

# UM10785

## Fm+ Demo Board Software Installation Guide

Rev. 1.0 — 25 February 2014

User manual

### Document information

Info	Content
Keywords	Fm+ Demo Board, OM13320
Abstract	Software installation guide for the Fm+ Demo Board, OM13320



**Revision history**

Rev	Date	Description
1.0	20140225	Initial Release

**Contact information**

For more information, please visit: <http://www.nxp.com>

For sales office addresses, please send an email to: [salesaddresses@nxp.com](mailto:salesaddresses@nxp.com)

## 1. Introduction

This software installation guide shows you how to correctly load communications firmware on the Fm+ Demo Board OM13320 and the GUI software that runs under Win7 64-bit operating system.

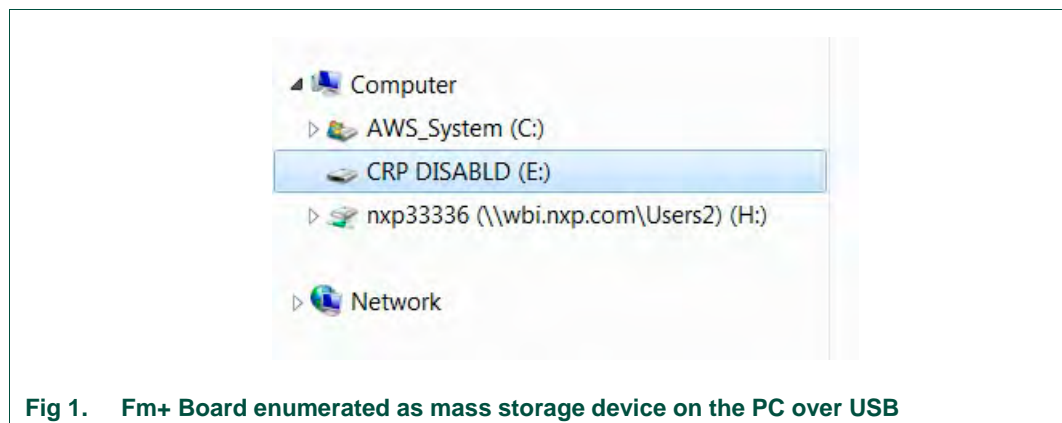
Please ignore any previous versions of software or firmware which may mention FM+DevelopmentBoard V03\_00.bin, size 19kb, or FmDevelopmentBoardOM13260SoftwareInstall.zip, size 118MB. Also, there is no need to install the correct USB driver.

## 2. Firmware Installation

The Fm+ demo board OM13320 contains an LPC1343 microcontroller which handles communications between the PC running a GUI and the I2C hardware on the board. This micro must have the correct communications firmware to communicate correctly with the PC.

To install firmware to enable communications, download NXP\_Fm+\_Eval\_Board\_v1.0 firmware.zip from <http://www.nxp.com/demoboard/OM13320.html#documentation>

1. Unzip NXP\_Fm+\_Eval\_Board\_v1.0 firmware.zip
2. Connect a USB cable from the PC USB port to CN5. Note: Two green LEDs are on (D4 for VUSB and D5 for 3V3)
3. Install the ISP (JP6) jumper to put the MCU into In-System Programming mode
4. Install and then remove RST (JP4) jumper to reset the MCU
5. The MCU will enumerate on the PC as shown in Fig 1
6. Delete the file on the MCU (size may vary - up to 32kB) as shown in Fig 2
7. Copy the new firmware file NXP\_Fm+\_Eval\_Board\_v1.0.bin to the MCU as shown in Fig 3
8. Remove the ISP (JP6) jumper
9. Install and then remove RST (JP4) jumper to reset the MCU



**Fig 1. Fm+ Board enumerated as mass storage device on the PC over USB**

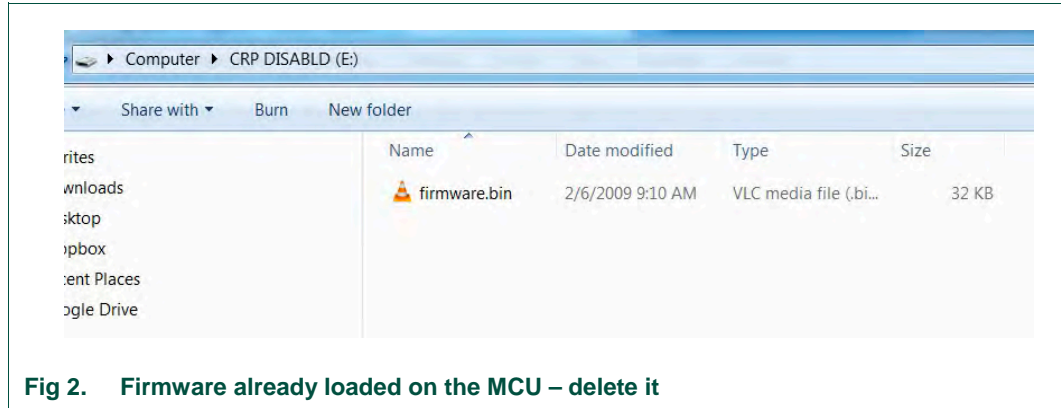


Fig 2. Firmware already loaded on the MCU – delete it

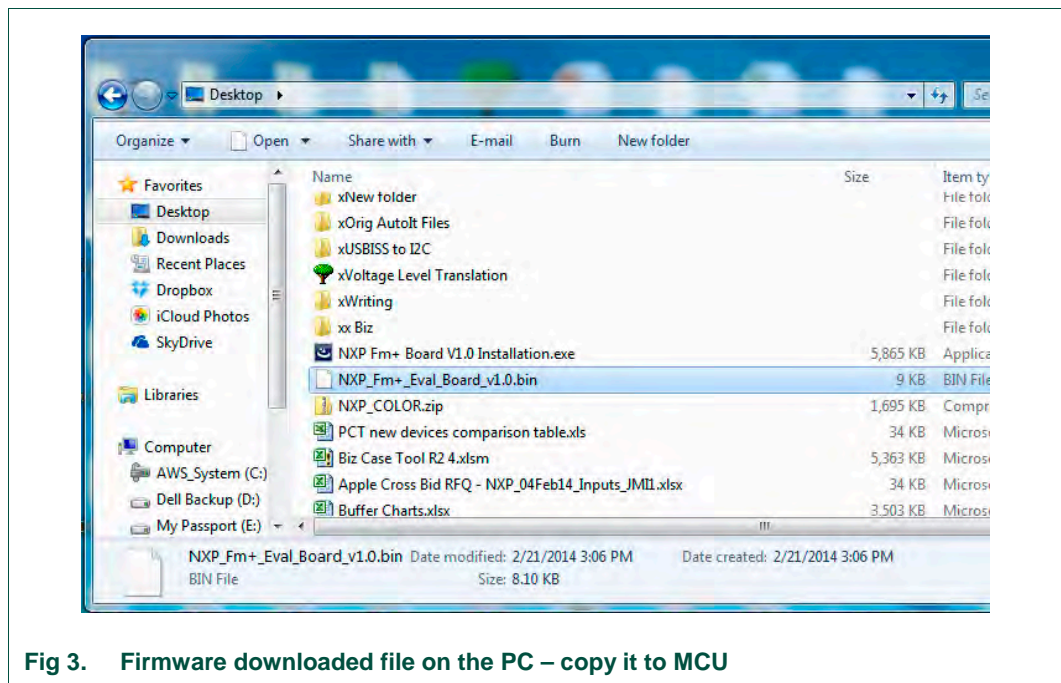


Fig 3. Firmware downloaded file on the PC – copy it to MCU

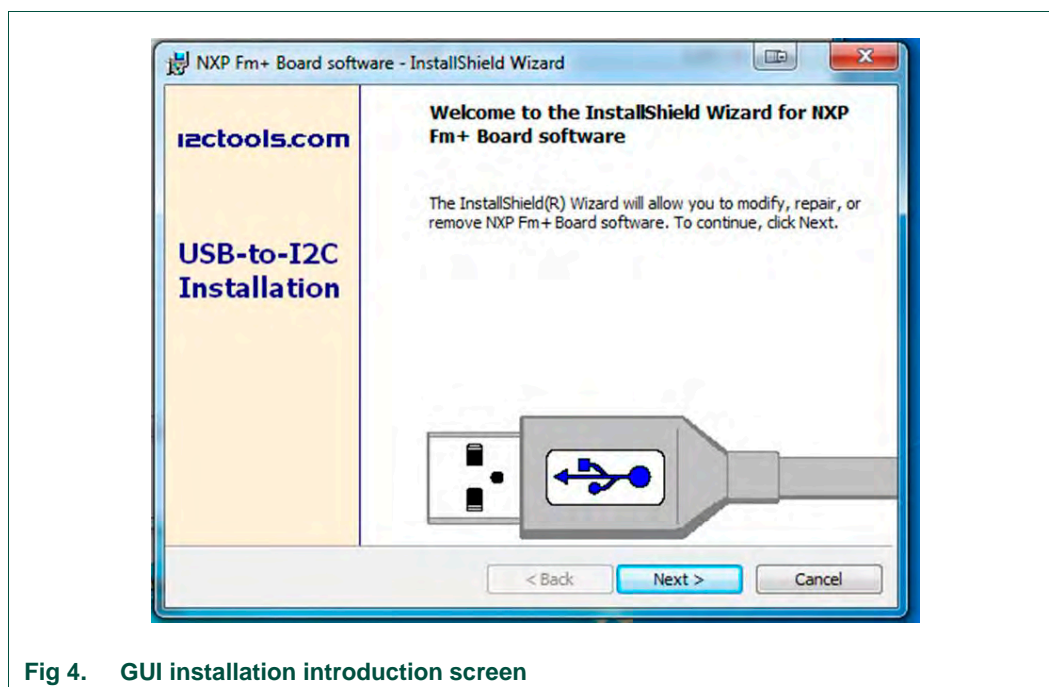
### 3. GUI Installation

The Fm+ Demo Board GUI provides an easy way to evaluate NXP I<sup>2</sup>C devices and understand the internal logic functions. It communicates directly with the Fm+ Demo Board hardware and provides real-time control of devices connected to the I<sup>2</sup>C-bus.

To install the GUI on the control PC, download NXP Fm+ Board V1.0 Installation.zip from <http://www.nxp.com/demoboard/OM13320.html#documentation>

1. Unzip NXP Fm+ Board V1.0 Installation.zip
2. Connect a USB cable from the PC USB port to CN5.
3. Run NXP Fm+ Board V1.0 Installation.exe.
4. Click next on the introduction screen, Fig 4.
5. Click the I accept radio button and next on the License screen, Fig 5.
6. Click next on the destination folder screen, Fig 6.
7. Click Anyone and then Install on the ready screen, Fig 7.
8. When the install is complete, click finish on the final screen, Fig 8.

Double click on the NXP Fm+ Evaluation Board shortcut on the desktop to start the GUI program. If the board is connected via USB cable and functioning correctly, a splash screen will appear with USB-I2C Hardware Detected in green, Fig 9.



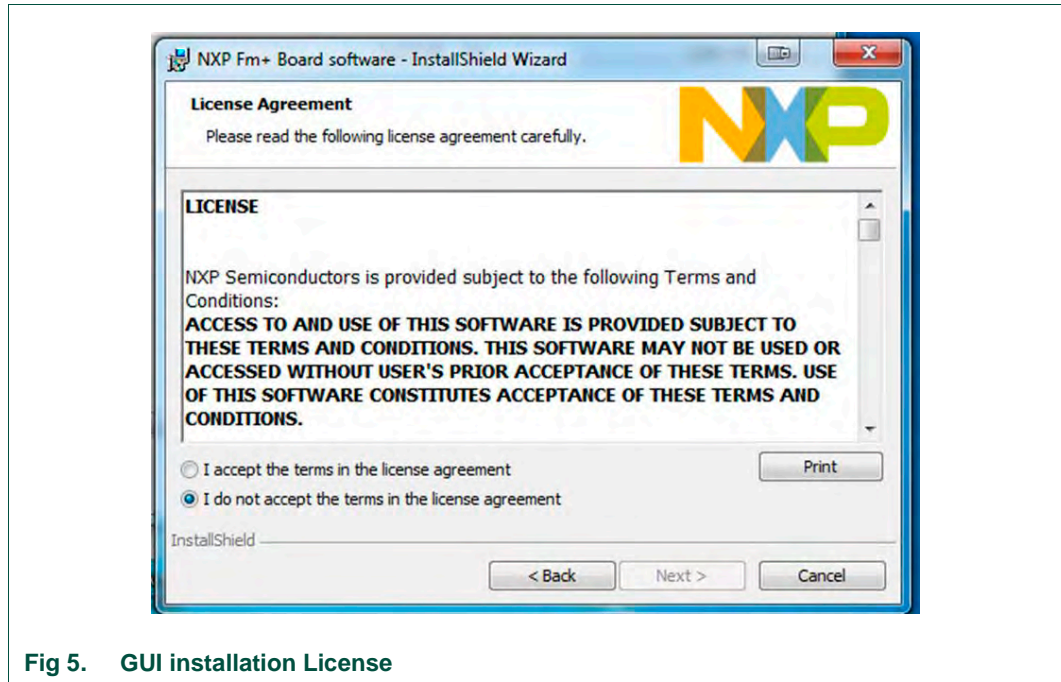


Fig 5. GUI installation License

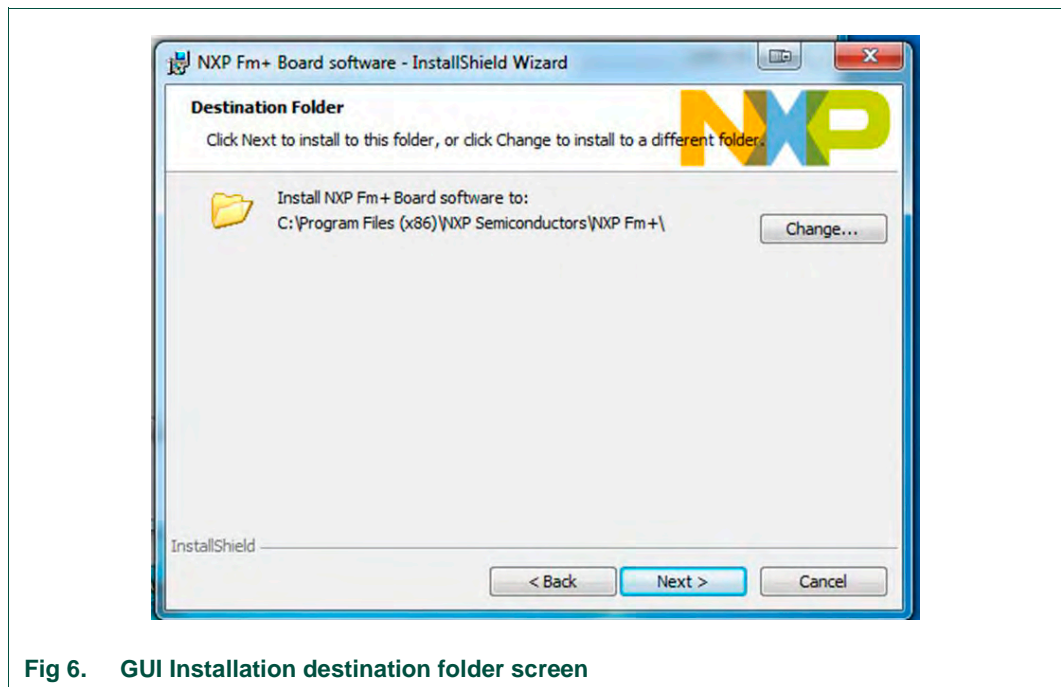


Fig 6. GUI Installation destination folder screen

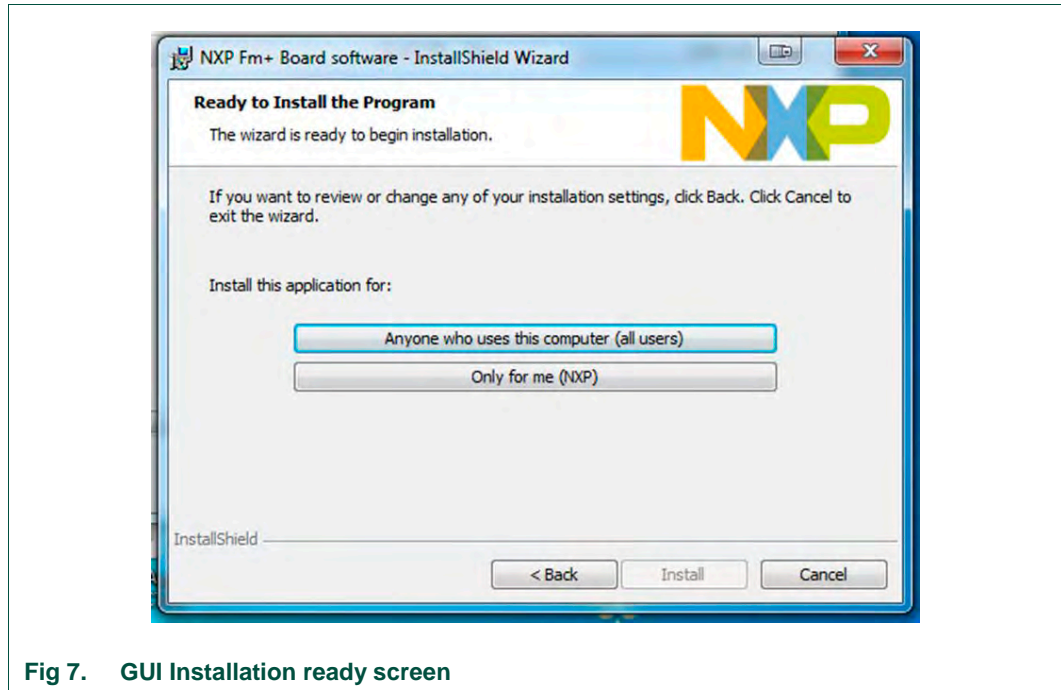


Fig 7. GUI Installation ready screen

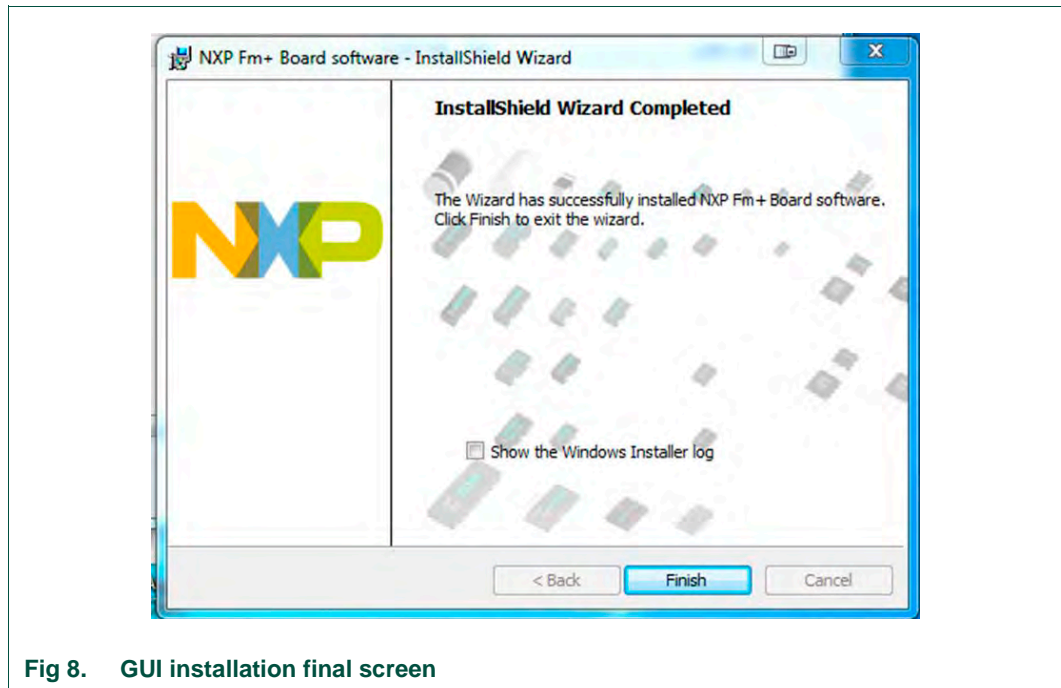


Fig 8. GUI installation final screen

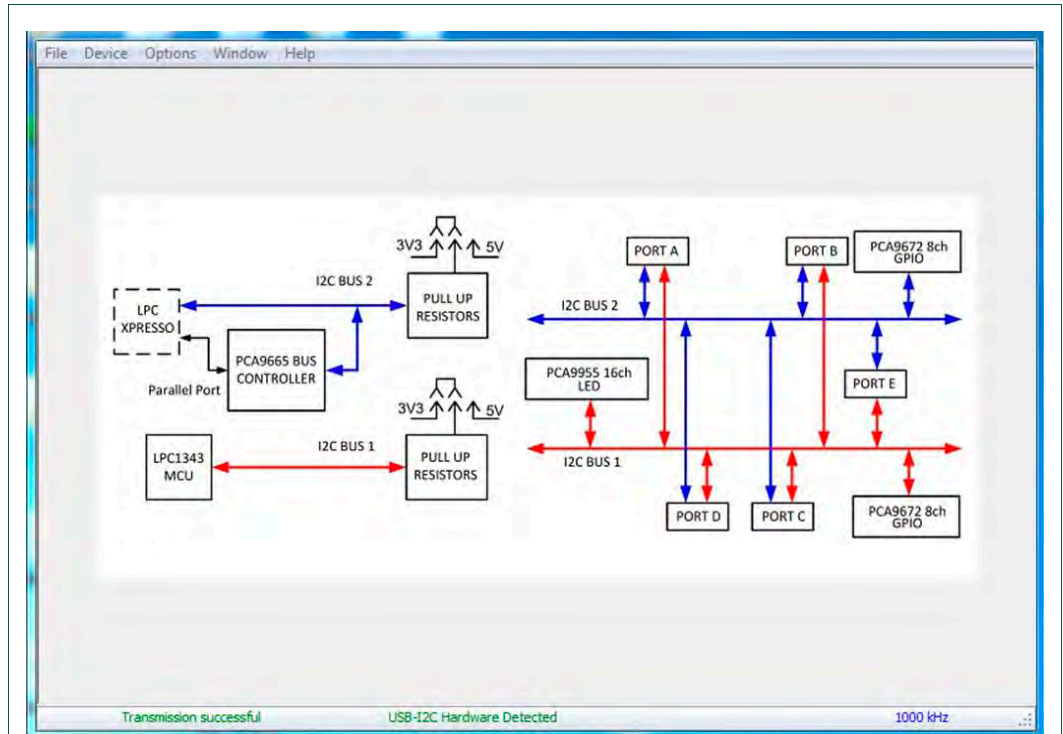


Fig 9. GUI Splash screen – working correctly with USB-I2C Hardware Detected in green



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