

Xilinx Virtex-5 Family – The Ultimate System Integration Platform

Key design team innovations in process technology, architecture and product development methodology have led to unprecedented performance and density gains with Virtex-5 FPGAs – at speeds on average 30 percent higher and 65 percent increased capacity over previous generation 90-nm FPGAs – while reducing dynamic power consumption by 35 percent, maintaining the same low static power and consuming 45 percent less area.

Xilinx Virtex-5 LX Devices in Customer Hands

The Xilinx Virtex™-5 LX Platform consists of six devices offering up to 330,000 logic cells, 1200 user I/Os, 10-Mbits of 36-Kbit block RAM, and 3.2-Mbits of distributed RAM, plus an abundance of hardened intellectual property (IP) blocks. The Virtex-5 LX50, LX85, and LX110 devices are available immediately with the remaining three devices to follow over the next six months.

Virtex-5 LX50 Device

The Virtex™-5 family LX platform targets ultra-fast high performance logic applications with six unique devices offering up to 330,000 logic cells, 10-Mbits on-chip block RAM, and 1,200 user I/Os, plus a range of embedded hard IP blocks all tuned to 550 MHz.

65nm Wafer: Xilinx Delivers World's First 65nm FPGAs

The new Xilinx Virtex™-5 family is the industry's first FPGA product line to use 300mm/65nm manufacturing technology with the latest generation of power-optimized triple-oxide process from foundry partners UMC and Toshiba.

Xilinx Virtex-5 Revolutionary ExpressFabric™

The Virtex™-5 family features new ultra-fast ExpressFabric™ technology with the industry's first look-up table (LUT) with six independent inputs and a new diagonal interconnect structure that reduces logic levels and improves signal interconnect between building blocks.