

# NXP UM10785 demo board Installation Guide

<http://www.manuallib.com/nxp/um10785-demo-board-installation-guide.html>

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.

ManualLib.com collects and classifies the global product instruction manuals to help users access anytime and anywhere, helping users make better use of products.

<http://www.manuallib.com>

# UM10785

## Fm+ Demo Board Software Installation Guide

Rev. 1.0 — 25 February 2014

User manual

### Document information

Info	Content
<b>Keywords</b>	Fm+ Demo Board, OM13320
<b>Abstract</b>	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

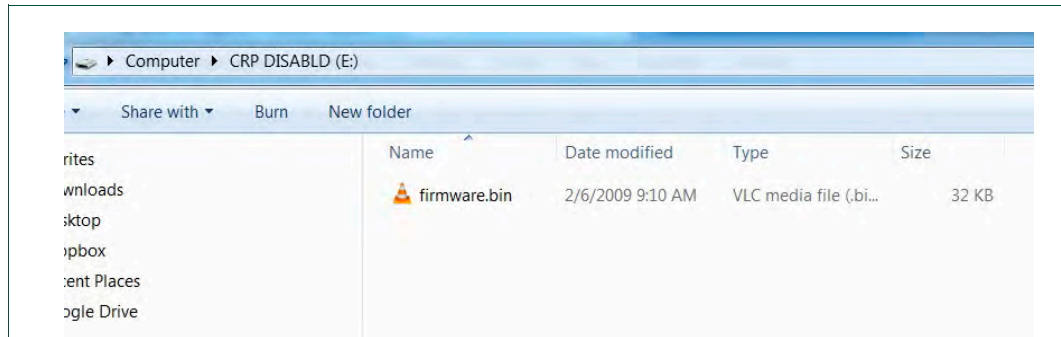


Fig 2. Firmware already loaded on the MCU – delete it

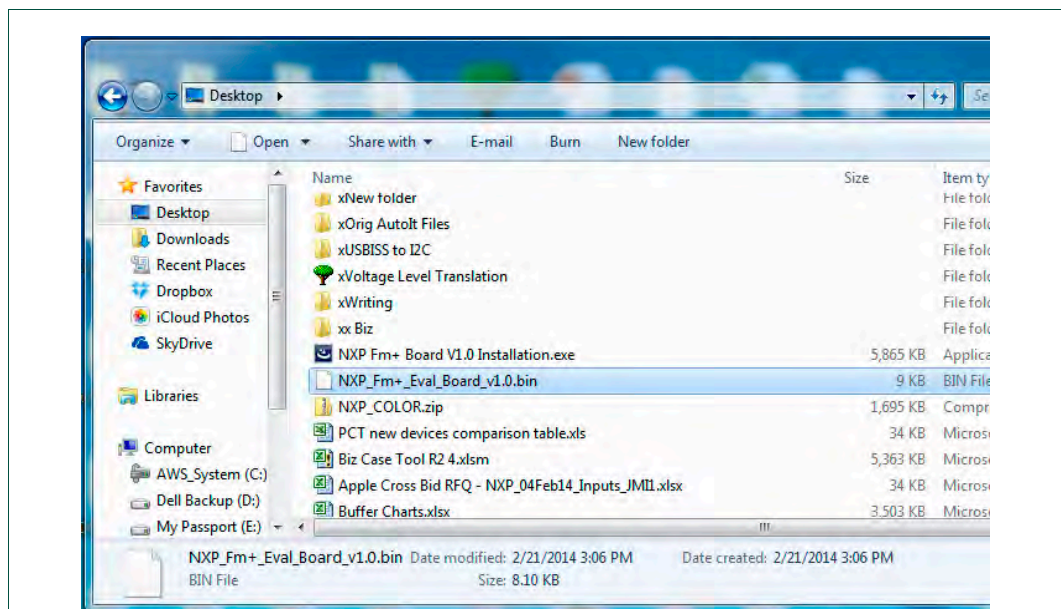


Fig 3. Firmware downloaded file on the PC – copy it to MCU

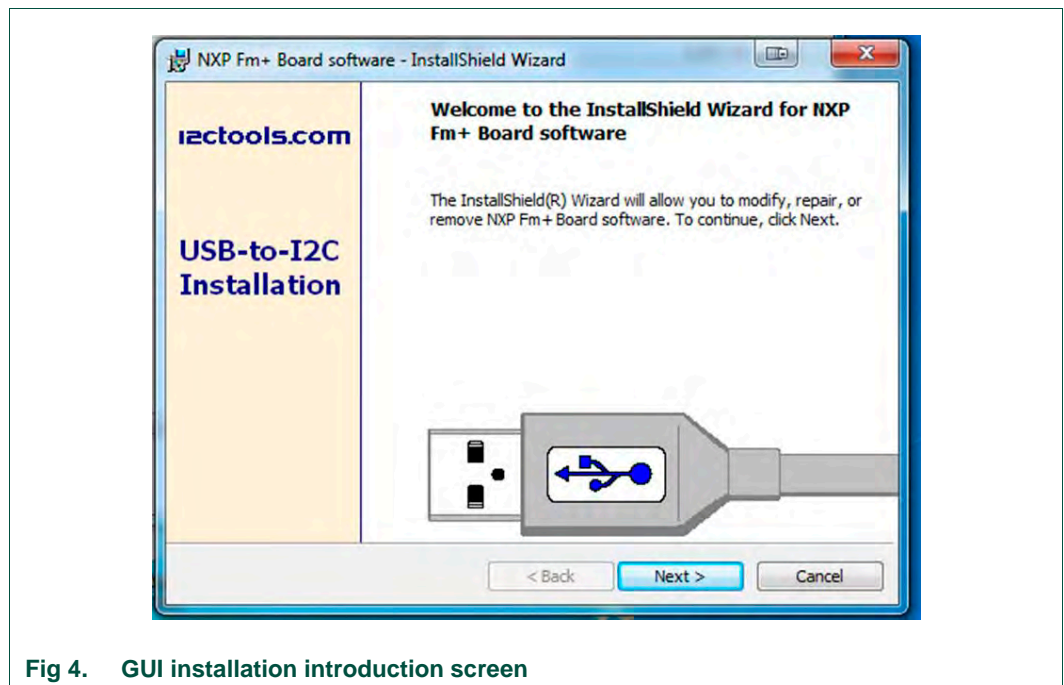
### 3. GUI Installation

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.



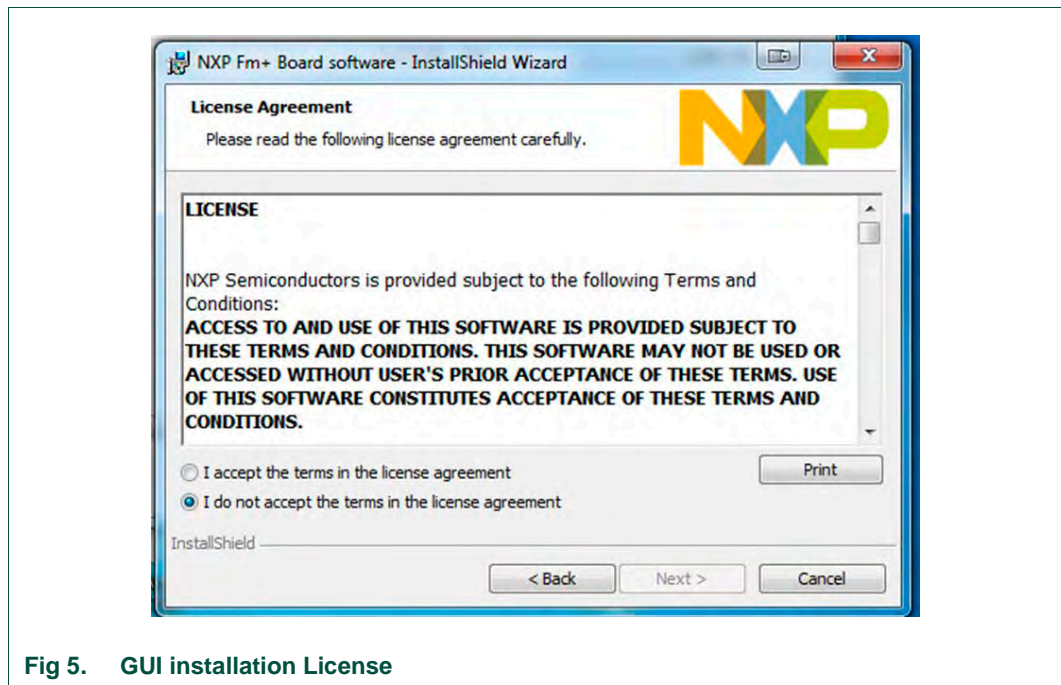


Fig 5. GUI installation License

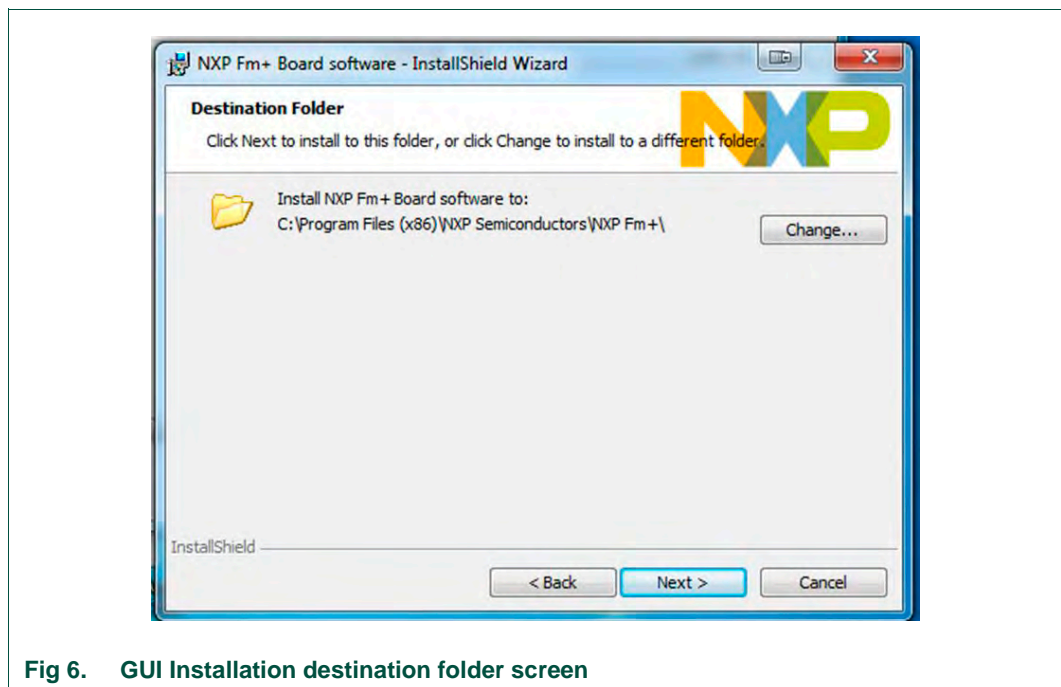


Fig 6. GUI Installation destination folder screen

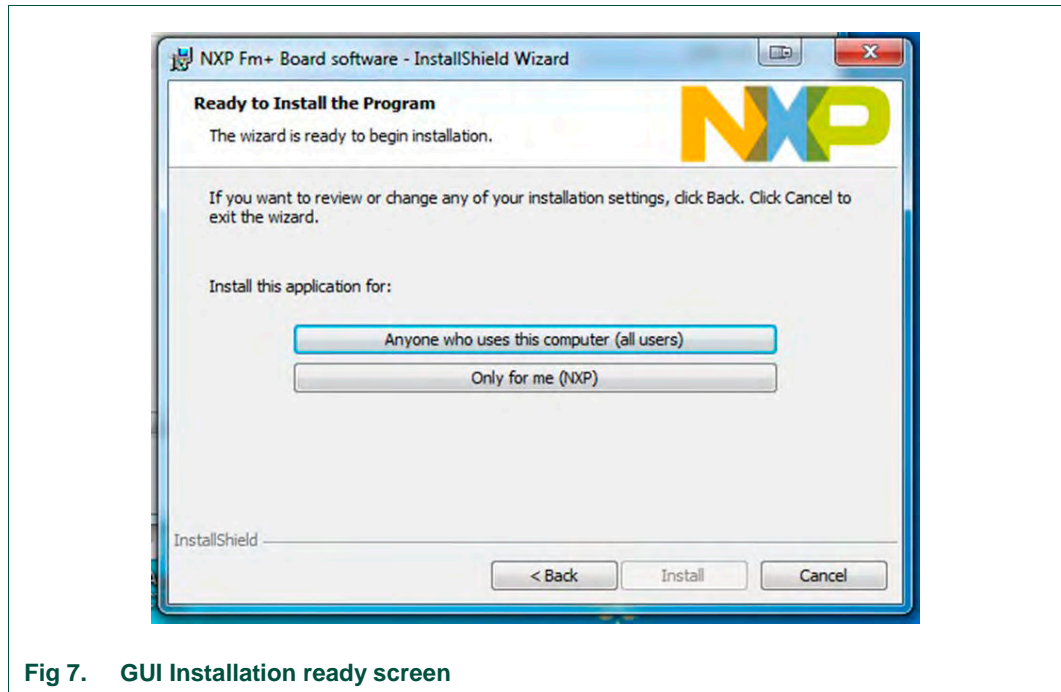


Fig 7. GUI Installation ready screen

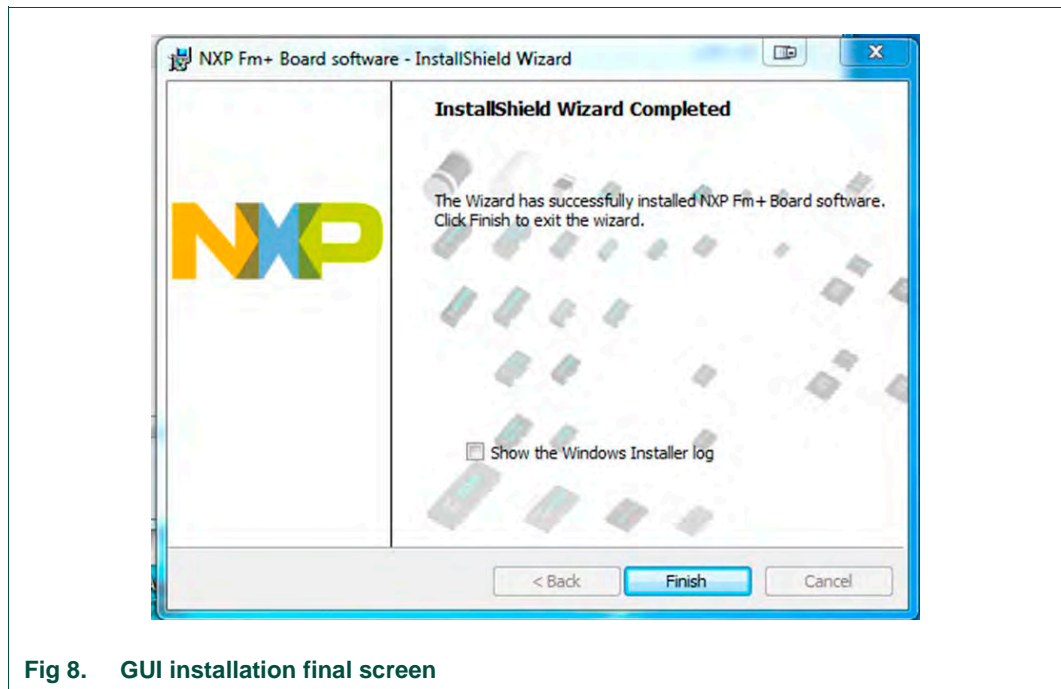


Fig 8. GUI installation final screen



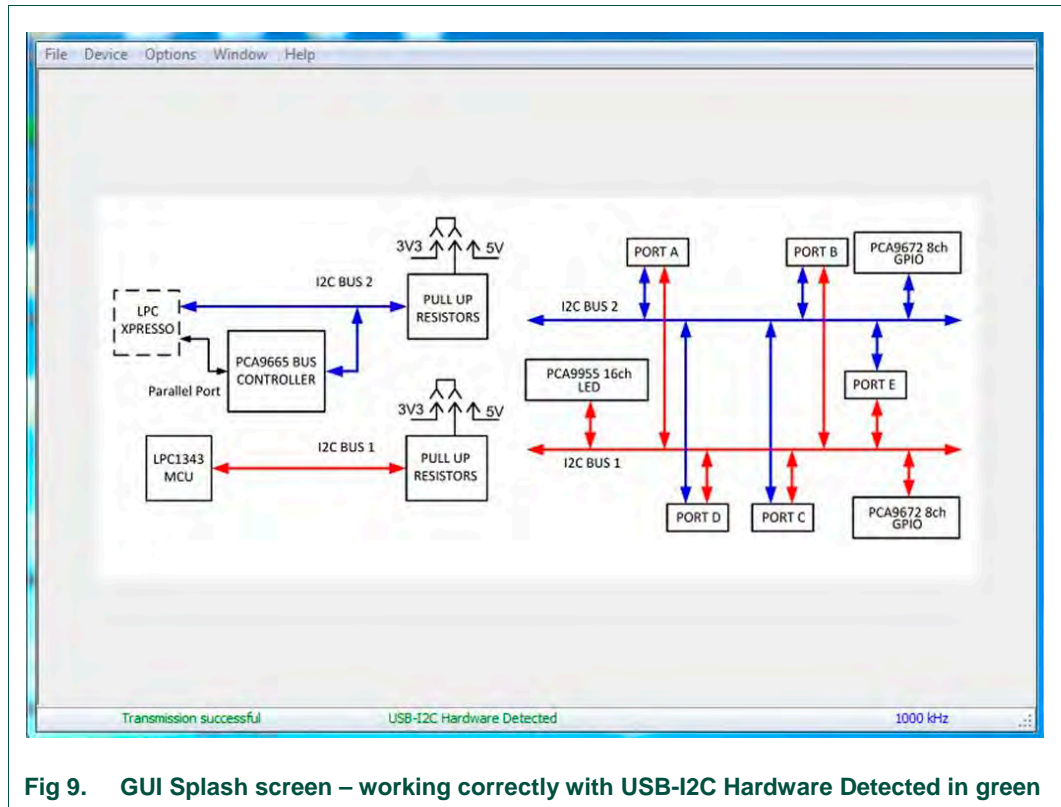


Fig 9. GUI Splash screen – working correctly with USB-I2C Hardware Detected in green

## 4. Legal information

### 4.1 Definitions

**Draft** — The document is a draft version only. The content is still under internal review and subject to formal approval, which may result in modifications or additions. NXP Semiconductors does not give any representations or warranties as to the accuracy or completeness of information included herein and shall have no liability for the consequences of use of such information.

### 4.2 Disclaimers

**Limited warranty and liability** — Information in this document is believed to be accurate and reliable. However, NXP Semiconductors does not give any representations or warranties, expressed or implied, as to the accuracy or completeness of such information and shall have no liability for the consequences of use of such information.

In no event shall NXP Semiconductors be liable for any indirect, incidental, punitive, special or consequential damages (including - without limitation - lost profits, lost savings, business interruption, costs related to the removal or replacement of any products or rework charges) whether or not such damages are based on tort (including negligence), warranty, breach of contract or any other legal theory.

Notwithstanding any damages that customer might incur for any reason whatsoever, NXP Semiconductors' aggregate and cumulative liability towards customer for the products described herein shall be limited in accordance with the Terms and conditions of commercial sale of NXP Semiconductors.

**Right to make changes** — NXP Semiconductors reserves the right to make changes to information published in this document, including without limitation specifications and product descriptions, at any time and without notice. This document supersedes and replaces all information supplied prior to the publication hereof.

**Suitability for use** — NXP Semiconductors products are not designed, authorized or warranted to be suitable for use in life support, life-critical or safety-critical systems or equipment, nor in applications where failure or malfunction of an NXP Semiconductors product can reasonably be expected to result in personal injury, death or severe property or environmental damage. NXP Semiconductors accepts no liability for inclusion and/or use of NXP Semiconductors products in such equipment or applications and therefore such inclusion and/or use is at the customer's own risk.

**Applications** — Applications that are described herein for any of these products are for illustrative purposes only. NXP Semiconductors makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.

Customers are responsible for the design and operation of their applications and products using NXP Semiconductors products, and NXP Semiconductors accepts no liability for any assistance with applications or customer product design. It is customer's sole responsibility to determine whether the NXP Semiconductors product is suitable and fit for the customer's applications and products planned, as well as for the planned application and use of customer's third party customer(s). Customers should provide appropriate design and operating safeguards to minimize the risks associated with their applications and products.

NXP Semiconductors does not accept any liability related to any default, damage, costs or problem which is based on any weakness or default in the customer's applications or products, or the application or use by customer's third party customer(s). Customer is responsible for doing all necessary testing for the customer's applications and products using NXP Semiconductors products in order to avoid a default of the applications and the products or of the application or use by customer's third party customer(s). NXP does not accept any liability in this respect.

**Export control** — This document as well as the item(s) described herein may be subject to export control regulations. Export might require a prior authorization from competent authorities.

**Evaluation products** — This product is provided on an "as is" and "with all faults" basis for evaluation purposes only. NXP Semiconductors, its affiliates and their suppliers expressly disclaim all warranties, whether express, implied or statutory, including but not limited to the implied warranties of non-infringement, merchantability and fitness for a particular purpose. The entire risk as to the quality, or arising out of the use or performance, of this product remains with customer.

In no event shall NXP Semiconductors, its affiliates or their suppliers be liable to customer for any special, indirect, consequential, punitive or incidental damages (including without limitation damages for loss of business, business interruption, loss of use, loss of data or information, and the like) arising out the use of or inability to use the product, whether or not based on tort (including negligence), strict liability, breach of contract, breach of warranty or any other theory, even if advised of the possibility of such damages.

Notwithstanding any damages that customer might incur for any reason whatsoever (including without limitation, all damages referenced above and all direct or general damages), the entire liability of NXP Semiconductors, its affiliates and their suppliers and customer's exclusive remedy for all of the foregoing shall be limited to actual damages incurred by customer based on reasonable reliance up to the greater of the amount actually paid by customer for the product or five dollars (US\$5.00). The foregoing limitations, exclusions and disclaimers shall apply to the maximum extent permitted by applicable law, even if any remedy fails of its essential purpose.

## 5. List of figures

---

Fig 1.	Fm+ Board enumerated as mass storage device on the PC over USB.....	3
Fig 2.	Firmware already loaded on the MCU – delete it .....	4
Fig 3.	Firmware downloaded file on the PC – copy it to MCU.....	4
Fig 4.	GUI installation introduction screen .....	5
Fig 5.	GUI installation License .....	6
Fig 6.	GUI Installation destination folder screen.....	6
Fig 7.	GUI Installation ready screen.....	7
Fig 8.	GUI installation final screen .....	7
Fig 9.	GUI Splash screen – working correctly with USB-I2C Hardware Detected in green .....	8

## 6. Contents

---

1.	<b>Introduction .....</b>	<b>3</b>
2.	<b>Firmware Installation .....</b>	<b>3</b>
3.	<b>GUI Installation .....</b>	<b>4</b>
4.	<b>Legal information .....</b>	<b>9</b>
4.1	Definitions .....	9
4.2	Disclaimers.....	9
5.	<b>List of figures.....</b>	<b>10</b>
6.	<b>Contents.....</b>	<b>11</b>

---

Please be aware that important notices concerning this document and the product(s) described herein, have been included in the section 'Legal information'.

---

© NXP B.V. 2014.

All rights reserved.

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)

Date of release: 25 February 2014

Document identifier: UM10785