RN00130

IEC60730B Library Release notes CM0 v4_4

Rev. 0 — 7 December 2023

Document information

Information	Content
Keywords	IEC 60730, IEC 60335, UL 60730, UL 1998
Abstract	The library is released in a pre-compiled format, together with functional example projects and documentation describing the respective tests.

1   Introduction

IEC60730B_CM0_4_4 is the actual version of the core self-test library for NXP devices with the CM0+ 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

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

- The *FS_CLK_CTIMER_LPC()* function was renamed to *FS_CLK_CTIMER()* due to new family support.
- The following devices were added to the CM0+ library: MKE17Z512.

2.1 Description

The supported devices are the following:

- MKV1x
- MKLxx
- MKE0x
- MKE1xZ
- MKW3x
- K32L2Axx
- K32L2Bxx
- K32L3Ax
- LPC51U68
- LPC86x
- LPC84x
- LPC82x
- LPC80x

The supported/recommended IDEs are the following:

- IAR v9.40.2 and higher
- Keil µVision v5.37 (C compiler V6) and higher
- MCUXpresso IDE v11.8

The tested components are the following:

- CPU registers
- Program counter
- Variable memory (RAM)
- Invariable memory (flash)
- Clock
- Digital I/O
- Analog I/O
- Stack

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- Watchdog
- Touch Sensing Interface (TSI) - peripheral TSIv5 and TSIv6

3 Optimizations, improvements, and changes

3.1 Library

The following devices were added to the CM0+ library: MKE17Z512.

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.

The documentation of the IEC60730B library consists of:

- IEC60730B_Library_User_Guide_CM0_v4_4.pdf
- IEC60730B_Library_Release_Notes_CM0_v4_4.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.

The example projects are available only in the MCUXpresso SDK as middleware.

To open an example, use the link from the table at http://www.nxp.com/iec60730 or perform the following steps:

- Go to http://mcuxpresso.nxp.com.
- Click Select Development Board.
- Select the supported board and add the IEC60730B Safety Library middleware.
- Build and download the SDK package.

4 Revision history

Table 1 summarizes the changes to this document.

Table 1. Revision history

Revision number	Release date	Description
0	7 December 2023	Initial release.

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