

# IEC60730BSERN

## IEC60730B Example release notes

Rev. 0 — 12/2020

Release Notes

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## 1 Introduction

These release notes describe important release information for the IEC60730B safety example application released with IEC60730B library v4.1.

All information about IEC60730B are at [www.nxp.com/iec60730](http://www.nxp.com/iec60730).

## 2 What is new

The example released with the IEC60730B library version v4\_1 contains example projects for the following boards:

Table 1. Device with available example projects

Development board	Version of library	Example projects available in MCUXpresso SDK
lpcpresso845max	4.1	Y
lpcpresso824max	4.1	Y
frdmkv11z	4.1	Y
frdmke15z	4.1	Y
frdmk32l2a4s	4.1	Y
frdmk32l2b3	4.1	Y
evkmimx8mm	4.1	Y
evkmimxrt1020	4.1	Y
evkmimxrt1024	4.1	Y
evkbimxrt1050	4.1	Y
evkmimxrt1060	4.1	Y
frdmkv31f	4.1	Y
lpcpresso55s69	4.1	Y
lpcpresso55s28	4.1	Y
evkmimx8mn	4.1	Y
frdmkl26z	4.1	N
frdmke02z40m	4.1	N
lpcpresso802	4.1	N

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Table 1. Device with available example projects (continued)

Development board	Version of library	Example projects available in MCUXpresso SDK
lpcxpresso804	4.1	N
lpcxpresso51u68	4.1	N
twrke18f	4.1	N
twrkv58f220m	4.1	N
twrkv46f150m	4.1	N
evkmimxrt1170	4.1	N

#### Updates in version 4.1

- **WDOG test function consolidated** - the function for the specific timer timer was merged to one with parameters that select the correct refresh sequence for a dedicated WDOG.
- **Hardware flash test on i.MXRT10xx** - The hardware test is now supported also for i.MXRT1010 and other devices with the same DCP module.
- **Analog I/O test on i.MXRT10xx** - software triggered version of the Analog I/O test was added.
- **Newly supported devices** - frdmk32l2b3, frdmk32l2a4s, lpcxpresso55s28, evkmimx8mn, evkmimx8mm, evkmimxrt1024, evkmimxrt1170.
- **Updated device** - The examples for Kinetis devices were updated from version 3 to example version 4.1.
- **frdm-ke15z** - The ADC test is now set for a 5 V reference. This is set in the *safety\_config.h* file. For more information, see the corresponding example user's guide.

## 3 Version of library in SDK

The following table lists the released examples in the SDK and the corresponding library version.

Table 2. Conversion table between SDK and IEC60730B library version

IEC60730B library version	Device cores	SDK release version
4.1	CM0,CM4,CM7,CM33	Rel. 2.9.0

## 4 Development tools

The safety IEC60730B example application was compiled and tested with the following development tools:

- IAR Embedded Workbench IDE version 8.50.6
- Arm<sup>®</sup>-MDK - Keil<sup>®</sup> μVision<sup>®</sup> version 5.33
- MCUXpresso IDE version 11.3.0

[FreeMASTER tool version 3.0](#) was used for application monitoring.

### 4.1 Debuggers

All projects (for the IAR, Keil, and MCUXpresso IDEs) have the following debuggers set in the default configurations:

**Table 3. Default board settings**

Development board	Default debugger	FreeMASTER communication channel via	Serial communication speed [Bd]
lpcpresso845max	CMSIS-DAP	on-board debugger	9600
lpcpresso824max	CMSIS-DAP	on-board debugger	9600
lpcpresso804	CMSIS-DAP	on-board debugger	9600
lpcpresso802	CMSIS-DAP	on-board debugger	9600
frdmkv11	PE micro	on-board debugger	9600
frdmkl26z	PE micro	on-board debugger	9600
frdmke02z40m	PE micro	on-board debugger	9600
frdmke15z	CMSIS-DAP	on-board debugger	9600
frdmk32l2a4s	CMSIS-DAP	on-board debugger	9600
frdmk32l2b3	CMSIS-DAP	on-board debugger	9600
frdmkv31f	CMSIS-DAP	on-board debugger	9600
twrkv46f150m	PE micro	on-board debugger	9600
twrke18f	CMSIS-DAP	on-board debugger	9600
evkmimx8mm	J-Link	external J-Link plugin	-
twrkv58f220m	CMSIS-DAP	on-board debugger	9600
evkmimxrt1010	CMSIS-DAP	on-board debugger	19200
evkmimxrt1020	CMSIS-DAP	on-board debugger	19200
evkmimxrt1024	CMSIS-DAP	on-board debugger	19200
evkmimxrt1060	CMSIS-DAP	on-board debugger	19200
evkbimxrt1050	CMSIS-DAP	on-board debugger	19200
evkmimx8mn	J-Link	external J-Link plugin	-
lpcpresso55s69	CMSIS-DAP	on-board debugger	9600
lpcpresso55s28	CMSIS-DAP	on-board debugger	9600

## 5 Known issues or important changes

This chapter contains the description of known issues or non-standard behavior of the released example.

### MIMX8M Mini and Nano

The MIMX8M Mini and Nano application examples are not provided for the Keil and MCUXpresso IDEs.

### LPCxpresso80x - MCUXpresso IDE

The FreeMASTER monitoring is turned off due to small memory size of the MCU.

### FRDM-KL26 uVision Keil support

The current version of the SDK does not support KL26 with the ArmV6 compiler.

**FRDM-KE02z uVision support**

The MKE02Z application example is not provided for the Keil IDE.

**TWR-KV58F220M - uVision support**

In the uVision Keil, turn off the flash test due to a problem with the download of the edited binary file by the debugger.

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