

1GHz Performance Milestone – 0.18 μ , 1.8V FPGA

Xilinx recently achieved 1GHz performance in a prototype 0.18 μ FPGA, using a frequency counter design. These FPGAs, derivatives of the XC4036XV family, were part of a mask set used as the process driver for our new 0.18 μ technology.

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The aggressive development of the 0.18 μ process, currently one of the most advanced in the world, reflects the very close working relationship between Xilinx and UMC Group (Taiwan). The partnership is based on an on-going, joint effort to be at the leading edge of semiconductor industry process development. This unprecedented level of cooperation gives you early access to the most advanced technology for low-power, high-performance applications.

“Xilinx is an ideal development partner because it is dedicated to being an early adopter of advanced foundry technology. Moreover, the regularity of the SRAM-based Xilinx FPGA architecture facilitates defect analysis and fault testing, making FPGAs excellent vehicles to troubleshoot the most up-to-date UMC Group processes,” said Jim Kupec, president of UMC Group (USA).

“Our strategy is to provide maximum value to our customers by aggressively pushing FPGA technology to the limits in order to provide more advanced features and performance,” said Wim Roelandts, president and CEO of Xilinx. “Like Xilinx, UMC Group is clearly focused on being at the leading edge of process technology. This common objective has led to a highly successful partnership.” Σ

1GHz Frequency Counter Operation

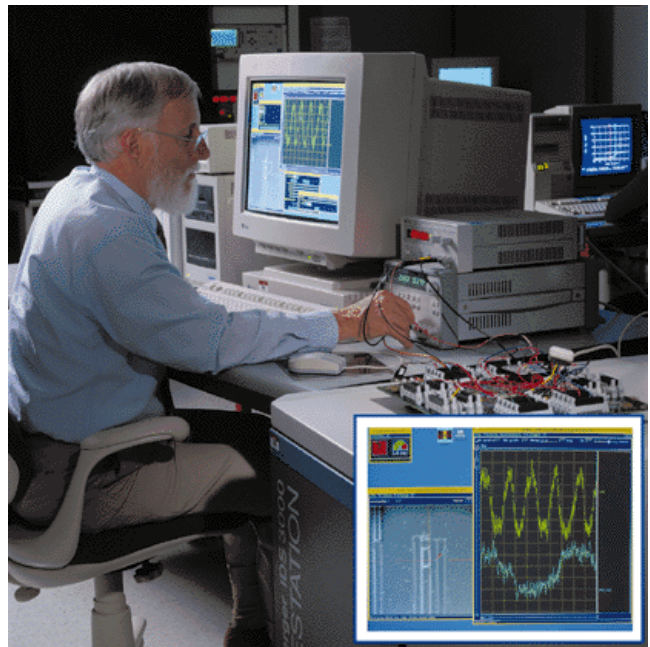


Figure 1

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