**GPIO** 

National Semiconductor® GPIO Controller



**Release Note** 

# **GPIO Controller Release Note**

**GPIO Controller (GPIO) Release 1.0.1** 

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## CHAPTER 1 WHAT'S NEW IN THIS RELEASE

### **New and Changed Features**

Release 1.0.1 of the GPIO resolves the issues listed in Table 1. For detailed descriptions of the issues, refer to the *GPIO Controller Errata* document, available from the "docs" link for GPIO release 1.0.0 on the IPextreme IP Distribution and Support Portal.

TABLE 1: ISSUES RESOLVED IN THIS RELEASE

Issue Number	Title
1233	Example script for preserving generic cells does not support recent versions of RTL Compiler

In addition, this release of the GPIO includes support for recent EDA tools (see Table 2).

## **Supported Operating Systems**

IPextreme supports the GPIO product for use with the following operating systems:

- ► Solaris 2.8 (on SPARC-compatible machines)
- ► RedHat Enterprise Linux 3.0 (on Intel x86\_64-compatible machines)
- ► RedHat Enterprise Linux 4.0 (on Intel x86 64-compatible machines)

## **Supported EDA Tools**

IPextreme supports the GPIO for use with the EDA tools/versions listed in Table 2.

In addition, to use the XPack sim.rb and syn.rb utilities for simulation and synthesis, you will need release 8.7.0 or later of the XPack tools. Refer to the XPack User Guide for information about installing the XPack tools and associated third-party software (Ruby and example synthesis libraries).

TABLE 2: SUPPORTED EDA TOOLS

Name	Version	Tool	Vendor
Incisive	9.2, 8.2 6.2	Simulator	Cadence Design Systems
VCS	2010.06, 2009.12, 2008.12	Simulator	Synopsys
ModelSim	6.6b, 6.5c, 6.4f	Simulator	Mentor Graphics
RTL Compiler	9.1, 8.1, 7.2	Synthesizer	Cadence Design Systems
Design Compiler DB mode	2004.12-SP5	Synthesizer	Synopsys
Design Compiler XG mode	2010.03-SP2, 2009.06-SP5, 2008.09-SP5	Synthesizer	Synopsys
XST	12.1, 11.5, 10.1	FPGA Synthesizer	Xilinx
Quartus II	9.1, 9.0, 8.0	FPGA Synthesizer	Altera
Precision Synthesis	2010a.218, 2009a.95, 2008a.47	FPGA Synthesizer	Mentor Graphics

## **Getting Started**

To get started working with the GPIO:

- If you have not already done so, refer to the XPack User Guide and XPack Guide for AMBA IP to familiarize yourself with the XPack environment and the workflow for the GPIO.
- Follow the procedures in the XPack Guide for AMBA IP to configure and download
  the GPIO from the IPextreme IP Distribution and Support Portal. Refer to the GPIO
  Controller Integration Guide for detailed information about the GPIO configuration
  parameters.
- 3. Follow the procedures in the *XPack Guide for AMBA IP* to simulate and synthesize the GPIO in your local environment.