

eSilicon Delivers 65nm Silicon and Package to Achronix

Company helps implement first member of 1.5GHz Speedster™ family of devices

SUNNYVALE, Calif. – eSilicon Corp., a pioneering semiconductor value chain producer (VCP), today announced it delivered working silicon on the world's fastest field programmable gate array (FPGA) for Achronix Semiconductor Corp. The implementation of the first member of the Speedster™ family, the SPD60, includes 20 lanes of full-duplex 10.3 Gbps SerDes and four independent 1066 Mbps/pin DDR2/3 SDRAM interfaces. Using Achronix's patented picoPIPE™ acceleration technology, the device operates at speeds up to 1.5 GHz.

"We were delighted to work with Achronix on their groundbreaking family of FPGAs," said Jack Harding, chairman, president and CEO of eSilicon. "This challenging project was an ideal fit for the world-class implementation and manufacturing expertise of the eSilicon team."

"This is another example of eSilicon's long track record of delivering right-first-time silicon and packages for its customers," Harding added. The Achronix application required an advanced process node, very complex internal circuitry, and several high-speed multi-protocol interfaces. eSilicon successfully delivered working first-pass silicon to Achronix, enabling it to deliver product to customers quickly.

The device incorporates multiple unique multi-protocol interfaces, capable of supporting DDR2, DDR3, RLDRAM, QDRII and SPI4 on the same set of I/O pins. This approach to the implementation has the advantage of providing the flexibility to interface to a wide variety of high-speed memory and communication chips, while minimizing the number of pins on the FPGA. In addition to addressing the silicon implementation challenges, eSilicon also managed design complexities to deliver a sophisticated package for the device. With multiple 10 Gbps interfaces, as well as a four 72-bit wide DDR2/3 memory interface operating at 1066 GHz, maintaining signal integrity was a critical element of delivering a working design.

"eSilicon was selected for their backend implementation, manufacturing and packaging expertise," said Ravi Sunkavali, vice president of Hardware Engineering at Achronix. "We are pleased with the results and look forward to our continued partnership."

About eSilicon

eSilicon, a leading Value Chain Producer (VCP) for the semiconductor industry provides a comprehensive suite of design, productization and manufacturing services enabling a flexible, low-cost, lower-risk path to volume chip production. The company delivers custom chips (ASICs) to system OEMs and fabless semiconductor companies who serve a wide variety of markets including the consumer, computer, communications and industrial segments. For more information, please go to www.esilicon.com.

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