

# **PLD Design Software**

## **Programmable Logic Device Design Software**

**OVERVIEW** 

Atmel<sup>®</sup> offers Programmable Logic Device (PLD) design engineers a wide variety of user-friendly electronic design automation software tools to fulfill different PLD design needs.

### **Atmel ProChip Designer**

Atmel ProChip Designer<sup>®</sup> is a fully featured IDE software suite incorporating state-of-the-art VHDL/Verilog synthesis and simulation tools from Mentor Graphics<sup>®</sup> with the Atmel user-friendly interface and design navigator as well as powerful fitter technologies. The combination of these tools will enable CPLD designers to achieve the highest possible logic utilization from the Atmel ATF15xxAS/ASL/ASV/ASVL series CPLDs with Atmel Logic Doubling<sup>®</sup> features. For more details, please refer to the "ProChip Designer Software Suite Overview" available online at:

http://www.atmel.com/Images/Atmel-3628-PLD-ProChip-Designer-Software-Suite-Overview.pdf.

## **Altium Protel Design Explorer 99SE**

The Altium® Protel® Design Explorer™ 99SE (Atmel Edition) can be used independently or in conjunction with the Atmel ProChip Designer v5.0 to create, compile, and functionally simulate schematic and CUPL designs for all Atmel SPLDs, as well as, the ATF750C/CL/LVC, ATF2500C, ATF1500A/AL, and ATF15xx CPLDs. Permanent license for this software can be purchased from any Atmel distributor:

Atmel Ordering Code: ATDS1500PC

#### **Atmel WinCUPL**

The Atmel WinCUPL supports CUPL designs for all Atmel SPLDs and CPLDs, which include the industry standard 16V8 and 22V10 SPLDs, as well as, the ATF15xxAS/ASL/ASV/ASVL, ATF750C/CL/LVC, ATF2500C, and ATF1500A/AL CPLDs. This tool is free and available for download online at:

http://www.atmel.com/tools/WINCUPL.aspx

# **Design Software Features**

Table 1. Software Features

	Feature	Atmel ProChip Designer	Protel 99SE	Atmel WinCUPL
Design Entry	VHDL	✓		
	Verilog	✓		
	CUPL		✓	✓
	Schematic		✓	
Synthesis	VHDL	✓		
	Verilog	✓		
	CUPL		✓	✓
	Schematic		✓	
Simulation	VHDL (Functional and Timing)	<b>√</b> (1)		
	Verilog (Functional and Timing)	<b>√</b> (1)		
	CUPL (Functional)		✓	✓
	Schematic (Functional)		✓	
Fitter	Atmel Proprietary Device Fitters	✓	✓	✓
Devices	Atmel ATF15xxAS/ASL/ASV/ASVL	✓	✓	✓
	Atmel ATF1500A/AL		✓	✓
	Atmel AT2500C		✓	✓
	Atmel ATF750C/CL/LVC		✓	✓
	SPLDs (16V8/22V10)		✓	✓

Note: 1. Atmel no longer provides licenses for the Mentor Graphics ModelSim simulation tool. Designers must obtain the appropriate license from Mentor Graphics if VHDL/Verilog simulation is required.

### **POF2JED Conversion Software**

Atmel offers POF2JED conversion software which enables existing applications to acquire a true second source with little or no effort. It is more user-friendly than ever:

- Push-button EPM7xxx/3xxx Support
- 5V/3.3V Auto Configuration
- Used as a Stand-alone Application

POF2JED can be downloaded from the Atmel website:

http://www.atmel.com/lmages/pof2jed.zip



### **ATMISP**

The Atmel ATF15xx JTAG ISP software, ATMISP, is used in conjunction with Atmel ATF15xx JTAG ISP cables (ATDH1150PC/VPC/USB) or other compatible cables to program the Atmel JTAG ISP CPLDs (ATF15xxAS/ASL/ASV/ASVL) on the target ISP hardware system. This software can also be used to generate the SVF files needed by the ATEs to program the ATF15 series on the circuit boards.

# **Technical Support**

Email pld@atmel.com

Hotline (1)(408) 436-4333

Online Support Form http://support.atmel.com/bin/customer.exe

Product Information http://www.atmel.com/products/other/spld-cpld/default.aspx













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© 2013 Atmel Corporation. / Rev.: Atmel-3629B-PLD-Design-Software-Overview\_122013.

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