



TEAM DESIGN ENABLING
SYSTEM-LEVEL PRODUCTIVITY

› Today's Digital Design Challenges

- Reducing design iterations to meet aggressive deadlines
- Increasing team efficiencies for collaborative projects
- Achieving greater performance, lower cost, and reduced power
- Addressing growing design complexity and domain-specific requirements
- Addressing the demands for product differentiation

› Xilinx ISE Design Suite Results

- Achieve greater individual and team productivity
- Focus on design differentiation
- Shrink time to production
- Deliver break-through performance, power, and cost results

ISE Design Suite 13: Enabling System-Level Productivity

With the Xilinx ISE® Design Suite development environment, individual developers and design teams can achieve greater design productivity and bring products to production faster. Break-through technologies facilitate power optimization and simplify IP integration. To unlock the full potential of Xilinx Targeted Design Platforms, ISE Design Suite configurations align with common methodologies for logic, embedded, DSP, and system design. ISE Design Suite provides a tight connection between embedded and DSP flows to enable integration of designs that contain embedded, DSP, IP, and user blocks in one system.

Highlights of the ISE Design Suite Release 13 include:

- Boosted designer productivity, a team design environment that streamlines collaborations
- Support for Xilinx 6 and 7 series FPGA-based designs
- Single, standard interface with AMBA® 4 AXI4™ IP for plug-and-play design
- Usability enhancements for PlanAhead
- Intuitive design flow with fifth-generation partial reconfiguration capabilities that lower system cost for a broad range of high-performance applications
- Intelligent clock-gating technology that reduces dynamic power consumption by as much as 30 percent

Complete Methodology for Targeted Design Platforms

Xilinx Targeted Design Platforms provide embedded, DSP, and hardware designers with access to a wide array of silicon devices supported by open standards, common design flows, IP, and run-time platforms. The ISE Design Suite brings it all together with domain-specific design environments, while enabling design teams to meet their power and performance goals with Xilinx FPGAs, including the newest Xilinx 6 and 7 series device families.

Visit www.xilinx.com/ise to download a free 30-day evaluation, or to learn more about the Xilinx Targeted Design Platforms.

ISE Design Suite: Logic Edition

This complete solution for logic and connectivity design encompasses the front-to-back base methodology and IP. The Logic Edition includes:

- A collaborative development environment, with tools that enable team workflows
- Partial Reconfiguration supporting Virtex-6 and Virtex-7 FPGAs
- Intelligent clock-gating technology supports Virtex-6, Spartan-6, Virtex-7 and Kintex-7 FPGAs
- Plug-and-play FPGA design support through AMBA 4 AXI4 interconnect protocol IP

These new capabilities are in addition to the Xilinx tools and technologies for design entry, synthesis, implementation, and verification, and help achieve optimal design results in the shortest time.

For more information, visit www.xilinx.com/ise-logic.

ISE Design Suite: Embedded Edition

With all of the features, technologies, and IP found in the Logic Edition, the Embedded Edition also adds tools and IP for designs that take advantage of Xilinx FPGAs with embedded PowerPC® hard processor or MicroBlaze™ soft processor cores. Designers have access to the Xilinx Platform Studio tool suite, which offers a graphical environment and command-line support for developing hardware platforms for embedded applications. The Embedded Edition supports plug-and-play IP optimized for embedded using AMBA 4 AXI4 interconnect protocol IP.

For more information visit www.xilinx.com/ise-embedded.

ISE Design Suite: DSP Edition

To address the unique needs of DSP design methodology, the DSP Edition starts with the tools, technologies, and IP of the Logic Edition and adds the System Generator for DSP and specialized IP. Even developers that are new to FPGA design can use System Generator for DSP to quickly create production-quality FPGA implementations of DSP algorithms in a fraction of traditional RTL development times. The DSP Edition also supports plug-and-play IP optimized for embedded using AMBA 4 AXI4 interconnect protocol IP.

For more information visit www.xilinx.com/ise-dsp.

ISE Design Suite: System Edition

The System Edition includes all of the tools, technologies, and IP from the Logic, DSP, and Embedded Editions. This complete and flexible solution meets the needs of the user who requires a unique methodology that combines powerful DSP functionality with an embedded design or who wants to dramatically extend DSP designs through embedded processor capabilities.

For more information visit www.xilinx.com/ise-system.

FEATURE COMPARISON TABLE

| FEATURES | ISE WEBPACK™ (DEVICE LIMITED) | LOGIC EDITION | EMBEDDED EDITION | DSP EDITION | SYSTEM EDITION |
|---|----------------------------------|---------------|------------------|-------------|----------------|
| ISE Foundation with ISE Simulator (ISim) | ● | ● | ● | ● | ● |
| PlanAhead™ Design and Analysis Tool | ● | ● | ● | ● | ● |
| ChipScope™ Pro and the ChipScope Pro Serial I/O Toolkit | | ● | ● | ● | ● |
| Embedded Development Kit* (EDK) | | | ● | | ● |
| Software Development Kit* (SDK) | | | ● | | ● |
| System Generator with DSP | | | | ● | ● |

*Available as a standalone product

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