



### **Industry Perspective:**

#### **Xilinx Unveils World's First 65nm FPGA Family**

“Bandwidth aggregation requirements are expected to increase 10-fold or more, ultimately requiring 20-50 Mbps per channel in order to deliver these new [triple-play] services. High performance programmable solutions such as the Virtex-5 family will play a key role for packet processing and transport in this communications infrastructure overhaul.”

- *Bob Wheeler, senior analyst at The Linley Group*

“Future SoC solutions must combine flexibility with very high-performance DSP, processing and connectivity capabilities in order to meet the aggregation bandwidth requirements of transporting voice, video and data. An example of such a solution is the Xilinx Virtex-5 family, which positions the Company well to expand its reach into these upcoming market opportunities.”

- *Alan Varghese, ABI Research*

“Using real hardware and early access software tools, we have discovered that it requires less programming effort to achieve high performance with Virtex-5 FPGAs. These devices will motivate users to shift more of their application into FPGAs. The significant improvements come from the ExpressFabric technology and other innovations added into the 65-nm parts. Mercury is motivated to get these advances quickly into the hands of our customers.”

- *Craig Lund, Vice President & CTO, Mercury Computer Systems. “*

“The Xilinx Early Access Program has enabled VMETRO to quickly get our initial Virtex-5 board-level designs implemented. This quick turnaround is beneficial to our traditional real-time, embedded customers, as higher performance subsystems that consume less power is always a pressing requirement. Virtex-5 LX devices address both of these key needs. The Virtex-5 ExpressFabric technology provides performance gains of up to 30 percent, while the power-saving IP block features enable our customers to design more powerful subsystems in the same or smaller footprint without sacrificing performance.”

- *Thomas Nygaard, CTO, VMETRO*

“Xilinx is breaking new ground with its 65-nm Virtex-5 FPGA product line. These platforms require tools that are optimized to solve timing closure issues that arise from the unprecedented levels of performance and capabilities. The creation of this [design] task force is targeted at helping our mutual customers deploy the Virtex-5 ultra-high-capacity devices in their systems in the fastest, most efficient manner.”

- *Ken McElvain, CTO, Synplicity*

“We have worked closely with Xilinx over the past year to ensure optimal support of the Synplify Pro tool for the new Virtex-5 devices. These devices will offer unprecedented levels of speed and capacity, making them an attractive solution for a broader range of applications. We believe that the enhanced optimizations built into the Synplify Pro software, along with its timing-driven approach to synthesis, will allow designers to push the performance of their complex designs while remaining comfortably within their time-to-market goals.

- *John Gallagher, Director Outbound Marketing, Synplicity*

"The new Virtex-5 family of FPGAs from Xilinx will expand the FPGA marketplace and enable new applications for high-performance, high-complexity FPGAs. Xilinx and Mentor Graphics have worked in close cooperation over the last year to ensure that Precision Synthesis, the key product in the Mentor Graphics family of FPGA development tools, is taking full advantage of Virtex-5 specific architectural features including the LUT6 capability, providing our mutual customers with superior quality of results and unprecedented analysis and productivity capabilities."

- *Simon Bloch, General Manager, Design Creation and Synthesis Division, Mentor Graphics*

“The Virtex-5 family of domain-optimized platforms is yet another testimony to Xilinx’ leadership in providing integrated and high performance solutions to the programmable community. With its innovative LUT scheme, feature-rich programmable fabric and leading-edge process technology, Virtex-5 FPGAs offer unrivaled system integration platforms for network infrastructure applications. We are excited to offer optimized support by working closely with Xilinx during the launch of the first 65-nm FPGA products.”

- *Sanjay Bali, product director for Structured and Programmable Solutions, Magma*