

Microsemi FPGA TechBytes


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[Microsemi FPGAs and SoCs](#)

Issue 4

New PolarFire FPGA Family Introduced!

Microsemi extends its non-volatile FPGA leadership with the PolarFire family of cost-optimized FPGAs. PolarFire FPGAs deliver up to 50% lower power than equivalent SRAM FPGAs. The devices are ideal for a wide range of applications within wireline access networks and cellular infrastructure, defense and commercial aviation markets, as well as industrial automation and IoT markets.



[PolarFire FPGA Family](#) - [Libero SoC PolarFire](#) - [PolarFire Evaluation Kit](#)


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RISC-V Instruction Set Architecture

Microsemi recently announced that it is the first FPGA provider to offer a comprehensive software tool chain and IP core for RISC-V designs. The company's RV32IM RISC-V core is available for Microsemi's PolarFire FPGAs, IGLOO2 FPGAs, SmartFusion2 SoC FPGAs, or RTG4 FPGAs, with an Eclipse-based SoftConsole IDE hosted on a Linux platform and the Libero SoC Design Suite providing full design support. [Learn More](#)



What the Experts Say about PolarFire

- *Electronic Design:* [Lower-Power, Cost-Optimized Flash FPGAs Can Handle 40 Gbit/s Ethernet Chores](#)
- *EE Times:* [Microsemi's PolarFire FPGAs Target Mid-Range Markets](#)
- [More quotes from Microsemi customers and partners](#)



Future Create, Develop, Deploy Workshop Series

Future Electronics is hosting a hands-on [seminar series](#) in Europe and North America featuring their Creative Development platform based on the IGLOO2 or SmartFusion2 SOC FPGAs. Attendees will learn first-hand the ease of using the Libero design suite and Creative Board. Attendees completing the course will take home their own Creative Development Kit (a \$50 value) to start their own designs immediately. [European and North America Seminars](#)



SmartFusion2 SoC FPGA Training Courses

Designing with SmartFusion2 SoC FPGAs is two 1-day classes for FPGA designers, embedded designers and firmware engineers who are designing with Microsemi's SmartFusion2 SoC family. These classes describe the SmartFusion2 architecture, including the microcontroller subsystem (MSS) and FPGA fabric along with the software tools and design flows for implementing SmartFusion2 designs. Hands-on lab exercises targeting the SmartFusion2 Starter kit are included to provide practical applications of the material presented. Students may attend one or both days of training. These classes are held at Microsemi's San Jose, CA facility and can be attended remotely via the web. [View Next Available Dates](#)



Libero SoC v11.8 Now Available

This new version of the Libero SoC Design Suite comes with a number of improvements, including integration of ModelSim Pro (offering mixed language simulation support for VHDL, Verilog, and SystemVerilog) and enhanced SmartDebug with differentiated features such as FPGA Hardware Breakpoint (FHB), enabling users to set breakpoints in their design and debug with each step of a clock cycle. Microsemi has also expanded the operating system support for this release to include RHEL/CentOS7 and Windows® 10.

[View release notes and download options](#)



In The News

- [Microsemi's Space Products Support Iridium® NEXT Satellite Program](#)
- [Microsemi Collaborates with Silicon Creations to Enable Industry's Lowest Power FPGA 12.7G Transceivers With PHYs for Microsemi's PolarFire FPGAs](#)
- [Microsemi Unveils Industry's Lowest Power Cost-Optimized FPGA Product Family for Access Networks, Wireless Infrastructure, Defense and Industry 4.0 Markets](#)

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