Release Notes

Eclipse Update for Freescale Kinetis SDK 1.0.0-GA
Version 1.0.1

Introduction
To use the Kinetis SDK with Eclipse and Processor Expert, this updated needs to be installed into Eclipse (e.g. Kinetis Design Studio or Processor Expert Driver Suite). Otherwise both 'New Project Wizard' and Processor Expert will not know about the devices present and supported in the Kinetis SDK.

The following Eclipse environments are applicable:
- Kinetis Design Studio V1.1.x
- Processor Expert Driver Suite V10.4 with Update V10.4.1

With the installation of this update, the 'New Project Wizard' will be enabled to use the Kinetis SDK for the devices supported, and Processor Expert components for the Kinetis SDK are added.

Installation

1. Launch Eclipse
   Note: You need to use administrator (root / run with sudo on Linux) permissions if you have KDS installed in any administrator area (for example: Program Files on Windows, /opt on Linux)
2. Choose the menu Help > Install New Software...
3. Press the Add... Button in the dialog
4. In the next dialog, choose the 'Archive...' button and browse for the SDK_1.0.0-GA_Update_for_Eclipse_1.0.1.zip installation package file
5. Then go through the guided update process
6. At the end, you are asked to restart Eclipse

Product Content

- CPUs – Kinetis
  - MK22FN128xxx10, MK22FN256xxx12, MK22FN512xxx12
  - MK24FN1M0xxx12
  - MK63FN1M0xxx12
  - MK64FN1M0xxx12, MK64FX512xxx12
  - MKV31F128xxx10, MKV31F256xxx12, MKV31F512xxx12

- SDK peripheral driver components
  - fsl_adc
  - fsl_can
  - fsl_clock_manager
  - fsl_dac
  - fsl_debug_console
  - fsl_dspi
  - fsl_edma
  - fsl_flextimer
  - fsl_gpio
  - fsl_hwtimer
  - fsl_interrupt_manager
• fsl_i2c
  • fsl_lptmr
  • fsl_lpuart
  • fsl_mpu
  • fsl_os_abstraction
  • fsl_pdb
  • fsl_pit
  • fsl_rtc
  • fsl_sai
  • fsl_sdhc
  • fsl_uart
  • fsl_wdog

• HAL components
  • fsl_adc_hal
  • fsl_can_hal
  • fsl_dac_hal
  • fsl_dmamux_hal
  • fsl_dspi_hal
  • fsl_edma_hal
  • fsl_enet_hal
  • fsl_flextimer_hal
  • fsl_gpio_hal
  • fsl_i2c_hal
  • fsl_llwu_hal
  • fsl_lptmr_hal
  • fsl_lpuart_hal
  • fsl_mcg_hal
  • fsl_mpu_hal
  • fsl_osc_hal
  • fsl_pdb_hal
  • fsl_pit_hal
  • fsl_pmc_hal
  • fsl_port_hal
  • fsl_rcm_hal
  • fsl_rtc_hal
  • fsl_sai_hal
  • fsl_sdhc_hal
  • fsl_sim_hal
  • fsl_smc_hal
  • fsl_uart_hal
  • fsl_wdog_hal

• Peripheral Initialization components
  • Init_ADC_VAR0
  • Init_AIPS0_VAR0
  • Init_AIPS1_VAR0
  • Init_AXBS_VAR0
  • Init_CAN_VAR0
  • Init_CMT_VAR0
  • Init_CRC_VAR0
  • Init_DAC_VAR0
  • Init_DMAMUX_VAR0
  • Init_eDMA_VAR0
  • Init_ENET_VAR0
  • Init_EWM_VAR0
• Init_FB_VAR0
• Init_FMC_VAR1
• Init_FTFL_VAR0
• Init_FTM_VAR0
• Init_GPIO_VAR0
• Init_HSCMP_VAR0
• Init_I2C_VAR0
• Init_I2S_VAR1
• Init_LLWU_VAR0
• Init_LPTMR_VAR0
• Init_MCM_VAR3
• Init_MPU_VAR0
• Init_NVIC_VAR1
• Init_PDB_VAR0
• Init_PIT_VAR0
• Init_PMC_VAR0
• Init_PORT_VAR0
• Init_RCM_VAR0
• Init_RNG_VAR1
• Init_SCB_VAR0
• Init_SDHC_VAR0
• Init_SIM_VAR3
• Init_SMC_VAR0
• Init_SPI_VAR0
• Init_SRTC_VAR0
• Init_SysTick_VAR0
• Init_UART_VAR0
• Init_USB_OTG_VAR0
• Init_USBDCD_VAR0
• Init_VREF_VAR0
• Init_WDOG_VAR0
• PinSettings

• High Level components
  • MQX_KSDK
  • MQX_KSDK_Task

**Known problems and limitations**

- IAR workbench integration using ProjectInfo.xml: projects with SDK mcu's cannot be built in IAR Embedded Workbench
  
  Workaround: Define <device> symbol additionally in compiler>

- The MQX_KSDK component does not install ISRs for MQX_KSDK RTOS component - user needs to install it using OSA_InstallIntHandler. This problem will be resolved in SDK drivers in 1.1.0-GA release (Q4-2014).

- SDK components with timing item are able to work only with 16 configurations. Selection of more configurations may lead to unexpected behavior.

- SDK components with timing item: Timing setting is validated according to all configurations in a CPU component. (ENGR00320699).
  
  Workaround: Configure only 1 clock configuration in CPU component.

- Parameters auto-fill for component methods does not work for some DRV SDK components.

- Common links in html help of SDK components do not work.
• The ‘View Code’ command does not work for some methods.

Revision history

• **PEXMCU-329** – Default heap size in board configuration templates has been increased to allow KDS GNU libraries to be used.

• **PEXMCU-321** – Fix of a problem with an installation conflict of the Kinetis_120_100MHz_K22F_KV31F service pack. If you installed this service pack together with the previous version of this Eclipse update (Eclipse Update for Freescale Kinetis SDK 1.0.0-GA version 1.0.0) you could face one of these problems:
  
  • If you installed Eclipse Update for Freescale Kinetis SDK 1.0.0-GA version 1.0.0 first and then the Kinetis_120_100MHz_K22F_KV31F service pack you would lose a possibility to create SDK or PEx+SDK projects.

  • If you installed the Kinetis_120_100MHz_K22F_KV31F service pack first and then the Eclipse Update for Freescale Kinetis SDK 1.0.0-GA version 1.0.0 you would lose a possibility to create PEx (without SDK) projects.

---

http://www.freescale.com/processorexpert
http://www.freescale.com

Freescale Support Department:
support@freescale.com