

# Updating the Firmware on USB SPI Boards (KITUSBSPIEVME, KITUSBSPIDGLEVME)

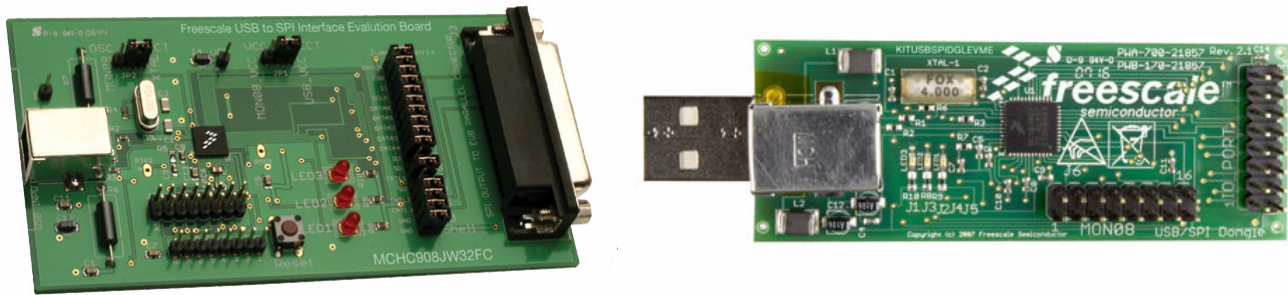


Figure 1. KITUSBSPIEVME and KITUSBSPIDGLEVME Boards

## 1 Introduction

This document provides reprogramming instructions for the firmware of the MCU contained on the KITUSBSPIEVME and the KITUSBSPIDGLEVME boards. It uses the USB connector instead of the MON08 connector (typical method).

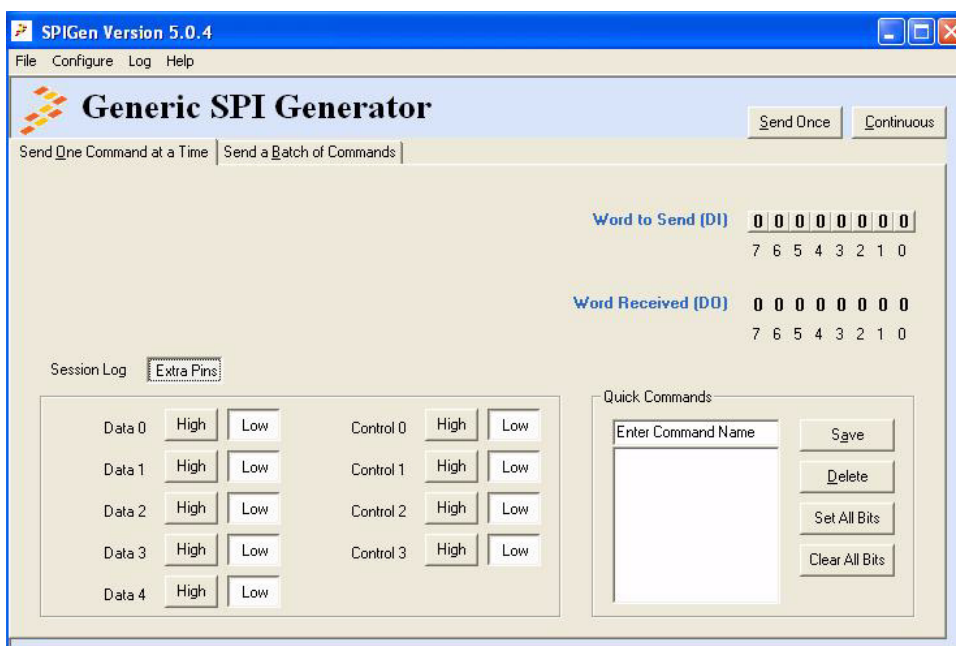
Both boards can be programmed through the USB connector, if the most recent firmware is installed. The jumpers, only on the KITUSBSPIEVME board, must remain in the position used in the normal operation mode.

## 2 Instructions to Update an EVME Board with new Firmware

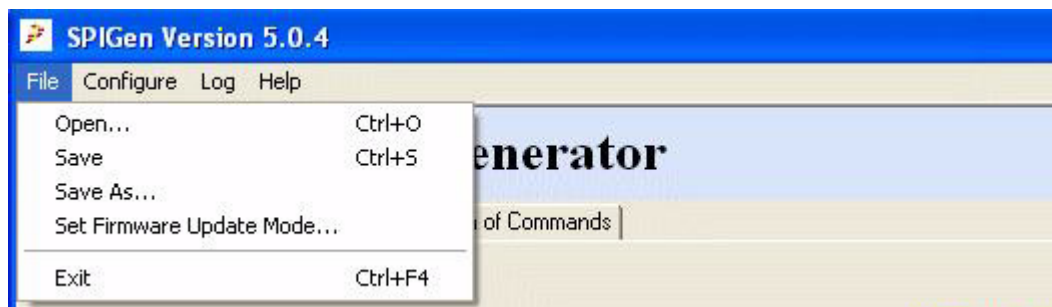
### CAUTION

Avoid touching the MON08 pins while unplugging and plugging in the USB cable as this may cause the EVME Board to think it is connected to a MON08 source.

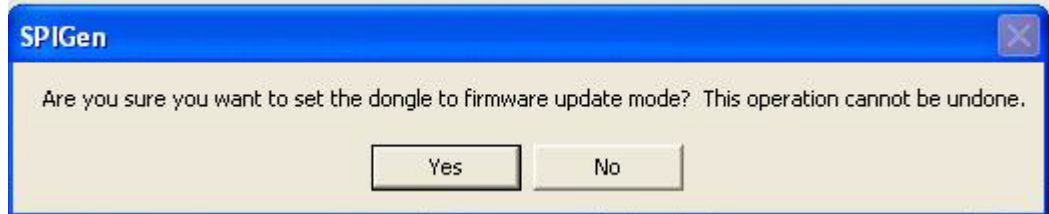
1. Connect the USB cable to the EVME board and the PC.
2. Test the connection by running **SPIGen**, clicking on **Extra Pins**, and selecting **Data0 High** and **Data0 Low**. The **LED3** will toggle.



3. Select **File** and then select the **Set Firmware Update Mode**.



4. When the message box appears asking you “Are you sure you want to set the dongle to firmware update mode?”, click on **Yes**. **LED2** should go out.
  - A) If **LED2** does not go out, then the EVME is not capable of being reprogrammed using the USB port. It can only be reprogrammed using a Cyclone Pro or Multilink adapter. Contact Freescale for further details.
  - B) If **LED2** does go out, then the EVME is capable of being reprogrammed using the USB port.



5. Click on the **OK** button twice to complete the procedure.



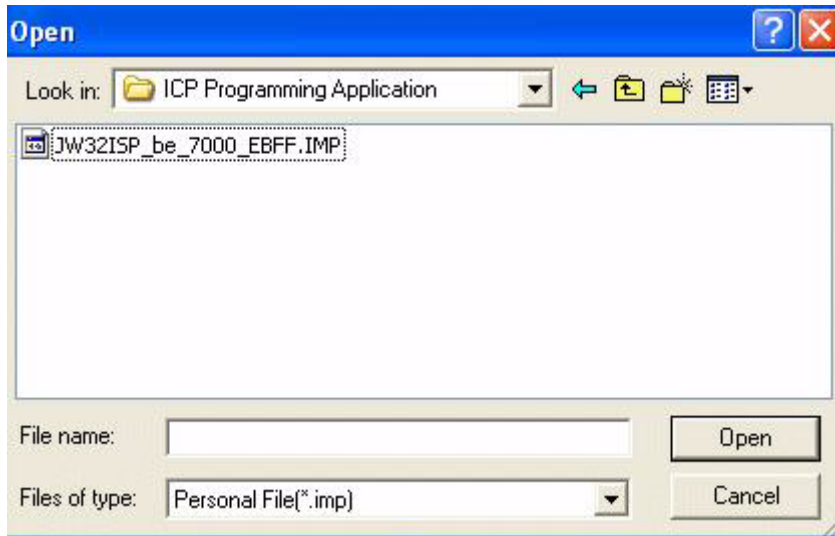
6. Exit SPIGen.

**CAUTION**

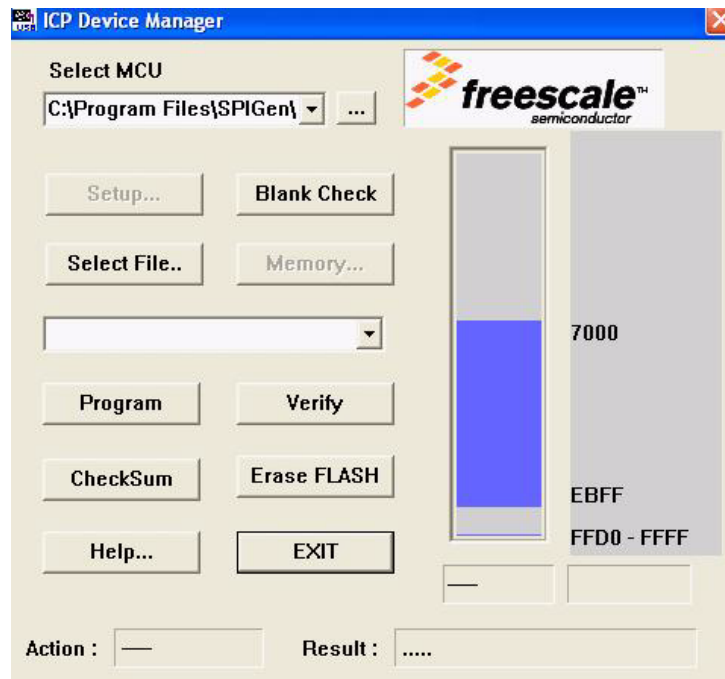
Avoid touching the MON08 pins while unplugging and plugging in the USB cable as this may cause the EVME Board to think it is connected to a MON08 source.

7. Disconnect the EVME board from the PC's USB Port.
8. Plug the EVME board back into the USB port. All LEDs on the Dongle should go off.
9. Windows should prompt you to install a driver for the device, unless you have done this procedure before and Windows already knows the proper driver to use.

10. If Windows prompts you for a new driver, Install the **USBICP.SYS** driver file found in the **C:\Program Files\SPIGen\ICP Programming Application** folder using the **USBICP.INF** file. Right click on this file and select **Install** or point the install wizard to it in the **C:\Program Files\SPIGen\ICP Programming Application** folder.
11. Run the **ISPexe.exe** program found in the **C:\Program Files\SPIGen\ICP Programming Application** folder. The following screen should appear. Browse to the **C:\Program Files\SPIGen\ICP Programming** folder.



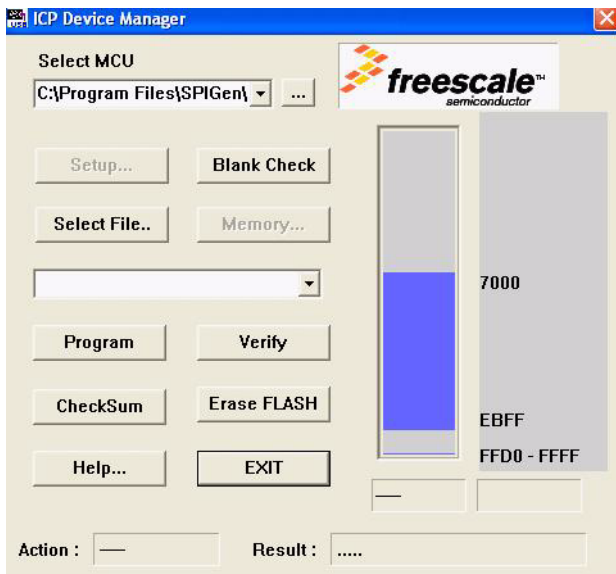
- When prompted, open the **JW32ISP\_be\_7000\_EBFF.IMP** personality file also found in the **C:\Program Files\SPIGen\ICP Programming Application** folder.



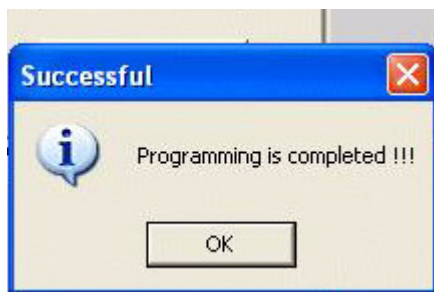
- Click on the **Erase FLASH** button.
- Click **OK**.



15. Click on the **Select File** button and select the **usb\_spi\_image\_xx-xx-xxx.s19** (this file name may contain a date) or the **usb\_spi\_image\_mc33912** file, if you are trying to run the MC33912 EVME in the **C:\Program Files\SPIGen\USB\_SPI Images** folder. Click on **Open**.



16. Click on the **Program** button to program the Dongle (or EVME).
17. If successful, click **OK**.
18. Exit the **ISPexe.exe**.



19. Disconnect the EVME board from the USB port and then reconnect it. The **LED2** should illuminate.
20. Run **SPIGen** and test the EVME board as explained in step 2.

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Freescale Semiconductor Japan Ltd.  
Headquarters  
ARCO Tower 15F  
1-8-1, Shimo-Meguro, Meguro-ku,  
Tokyo 153-0064  
Japan  
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[support.japan@freescale.com](mailto:support.japan@freescale.com)

### **Asia/Pacific:**

Freescale Semiconductor China Ltd.  
Exchange Building 23F  
No. 118 Jianguo Road  
Chaoyang District  
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