



BC127 Melody DFU Tool

Application Note



SIERRA
WIRELESS®

41110790
Rev 1

Important Notice

Due to the nature of wireless communications, transmission and reception of data can never be guaranteed. Data may be delayed, corrupted (i.e., have errors) or be totally lost. Although significant delays or losses of data are rare when wireless devices such as the Sierra Wireless modem are used in a normal manner with a well-constructed network, the Sierra Wireless modem should not be used in situations where failure to transmit or receive data could result in damage of any kind to the user or any other party, including but not limited to personal injury, death, or loss of property. Sierra Wireless accepts no responsibility for damages of any kind resulting from delays or errors in data transmitted or received using the Sierra Wireless modem, or for failure of the Sierra Wireless modem to transmit or receive such data.

Safety and Hazards

Do not operate the Sierra Wireless modem in areas where blasting is in progress, where explosive atmospheres may be present, near medical equipment, near life support equipment, or any equipment which may be susceptible to any form of radio interference. In such areas, the Sierra Wireless modem **MUST BE POWERED OFF**. The Sierra Wireless modem can transmit signals that could interfere with this equipment.

Do not operate the Sierra Wireless modem in any aircraft, whether the aircraft is on the ground or in flight. In aircraft, the Sierra Wireless modem **MUST BE POWERED OFF**. When operating, the Sierra Wireless modem can transmit signals that could interfere with various onboard systems.

Note: Some airlines may permit the use of cellular phones while the aircraft is on the ground and the door is open. Sierra Wireless modems may be used at this time.

The driver or operator of any vehicle should not operate the Sierra Wireless modem while in control of a vehicle. Doing so will detract from the driver or operator's control and operation of that vehicle. In some states and provinces, operating such communications devices while in control of a vehicle is an offence.

Limitation of Liability

The information in this manual is subject to change without notice and does not represent a commitment on the part of Sierra Wireless. SIERRA WIRELESS AND ITS AFFILIATES SPECIFICALLY DISCLAIM LIABILITY FOR ANY AND ALL DIRECT, INDIRECT, SPECIAL, GENERAL, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS OR REVENUE OR ANTICIPATED PROFITS OR REVENUE ARISING OUT OF THE USE OR INABILITY TO USE ANY SIERRA WIRELESS PRODUCT, EVEN IF SIERRA WIRELESS AND/OR ITS AFFILIATES HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR THEY ARE FORESEEABLE OR FOR CLAIMS BY ANY THIRD PARTY.

Notwithstanding the foregoing, in no event shall Sierra Wireless and/or its affiliates aggregate liability arising under or in connection with the Sierra Wireless product, regardless of the number of events, occurrences, or claims giving rise to liability, be in excess of the price paid by the purchaser for the Sierra Wireless product.

Patents

This product may contain technology developed by or for Sierra Wireless Inc. This product includes technology licensed from QUALCOMM®. This product is manufactured or sold by Sierra Wireless Inc. or its affiliates under one or more patents licensed from InterDigital Group and MMP Portfolio Licensing.

Copyright

© 2017 Sierra Wireless. All rights reserved.

Trademarks

Sierra Wireless®, AirPrime®, AirLink®, AirVantage® and the Sierra Wireless logo are registered trademarks of Sierra Wireless.

Windows® and Windows Vista® are registered trademarks of Microsoft Corporation.

Macintosh® and Mac OS X® are registered trademarks of Apple Inc., registered in the U.S. and other countries.

QUALCOMM® is a registered trademark of QUALCOMM Incorporated. Used under license.

Other trademarks are the property of their respective owners.

Contact Information

Sales information and technical support, including warranty and returns	Web: sierrawireless.com/company/contact-us/ Global toll-free number: 1-877-687-7795 6:00 am to 6:00 pm PST
Corporate and product information	Web: sierrawireless.com

Revision History

Revision number	Release date	Changes
1	March 22, 2017	Initial revision in SWI template.

>> | Contents

Introduction	5
Installation	6
Upgrading Melody	7
Introduction	7
How to Upgrade	8

>> 1: Introduction

The Melody Device Firmware Upgrade Tool is a 32-bit Windows application that upgrades melody on the BC127 and BC128 to a newer version of Melody.

This application note describes the main functionality of the tool and how to use it to upgrade Melody.

2: Installation

The tool has some prerequisites that need to be available on the Windows machine to operate properly. After unpacking the tool to the desired location, you will end up with the following set of files:

- redistrib (folder)
- Melody DFU (application)
- DFUEngine.dll
- lib_dfu.dll

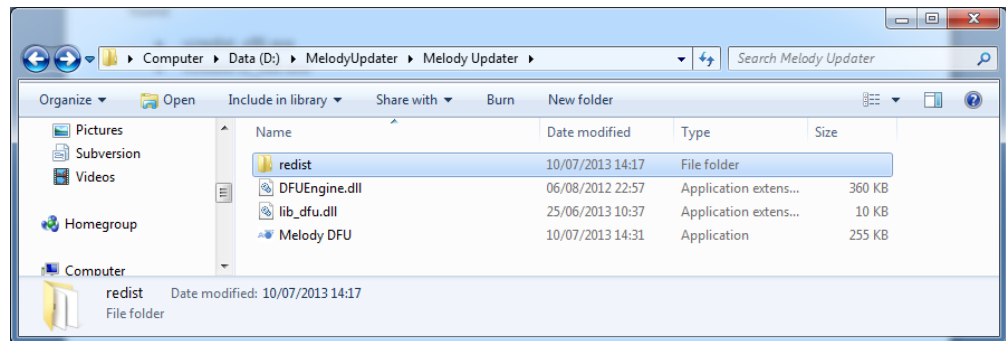


Figure 2-1: Files in the Melody Updater Folder

If this is the first time running the tool on Windows, installing the prerequisites is required for the updater to work properly. The prerequisites are available in the redistrib folder, opening the redistrib folder, the following 2 files can be found:

- vcredist_x86.exe
- vcredist12_x86.exe
- dotNetFx40_Client_setup.exe

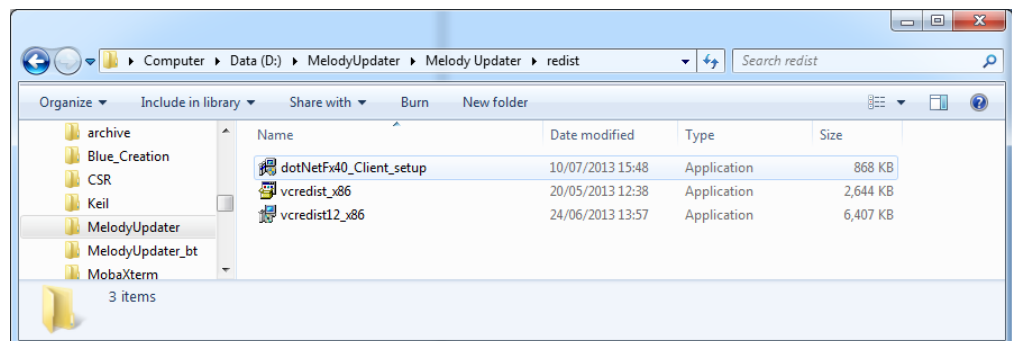


Figure 2-2: Files in the redistrib Folder

Run the executables to install the required dependencies on the Windows machine.

Once this step is finished, the upgrade tool can start by starting **Melody DFU** application.

Note that every time the upgrade tool is starting it will check for the prerequisites, but this step will not finish quickly.

3: Upgrading Melody

Introduction

Once Melody DFU is started, the following window will open.

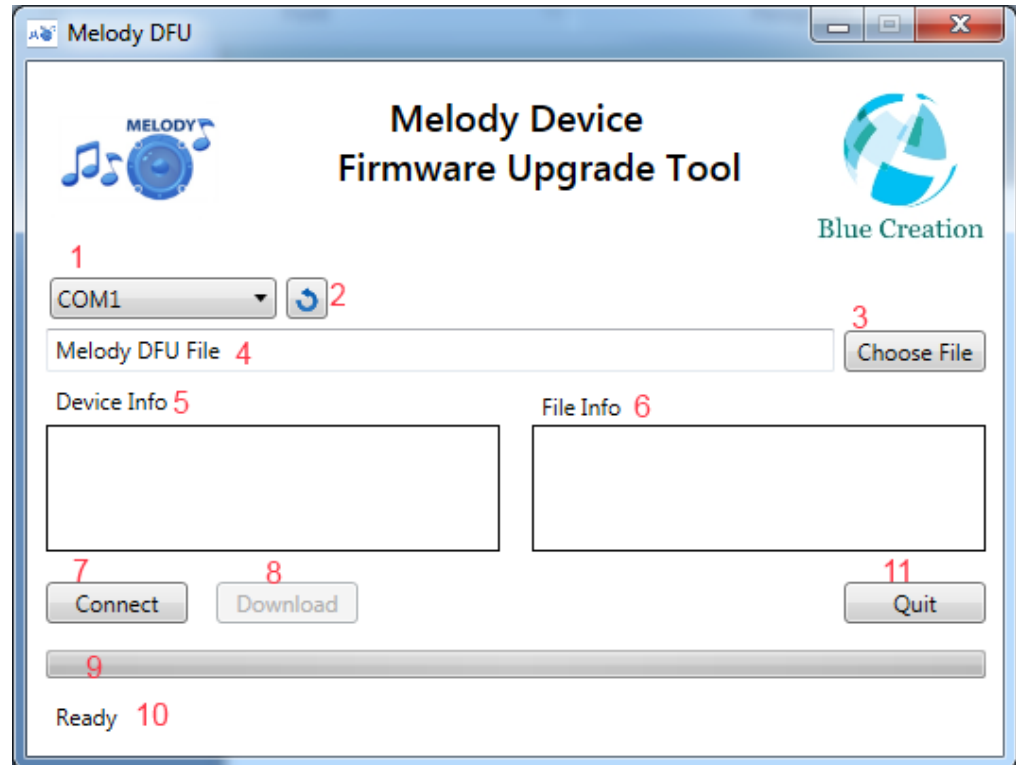


Figure 3-1: Melody Device Firmware Upgrade Tool Screen

The following is an outline of each part of the window:

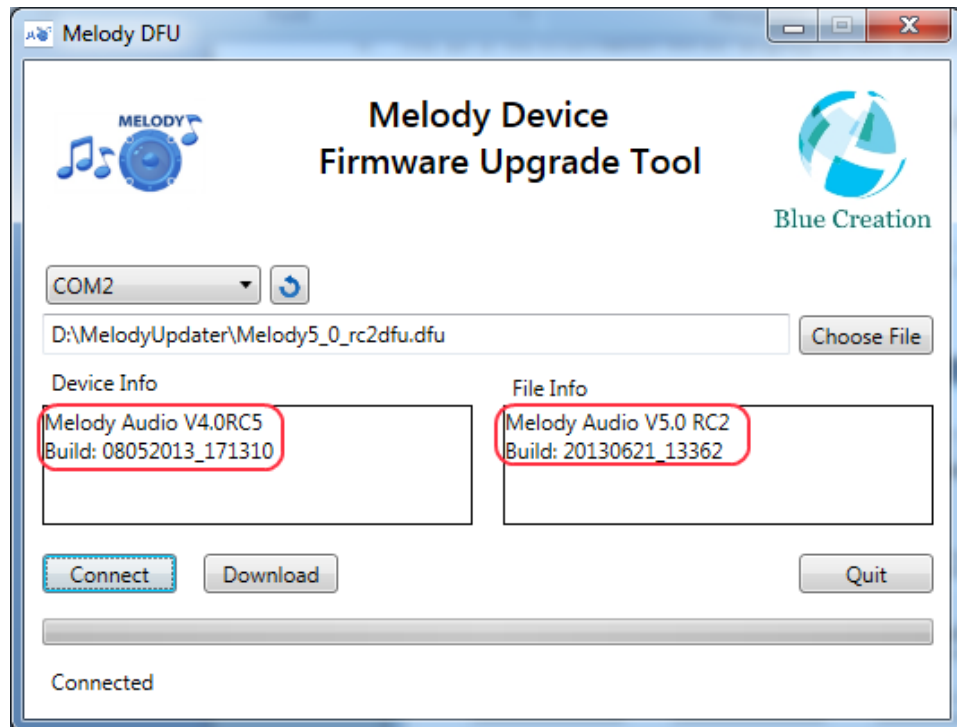
1. The COM port where Melody is connected: this box is updated when the application is starting, therefore, it might not contain all the COM ports if they are connected to Windows afterwards.
2. Refresh the COM ports: In case the COM port is connected afterwards, this button can be used to refresh the available COM ports.
3. Select a DFU file: this will open a select file window to find the DFU file.
4. Once the file is selected, the full path will be displayed here.
5. Melody Info will be displayed here after connecting to a melody device.
6. The DFU file information will be displayed here once a melody DFU file is selected.
7. Connect to melody using the COM port selected.
8. Download button will be highlighted when a melody device is connected. During a download, it is not possible to abort from within the application.

- 9. The progress bar will show the download progress.
- 10. This section will show the status of the upgrade process.

How to Upgrade

This section will go through the upgrade process after starting the application.

- 1. Select the correct COM port and press the **connect** button.
- 2. Select the DFU File
- 3. Check that the DFU file contains a new version and build date.



- 4. Press the **Download** button to update.

When the progress bar reaches the end, allow a short while for the update to finalise since the application will be waiting for BC127 to get ready.

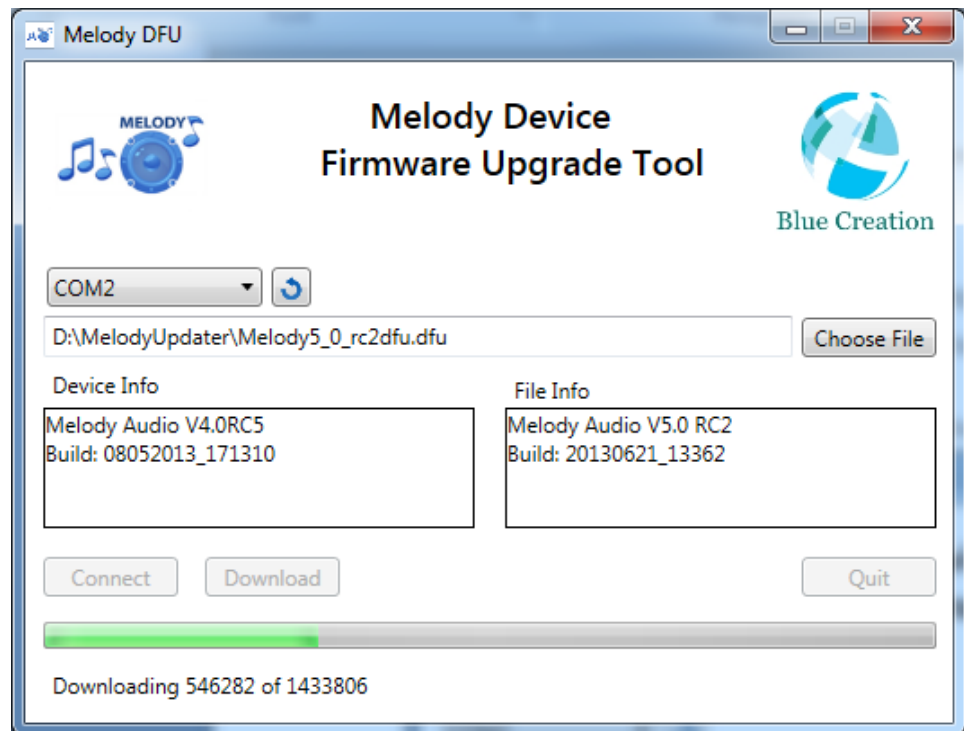


Figure 3-2: Downloading Phase of the Upgrade