



# NXP LPC5500 Family 1-Day Workshop

## Course Description

The LPC5500 1-Day Workshop is an introduction to the latest NXP LPC MCU family.

The course starts by overviewing the LPC5500 Family architecture, roadmap and its Target applications.

The objective of this course is to give you a “first foot in the door” exposure to programming the LPC55S69 series of the LPC5500 family of MCUs from NXP and introduces you to key elements of the LPC55S69 through hands-on practice, in a series of labs, that cover different topics.

You will learn how to use software developers’ tools, such as the MCUXpresso IDE, to create and configure different types of projects from scratch, and learn how to build, download and debug these projects on the LPC55S69-EVK development board.

Through these hands-on labs and learn by doing approach, we will focus on learning a variety of topics, including: Software/Tools Configuration, Power Management, Multi-Core Programming, DSP Acceleration, Cryptography, Hashing, Security and more...

## Course Duration: 1-Day

## Goals

1. Become familiar with LPC5500 architecture
2. Become familiar with Cortex-M33 multicore development (setup, debugging, inter-cpu communication, etc.)
3. Optimize power consumption using various processor modes and PMU
4. Become familiar with the LPC5500 security features and IPs (Secure Boot, TrustZone, Cryptography Accelerators, PUF, etc.)
5. Apply PowerQuad efficiently to improve modern IoT applications performance and throughput



When innovation meets expertise...



## Target Audience

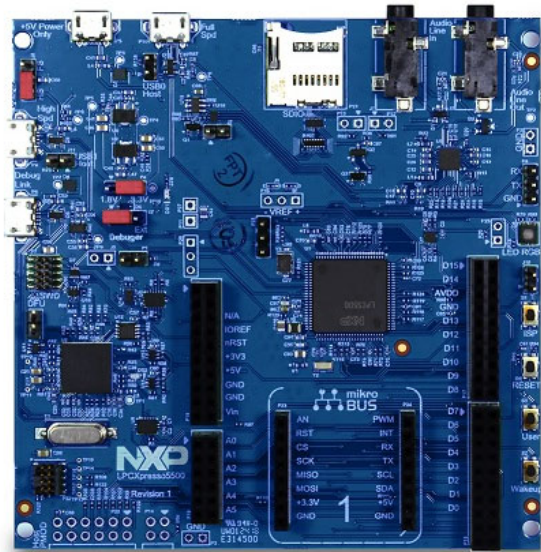
Software engineers that would like developing modern IoT applications on the LPC5500 family.

## Prerequisites

- Computer architecture background
- ARM architecture is an advantage but not mandatory
- Experience in developing embedded systems
- C/C++ knowledge

## LPCXpresso55S69 development board (LPC55S69-EVK)

The LPCXpresso™ family of boards provides a powerful and flexible development system for NXP's Cortex-M family of MCUs. The LPCXpresso55S69 board has been developed by NXP to enable evaluation of and prototyping with the LPC55S69 MCU.



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