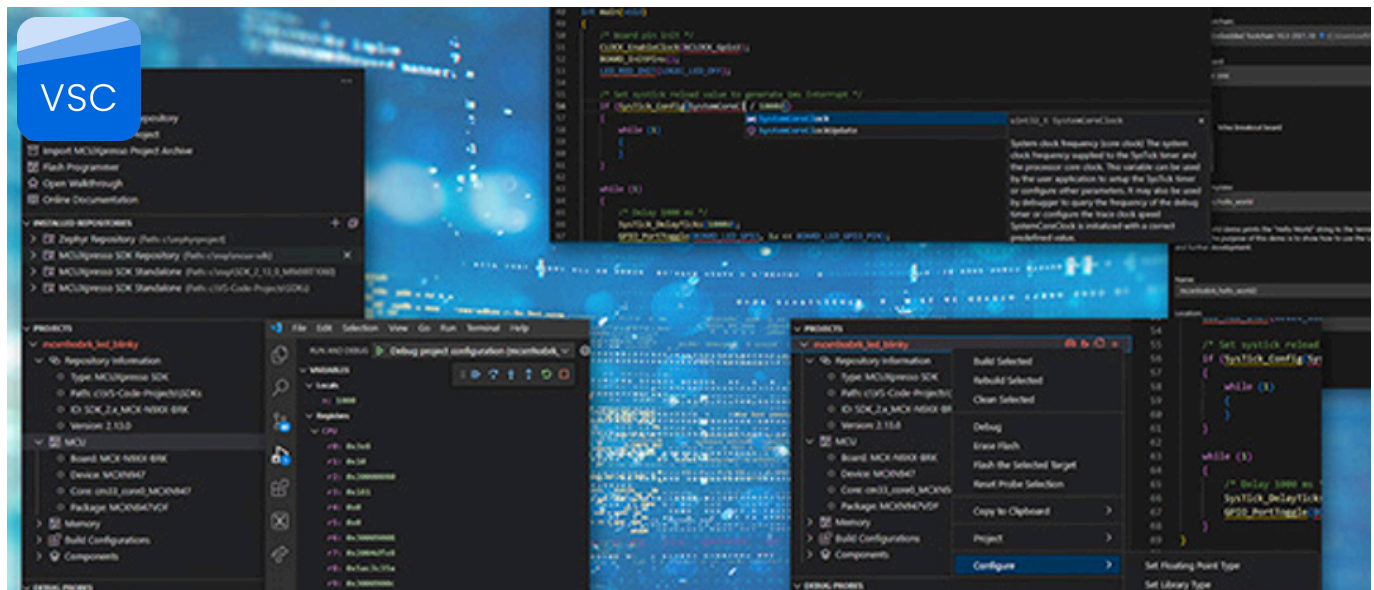


# MCUXpresso for Visual Studio Code Supports NXP's Arm® Cortex®-M MCUs



Collage of Visual Studio Code interface screenshots highlighting coding and debugging features.

[MCUXpresso for Visual Studio Code](#) (VS Code) provides an optimized embedded developer experience for code editing and development. The extension enables NXP developers to use one of the most popular embedded editor tools. MCUXpresso for VS Code supports NXP MCUs based on Arm® Cortex®-M cores including [MCX](#), [LPC](#), [Kinetis](#) and [i.MX RT](#). MCUXpresso for VS Code allows developers the flexibility to work on projects from Matter, Zephyr, or MCUXpresso SDK.

The extension provides full support for MCUXpresso software drivers and middleware, enabling developers to use this highly popular IDE for fast and responsive coding using MCUXpresso SDK. The extension is complemented by the easy-to-use MCUXpresso Installer, which manages the installation of all the other components needed such as Python, toolchains and debug probe drivers. Matter and Zephyr developers will find an optimized environment in VS Code that makes it easier to explore modern technologies built on open standards.

## Benefits

- Fast. Quickly launch and get started
- Editor first and foremost
- Flexible Marketplace extensions
- CMake + Kconfig based projects
- Optimized Tools and Views for NXP developers

Designed to ease and accelerate embedded system development and optimization, the **MCUXpresso Software and Tools** ecosystem brings high-quality, comprehensive enablement to NXP's general-purpose, crossover and wireless enabled Arm Cortex-M-based MCUs, allowing easy migration and scalability between families.

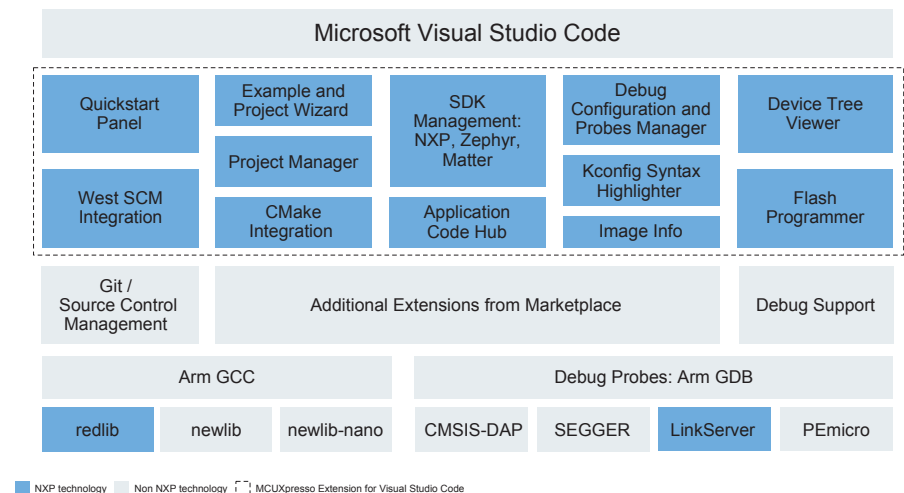
## VS code features

- **Fast** launch time from click-to-edit
- **Explorer** to view workspace/folders/files
- **GitHub** for source control management
- **Extension marketplace** for new plugin features
- **Code editing** macros, multi-cursor, snippets
- **Terminal** integrated to run shell commands
- **Syntax highlighting** for readable C/C++ code
- **IntelliSense** code completion, parameter info, quick info and member lists
- **Run and debug** helpful tools
  - Toolbar: continue/pause/step/stop...
  - Breakpoints and logpoints
  - Variables
  - Registers
  - Watch lists
  - Call Stack
  - RTOS/thread Awareness
  - Peripheral view: Control/Status registers
  - Memory editor
  - Disassembly
  - Memory Viewer
  - SWO
  - Heap and Stack
- **Profiles** allow switching between extensions. Isolate setting conflicts. Allows sharing setup

## NXP enhancements

- **MCUXpresso installer** handles complex tool dependencies
- **Quickstart panel** for most common operations
- **SDK management**
  - Matter
  - Zephyr
  - MCUXpresso SDK
- **Import/create** projects
  - Application code hub
  - SDK examples
  - MCUXpresso IDE migration
  - Arm GNU Compiler (GCC)
  - CMake + Kconfig based

- **Debug probe** configuration for LinkServer, SEGGER, and PEmicro
- **Image info** of project static callgraph & memory
- **Heap & stack usage** displays memory use levels
- **Flash programmer** with extended command UI
- **Devicetree** helps view/edit and create overlays
- **Kconfig configuration** GUI launches from project
- **MCUXpresso config tools** launch for pins, clocks, peripherals and trusted execution



## Get Started:

Learn more: [nxp.com/vscode](https://nxp.com/vscode)

Join the [MCUXpresso for VS Code Community](https://nxp.com/vscode)

Professional support and services: [nxp.com/services](https://nxp.com/services)

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