

BC95 Firmware Upgrade User Guide

NB-IoT Module Series

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About the Document

History

Revision	Date	Author	Description
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1 Introduction

This document mainly introduces how to use “Universal Code Loader” tool to upgrade firmware for Quectel BC95 module on Window 7 system.

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2 Tools Installation

Customers need to install “Microsoft .NET Framework” and “Microsoft Visual C++ 2015 Redistributable (x86)” on PC before installing Universal Code Loader.

2.1. Microsoft .NET Framework Installation

1. Double-click *microsoft.net framework 4.5.exe* to install Microsoft .NET Framework.

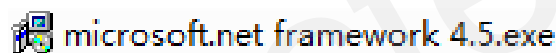


Figure 1: Microsoft .NET Framework Installation Package

2. Wait until the following window comes up, and then click “**I have read and accept the license terms**” and “**Install**” as shown below.

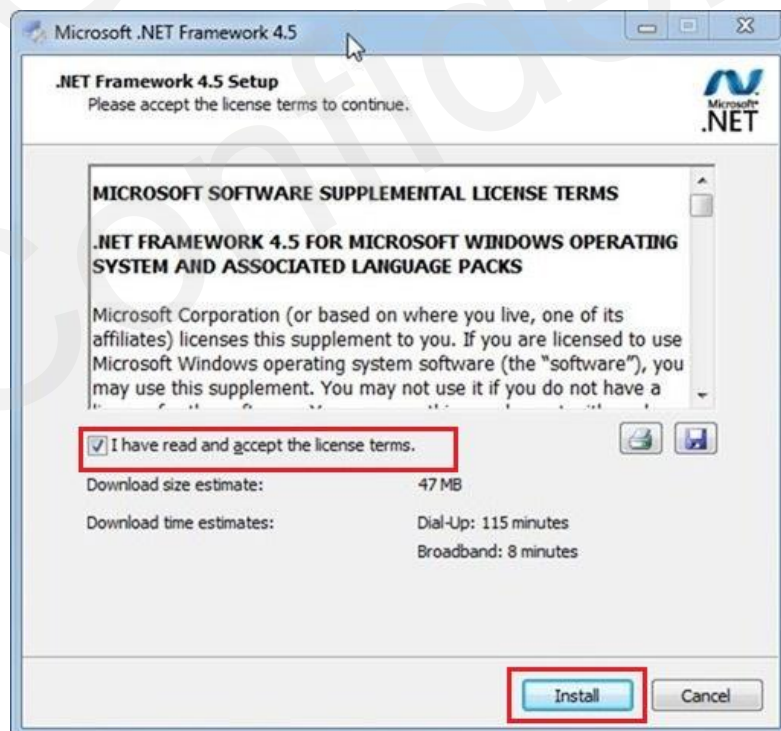


Figure 2: License Agreement for Microsoft .NET Framework Installation

- Please wait for the program to install.

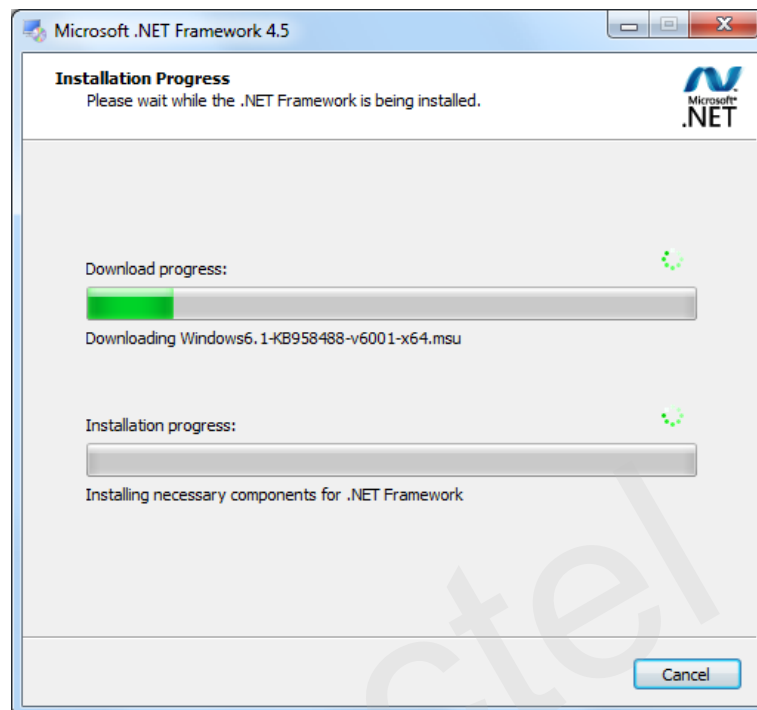


Figure 3: Microsoft .NET Framework is Installing

- Click “**Finish**” to accomplish installation.

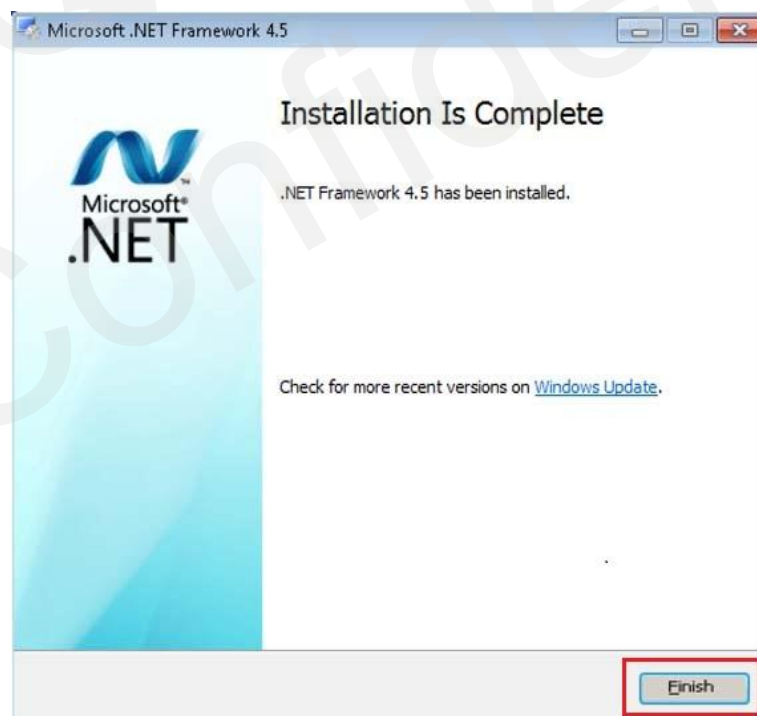


Figure 4: Microsoft .NET Framework Successfully Installed

2.2. Microsoft Visual C++ 2015 Redistributable (x86) Installation

1. Double-click `vc_redist.x86.exe` to install Microsoft Visual C++ 2015 Redistributable (x86).



Figure 5: Installation Package of Microsoft Visual C++ 2015 Redistributable (x86)

2. Wait until the following window comes up, and then click “**I Agree to the license terms and conditions**” and “**Install**” as shown below.

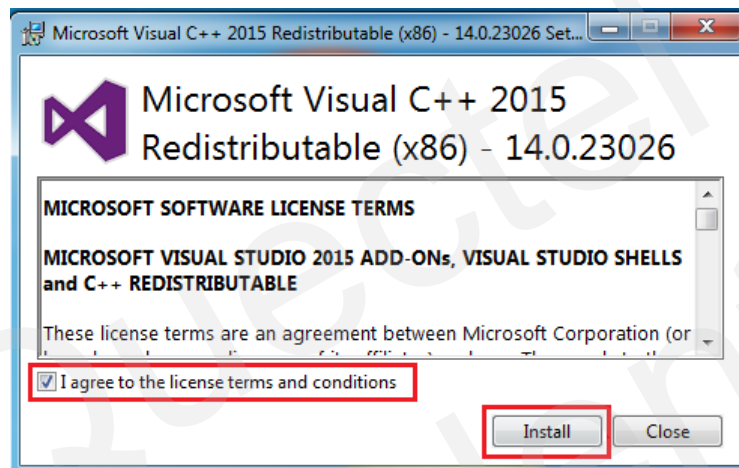


Figure 6: License Agreement for Microsoft Visual C++ 2015 Redistributable (x86) Installation

3. Please wait for the program to install.

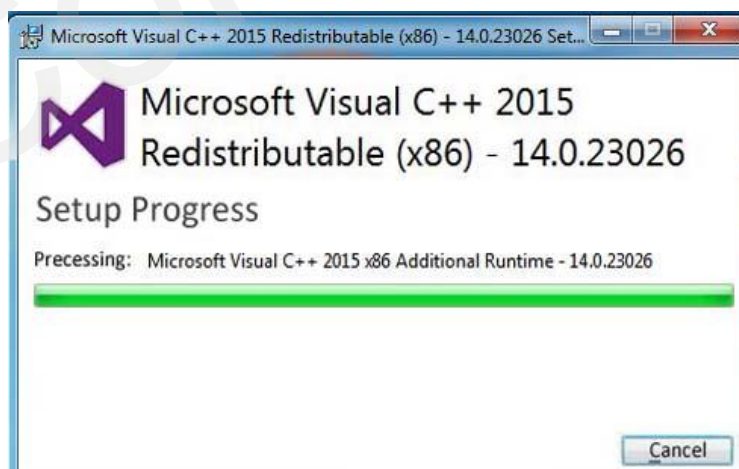


Figure 7: Microsoft Visual C++ 2015 Redistributable (x86) is Installing

- Click **“Close”** to accomplish installation.

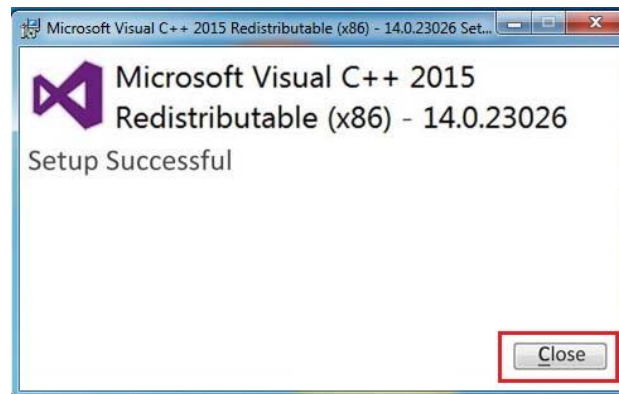


Figure 8: Microsoft Visual C++ 2015 Redistributable (x86) Successfully Installed

2.3. Universal Code Loader Installation

- Double-click *Setup* to install Universal Code Loader.

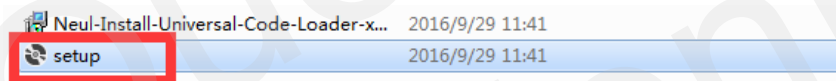


Figure 9: Universal Code Loader Installation Package

- When the following window comes up, please click **“Next”**.

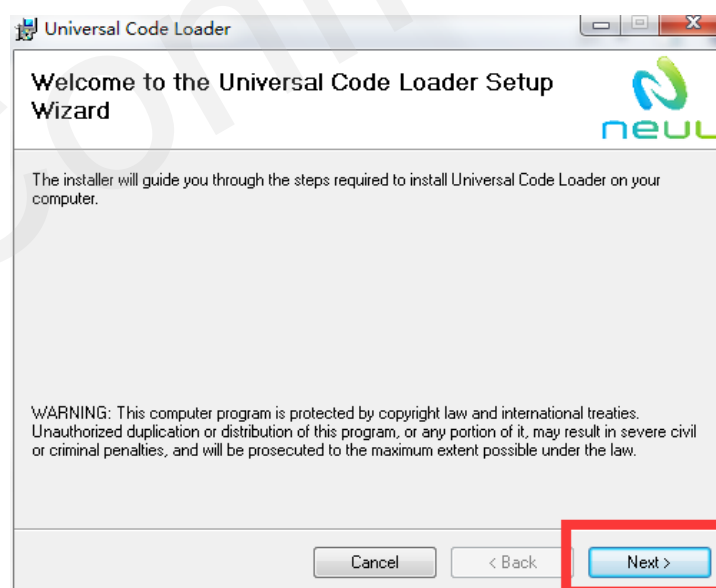


Figure 10: Universal Code Loader Setup Wizard

3. Select installation folder to install the Universal Code Loader.

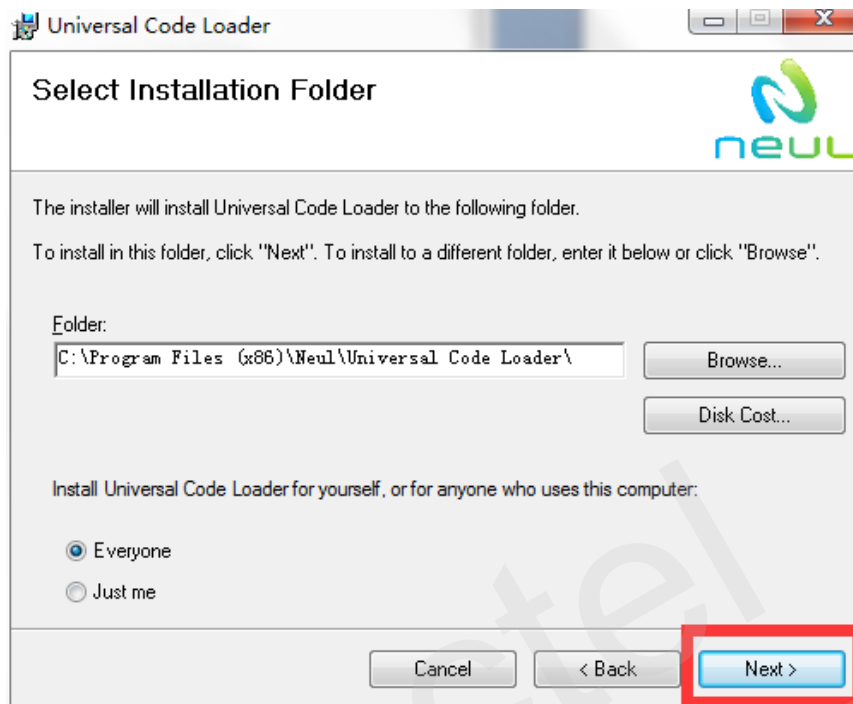


Figure 11: Select Installation Folder for Universal Code Loader

4. Click "Next" to start installing Universal Code Loader.

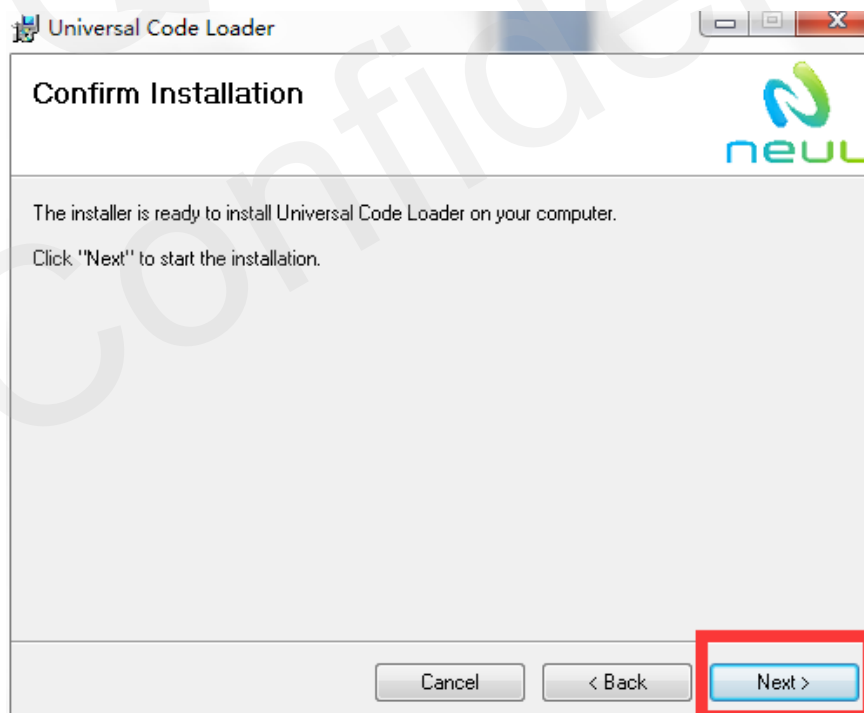


Figure 12: Confirm Installation for Universal Code Loader

- Please wait for the program to install.

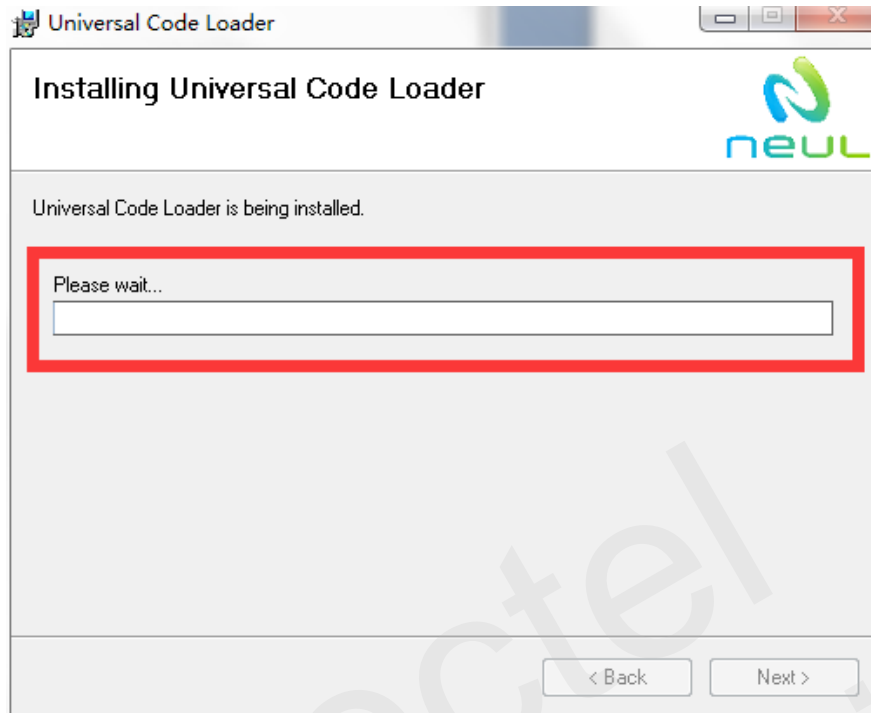


Figure 13: Universal Code Loader is Installing

- Click "**Close**" to accomplish Universal Code Loader installation.

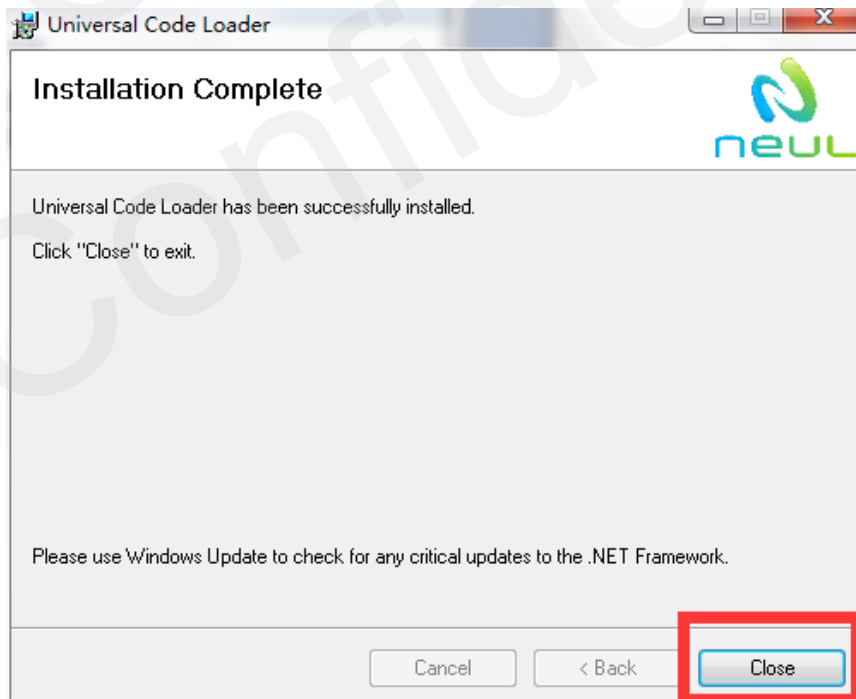


Figure 14: Universal Code Loader Successfully Installed

3 Firmware Upgrade

3.1. Circuit Connection

BC95 module should be turned off before upgrading the firmware. The following is a reference design for the connection between BC95 and PC.

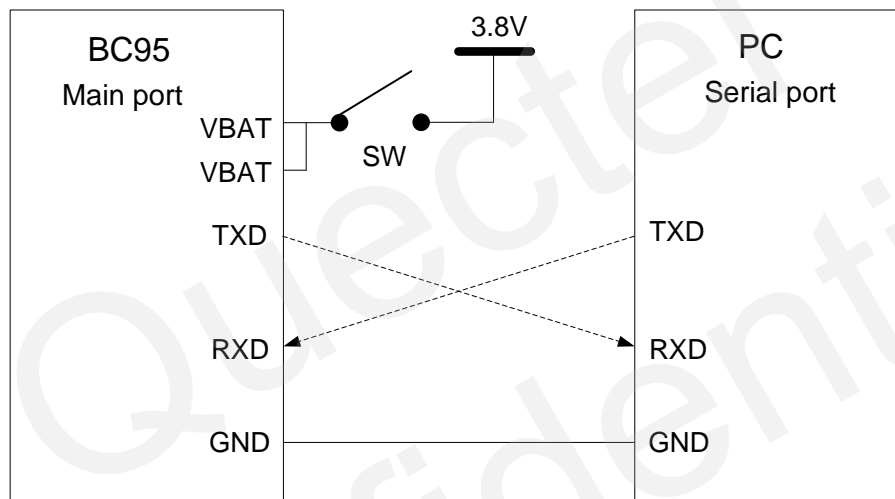


Figure 15: Reference Design for Connection between BC95 and PC

3.2. Firmware Upgrade

1. Double-click *Universal Code Loader* that has been installed on you PC to start the upgrade tool.

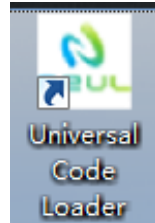


Figure 16: Universal Code Loader Tool

2. When the following window comes up, please click the buttons in green box to select the proper COM port and bin files in the following red boxes for configuration. *security.bin*, *protocol.bin* and *application.bin* files can be found in *NB-IOT-B350SP12_Evk* folder, and *protocol.bin* file exists in the *evk* folder, as shown below.

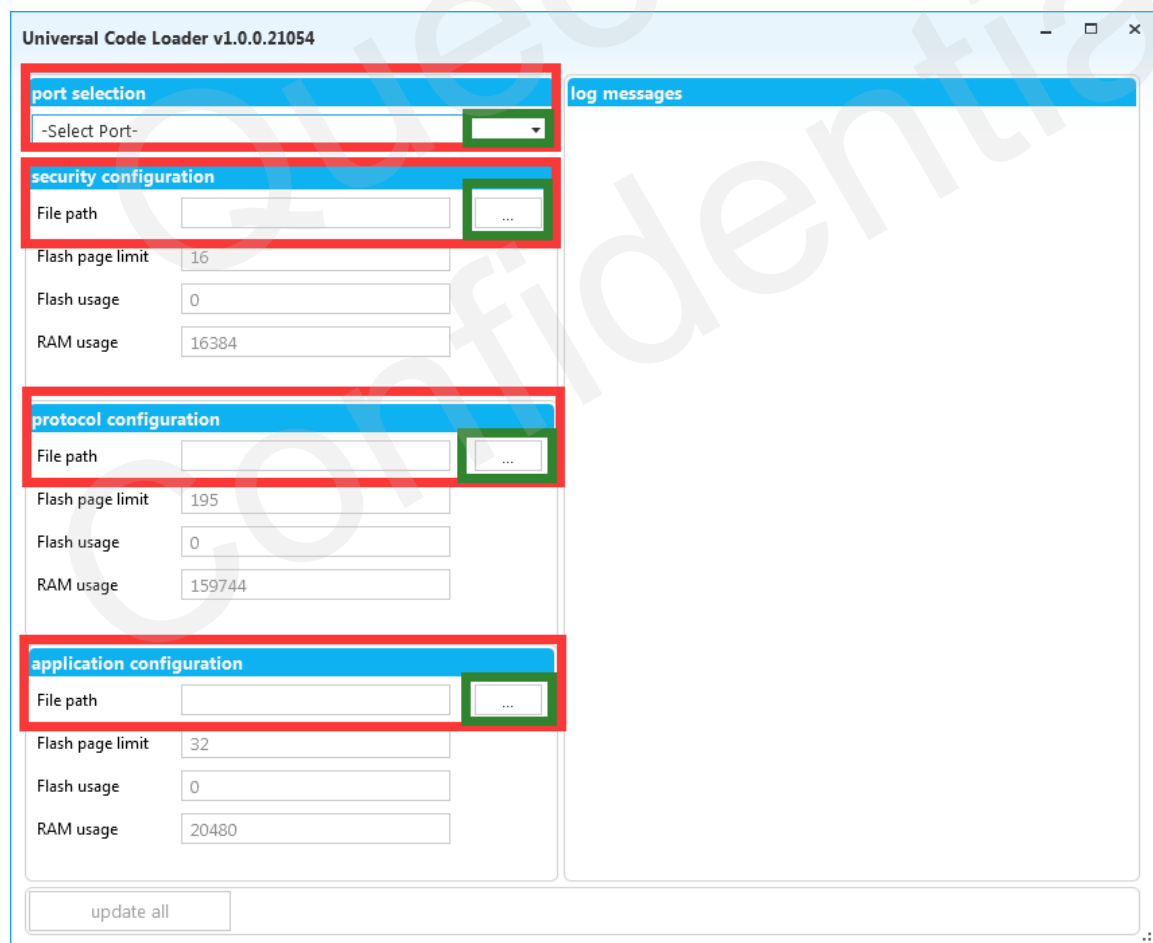


Figure 17: Configuration for Firmware Upgrade

evk	2016/10/14 16:33
FlashErase	2016/10/14 16:32
application.bin	2016/10/14 13:02
LoadEVK	2016/9/16 9:55
README-IMEI	2016/10/7 15:50
security.bin	2016/10/14 13:02

Figure 18: Bin Files

- Please click “**update all**” to start firmware upgrade.

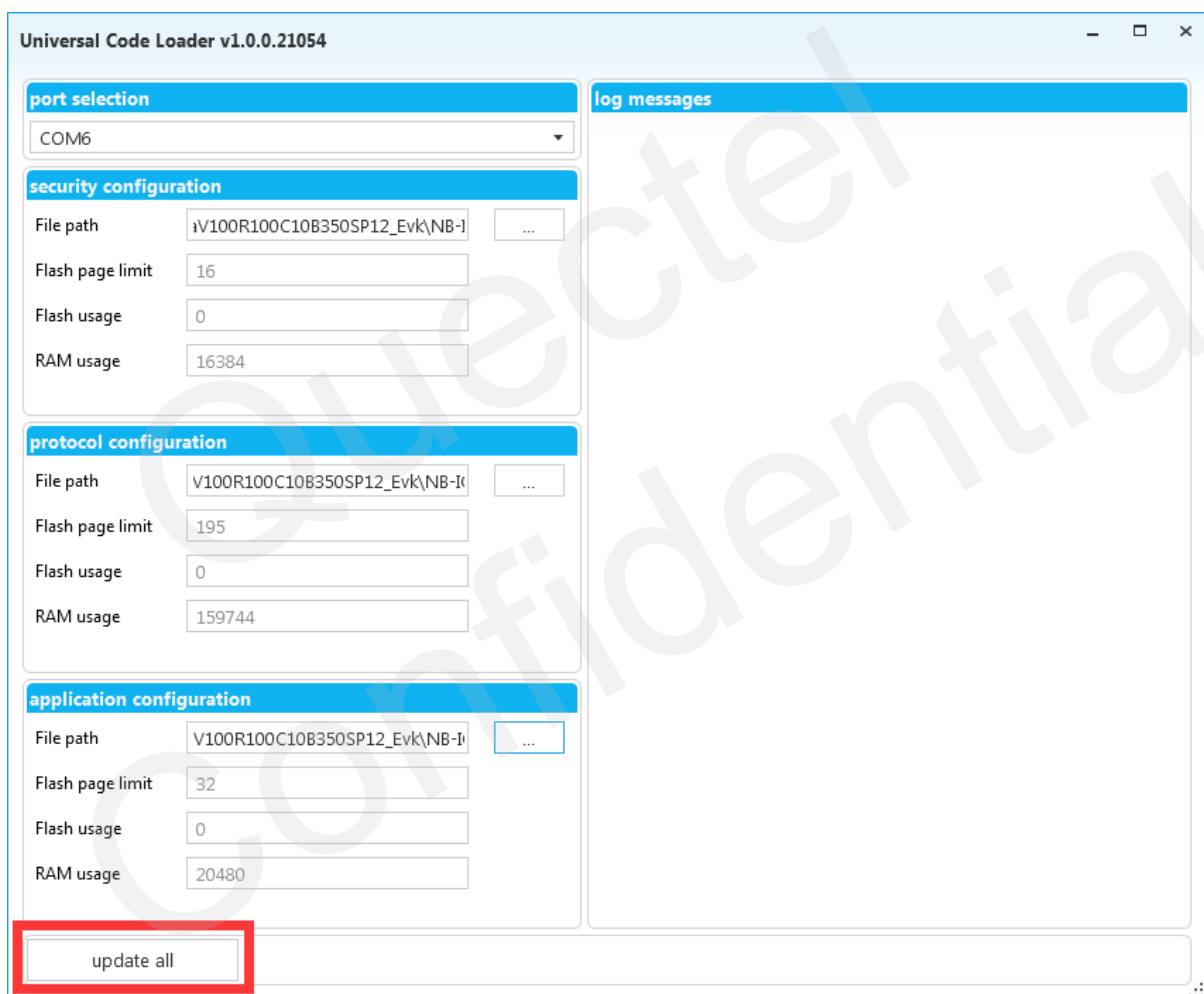


Figure 19: Start Firmware Upgrade

- When the information in the red box appears, please turn on the BC95 module.

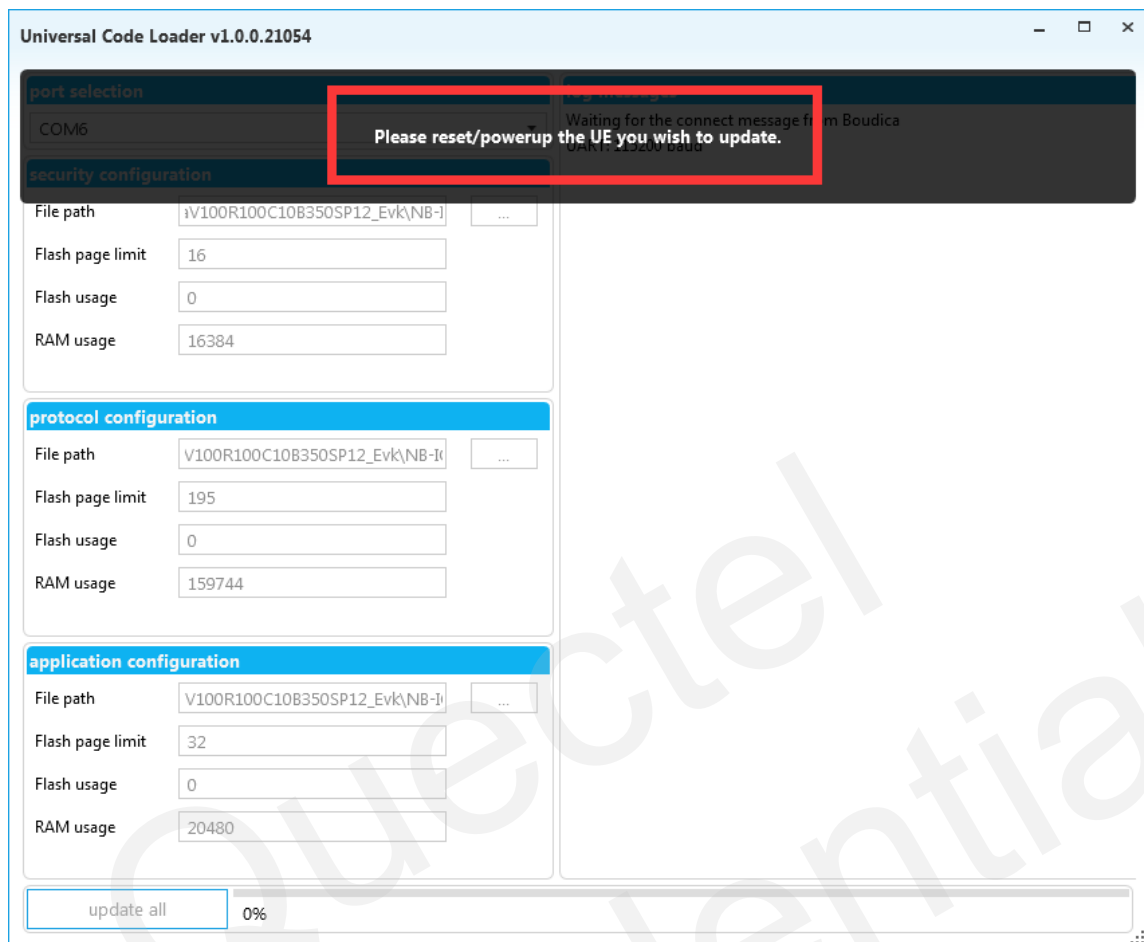


Figure 20: Instruction for Firmware Upgrade

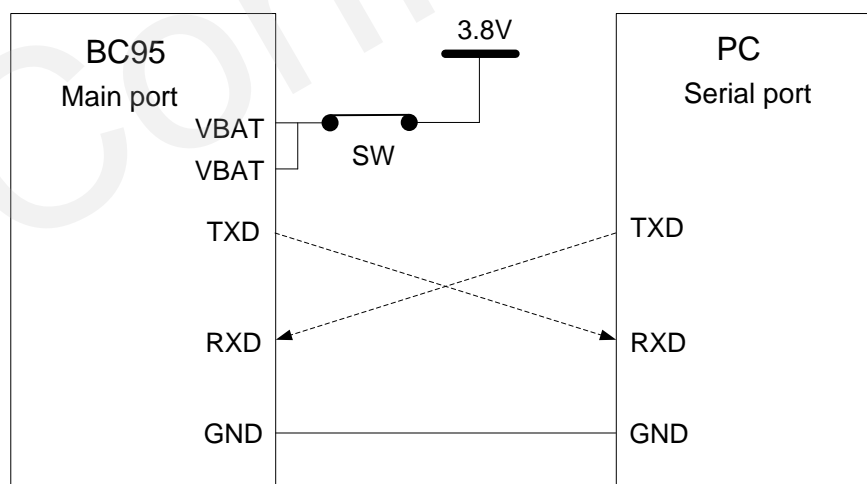


Figure 21: Reference Design for Turning on BC95 Module

- After turning on the module, it starts to upgrading firmware. Please wait during the process.

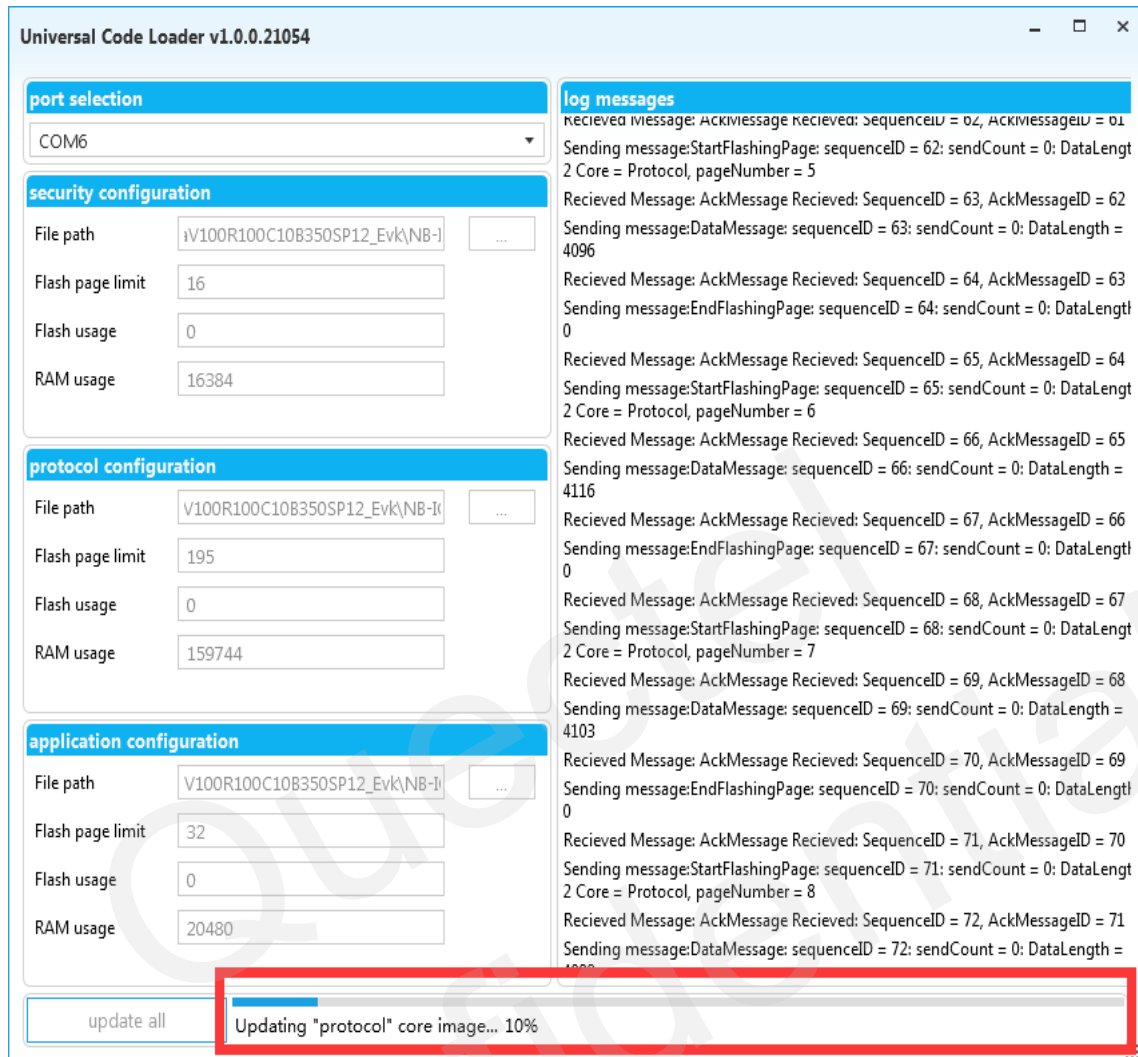


Figure 22: Upgrading Firmware

6. When the information in the following red boxes shows up, it means that firmware downloading process has been finished.

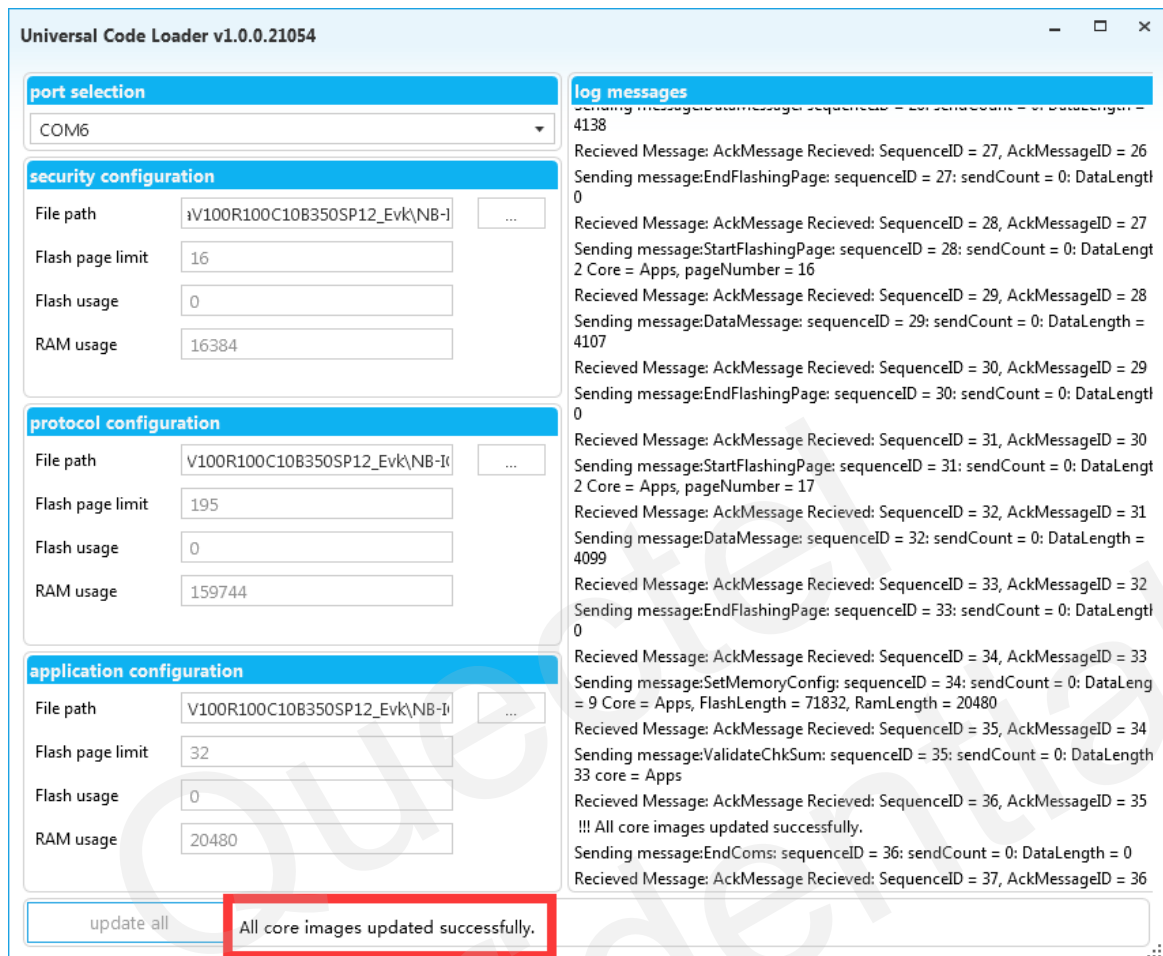


Figure 23: Firmware Successfully Upgraded