

# TN00026

## LPC5410x Power Library Source Code

Rev. 1.1 — 5 March 2018

Technical Note

### Document information

| Info            | Content  |
|-----------------|--|
| <b>Keywords</b> | LPC5410x, power library source code, LPCOpen   |
| <b>Abstract</b> | This technical note provides the source code of the power library used with the LPCOpen software platform. |



## Revision history

| Rev | Date     | Description   |
|-----|----------|---|
| 1.1 | 20180305 | <ul style="list-style-type: none"><li>Removed SDK software support.</li></ul> |
| 1.0 | 20171121 | Initial version   |

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## 1. Introduction

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The LPC5410x is a family of ARM Cortex-M4/Cortex-M0+ based microcontrollers for embedded applications. On the LPC5410x, power API functions are available to configure the system clock and set up the system for expected performance requirements. The power APIs allow to control power consumption and wake-up in all power modes. It has the following features:

- Manage power consumption for sleep and active modes.
- Prepare the device to enter low power modes (sleep, deep-sleep, and deep power-down).
- Configure wake-up from deep-sleep via functions enabled by bits in the PDRUNCFG0 register.

## 2. Description

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The Power APIs are available in the power library provided with the LPCOpen software package available on [nxp.com](http://nxp.com)

This technical note provides the source code of the power library. It is intended for users who would like to have the power library source code in their software platform instead of using the library. **The user should not modify the power library source code and must comply with the power API functions defined in the user manual.** Any change to the power library source code can cause an application failure. NXP is not responsible for any change to the power library code and is not obligated to provide support.

In addition to the technical note, a Power Management Unit (PMU) software example is provided showing the usage of the power library source code. Note that the wake-up time from the low power modes can vary depending upon the optimization selected in the compiler.

The PMU example is available in three tool chains:

- MCUXpresso IDE.
- Keil MDK.
- IAR Workbench.

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