Freescale Semiconductor

FRDM-K64F SDK Board Support Package content

The FRDM-K64F SDK Board Support Package consists of the following files:

- frdmk64f.peb – Processor Expert Board Support configuration file that can be imported in a PEx project and contains the configuration of the target board.
- pin_mux.c – driver that is based on *PinSettings* component driver (modified version of the Pin Settings driver). It contains functions for routing pins of the following devices that are available on the target board:
  - o CAN (FlexCAN) device
  - o CMP (Comparator) device
  - o ENET (10/100-Mbps Ethernet MAC) device
  - o GPIO (General-Purpose Input/Output pins) device
  - o I2C (Inter-Integrated Circuit) device
  - o I2S (Integrated Interchip Sound) device
  - o RTC (Real Time Clock) device
  - o SDHC (Secured digital host controller) device
  - o SPI (Serial Peripheral Interface) device
  - o SPI chip selection pins
  - o UART (Universal Asynchronous Receiver/Transmitter) device
  - o FTM (FlexTimer Module) device
- pin_mux.h – definitions of pin_mux driver. This header file is based on the *PinSettings* component driver. It contains declaration of routing functions with detailed description.
- hardware_init.c – initialization functions for pins (routing of the pins), initialization of global variables with values of external crystals and a serial port initialization function for the debug console (calling of pin_mux.c functions).
- gpio_pins.c, gpio_pins.h – Processor Expert fsl_gpio component driver that contain initialization code of configuration structures of GPIO pins for the fsl_gpio SDK driver and an enum type for all used pins (customized pin names). It contain following pins used on the FRDM-KJ64F target board:
  - o SW2 and SW3 switch input pins
  - o INT1 and INT2 input pins of the Accelerometer
  - o UART Demo Rx pin
  - o SDHC Card Detect input pin
  - o RGB LED output pins
  - o SPI0 Chip Selection pins
- board.h – This file contains definition of the serial port for debug_console and set of definitions used by SDK demo application for the FRDM-K64F target board (used pins, device instances, print statements). These defines are used for abstraction of the target board connections and devices across all the boards supported by the Kinetis SDK.

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