



## Pre-requisites MCUXpresso IDE installation and SDK download

### 1. Install MCUXpresso v10.3.1

Goto : <https://www.nxp.com/support/developer-resources/software-development-tools/mcuxpresso-software-and-tools/mcuxpresso-integrated-development-environment-ide:MCUXpresso-IDE>

#### 1.1 Sign in or register an account if you do not have one with Nxp.com

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#### 1.2 Download MCUXpresso IDE v10.3.1

← → ↻ <https://www.nxp.com/support/developer-resources/software-development-tools/mcuxpresso-software-and-tools/mcuxpresso-integrated-development-e...>

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🏠 Developer Resources > Software Development Tools > MCUXpresso Software and Tools > MCUXpresso Integrated Development Environment (IDE)

MCUBOOT: MCU Bootloader for NXP microcontrollers  
MCUXpresso Config Tools - Pins, Clocks, Peripherals  
MCUXpresso Software Development Kit (SDK)  
**MCUXpresso Integrated Development Environment (IDE)**

MCUXpresso Integrated Development Environment (IDE) DOWNLOADS DEVELOPMENT TOOLS TRAINING & SUPPORT

**Jump To**

- Overview & Features
- Supported Devices
- Target Applications
- System Requirements

**Overview**

The MCUXpresso IDE brings developers an easy-to-use Eclipse-based development environment for NXP® MCUs based on Arm® Cortex®-M cores, including LPC and Kinetis® microcontrollers and i.MX RT crossover processors. The MCUXpresso IDE offers advanced editing, compiling and debugging features with the addition of MCU-specific debugging views, code trace and profiling, multicore debugging, and integrated configuration tools. The MCUXpresso IDE debug connections support Freedom, Tower® system, LPCXpresso, i.MX RT, and your custom development boards with industry-leading open-source and commercial debug probes from NXP P&E Micro® and

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**Features**

- A free-of-charge, code size unlimited, easy-to-use IDE for Kinetis and LPC MCUs, and i.MX RT crossover processors
- Advanced editing, compiling and editing with MCU-specific debugging views, code trace, and profiling
- Integrated configuration tools, including pins, clocks and peripheral tools
- Industry-standard GNU toolchain with a choice of libraries: optimized C library or the standard GNU Newlib-Nano library with support for semihosting
- Managed make files and linker files
- Built-in support for LPC Cortex-M MPU in secure





## 1.5 Choose the IDE per your laptop OS(Linux, Mac or Windows) and install

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### Product Download

MCUXpresso IDE

Files License Keys Notes

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File Description	File Size	File Name
MCUXpresso v10.3.1 - Linux	753.4 MB	mcuxpressoide-10.3.1_2233_x86_64.deb bin
MCUXpresso v10.3.1 - Mac	720.8 MB	MCUXpressoIDE_10.3.1_2233.pkg
MCUXpresso v10.3.1 - Windows	675.8 MB	MCUXpressoIDE_10.3.1_2233.exe
Readme MCUXpresso 10.3.1	53.7 KB	Readme MCUXpresso 10.3.1.pdf

Download Selected Files

## 2 Download LPC55S69 SDK for Handon

Goto : [https://www.nxp.com/support/developer-resources/software-development-tools/mcuxpresso-software-and-tools/mcuxpresso-software-development-kit-sdk:MCUXpresso-SDK?lang=en&lang\\_cd=en&](https://www.nxp.com/support/developer-resources/software-development-tools/mcuxpresso-software-and-tools/mcuxpresso-software-development-kit-sdk:MCUXpresso-SDK?lang=en&lang_cd=en&)

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### MCUXpresso Software Development Kit (SDK)

Follow

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**Jump To**

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**Overview**

The MCUXpresso SDK is a comprehensive software enablement package designed to simplify and accelerate application development with NXP's LPC and Kinetis® microcontrollers and i.MX RT crossover processors based on Arm® Cortex®-M cores. The MCUXpresso SDK includes production-grade software with integrated RTOS (optional), integrated stacks and middleware, reference software, and more.

Underscoring highest quality, the MCUXpresso SDK is MISRA compliant and checked with Coverity® static analysis tools and is available in custom downloads based on user selections of MCU, evaluation board, and optional software components.

**Features**

The MCUXpresso SDK consists of the following runtime software components:

- Arm® CMSIS-CORE startup and device header files and CMSIS-DSP standard libraries
- Open-source peripheral drivers that provide stateless, high performance, easy-to-use APIs
- Drivers for communication peripherals also include high-level transactional APIs for high-performance data transfers and RTOS wrappers that leverage native RTOS services to better comply with the RTOS cases

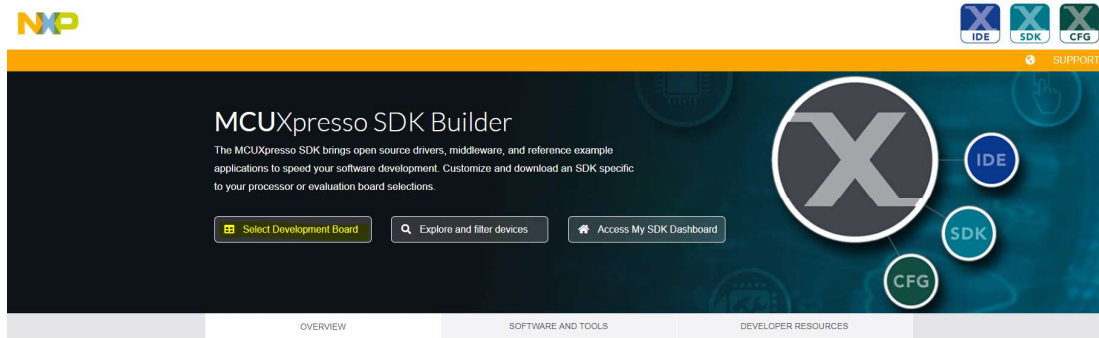
Use multiple software: all drivers and startup code are

More

User Guide Download

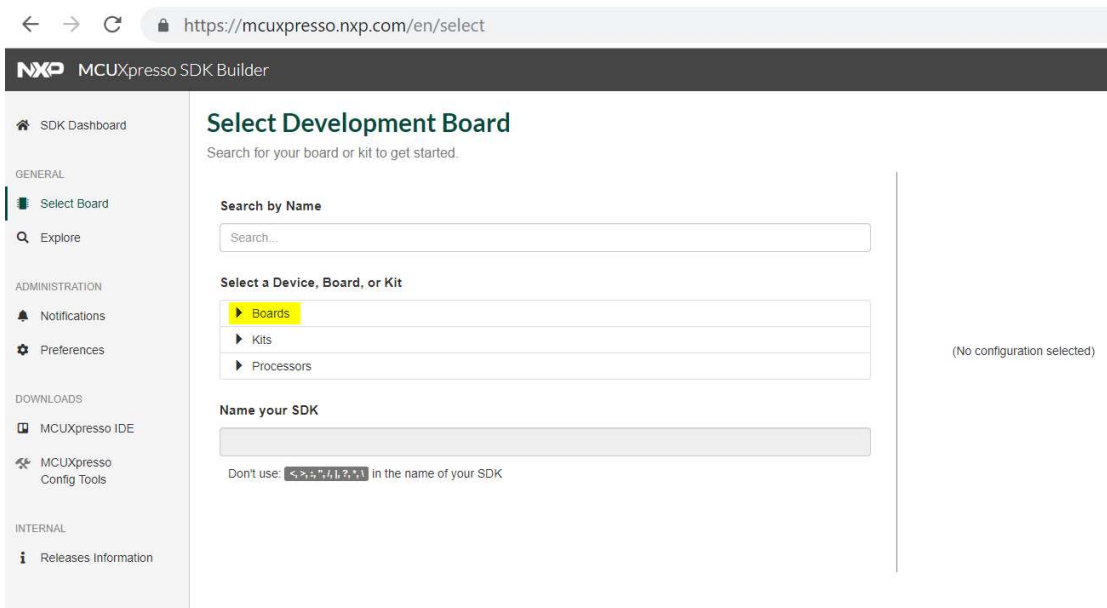


## 2.1 Click Select Development Board



Getting started with MCUXpresso SDK is simple.

## 2.1 Select Boards







## 2.4 Add Software Component

The screenshot shows the NXP MCUXpresso SDK Builder web interface. The main content area is titled "SDK Builder" and includes a "Developer Environment Settings" section with dropdowns for Host OS (Windows) and Toolchain / IDE (MCUXpresso IDE), and a dropdown for SDK Version (2.5.1 REL\_SDK\_NIOBE4\_2.5.1\_RFP\_RC1). Below this is a "Select Optional Middleware" section with an "Add software component" button. A "Download SDK" button is also visible. On the right, "Hardware Details" and "SDK Details" are displayed. The hardware details for the LPCXpresso55S69 board include device, core type, and memory information. The SDK details show the version, tag, host OS, toolchain, and middleware (multicore, USB stack, Amazon-FreeRTOS Kernel).

## 2.5 Select All then Save Changes

The screenshot shows the NXP MCUXpresso SDK Builder web interface with the "Select Software Components" dialog box open. The dialog box has a search bar and a list of 14 items selected. The "Select All" button is highlighted. The list of components includes CMSIS DSP Library, Middleware (AVS IoT, emWin, FatFS, ISSDK, mbedTLS, mcu-boot, multicore, NTAG I2C, sdmmc stack, USB stack, USB Type-C PD stack, wif\_gca), Operating System (Amazon-FreeRTOS Kernel), and other components. The "Save changes" button is highlighted. The background shows the same SDK Builder interface as in the previous screenshot.



## 2.6 Choose the MCUXpresso OS that you installed

MCUXpresso SDK Builder

### SDK Builder

Generate a downloadable SDK archive for use with desktop MCUXpresso Tools.

**Developer Environment Settings**  
Selections here will impact files and examples projects included in the SDK and Generated Projects

Host OS: Windows (selected)  
Toolchain / IDE: MCUXpresso IDE  
SDK Version: 2.5.1 (Released: 2019-04-18)

**Select Optional Middleware**  
Add middleware, operating systems, and software libraries to your SDK.

[Add software component](#)

This MCUXpresso SDK configuration is available for direct download

Archive Name: SDK\_2.5.1\_LPCXpresso55S69  
Don't use: [x.x.x.x.x.x.x] in the name of your SDK

[Download SDK](#)

**Hardware Details**

Board: LPCXpresso55S69  
Device: LPC55S69  
Core Type / Max Freq: Cortex-M33 / 100MHz  
Device Memory Size: 608 KB Flash, 304 KB RAM

**SDK Details**

SDK Version: 2.5.1 (released 2019-04-18)  
SDK Tag: REL\_SDK\_NIOBE4\_2.5.1\_RFP\_RC1  
Host OS: Windows  
Toolchain: MCUXpresso IDE

**Documentation**

Base SDK: [MCUXpresso SDK API Reference Manual](#)  
Middleware: [ISSDK API Reference Manual](#)

**Additional Links**

[If using MCUXpresso IDE, please note that LPCXpresso55S69 requires MCUXpresso IDE v10.3.1 or later](#)

## 2.7 Choose the Toolchain IDE

MCUXpresso SDK Builder

### SDK Builder

Generate a downloadable SDK archive for use with desktop MCUXpresso Tools.

**Developer Environment Settings**  
Selections here will impact files and examples projects included in the SDK and Generated Projects

Host OS: Windows  
Toolchain / IDE: MCUXpresso IDE (selected)  
SDK Version: 2.5.1 REL\_SDK\_NIOBE4\_2.5.1\_RFP\_RC1

**Select Optional Middleware**  
Add middleware, operating systems, and software libraries to your SDK.

[Add software component](#)

This MCUXpresso SDK configuration is available for direct download

Archive Name: SDK\_2.5.1\_LPCXpresso55S69  
Don't use: [x.x.x.x.x.x.x] in the name of your SDK

[Download SDK](#)

**Hardware Details**

Board: LPCXpresso55S69  
Device: LPC55S69  
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**SDK Details**

SDK Version: 2.5.1 (released 2019-04-18)  
SDK Tag: REL\_SDK\_NIOBE4\_2.5.1\_RFP\_RC1  
Host OS: Windows  
Toolchain: MCUXpresso IDE

**Documentation**

Base SDK: [MCUXpresso SDK API Reference Manual](#)  
Middleware: [ISSDK API Reference Manual](#)

**Additional Links**

[If using MCUXpresso IDE, please note that LPCXpresso55S69 requires MCUXpresso IDE v10.3.1 or later](#)



## 2.8 Download the SDK

The screenshot shows the NXP MCUXpresso SDK Builder web interface. The browser address bar shows the URL <https://mcuxpresso.nxp.com/en/builder>. The page title is "MCUXpresso SDK Builder".

**GENERAL**

- SDK Dashboard
- Select Board
- Explore

**ADMINISTRATION**

- Notifications
- Preferences

**DOWNLOADS**

- MCUXpresso IDE
- MCUXpresso Config Tools

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- Releases information

**SDK Builder**

Generate a downloadable SDK archive for use with desktop MCUXpresso Tools.

**Developer Environment Settings**

Selections here will impact file and examples projects included in the SDK and Generated Projects

Host OS: Windows | Toolchain / IDE: MCUXpresso IDE

SDK Version: 2.5.1 REL\_SDK\_NIOBE4\_2.5.1\_RFP\_RC1 (Released: 2019-04-18)

**Select Optional Middleware**

Add middleware, operating systems, and software libraries to your SDK

[Add software component](#)

**This MCUXpresso SDK configuration is available for direct download**

Archive Name: SDK\_2.5.1\_LPCXpresso55869

Don't use `xxxx(Linux)` in the name of your SDK

[Download SDK](#)

**Hardware Details**

Board: LPCXpresso55869  
Device: LPC55869  
Core Type / Max Freq: Cortex-M33 / 100MHz  
Device Memory Size: 608 KB Flash, 304 KB RAM

**SDK Details**

SDK Version: 2.5.1 (released 2019-04-18)  
SDK Tag: REL\_SDK\_NIOBE4\_2.5.1\_RFP\_RC1  
Host OS: Windows  
Toolchain: MCUXpresso IDE

**Middleware:** SDK v2.5.x requires MCUXpresso IDE v10.3.x or later

**Documentation**

- Base SDK: [MCUXpresso SDK API Reference Manual](#)
- Middleware: [ISSDK API Reference Manual](#)

**Additional Links**

[If using MCUXpresso IDE, please note that LPCXpresso55869 requires MCUXpresso IDE v10.3.1 or later](#)