



## MicroBlaze Development Kit Spartan-3E 1600E Edition



### The Challenges in Creating New, Real-Time, Embedded Systems

- Building sophisticated embedded systems from scratch is both time-consuming and inefficient
- Creating and validating system components from different sources is often difficult
- Debugging brand new hardware, software, and IP simultaneously is always complex

### Accelerate Your Embedded Designs With Integrated Hardware/Software/IP Development Environments

- Intelligent tools, IP and reference designs streamline development
- Build fast and flexible embedded processing systems on high performance and customizable hardware platforms

### Build Fast and Flexible Embedded Processing Systems

Programmable platforms and innovative tools allow you to craft an embedded design with the perfect combination of feature set, performance, area and cost. Instantiate a flexible soft processor core, customize your IP, optimize the performance, and validate your software on a development board before you even have your custom hardware back from the shop!

### Programmable Platform FPGAs are Versatile SOCs

Programmable, reprogrammable, and field-upgradeable platforms mean that your product gets to market quicker and has a longer life. System features immersed in the chip allow you to build a wide variety of applications with off-the-shelf devices.

### Flexibility and Performance Optimization

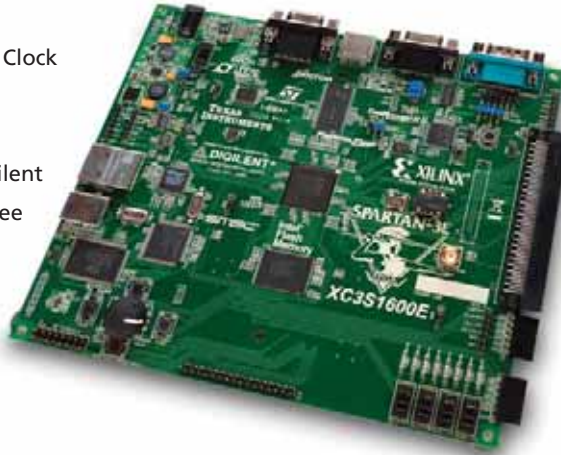
Create the system you require from customizable elements to best fit your application. Utilize the innovative FSL (Fast Simplex Links) to directly connect your processor core to the high-performance FPGA hardware and boost the performance of individual modules by 40X or more. Intelligent tools and reference designs help accelerate development even further.

### The MicroBlaze Development Kit, Spartan-3E 1600E Edition includes the following:

- Spartan-3E SP3E1600E Development Board
- Platform Studio embedded and ISE Webpack FPGA tool suites
- Pre-Verified Reference Designs, JTAG Probe, Power Supply, Serial and Ethernet Cables.

### SP3E1600E Development Board Features:

- Xilinx Devices – XC3S1600E-4FG320C FPGA, XC9572XL CPLD
- Memory - 512Mb DDR SDRAM, 128Mb Linear FLASH, 32Mb Platform FLASH PROM, 16Mb SPI Serial FLASH
- Clocks – 50Mhz Crystal, Socket for User Clock populated with 66MHz Osc
- Display – Optional LCD Display
- Connectors – Xilinx USB download, Digilent JTAG 3 cable, 43 Expansion I/O and Three 6-pin I/O ports
- Interfaces – RS232, SPI port, 4 Buttons, 8 LEDs, 4 DIP Switches, Rotary Encoder
- Peripherals – 10/100 Ethernet PHY, 4 Channel DAC, 2 Channel ADC



### Development Tools and IP:

- Embedded Development Kit (EDK) and Platform Studio tool suite
- Graphical tools for developing/debugging embedded platforms
- GNU compiler, debugger and utilities
- Platform Studio SDK – Software Development Kit, Eclipse-based IDE for powerful embedded software development and debug
- MicroBlaze soft processor license
- IP library of processor peripheral cores and other evaluation cores
- XMD – Xilinx Microprocessor Debug engine for run time target control

### ISE™ WebPack FPGA Design Tool Suite

- Timing driven FPGA hardware implementation tools
- Design entry, synthesis and verification capabilities
- Data2MEM – application for loading on-chip memory

**Ordering Info:** Part Number: DO-SP3E1600E-DK-UNI-G

### Corporate Headquarters

Xilinx, Inc.  
2100 Logic Drive  
San Jose, CA 95124  
Tel: 408-559-7778  
Fax: 408-559-7114  
Web: [www.xilinx.com](http://www.xilinx.com)

### Europe Headquarters

Xilinx  
Citywest Business Campus  
203 Brooklands Road  
Saggart,  
Co. Dublin  
Ireland  
Tel: +353-1-464-0311  
Fax: +353-1-464-0324  
Web: [www.xilinx.com](http://www.xilinx.com)

### Japan

Xilinx, K. K.  
Shinjuku Square Tower 18F  
6-22-1 Nishi-Shinjuku  
Shinjuku-ku, Tokyo  
163-1118, Japan  
Tel: 81-3-5321-7711  
Fax: 81-3-5321-7765  
Web: [www.xilinx.co.jp](http://www.xilinx.co.jp)

### Asia Pacific Pte. Ltd.

Xilinx, Asia Pacific  
No. 3 Changi Business Park Vista, #04-01  
Singapore 486051  
Tel: (65) 6544-8999  
Fax: (65) 6789-8886  
Web: [www.xilinx.com](http://www.xilinx.com)

## TAKE THE NEXT STEP

For more information on all Xilinx Embedded Processing Solutions, please visit: [www.xilinx.com/processor](http://www.xilinx.com/processor)



[www.xilinx.com](http://www.xilinx.com)

Copyright © 2006 Xilinx, Inc. All rights reserved. XILINX, the Xilinx logo, and other designated brands included herein are trademarks of Xilinx, Inc. All other trademarks are the property of their respective owners.

Printed in U.S.A. PN 0010958