

Feature-rich and easy-to-use Eclipse-based integrated development environment (IDE)

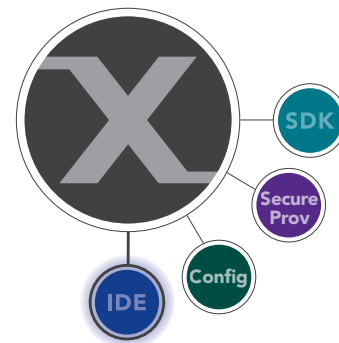
MCUXpresso IDE for NXP's Arm[®] Cortex[®]-M-Based MCUs

Application development with Eclipse and GCC-based IDE for advanced editing, compiling, and debugging for general purpose, crossover and Bluetooth[®]-enabled Arm Cortex-M-based MCUs from NXP.

MCUXpresso IDE

The MCUXpresso IDE enables powerful application development for general-purpose, crossover and Bluetooth[®]-enabled Arm Cortex-M-based MCUs from NXP. 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 more.

- Feature-rich IDE with integrated MCUXpresso config tools (pins, clocks, peripherals, device configuration and TEE)
- Based on industry-standard Eclipse and GCC providing a powerful application development environment
- Supports Freedom, Tower[®], LPCXpresso, i.MX RT and your own custom boards with plug-and-play support for debug probes from NXP, P&E*, and SEGGER
- Fully featured, no code size limits, with many MCU-specific enhancements
- Includes pre-built SDK packages for easy device/board selections



The MCUXpresso IDE is part of the cohesive suite of MCUXpresso Software and Tools, and is inherently compatible with the MCUXpresso Software Development Kit (SDK), the MCUXpresso Config Tools suite, and the MCUXpresso Secure Provisioning Tool.

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

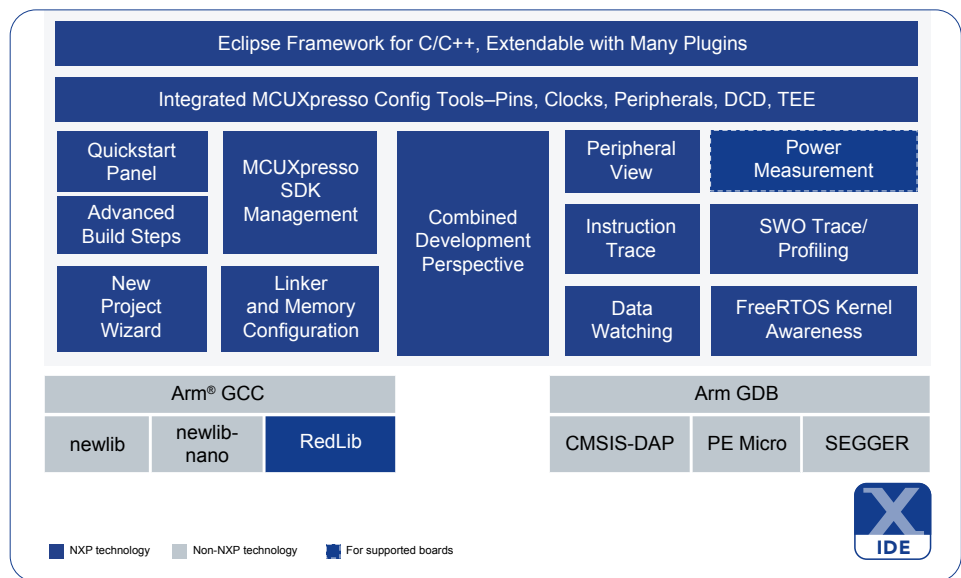
* Only specific versions of P&E Micro probes. Check with P&E Micro for more details.



FEATURES

- A complimentary code-size-unlimited IDE for general-purpose, crossover and Bluetooth-enabled Arm Cortex-M-based MCUs from NXP
- Based on extensible and feature-rich Eclipse IDE with specific enhancements to simplify MCU application development and debugging
- Industry-standard GNU toolchain with a choice of libraries: Arm newlib C/C++ library, Arm newlib-nano library, and an optimized, small footprint NXP RedLib library
- Single installation image with on-demand SDK and device support files
- SDK wizards to create and clone projects
- Support for customizing and exporting SDK packages
- Manager to view full details of all SDK components
- Support for LPCOpen and Kinetis® SDK v2
- Drag-and-drop importing of projects and MCUXpresso SDK packages
- ITM feature supporting very low overhead data I/O streaming over SWO
- Advanced views for instruction trace, SWO trace, profiling, data watching and peripheral viewing
- Editor awareness functionality for linker map files, linker scripts and linker script templates, providing syntax coloring as well as navigation of file content
- Support for Cortex-M33 secure / non-secure projects
- “Faults” view to analyze Cortex-M CPU’s fault registers and stack backtrace
- Instruction trace view support (for target MCUs with MTB or ETB hardware)

MCUXpresso IDE BLOCK DIAGRAM



- Image info view gives a breakdown analysis of a project build, including overall memory usage, content of memory regions and static call graph (including stack usage information)
- Heap and stack usage view provides ability to track heap and stack usage
- FreeRTOS Task Aware Debugger (TAD) functionality directly implemented within the IDE
- GUI flash programming tool
- Live variable viewing for all probe types, with graphing option
- Peripheral and core register views
- Integrated serial terminal for simplified use of board VCOM features
- Extendible with thousands of Eclipse plug-ins
- Supported host operating systems:
 - Microsoft® Windows® 8/10 (64 bit only)
 - Ubuntu Linux® 16.04 LTS and 18.04 LTS (64 bit only)
 - Mac OS X 10.11 and later

GET STARTED:

Learn more:

www.nxp.com/mcuxpresso/ide

Join the MCUXpresso IDE community:

<https://community.nxp.com/community/mcuxpresso/mcuxpresso-ide>

Professional Support & Services:

www.nxp.com/services

www.nxp.com/mcuxpresso/ide

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