Embedded Development Kit

Design Tools and IP Streamline Processing Design

The Challenges

- Developing a custom processing system using traditional solutions involves risk, restrictions, time delays, and challenges in both resources and cost

- Resolve these issues with FPGA-based programmable platforms that offer hard and soft processor core options, along with customizable peripherals – satisfy your unique embedded system requirements

The Xilinx Solution

- By combining a flexible Platform FPGA with a tightly integrated embedded design environment, the Xilinx Embedded Development Kit (EDK) streamlines the platform development process and accelerates your time to market

- This kit includes PowerPC and MicroBlaze embedded design support with Xilnx Platform Studio, the Software Development Kit, and a powerful processor IP catalog

- **Create High Performance, Customized Embedded Designs.** Create your own custom-processing platform while reducing your system cost by consolidating external functions into an FPGA. Select the perfect balance of feature and size for your system, and optimize hardware/software design trade-offs for the best price-performance results that meet your exacting requirements.

- **Create Designs Faster.** Xilinx Platform Studio enables you to quickly configure an embedded processing hardware platform. The Software Development Kit provides the software design environment that includes required software libraries as well as automated generation of device drivers and a complete Board Support Package (BSP). This productive hardware and software design environment saves time by accelerating design steps that would otherwise be manual and error-prone.

- **Create Better Embedded Systems while Saving Time and Money**
The Xilinx Embedded Development Kit (EDK) is a comprehensive suite of integrated development environment, software tools, configuration wizards, and IP that facilitates your design and utilizes all of the flexibility offered by a programmable platform.

XILINX®

The Embedded Development Kit Provides:

- **Xilinx Platform Studio (XPS) Tool Suite.** Including: Graphical IDE and command line support for developing and debugging hardware platforms; Base System Builder (BSB) configuration wizard to quickly create a known good working system; other intelligent design wizards to quickly configure the embedded system architecture, buses, and peripherals

- **Software Development Tools for MicroBlaze and PowerPC.** Including: GNU C/C++ compiler and GDB debugger; Xilinx MicroProcessor Debug (XMD) target server; Data2MEM utility for bitstream loading and updating; built-in FPGA download feature. The SDK is based on industry standard Eclipse IDE and CDT programming environment.

- **Real-Time Operating System and Embedded OS Support.** Provides design support and board support package (BSP) generation for numerous third party suppliers in the Xilinx ecosystem, including vendors such as Wind River, Green Hills, Mentor, LynuxWorks and other embedded industry leaders. Learn more about our processing ecosystem by visiting: *http://www.xilinx.com/ise/embedded/epartners/listing.htm*

- **Processing IP and MicroBlaze Soft Processor Core.** Embedded Processor IP and MicroBlaze Soft Processor Core. Pre-verified IP catalog, including a wide variety of processor peripheral cores, allowing for complete customization of your embedded system. Also included is the MicroBlaze 32-bit soft processor core. The royalty free MicroBlaze offers fully configurable floating point and memory management support, enabling commercial grade RTOS support. Learn more about MicroBlaze at: *www.xilinx.com/microblaze*

Take the Next Step

For the latest information or to buy the Embedded Development Kit go to:

www.xilinx.com/edk

For comprehensive information on Xilinx Processing Solutions, HW/SW Development Kits, IP Catalog, Design Services, Training Courses or Embedded Alliance Partners, please visit:

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