FlashPro/**FlashPro Express** v11.6 Release Notes

FlashPro and FlashPro Express for Windows, and FlashPro Express for Linux are packaged with Libero® System-on-Chip (SoC) software and installed by default. If Libero SoC v11.6 is installed, it is not required to install FlashPro standalone.

FlashPro and FlashPro Express are available as a standalone installation as a convenience for programming-only installations.

The Libero SoC v11.6 software is used for designing with Microsemi®'s SmartFusion®2 and SmartFusion SoC FPGAs, and IGLOO®2, IGLOO, ProASIC3, and Fusion FPGA families.

To access Datasheets and Silicon User Guides, visit www.microsemi.com. Any product can be selected and clicked to go to the **Documents** tab of that particular product. Tutorials, Application Notes, Development Kits and Starter Kits are listed in the **Design Resources** tab of each product.

Discontinued Devices:

- Some SmartFusion2 and IGLOO2 Data Security devices are discontinued. These devices are not available in Libero SoC v11.6. The existing design is required to be moved to a different device before upgrading to Libero SoC v11.6. For more information, refer to the *CN1419: Availability of SmartFusion2 and IGLOO2 Data Security, "S" Devices*.
- SmartFusion2 M2S100 and IGLOO2 M2GL100 devices are being discontinued. These devices are not available in Libero SoC v11.6. The existing design is required to be moved to the equivalent M2S150 or M2GL150 device before upgrading to Libero SoC v11.6.
- 144 VQ packages are being replaced with 144 TQ. When using Libero SoC v11.6, the design has to be moved to TQ before proceeding. 144 VQ packages will be removed in the next release.

For more information about the new software features and enhancements, refer to the *Libero SoC Online Help*.

Contents

What's New in FlashPro/FlashPro Express v11.6?

New Device Support

RTG4

Die	Package	Speed Grade	Temp Ranges	Free Libero Gold
RT4G150	1657 CCGA/LGA	STD, -1	MIL	No
RT4G150_ES	1657 CCGA/LGA	STD	MIL	No

RT4G150_ES refers to the Engineering Samples (ES) of the RT4G150 device. RT4G150_ES must be selected when designing with RTG4 ES or Mil-temp ES (MS) devices.

The CCC/PLL when used targeting the **RT4G150_ES** device, the PLL is configured without Triple Module Redundancy for radiation mitigation. When targeting the RT4G150 device, the PLL is configured with the Triple Module Redundancy feature.

The **RT4G150_ES** device supports only the *No automatic resynchronization* selection for the *Output Resynchronization after lock* option when the PLL Feedback is CCC internal or external. The other two selections (in the Clock Conditioning Circuit configurator) are available when the feedback is selected as PLL internal.

Note: In Libero SoC v11.6, programming is only enabled for the RT4G150_ES device.

Note: Microsemi recommends that you migrate your design to the RT4G150 production device when you are ready to go into production.

Software Enhancements

Generate single device chain STAPL file for SmartFusion2/IGLOO2 via Tcl

The Tcl command "export_single_stapl" has been added to FlashPro software. This command allows users to export a single device chain STAPL file for SmartFusion2 and IGLOO2 devices. For details, see the FlashPro online help.

Resolved Issues

Issues Fixed in v11.6

SAR 62608 - FlashPro5 programming time is longer than FlashPro4
As of FlashPro v11.6, FlashPro5 programming time has now been optimized to be in the same range as FlashPro4.

SAR 62640 - No error is provided in the Update eNVM Memory Content tool when the maximum number of devices to program for serialization clients is set to 0.

SAR 51767 - If the serialization content files cannot be found during programming file generation, you will see the following error:

```
Generating Bitstream File...
Error: Errors detected during eNVM programming data generation. Correct these
errors using the eNVM configurator or the 'Update eNVM Memory Content' tool in
the Design Flow.
```

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. In Libero SoC v11.6, we have improved error messages to be more descriptive.

Customer Reported SARs Fixed in Libero SoC v11.6

Refer to the Technical Support Hotline Case Number to determine if the SAR has been fixed in this release. The case number and SAR are listed in the following table.

List of Case Numbers and SARs Fixed in Libero v11.6

SAR	Case Number	Product	Summary
63535	493642-1770448698	FlashPro	Programming of Flash ROM in batchmode fails if the ufce file is missing.
69619	493642-1916409332	FlashPro	"Generate a Programming File in FlashPoint" is broken.
64181	493642-1803924472	FlashPro	Error: programmer '54250' : Line : 2980 Exception : The index is out of range.
67408	493642-1859503365	FlashPro	Saving PDB in FlashPro IGLOO device is giving error.
66323	493642-1841188667	FlashPro	FlashPro5 driver missing from website & driver docs outdated
65420	493642-1720564614	FlashPro	Generate single device chain STAPL file for SF2/IGLOO2 via TCL

Known Limitations, Issues, and Workarounds

SAR 62057 – SmartFusion2/IGLOO2 Programming action “Help link” in the Messages/Errors window links to ProASIC3 Help.

SAR 58063 – For SmartFusion2 and IGLOO2 devices, 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.

Note: FlashPro5 is not supported for RHEL 5 and CentOS 5. SVF for SmartFusion2 and IGLOO2 will be available in a future release.

System Requirements

For more information about the operating systems (OS) support and minimum system requirements, refer to *System Requirements* on the web. 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

RHEL 5* and RHEL 6, CentOS 5* and CentOS 6

** 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.

Download FlashPro/FlashPro Express v11.6

Installation requires Administrator privileges.

- FlashPro and FlashPro Express for Windows
- FlashPro Express for Linux

Note: During installation, you will see a dialog box with the message “*To complete the FlashPro installation, please connect your FlashPro6, FlashPro 5, FlashPro4, …*”. Please ignore the FlashPro6 reference.

List of Changes

The following table lists critical changes that were made in each revision of the document.

Date	Change	Page
September 2015	Initial release of FlashPro/FlashPro Express v11.6 Release Notes	NA

Product Support

Microsemi SoC Products Group backs its products with various support services, including Customer Service, Customer Technical Support Center, a website, electronic mail, and worldwide sales offices. This appendix contains information about contacting Microsemi SoC Products Group and using these support services.

Customer Service

Contact Customer Service for non-technical product support, such as product pricing, product upgrades, update information, order status, and authorization.

From North America, call **800.262.1060**
From the rest of the world, call **650.318.4460**
Fax, from anywhere in the world **650. 318.8044**

Customer Technical Support Center

Microsemi SoC Products Group staffs its Customer Technical Support Center with highly skilled engineers who can help answer your hardware, software, and design questions about Microsemi SoC Products. The Customer Technical Support Center spends a great deal of time creating application notes, answers to common design cycle questions, documentation of known issues and various FAQs. So, before you contact us, please visit our online resources. It is very likely we have already answered your questions.

Technical Support

For Microsemi SoC Products Support, visit http://www.microsemi.com/products/fpga-soc/design-support/fpga-soc-support.

Website

You can browse a variety of technical and non-technical information on the Microsemi SoC Products Group home page, at http://www.microsemi.com/soc/.

Contacting the Customer Technical Support Center

Highly skilled engineers staff the Technical Support Center. The Technical Support Center can be contacted by email or through the Microsemi SoC Products Group website.

Email

You can communicate your technical questions to our email address and receive answers back by email, fax, or phone. Also, if you have design problems, you can email your design files to receive assistance. We constantly monitor the email account throughout the day. When sending your request to us, please be sure to include your full name, company name, and your contact information for efficient processing of your request.

The technical support email address is soc_tech@microsemi.com.

My Cases

Microsemi SoC Products Group customers may submit and track technical cases online by going to My Cases.

Outside the U.S.

Customers needing assistance outside the US time zones can either contact technical support via email (soc_tech@microsemi.com) or contact a local sales office. Sales office listings can be found at: http://www.microsemi.com/salescontacts.

ITAR Technical Support

For technical support on RH and RT FPGAs that are regulated by International Traffic in Arms Regulations (ITAR), contact us via soc_tech_itar@microsemi.com. Alternatively, within My Cases, select **Yes** in the ITAR drop-down list. For a complete list of ITAR-regulated Microsemi FPGAs, visit the ITAR web page.

Microsemi Corporate Headquarters
One Enterprise, Aliso Viejo, CA 92656
USA

Within the USA: +1 (800) 713-4113
Outside the USA: +1 (949) 380-6100
Sales: +1 (949) 380-6136
Fax: +1 (949) 215-4996

E-mail: sales.support@microsemi.com

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