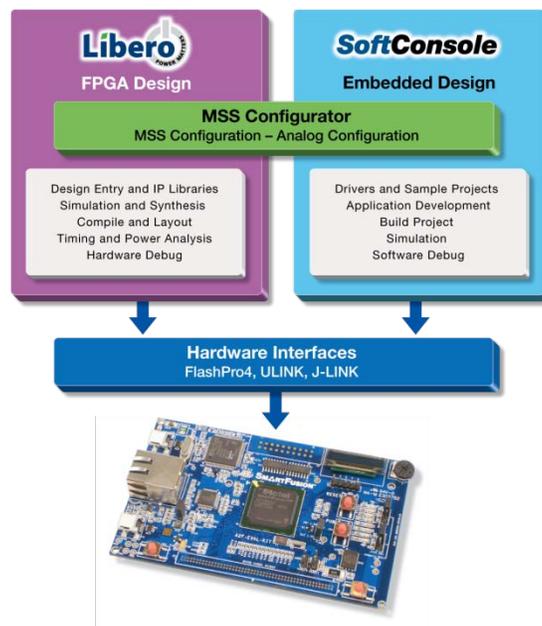# Microsemi SmartFusion Design Resources

Overview

The Microsemi SoC Products Group provides all the software tools necessary for creating fully integrated SmartFusion™ designs as well as designs for all other Microsemi FPGAs. Microsemi Libero® Integrated Design Environment (IDE) supports the complete hardware design flow from design creation through synthesis, simulation, layout, timing constraint generation, timing and power analysis, device programming and hardware design debug. SoftConsole is Microsemi's free Eclipse-based software development environment that enables the rapid production and debug of GNU C and C++ executables for SmartFusion ARM® Cortex™-M3 and other embedded processor designs. Firmware support for embedded processor designs is also included, and device programming for hardware and software implementation is provided by Microsemi's FlashPro tools.

Microsemi Software Configurations

The Libero IDE tools suite includes all of the tools you need to create both the hardware and software design. The Libero IDE web download or DVD includes the following tools:

- Libero IDE base tools: Project Manager, SmartDesign, IP and Firmware Catalogs, Designer, SmartTime, SmartPower, SoftConsole and FlashPro.
- Libero OEM Tools: Synplify® Pro AE, ModelSim® AE, Identify® AE, Synplify DSP AE, and Precision®.

Detailed Tool Information: www.actel.com/products/software

Download and Install Microsemi Software

The Libero IDE web downloader allows you to select various Libero IDE tools for download and installation, or you can download the full DVD image, which contains all Libero IDE tools. Select SoftConsole from the list of available tools if you plan to use this as your software IDE.

Download and Install Now: www.actel.com/download/software/libero

Obtain and Install a Software License

Libero IDE software for SmartFusion requires an unexpired Libero v9.0 or later Eval, Gold, Platinum, or Standalone (SA) license. You can recognize a license version by looking for 9.0 or later in the feature line. For example, a Libero Gold v9.0 license includes the feature line:

"FEATURE ACTEL_VISTA actlmgrd 9.0 (expiration date)…".

Typically your license is located at C:\flexlm\license.dat.

If you already have an unexpired Libero Gold, Platinum or SA license, please go to your Customer Portal and download an updated license from your license list. Check the software ID of your installed license. An updated copy of that same software ID license should be visible. SmartFusion operates with a Libero Gold license and does not require a Libero Platinum license. Please contact your local distributor or Microsemi Representative if you are interested in purchasing a Libero Platinum or Libero SA license.

Get a FREE License Now: www.actel.com/LicenseRequest and click the "Request Free License" button.

Operating System Support

 Microsemi software and hardware development software is supported on Windows® XP Pro SP3 and Windows Vista Business.

View System Requirements: www.actel.com/tools/systemreqs

SmartFusion Design Hardware

Information on the SmartFusion Evaluation or Development Kits is available from the links below. This includes tutorials and design examples targeted to each board and links to buy now from online distributors.

SmartFusion Evaluation Kit: www.actel.com/products/hardware/devkits_boards/smartfusion_eval.aspx
SmartFusion Development Kit: www.actel.com/products/hardware/devkits_boards/smartfusion_dev.aspx

SmartFusion Design Resources

SmartFusion and other Microsemi FPGAs are well supported with tutorials, applications notes, design examples, and hardware evaluation kits. Refer to the following sites for more information:

SmartFusion Home Page: www.actel.com/products/smartfusion

SmartFusion Documentation Page: www.actel.com/products/smartfusion/docs.aspx

Libero IDE Home Page: www.actel.com/products/software/libero

SoftConsole Home Page: www.actel.com/products/software/softconsole

FlashPro Software and Hardware Home Page: www.actel.com/products/hardware/program_debug/flashpro

Tutorials, Webcasts, and Training: www.actel.com/support/training

Technical Support and Contacts

Technical support is available online at www.actel.com/mycases, by email at soc_tech@microsemi.com, or by phone:
Phone (NA): 800.262.1060
Phone (Int'l): +1 650.318.4460
Microsemi SoC Product Group sales offices, including representatives and distributors, are located worldwide. To find your local representative go to: www.actel.com/company/contact/offices.