1 Introduction

MCUXpresso Config Tools are a suite of evaluation and configuration tools that help guide users from first evaluation to production software development. This document describes how to install the MCUXpresso Config Tools software. The software is available as an online version (using a web browser) and also as a desktop application installed on the host machine. The MCUXpresso Config Tools are used for board level configuration and code-generation, including pin routing with electrical and functional property settings, clock input/output setup with graphical diagram views, and peripheral initialization with parameter validation and quick start selections.

The MCUXpresso Config Tools are for general use and aim to help hardware designers, software engineers, embedded engineers, and field application engineers (FAEs).

The MCUXpresso Config Tools support:

- Graphical views to create and change pins, clocks, and peripherals configuration
- Creation of C source code for device initialization which can be used in any IDE
- Package view with all pins and routable peripherals
- View of routed pins
- Registers with initialization values
- Clock diagram view with highlighted clock paths
- Update existing IDE projects with generated C source code from pins, clocks, and peripherals

NOTE

If the MacOS is set to Traditional Chinese, MCUXpresso starts in English and not Chinese. This is intended.

2 Minimum System Requirements

The following lists the minimum system requirements to install and run the software:

- One of the following graphical operating systems:
  - Microsoft® Windows® 7, 8.1, 10 (32-bit and 64-bit versions supported)
  - Ubuntu 16.04 LTS, 18.04 LTS Linux-hosted variants of the MCUXpresso Config Tools software are distributed as 64-bit binaries, which may not work on 32-bit systems
  - Mac OS X operating system (10.12 Sierra, 10.13 High Sierra, or later)

- 4 GiB RAM
- Display with resolution 1024 x 768
3 Supported Processors

The tool goes with limited data and the supported devices. You can download the additional supported devices later. It requires internet connection to get the data for the supported processors.

4 Limitations

Refer to the Release Notes to see the limitations.

5 Installation

For the desktop setup executable, there is an installer available at https://mcuxpresso.nxp.com

The installer file is about 180 MB in size and includes all the files required for the setup and does not need a connection to the Internet during installation. You can use this method for slow network connections or for installing the software on multiple machines.

Missing device information files are downloaded from the Internet when loading a configuration into the tool.

5.1 Installing on Windows

Two setup binaries are available for Microsoft Windows:

- 64-bit version: Contains "x64" in the installer executable name.
- 32-bit version: Contains "x86" in the installer executable name.

Running a non-matching executable for a given host system, for example 64-bit setup on a 32-bit system, will give an error message dialog.

To install MCUXpresso Config Tools as a desktop application on a local host:

1. Run the MCUXpresso_Config_Tools_<version>_<architecture>.exe.
   
   The MCUXpresso Config Tools Setup wizard starts.
2. Select the language in which you want to run the installer.

3. The setup will prompt you about the installation.

4. Click **Next**.

   The **Select Installation Folder** page of the wizard appears.

5. Click **Browse** and navigate to a destination folder if you want to install the features different from the default folder.

6. Click **Next**.
The **Configure Shortcuts** page appears.

![Configure Shortcuts](image)

**Figure 3. Configure Shortcuts**

7. Click **Next**.

   The **Ready to Install** page appears.
8. Click **Install**.

    The setup begins the installation.

    **NOTE**
    If you want to review or change any of your installation settings, click **Back**. Click **Cancel** to exit the wizard.

    The installer prompts you when the installation completes.
9. Click **Finish** to close and exit the setup wizard.
10. To start using the MCUXpresso Config Tools, run the tool from the shortcut on desktop or from the Start menu. You can also navigate to the <product installation folder>\bin\ folder and launch the tools.exe or launch the shortcut in the <product installation folder>.

5.2 Installing on Mac

To install MCUXpresso Config Tools as a desktop application on a local host:

1. Click the MCUXpresso_Config_Tools_<version>_<architecture>.pkg.

   The Install MCUXpresso Config Tools setup initiates and the Introduction page appears.

   **NOTE**
   
   You may receive an error when trying to open the MacOS installer. To avoid it, manually select the option Mac App Store and identified developers from the Security & Privacy menu.
2. Click **Continue**.
   
   The **Destination Select** page appears.

3. Click the green down arrow to select the disk where you want to install the MCUXpresso Config Tools.
4. Click **Continue**.

   The **Installation Type** page appears.
5. Click **Install**.
   
The **Installation** page appears.

6. Type in your login credentials to continue with the installation.

7. Click **Install Software**.
8. Click **Continue**.

   The **Summary** page prompts that the installation was successfully completed.
9. Click Close to exit the installation wizard.

5.3 Installing on Linux

5.3.1 Installation prerequisites

There are two possible methods to satisfy installation prerequisites:

**Method 1:**
1. Open the terminal.
2. Execute the commands:
   
   ```
   sudo apt-get update
   sudo apt-get upgrade
   sudo apt-get install -f
   sudo dpkg --configure -a
   ```

**Method 2:**
Install directly from terminal/command-line, described in Installing with Debian package manager (DEB).
5.3.2 Installing using Ubuntu Software Center

To install MCUXpresso Config Tools on Ubuntu using Ubuntu Software Center:

1. Click the MCUXpresso_Config_Tools_<version>_<architecture>.deb.
2. The installation prompts you to confirm that you trust the origin of the file.
3. Click Install.
   The setup initiates. To install the package you need to authenticate yourself.
4. Specify your login credentials.
5. Click Authenticate.

   ![Authentication required](image)

6. If the login is successful, the setup installs the MCUXpresso Config Tools software.

   *NOTE*
   Installation prerequisites are necessary due to known Ubuntu bug: [https://bugs.launchpad.net/ubuntu/+source/gnome-software/+bug/1573408](https://bugs.launchpad.net/ubuntu/+source/gnome-software/+bug/1573408).

5.3.3 Installing using Command Line

To install the tools on a Linux system, use the following package files:

- .deb — Use .deb to install software tools on systems that use the Debian package manager. For example, Ubuntu.

5.3.3.1 Installing using Debian package manager (DEB)

To install the tools on Debian-like systems, including Ubuntu, use the .deb package file:

   ```bash
   $ sudo dpkg -i <name>_<version>_<pkg_revision>_<architecture>.deb
   (Reading database ... ... files and directories currently installed.)
   Preparing to replace <name> <version> (using
   <name>_<version>_<pkg_revision>_<architecture>.deb) ...
   Unpacking replacement <name> ...
   Setting up <name> (<version>) ...
   ```

This installs the tools to the default location (/opt/nxp/<default_path>).
5.3.4 Uninstalling using Command Line

To uninstall the tools on a Linux system, use the following package files:

- .deb — Use .deb to install software tools on systems that use the Debian package manager. For example, Ubuntu.

5.3.4.1 Uninstalling using Debian package manager (DEB)

To uninstall the tools on Debian-like systems, including Ubuntu, use the .deb package file:

```bash
$ sudo dpkg -r <package-name>
(Reading database ... .... files and directories currently installed .)
Removing <name> (<version>)
Processing triggers for ...
Rebuilding /usr/share/applications/bamf-2.index...
```
Information in this document is provided solely to enable system and software implementers to use NXP products. There are no express or implied copyright licenses granted hereunder to design or fabricate any integrated circuits based on the information in this document. NXP reserves the right to make changes without further notice to any products herein.

NXP makes no warranty, representation, or guarantee regarding the suitability of its products for any particular purpose, nor does NXP assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation consequential or incidental damages. “Typical” parameters that may be provided in NXP data sheets and/or specifications can and do vary in different applications, and actual performance may vary over time. All operating parameters, including “typicals,” must be validated for each customer application by customer’s technical experts. NXP does not convey any license under its patent rights nor the rights of others. NXP sells products pursuant to standard terms and conditions of sale, which can be found at the following address: nxp.com/SalesTermsandConditions.

While NXP has implemented advanced security features, all products may be subject to unidentified vulnerabilities. Customers are responsible for the design and operation of their applications and products to reduce the effect of these vulnerabilities on customer’s applications and products, and NXP accepts no liability for any vulnerability that is discovered. Customers should implement appropriate design and operating safeguards to minimize the risks associated with their applications and products.

NXP, the NXP logo, NXP SECURE CONNECTIONS FOR A SMARTER WORLD, COOLFLUX, EMBRACE, GREENCHIP, HITAG, I2C BUS, ICODE, JCOPI, LIFE VIBES, MIFARE, MIFARE CLASSIC, MIFARE DESFire, MIFARE PLUS, MIFARE FLEX, MANTIS, MIFARE ULTRALIGHT, MIFARE4MOBILE, MIGLO, NTAG, ROADLINK, SMARTLX, SMARTMX, STARPLUG, TOPFET, TRENCHMOS, UCODE, Freescale, the Freescale logo, Altivec, C-5, CodeTEST, CodeWarrior, ColdFire, ColdFire+, C-Ware, the Energy Efficient Solutions logo, Kinetis, Layerscape, MagniV, mobileGT, PEG, PowerQUICC, Processor Expert, CorIQ, CorIQ Converge, Ready Play, SafeAssure, the SafeAssure logo, StarCore, Symphony, VortiQa, Afast, BeeKit, BeeStack, CoreNet, Flexis, MXC, Platform in a Package, QUIICC Engine, SMARTMOS, Tower, TurboLink, and UMEMS are trademarks of NXP B.V. All other product or service names are the property of their respective owners. AMBA, Arm, Arm7, Arm7TDMI, Arm9, Arm11, Artisan, big.LITTLE, Cordio, CoreLink, CoreSight, Cortex, DesignStart, DynamIQ, Jazelle, Keil, Mali, Mbed, Mbed Enabled, NEON, POP, RealView, SecurCore, Socrates, Thumb, TrustZone, ULINK, ULINK2, ULINK-ME, ULINK-PLUS, ULINKpro, µVision, Versatile are trademarks or registered trademarks of Arm Limited (or its subsidiaries) in the US and/or elsewhere. The related technology may be protected by any or all of patents, copyrights, designs and trade secrets. All rights reserved. Oracle and Java are registered trademarks of Oracle and/or its affiliates. The Power Architecture and Power.org word marks and the Power and Power.org logos and related marks are trademarks and service marks licensed by Power.org.

© 2016-2018 NXP B.V.