

Xilinx delivers world's most advanced 90nm FPGAs to key customers

June 28 2004

SAN JOSE, Calif., June 28, 2004 - Xilinx, Inc., the world's leading supplier of programmable logic solutions and inventor of the FPGA, announced today that it has initiated shipment of Virtex-4 FPGAs to its early access customers. Manufactured using the world's first triple-oxide 90nm CMOS technology with 11-layer metal interconnect, Virtex-4 devices represent a quantum leap in programmable device architecture, technology, and system design capabilities. With over \$2.5B in cumulative revenue, Virtex FPGAs are the world's most popular programmable logic brand.

The Virtex-4 FPGA family extends that leadership with a host of innovations that deliver unprecedented design capabilities to system designers worldwide.

- Triple-Oxide 90nm CMOS Process, enabling performance and system capacity increases of up to 2x compared to existing Virtex-II and Virtex-II Pro FPGAs.
- ASMBL architecture, a modular framework of silicon subsystems, enabling multiple platforms to most efficiently support different application domains.
- Advanced deep-submicron design techniques reducing dynamic and static power by half compared to previous generation Virtex FPGAs.
- 500MHz XtremeDSP™ Slices, delivering aggregate DSP performance

of 256GigaMACs per second at record-setting power-efficiency levels of 56uW/MHz.

- 500MHz SmartRAM™, 18Kb configurable synchronous dual-port Static RAM, featuring integrated FIFO control logic to build fast FIFOs without consuming logic cell resources.

- 500MHz DCM™ Digital Clock Managers, offering sub-30ps timing resolution and the world's most advanced clock synthesis and timing capabilities.

- 500MHz high-performance on-chip differential clock networks for highest precision control of skew and duty-cycle.

- 0.6 - 11.1 Gbps RocketIO™ High-Speed Serial Transceivers, offering industry-leading bandwidth, and channel speeds including 10, 6.25, 3.125, 2.5, 1.25, and 0.6 Gbps.

- 32-bit RISC PowerPC™ processors delivering in excess of 1300 Dhrystone MIPS.

"We have been working with a select group of customers since the first of the year through our early access program. As a result, engineering teams are already designing next-generation products that simply were not possible before the introduction of our Virtex-4 FPGAs," said Erich Goetting, vice president and general manager of the Advanced Products Division at Xilinx.

About Xilinx Virtex-4 FPGAs

The initial Virtex-4 family includes three platforms; Virtex-4 LX optimized for logic-intensive designs, Virtex-4 SX optimized for very high performance signal processing and Virtex-4 FX for embedded processing and high-speed serial connectivity. Each platform will offer a

range of device options. With up to 200,000 logic cells and up to 500 MHz performance, the Virtex-4 family delivers twice the density and up to twice the performance of any FPGA in the industry currently in production. Initial engineering samples of the Virtex-4 LX Platform FPGAs have already been delivered with general samples and additional platforms to follow shortly. For more information on the early access program and availability contact your local Xilinx representative.

The original press release can be found [here](#).

Citation: Xilinx delivers world's most advanced 90nm FPGAs to key customers (2004, June 28)
retrieved 18 April 2024 from

<https://phys.org/news/2004-06-xilinx-world-advanced-90nm-fpgas.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.