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Kinetis SDK Project Generator 2.3

1 Purpose

This document describes the Kinetis SDK (KSDK) Project Generator release. It covers the features and known issues.

2 Overview

This software tool is a supplement to the KSDK. It is intended to provide users with a convenient method for generating KSDK based projects for their intended target hardware.

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3 Revision history

Changes in V2.3:

- Support generation of standalone cloned project updated for IAR and KEIL to fix several issues Changes in V2.2:
 - Support generation of standalone cloned project
 - About dialog added
 - Several bug fixed

4 Prerequisites

The KSDK Project Generator requires the user to install an instance of KSDK 1.2.0, 1.3.0 or 2.x before generating new projects. Visit www.nxp.com/ksdk to get the Kinetis SDK.

5 Features

The following features are available with the KSDK Project Generator tool:

- Cross platform
 - o Operates on Windows, Linux, and Mac OSX
 - o Developed in 32-bit Python 2.7 on Windows 7, Ubuntu 14.10, OSX 10.10 & 10.11
- Supports KSDK 1.2.0, 1.3.0 and 2.x
- Quick Generate of development board based KSDK projects
- Advanced Generate of New KSDK based projects
 - Device or development board based
 - Linked to KSDK installation or standalone
 - o RTOS support (when project with FreeRTOS is created part of source code is licensed with GPL-2.0 WITH the FreeRTOS GPL exception license)
 - o HAL or Platform library level projects (for KSDK 1.2, 1.3)
 - o Libraries in standalone projects tailored to device package (for KSDK 1.2, 1.3)
 - o KDS, IAR, Keil MDK, and/or Atollic TrueSTUDIO IDE projects
 - Generation of standalone or linked cloned project

6 Known Issues

The following are known issues in the KSDK Project Generator 2.2 release:

- When user generates project for MK22FN128xxx12 or MKL81Z128xxx7 or FRDM-KL81Z, there is the build error in IAR Embedded Workbench when user tries to build it. The solution is: right click on project -> select "Options" -> select category "General Options" and set "Processor variant" to "Core" and select "Cortex-MX4" - for MK22FN128xxx12 or "Cortex-MX0+" for MKL81Z128xxx7 and FRDM-KL81Z from combo-box.
- When KSDK 1.3 is used and there are some toolchains folder missing, the tool does not work correctly (it never stops project creation, tool must be restarted).
- For some devices there are build errors because of some driver files. The solution is to remove these files from project.
- When USB stack is used in project (for example project for usbkw24d512), it is necessary to define macro settings – USB_STACK_BM for none rtos, USB_STACK_FREERTOS for freertos, USB_STACK_UCOSII for ucosii and USB_STACK_UCOSIII for ucosiii.

7 Getting Started

Get started by downloading the KSDK_Project_Generator.zip package from KSDK web page, then unzip the package to a location of your choosing on your host machine. To run, open up the folder for your operating system and execute the 'KSDK_Project_Generator' application. Once the application is running, make sure to point the tool to a valid KSDK 1.2.0, 1.3.0 or 2.0.0 installation.

8 Target system configurations

This product has been tested on the following system configurations:

8.1 Operating Systems

- Windows 7 32-bit, 64-bit
- Linux Ubuntu 14.10 64-bit
- Mac OS X 10.10 or 10.11

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