Emulex Enhances Design Productivity With Synopsys’ Advanced Verification Solutions

“Emulex has built a strong working relationship with Synopsys over the past several years. Because of the confidence we’ve gained in Synopsys’ support, breadth and quality of their technology and overall company stability, we can quickly take advantage of new process nodes as they become available. As our primary EDA partner, we look forward to an ongoing, long-term relationship.”

Peter Paterson
Senior Vice President of Engineering, Emulex

Emulex is a leader in converged networking solutions for data centers. Emulex provides a single framework that intelligently connects every server, network and storage device within the data center. Emulex’s product portfolio of controller chips, adapters, blades, and connectivity solutions are proven, tested and trusted by the world’s largest and most demanding IT environments.

Addressing Design Productivity at Advanced Process Nodes

Emulex’s product offerings serve as the backbone infrastructure for many IT departments worldwide. With demands on server speed growing exponentially, Emulex must deliver new ASIC products quickly and with significant gains in performance, generation after generation. So, when embarking on their new 40nm designs, Emulex needed an EDA partner who could provide leading-edge technology to address their key design challenges: verification productivity and low power.

Of particular importance for Emulex was support for SystemVerilog (IEEE 1800TM), the industry’s first unified hardware description and verification language standard. By deploying Synopsys flows that offer unmatched support of the most advanced SystemVerilog constructs, Emulex is able to boost productivity in their chip development process. In addition, an increasingly critical challenge in high-end electronic system designs is the need to manage power, and Synopsys’ low power solutions provide Emulex the ability to efficiently implement key power management techniques early in the design flow.

Easing The Manufacturing Handoff: “Synopsys Is the Standard”

Emulex’s choice to standardize on Synopsys tools was made in part because of the more efficient collaboration it enabled with the fab. According to Paterson, “Synopsys’ Design Compiler® and PrimeTime® are accepted as de facto standards with ASIC vendors”, easing design and manufacturing correlation and providing Emulex manufacturing flexibility. As Emulex continues to innovate through network switching devices that utilize ever-advancing process nodes, its primary EDA relationship with Synopsys helps them realize a high-quality, predictable handoff to their manufacturing partners and a more rapid introduction of new products to their markets.