Microsemi® Corporation

March 18, 2015

Customer Notification No: CN1503
Customer Advisory Notice (CAN)

Subject: SmartFusion2® and IGLOO2® In-Application Programming (IAP) or In-System programming (ISP) workaround for internal Fabric SRAM.

Description:

This Customer Advisory Notice covers a workaround for SmartFusion2 and IGLOO2 applications using In-Application Programming (IAP) or SmartFusion2 applications using In-System Programming (ISP) methodologies.

Currently, after IAP or a SmartFusion2 ISP operation is initiated by the Cortex-M3, the internal Fabric SRAMs (LSRAM and uSRAM) are inaccessible. All other aspects of the device are operational.

Workaround:

Users must follow the new guidelines described in the following application notes to enable the use of Fabric SRAMs after an IAP or ISP operation. The procedure is outlined here:

1. Instantiate the Tamper Macro
    a. Configure the macro to expose a reset input port to the System Controller
2. On power-up :
    a. Write to any uSRAM or LSRAM, a test pattern
    b. Read from memory, the previously written test pattern
    c. If read pattern != write pattern
        i. Reset System Controller via Tamper Macro

The following demo guides have been updated to implement the workaround:

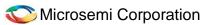*In System Programming using the USB OTG Controller*

In System Programming using the UART Interface

In Application Programming using the PCIe Interface

Contact Information:

For further clarifications or questions, email Microsemi's Technical Support at:
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Regards,

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