## FlashPro v11.4 Release Notes

FlashPro software is packaged with Libero® software and installed by default. If you install Libero SoC v11.4 you do not need to install FlashPro standalone.

FlashPro is available as a standalone installation as a convenience for programming-only installations.

Libero SoC v11.4 is a comprehensive software suite for designing with Microsemi's SmartFusion2 and SmartFusion SoC FPGAs, and IGLOO2, IGLOO, ProASIC3 and Fusion FPGA families.

Visit the Documents tab on your device page at <a href="www.microsemi.com">www.microsemi.com</a> to obtain silicon Datasheets, Silicon User's Guides, Tutorials and Application Notes.

Development Kits and Starter Kits are available from the Microsemi website.

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## What's New?

## FlashPro Express for Windows and Linux

### FlashPro Express is a new production programming tool

- Windows supports FlashPro Lite, FlashPro3, FlashPro4, FlashPro5
- Linux supports FlashPro5 only

### **Programming**

Integrated drivers for FlashPro5 hardware for Windows and Linux platforms.

New FlashPro Express programming tool for production programming.

Debug Policy can be enabled within the Security Policy Manager.

Libero programming on Linux with FlashPro5 for SmartFusion2 and IGLOO2.

Programming Recovery and Auto Update in Libero.

Updated Security Policy Manager in Libero.

Libero Export Programming Job tool simplifying job transfers to FlashPro Express.

Updated Export Bitstream tool In Libero allowing users flexibility in customizing the bitstream components and types of security files to be exported.

SmartDebug support for SmartFusion2 and IGLOO2 on Linux with FlashPro5.

Silicon Signature Programming Support.

# Known Limitations, Issues and Workarounds

## **Programming**

SAR 59220 - Export Bitstream, Export Programming Job and Generate Bitstream will fail if DPK is not entered in the Security Policy Manager

In the Security Policy Manager, if you only select the "Restrict external Fabric/eNVM digest check request via JTAG and SPI" option in Debug Policy without entering the DPK, then Export Bitstream, Export Programming Job and Generate Bitstream will fail.

Workaround: Always enter DPK if Debug Policy is used.

SAR 58993 - Generate Bitstream fails if device name is changed in "Programming Connectivity and Interface" tool

You will see the bitstream generation error s below in the log window when the Libero design device name is changed in "Programming Connectivity and Interface" tool and then "Generate Bitstream" or "Export Bitstream" tool is run.

Error: The command 'load\_programming\_data' failed.

Error: Failure when executing Tcl script. [Line 3]

Error: The Execute Script command failed.

SAR 58063 - For SmartFusion2 and IGLOO2, optional procedures for a programming action configured in Libero are not exported in the Programming Job.

Workaround: Open the programming job project in FlashPro to configure and save this setting.

FlashPro5 is not supported for RHEL 5 and CentOS 5.

Programming Connectivity and Interface TCL support will be added in a future release.

Programming Settings TCL support will be added in a future release.

SVF for SmartFusion2 and IGLOO2 will be available in a future release.

SAR 51767 - Error: The command 'load\_programming\_data' failed.

During programming file generation if the serialization content files cannot be found, then you will see the following error: "Error: The command 'load\_programming\_data' failed."

Workaround: Open Update eNVM Memory Content and specify a valid path for each serialization content file.

SAR 45867 - STAPL player for SmartFusion2 or IGLOO2 will be available in a future release.

SAR 41069 - Add PDB loading from DDF for Libero environment

You may get an exit 6 idcode failure when chain programming within Libero using a PDB file.

Workaround: Use a STAPL file or use the standalone FlashPro tool for chain programming

SAR 47452 - FlashPro verify and erase errors are reported as programming failures.

If you run programming ACTION VERIFY/ERASE and there is a failure, then the error code will indicate it is a programming failure even though you were running action VERIFY/ERASE.

## **SmartDebug**

#### SAR 59184 - Workaround for SmartFusion2 to prevent MSS resets when SmartDebug is opened.

The following devices will have MSS reset upon any interaction of SmartDebug with the device:

M2S/M2GL 005 Step Mark 0

M2S/M2GL 010 Step Mark 0

M2S/M2GL 025 Step Mark 0

M2S/M2GL 050 Step Mark 0

This behaviour is exhibited by the silicon issue causing MSS reset upon JTAG reset operation.

JTAG reset can be disabled inside the SmartDebug GUI session by setting SMART\_DEBUG\_DISABLE\_JTAG\_RESET DEF variable to "1".

Try to setup and start debug session after opening SmartDebug GUI. Note that setting the DEF variable does not disable JTAG reset upon opening and closing SmartDebug GUI session. Power-cycling, resetting device or accessing JTAG port from any other tool will invalidate SmartDebug GUI session.

SAR 54004 - Search in Debug FPGA GUI does not support wild card. This will be supported in a future release.

SmartFusion2 devices will read invalid memory content if the MSS is held in the reset state or M3 is executing invalid microcode programmed into the Flash Memory.

Workaround: Program a valid design. Confirm that the MSS is not in the reset state.

SmartDebug SERDES is not supported for M2S050PP and ES parts.

# System Requirements

Refer to <u>System Requirements</u> on the web for more information regarding operating systems support and minimum system requirements. 64-bit OS is required for designing SmartFusion2 and IGLOO2 devices.

Setup Instructions for Linux OS can be found on the Libero SoC Documents webpage.

### **Changes in OS support**

#### Supported

Windows 7, Windows 8.1 (new)

RHEL 5\* and RHEL 6, CentOS 5\* and CentOS 6 (new)

\* RHEL 5 and CentOS 5 do not support programming using FlashPro5.

### Discontinued

32-bit operating systems are no longer supported.

Windows XP is no longer supported.

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Installation requires Admin privileges.

Windows or Linux