SPC5-FLASHER

## Flash management tool for SPC5x family

Description

SPC5-Flash Programmer application is developed to manage the Flash using the BAM/BAF functionality (erasing, programming, verification, dumping and checksum function) on different targets via SCI, CAN and K-line in the same tool.

The application GUI is a user friendly interface that allows the user to connect the tool with the target using a USB dongle and to perform the tool's functionalities.

The application board should have at least one of the interfaces available.

Features

- SPC5x family supported
- Flash program: binary image file (s19, run, hex)
- Flash erase: all data flash sectors
- Flash dump: save the Flash content in a file (hex format)
- Flash blank check: all data flash sectors
- Flash verify: check the Flash content with a binary image file
- Unsecured sequence for censored device: sending the private password selected from the GUI
- Interface supported: SCI, K-Line and CAN

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1   Overview

Figure 1. SPC5 Flash Programmer schema
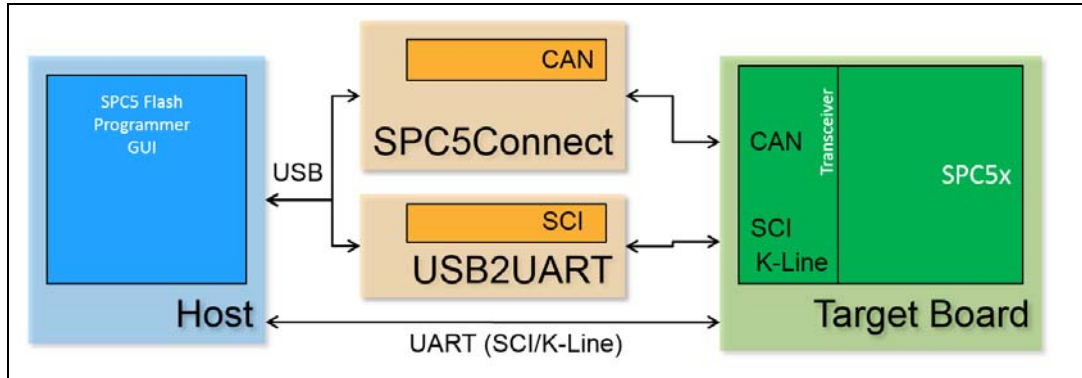
SCI

This solution uses the SCI BAM/BAF serial boot. The tool sends via SCI a plugin that is loaded in the RAM of the target. After loading this firmware, the plugin target side is executed and implemented. The plugin waits for a command sent from the host to execute all Flash management functions.

K-Line

This solution uses the K-line in conjunction with the BAM/BAF serial boot to implement the serial boot via K-Line. The receiving of transmitted bytes has to be suppressed during serial boot to allow the correct progress of SCI serial boot loader (only for SPC563M target it is possible to select an alternate pin for SCI transmission which is not initialized in the BAM/BAF). After loading the firmware, the plugin target side is executed and implemented.

CAN

This solution uses the CAN BAM/BAF serial boot. The SPC5 Connect is used as interface between the SPC5 Flash Programmer and target. SPC5-Flash Programmer sends via CAN a plugin that is loaded in the RAM of the target. After loading the firmware, the plugin target side is executed and implemented.

Appendix A   System requirements

- Supported operating system: Windows 7.

Revision history

Table 1. Document revision history

Date	Revision	Changes
14-Mar-2013	1	Initial release.
20-Sep-2013	2	Updated disclaimer.
10-Jan-2017	3	Updated *Features* and *Description*. Updated *Section : CAN* and removed Section Jtag.

IMPORTANT NOTICE – PLEASE READ CAREFULLY