

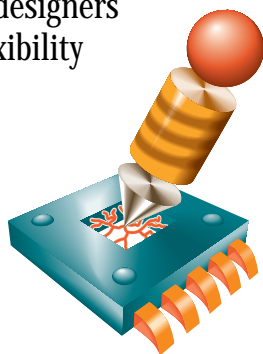
# Xilinx Foundation Series



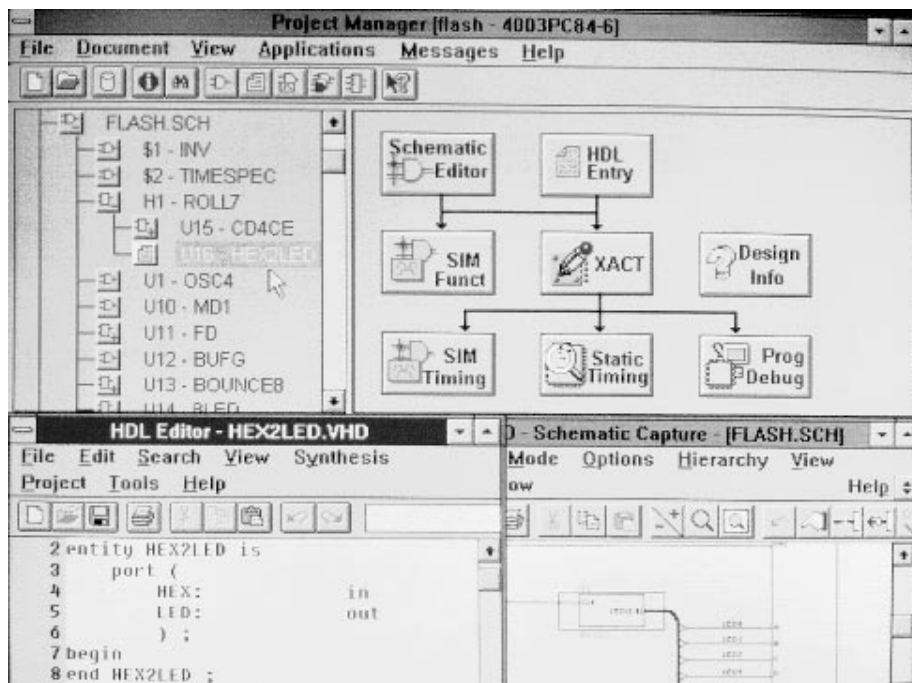
The Xilinx Foundation Series is an easy-to-use, shrink-wrapped solution that provides everything required to design a programmable logic device. This fully-integrated solution makes designing easy by providing push-button design flows, interactive tutorials and on-line training in a Windows-based design environment.

This series features broad support for standards-based HDL design. All configurations come with the popular ABEL-HDL language and fitters optimized for each target architecture. "VHDL" configurations include integrated VHDL synthesis with multimedia tutorials and an HDL Wizard™ to turn new users into experts quickly and easily.

The Xilinx Foundation Series supports the industry's broadest array of programmable logic solutions including the XC2000, XC3000, XC3100, XC4000, XC4000E\*, XC5000, XC7000 and XC9500\* families. This provides technology independence by giving designers the flexibility



**X S A T C E T P**



to select the optimal technology for their design, and migrate to new technologies if design requirements dictate a change.

Easy upgrade paths from the Xilinx Foundation Series support higher density devices and system-level design capabilities. This protects design tool and training investments as the design requirements grow.

## Xilinx Foundation Series Highlights

- Low-cost, complete solutions
  - Fully integrated, comprehensive tool set
  - Shrink-wrapped solution
  - Everything needed to complete a successful design
- Easy to learn and use
  - Integrated solution provides seamless design flow

- Push button flows simplify the design process
- Windows-based XACT<sup>step</sup> v6 shortens the learning curve
- Interactive tutorials provide on-line training for VHDL design and implementation tools
- Integrated HDL support
  - Supports VHDL and ABEL-HDL
  - HDL Wizard produces optimized code
  - Intelligent HDL editor makes language easy to write and debug
  - FPGA-specific synthesis tools produce high performance designs
- Technology Independence
  - Supports wide range of FPGA and CPLD families
  - Flexibility to target devices late in design cycle
  - Ability to reuse design files, migrate to new technologies
- Easy migration paths protect investment
  - Upgrade to configurations that support higher densities
  - Upgrade to system-level design tools
- World class technical support and service
  - Xilinx provides single point of contact for every step in the design process

\* Available in v6.0.1

## Complete, shrink-wrapped design solution for FPGA and CPLD devices

### Product Configuration

	Foundation Base	Foundation Base VHDL	Foundation Standard	Foundation Standard VHDL
Schematic Editor	✓	✓	✓	✓
XABEL	✓	✓	✓	✓
Integrated VHDL Synthesis		✓		✓
Gate-level Simulator	✓	✓	✓	✓
Design Manager	✓	✓	✓	✓
Flow Engine	✓	✓	✓	✓
Timing Analyzer	✓	✓	✓	✓
Hardware Debugger	✓	✓	✓	✓
PROM File Formatter	✓	✓	✓	✓
Floorplanner			✓	✓
XACT Design Editor			✓	✓
All FPGA Place & Route			✓	✓
Low-Density FPGA Place & Route	✓	✓		
EPLD Place & Route	✓	✓	✓	✓
X-BLOX		✓	✓	✓

### Easy to Learn and Use

The Xilinx Foundation Series features a fully-integrated tool set allowing users to access design entry, implementation and verification tools from a single graphical user interface. Every step in the design process is accomplished using graphical tool bars, icons and pop-up menus supported by interactive tutorials and comprehensive on-line help.

Design implementation is made easy using push-button design flows and the XACT<sup>step</sup> v6 Flow Engine. For HDL designers, the powerful HDL Wizard speeds the design process and produces optimized results.

### HDL Support

All Xilinx Foundation Series packages include the HDL Wizard with these exciting features:

- On-line multimedia tutorial teaches the techniques of VHDL design

- Intelligent HDL editor with color coding, syntax checking and single click error navigation makes it easy to read and debug VHDL and ABEL-HDL designs
- HDL Language Assistant provides template libraries of common functions with optimized VHDL and ABEL-HDL code
- FPGA-specific synthesis tools produce high-density, high-performance results

All packages support ABEL-HDL; VHDL configurations contain VHDL synthesis.

### Migration Paths

All tools in the Xilinx Foundation Series use standards-based design to protect the user's investment as design requirements change.

For example, designers can use Xilinx Foundation products to learn ABEL-HDL and VHDL and produce code optimized for FPGA resources. If future require-

ments force the use of different design tools, users can upgrade to the Xilinx Alliance Series and reuse their code while gaining access to powerful system-level tools.

The Xilinx Foundation and Xilinx Alliance Series use the same core implementation tools eliminating the need to relearn the design process after an upgrade.

Unified libraries and standard design file formats allow schematic designers to enjoy the same migration capabilities.

### Technical Support and Service

Xilinx world class technical support provides a single point of contact for every step in the design process. Questions about schematic capture, VHDL code generation, synthesis, design implementation and verification are handled by the Xilinx technical hotline with additional support provided by an extensive Field Application Engineering Force.

This real-time, hands-on support is supplemented with an electronic bulletin board, world wide web connection, Apps Fax, technical newsletter and extensive application notes. Hotline support is included free with every Xilinx Foundation System purchase.

### Platform Support

The Xilinx Foundation Series runs on PC compatibles under Windows 3.1. and Windows 95\*.

### Ordering Information

Please contact a Xilinx representative or distributor to order products in the Xilinx Foundation Series.

\* Contact factory for availability.

### Sales Offices

#### Corporate Headquarters

Xilinx, Inc.  
2100 Logic Drive  
San Jose, CA 95124 U.S.A.  
Tel: 1 (408) 559-7778  
Fax: 1 (408) 559-7114

#### Europe

**England**  
Xilinx, Ltd.  
Suite 1B, Cobb House  
Oyster Lane, Byfleet  
Surrey KT14 7DU  
United Kingdom  
Tel: (44) 1 932 349401  
Fax: (44) 1 932 349499

#### Asia

**Japan**  
Xilinx K. K.  
Daini-Nagaoka Bldg. 2F,  
2-8-5, Hatchobori Chuo-ku.  
Tokyo 104, Japan  
Tel: 81-33-297-9191  
Fax: 81-33-297-9189

#### Hong Kong

Xilinx Asia Pacific  
Unit No. 4312  
Tower II, Metroplaza  
Hing Fong Road  
Kwai Fong, N.T.  
Hong Kong  
Tel: (852) 2-424-2739  
Fax: (852) 2-494-7159



The Programmable Logic Company<sup>SM</sup>