

Unified tool suite for embedded software development on Arm® Cortex®-M cores

MCUXpresso Software and Tools

The MCUXpresso SDK, IDE and configuration tools speed development time with highest quality software and tools for Kinetis and LPC microcontrollers and i.MX RT crossover processors from NXP.

NXP's MCUXpresso software and tools offer comprehensive development solutions designed to optimize, ease and accelerate embedded system development of applications based on Cortex-M core devices, including Kinetis and LPC microcontrollers, and i.MX RT crossover processors.

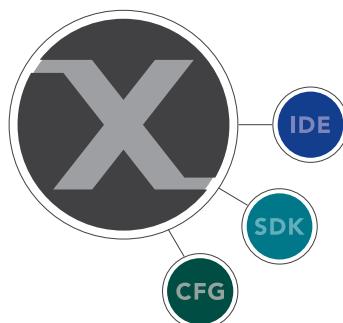
The common set of MCUXpresso software and tools offers designers a high-quality and flexible toolset and software framework that includes:

- ▶ An open-source software development kit (SDK) built specifically for your processor and evaluation board selections
- ▶ An easy-to-use integrated development environment (IDE), with integrated configuration tools, for creating, building and debugging and optimizing your application.
- ▶ A comprehensive suite of system configuration tools, including pins, clocks, and peripherals tools, with easy project updating and generation.

COHESIVE AND COMPATIBLE SOFTWARE AND TOOLS

Developed as a cohesive set of software development tools, MCUXpresso software and tools bring together the best of NXP's software enablement into one enablement platform for a shared software experience across a broader set of Cortex-M MCUs. The toolkit supports the Kinetis, LPC, and i.MX RT portfolios, further streamlining end application development and enabling easy migration and scalability for your future design needs.

MCUXpresso Software and Tools



A cohesive software framework shared across the MCUXpresso SDK, IDE and configuration tools brings inherent compatibility. This framework also eases your design with a complete set of synergistic development tools that also support a large ecosystem of third-party partner IDEs.

MCUXpresso SDK

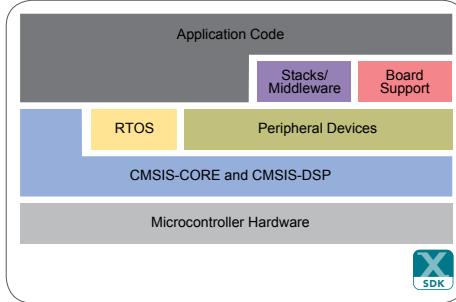
Created as a software framework and reference for application development with NXP's i.MX RT crossover processors and Kinetis and LPC microcontrollers based on Arm Cortex-M cores, MCUXpresso SDK includes production-grade software with integrated RTOS (optional), integrated stacks and middleware, reference software, and more. Underscoring the highest quality, MCUXpresso SDK is MISRA-compliant and checked with Coverity® static analysis tools. This SDK is available in custom downloads based on user selections of MCU, evaluation board, and optional software components.

Learn more at

www.nxp.com/mcuxpresso/sdk



MCUXpresso SDK BLOCK DIAGRAM



MCUXpresso IDE

The GNU and Eclipse-based MCUXpresso IDE brings developers an easy-to-use and unlimited code size development environment for NXP MCUs based on Cortex-M cores (LPC, Kinetis, and i.MX RT portfolios). Full-featured and code size unlimited, MCUXpresso IDE provides an intuitive and powerful interface for professional editing, compiling and debugging at no cost. The MCUXpresso IDE offers integrated configuration tools, profiling, power measurement on supported boards, GNU tool integration and library, multicore-capable debugger, trace functionality and more. MCUXpresso IDE debug connections support Freedom, Tower®, LPCXpresso, i.MX RT EVK and your custom development boards with industry-leading open-source and commercial debug probes including LPC-Link2, P&E and SEGGER.

Learn more at

www.nxp.com/mcuxpresso/ide



MCUXpresso CONFIG TOOLS

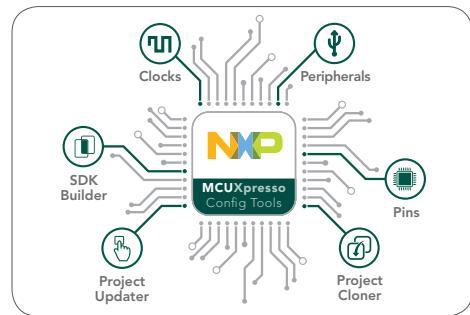
Offered as a suite of evaluation and configuration tools, MCUXpresso config tools helps guide users from first evaluation to production software development when developing with Kinetis and LPC microcontrollers. Available in online and desktop editions, MCUXpresso config tools include an SDK builder, a project generator, and pin, clock and peripheral tools which generate initialization C code for custom board support. The configuration tools also enable easy project updating and cloning within the MCUXpresso IDE and for use with third party IDEs.

Learn more at

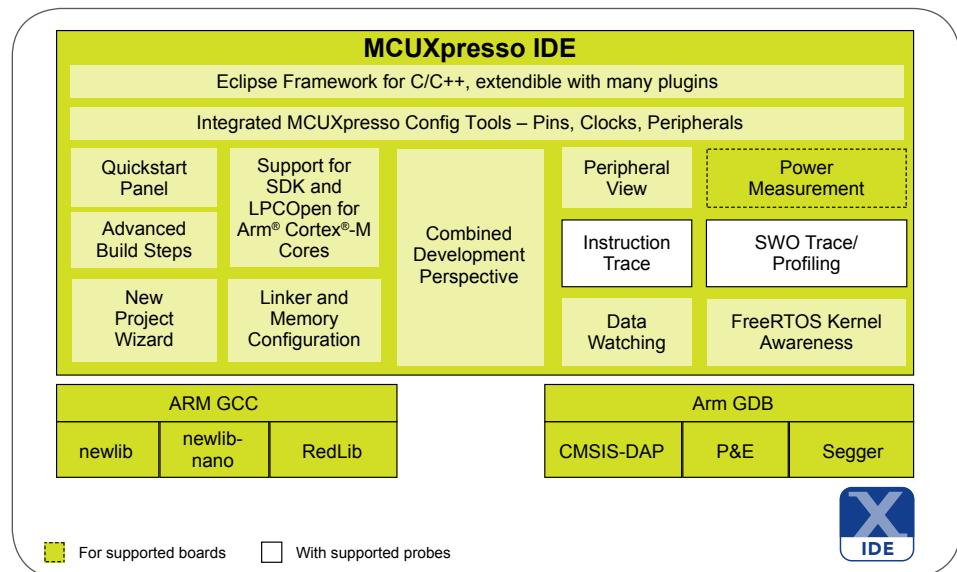
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MCUXpresso CONFIG TOOLS



MCUXpresso IDE BLOCK DIAGRAM



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