

# IEC60730BCM4CM7L43RN

IEC60730B Library Release notes CM4/CM7 v4.3

Rev. 0 — 30 September 2022

Release notes

## 1 Introduction

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IEC60730B\_CM4\_CM7\_4\_3 is the actual version of the core self-test library for NXP devices with the CM4 and CM7 core. The library is certified by VDE/UL. It is dedicated for use in applications compliant with the Safety class B standard (specified by IEC 60730, IEC60335 and/or UL 60730, and UL 1998).

The library is released in a pre-compiled format, together with functional example projects and documentation describing the respective tests.

The library is created in close cooperation with the application team, who have vast experience in customer projects. The customer feedback is also taken into consideration.

## 2 What is new

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When compared to the previous version of the library, the main changes are:

- The AIO functions were rewritten according to customer requests. Now, a similar approach to that of the DIO is adapted. Please see the corresponding chapter in the library user guide.
- The following devices were added to the CM4/CM7 library: MIMXRT104x.

### 2.1 Description

The supported devices are the following:

- MKV3x
- MKV4x
- MKV5x
- MKE1xF
- MK2xF
- MIMXRT10xx
- MIMXRT117x
- MIMXRT116x
- MIMX8MNx
- MIMX8MMx
- LPC540x
- LPC54S0x
- K32L3Ax

The supported/recommended IDEs are the following:

- IAR v9.30.1 and higher
- Keil  $\mu$ Vision V5.37(C compiler V6) and higher
- MCUXpresso IDE V11.6



The tested components are the following:

- CPU registers
- Program counter
- Variable memory (RAM)
- Invariable memory (flash)
- Clock
- Digital I/O
- Analog I/O
- Stack
- Watchdog
- Touch Sensing Interface (TSI)

## 3 Optimizations, improvements, and changes

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### 3.1 Library

The AIO functions were rewritten in an approach similar to the DIO test. For more information, see the dedicated chapter in the respective library user guide for your device.

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The following devices were added to the CM4/CM7 library: MIMXRT104x.

### 3.2 Documentation

The documentation for the library is a part of the SDK package and it is also available at [www.nxp.com/iec60730](http://www.nxp.com/iec60730).

The documentation of the IEC60730B library consists of:

- IEC60730B\_Library\_User\_Guide\_CM4\_CM7\_v4\_3.pdf
- IEC60730B\_Library\_Release\_Notes\_CM4\_CM7\_v4\_3.pdf

The example applications have their dedicated release notes and user guides.

### 3.3 Functional example projects

All information about the IEC60730B library is available at [www.nxp.com/iec60730](http://www.nxp.com/iec60730).

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