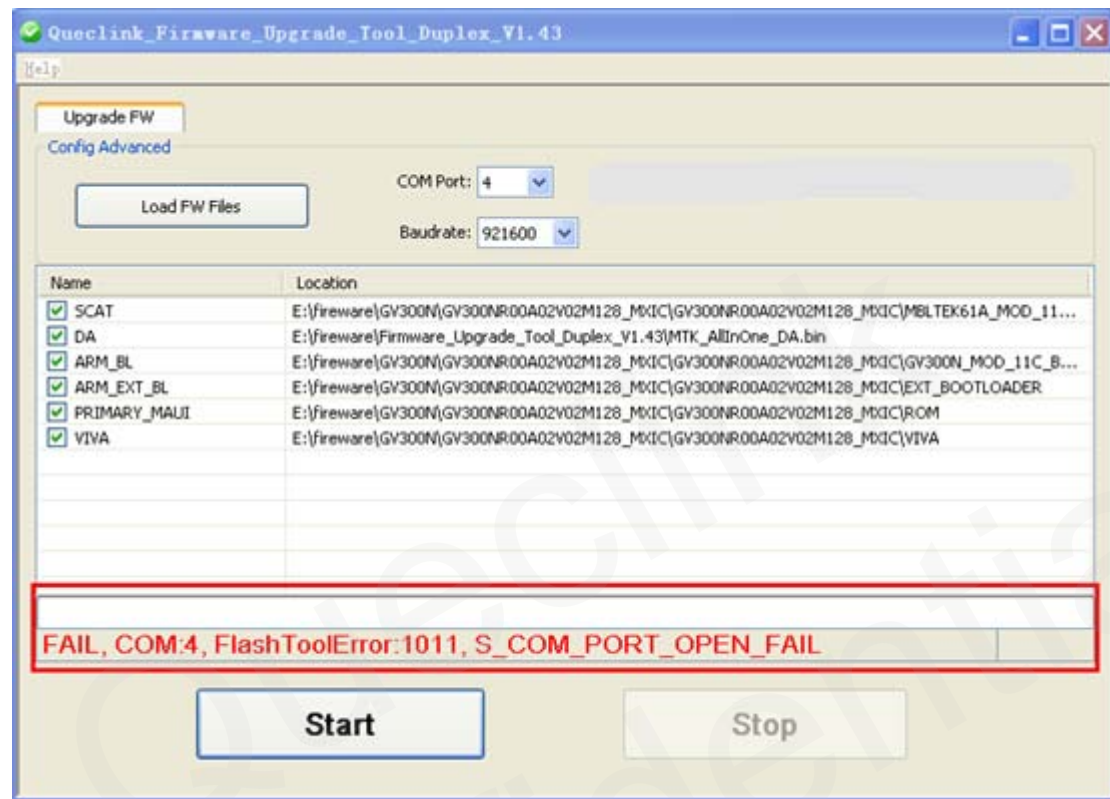


Figure 19: UI of Port ERROR

Possible Reason	Solution
COM port is occupied by other tools, this tool cannot open COM.	Release this COM in other tools.
Upgrade cable is not connected.	Connect cable to PC.
This COM port is dead.	Reboot PC.

3.2 CHANGE_BAUDRATE_FAIL

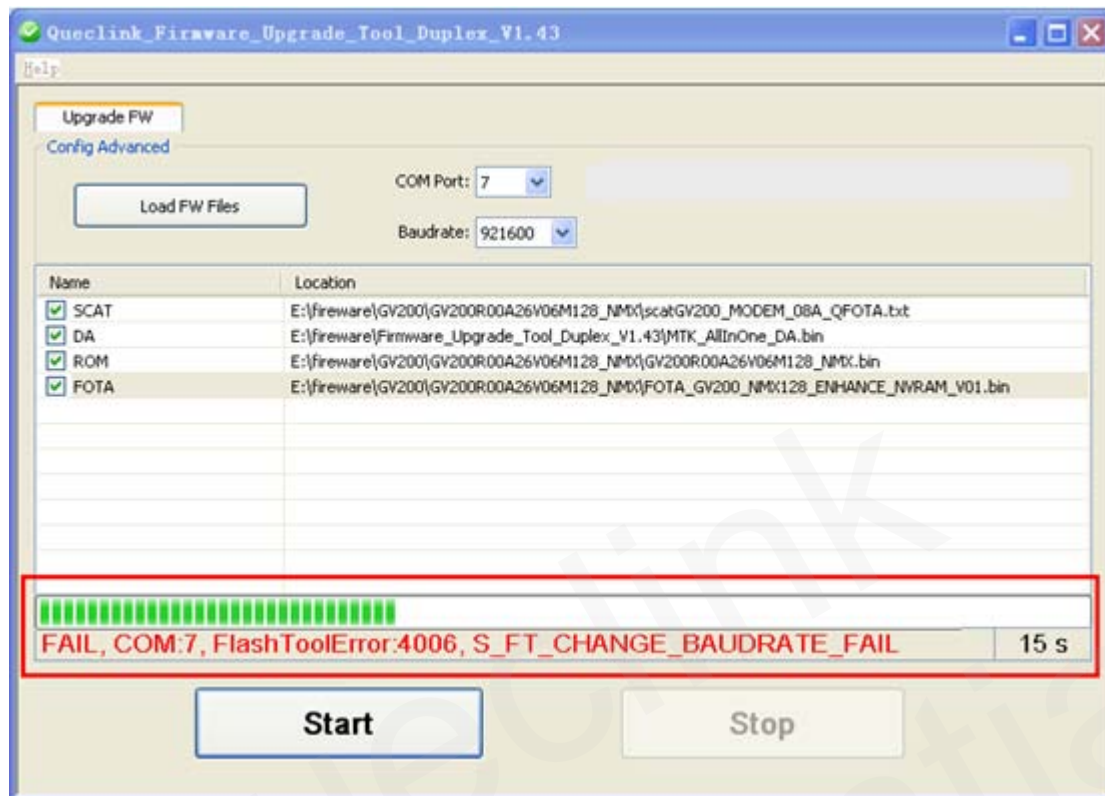


Figure 20: UI of Baud rate ERROR

Possible Reason	Solution
Baud rate is not supported by environment.	Change baud rate, and try again.

3.3 INCORRECT_ROM_LOAD

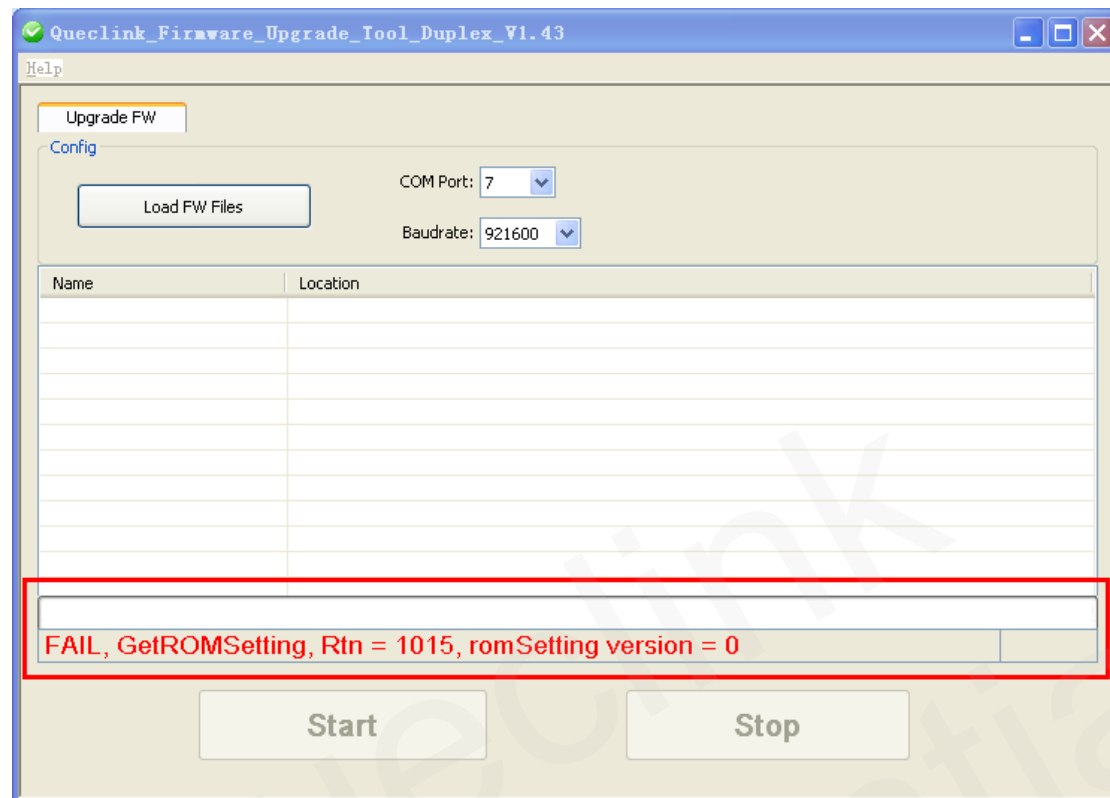


Figure 21: UI of Upgrade with Incorrect Scatter File Path

Possible Reason	Solution
Wrong scat file path select.	Correct the scat file path.

3.4 DA_EXT_RAM_ERROR

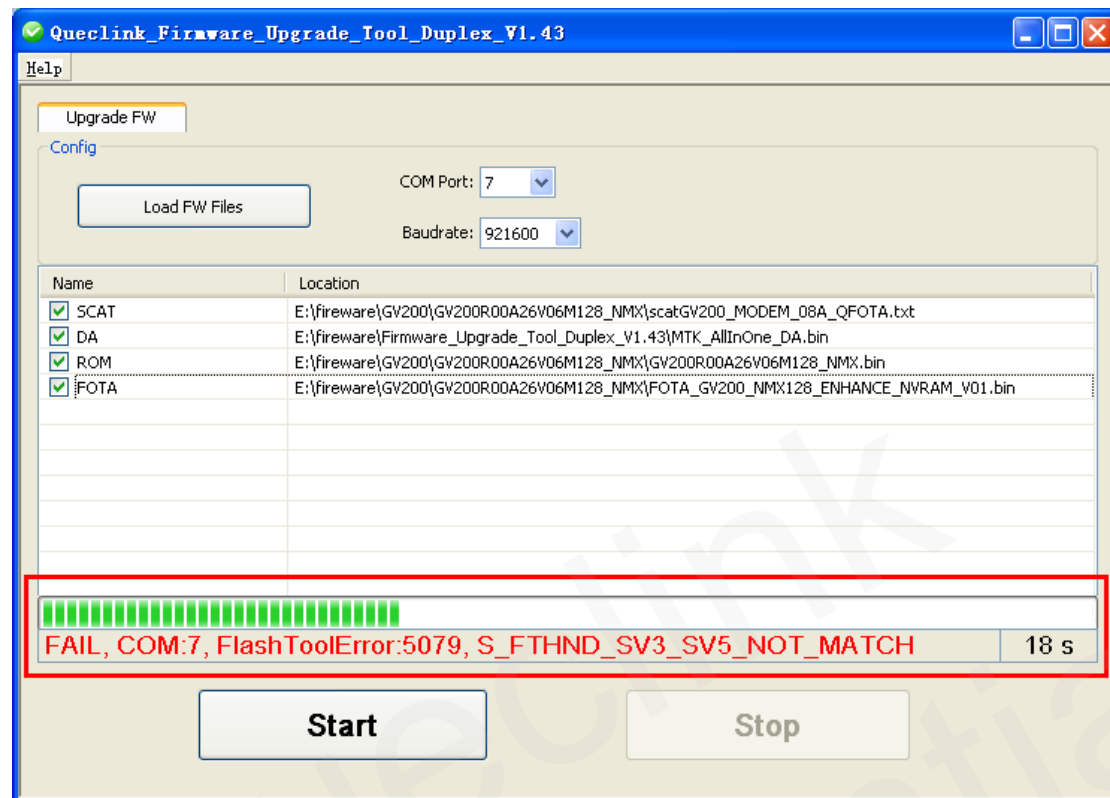


Figure 22: UI of Upgrade with Incorrect Scatter File

Possible Reason	Solution
Wrong scat file select.	Correct the scat file.

3.5 DOWNLOAD_DA_FAIL or BROM_CMD_JUMP_FAIL

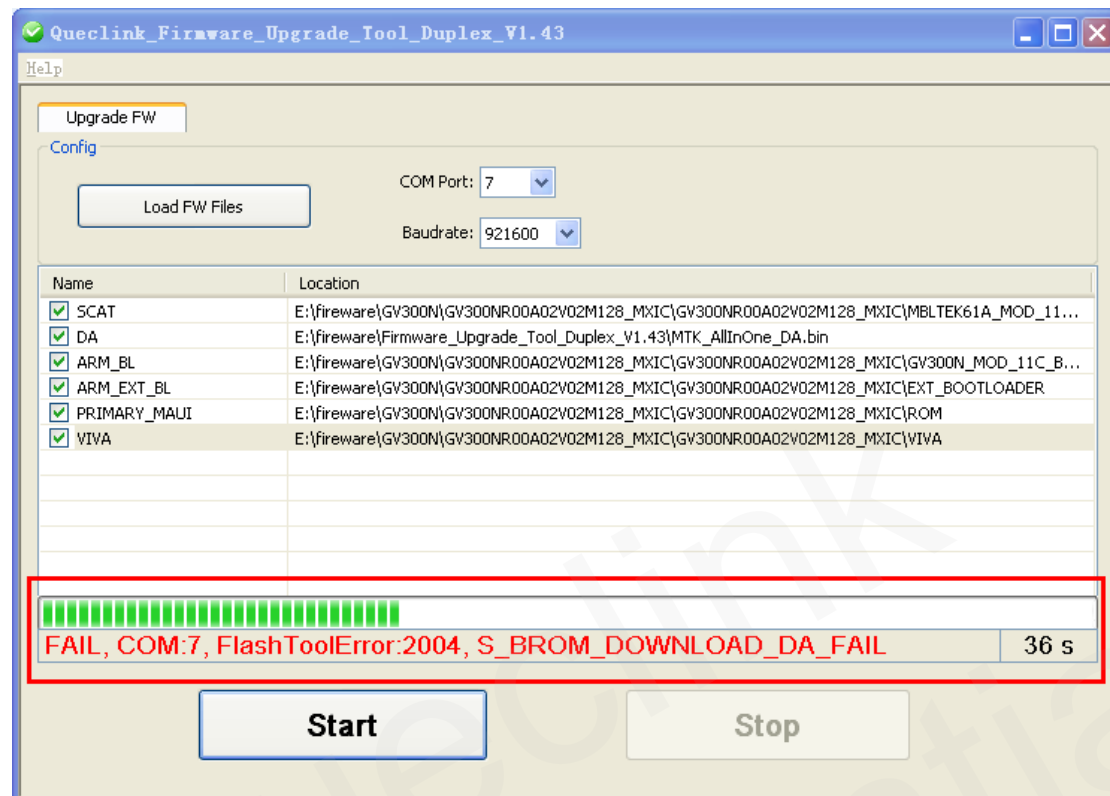


Figure 23: UI of Power supply or USB Abnormal

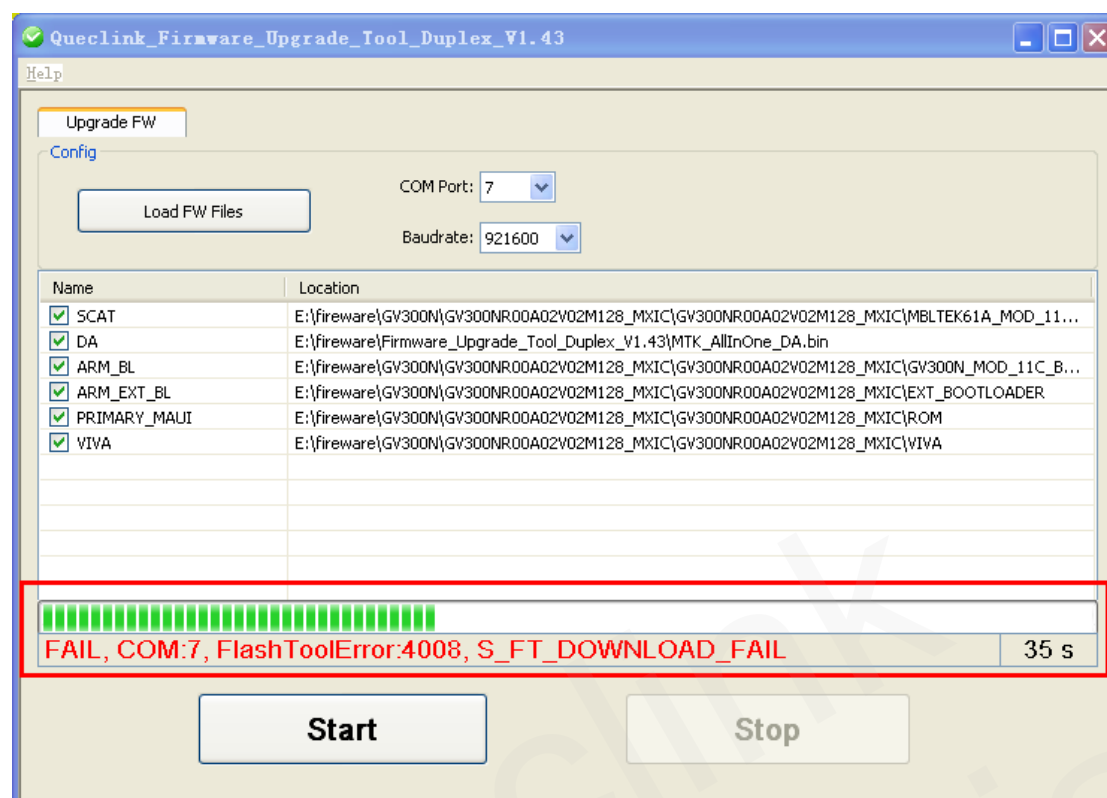


Figure 24: UI of Power supply or USB Abnormal

Possible Reason	Solution
Power supply is unstable.	Obtain stable power supply.
USB abnormal	Change PC or upgrade cable to obtain stable COM port communication.

3.6 Progress Bar Does Not Run

Follow the standard steps, in step 2.6, progress bar does not run in this step.

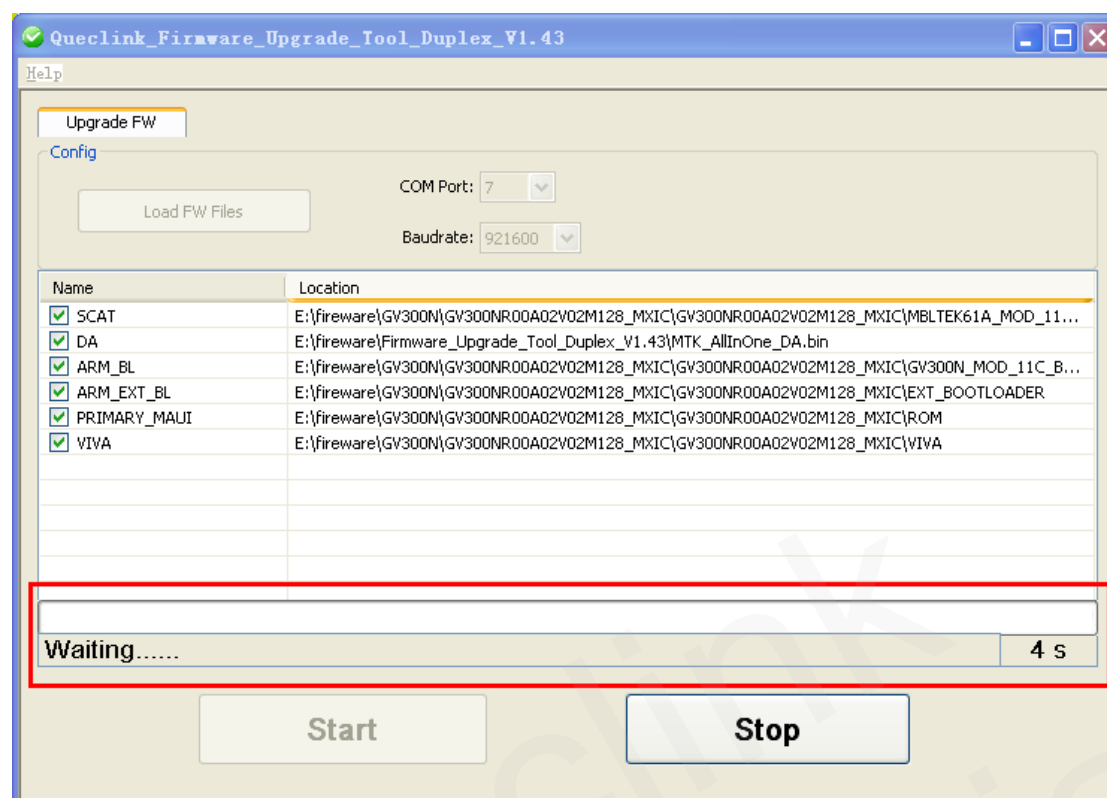


Figure 25: UI of Progress Bar Does Not Run

Possible Reason	Solution
Upgrade Cable Broken	Change another upgrade cable to try;
Serial port problem	1) Make sure COM Port is available or try to change another valid COM Port; 2) Reboot PC and try to upgrade once more.