SYNOPSYS®

SUCCESS STORY

Synopsys and Achronix

Achronix Accelerates Chip Design and Development by Adopting Synopsys Cloud for All SoCs

"Synopsys Cloud offers a complete design environment to design SoCs. Highly elastic EDA and compute resources provide excellent flexibility and remove barriers for on-time delivery of designs. Synopsys Cloud has helped us reimagine how we plan and execute SoC design projects on cloud. With the ability to deliver complete designs at a much quicker pace, we can optimize future roadmap schedules for improved verification and higher quality designs ahead of schedule."

~ Chris Pelosi, Vice President, Hardware Engineering, Achronix

Achronix
Data Acceleration

Business

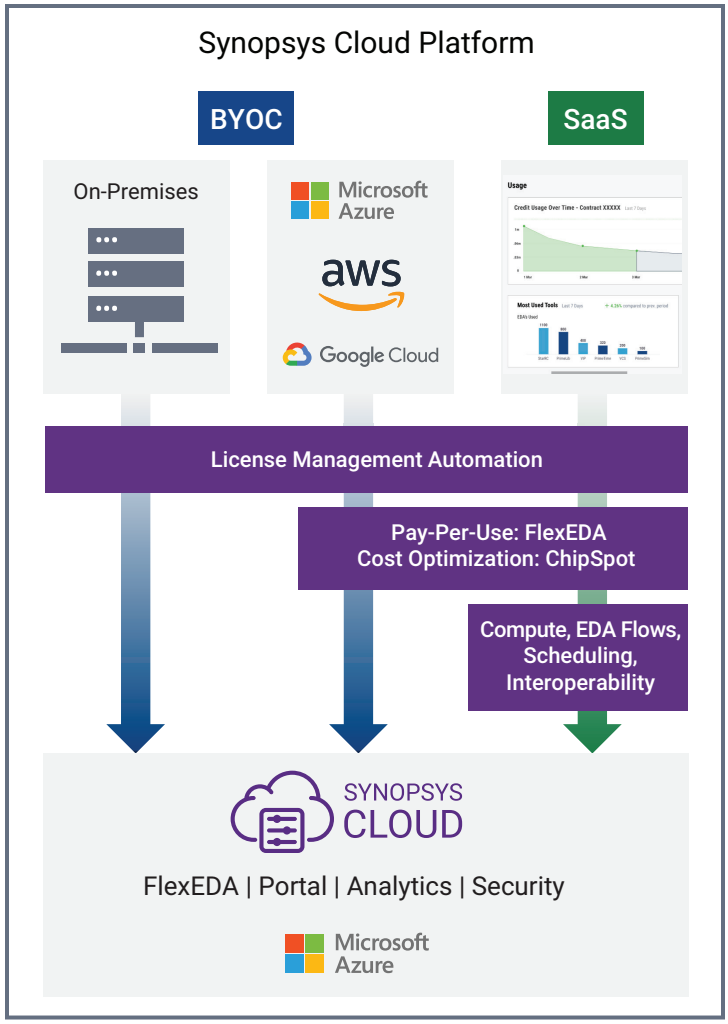
Achronix Semiconductor Corporation is a fabless semiconductor corporation based in Santa Clara, California, offering high-end FPGA-based data acceleration solutions, designed to address high-performance, compute-intensive and real-time processing applications. Achronix is the only supplier to have both high-performance, high-density standalone FPGAs and licensed eFPGA IP solutions. Achronix Speedster®7t FPGA and Speedcore™ eFPGA IP offerings are further enhanced by ready-to-use VectorPath® accelerator cards targeting AI, machine learning, networking and data center applications. All Achronix products are fully supported by the Achronix Tool Suite which enables customers to quickly develop their own custom applications.

Challenges

- Aging compute resources, infrastructure scalability limitations, and resource constraints create longer design cycle and time to results, as well as unpredictability
- License constraints: EDA licenses not scalable and not available on demand
- License management overhead: Lost time and productivity in managing and scaling license servers

Synopsys Solution

- Synopsys Cloud provided both EDA software and access to the latest compute resources through a seamless browser-based environment
- Complete automated license server management and scalability



Benefits

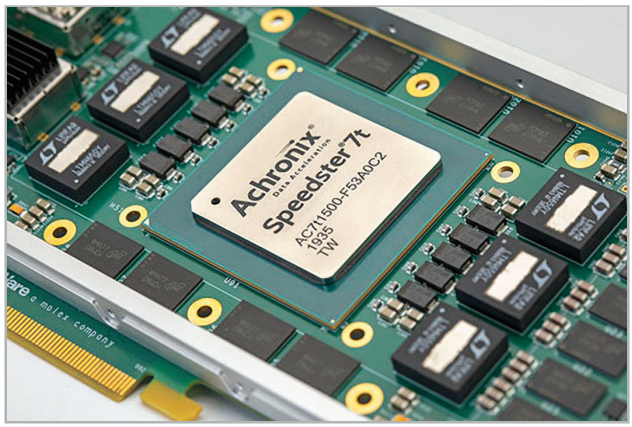
- **Production Environment:** Up and running in 15 hours
- **Time to Results:** Completed full-chip physical verification 5x faster compared to on-prem due to unlimited, on-demand true pay-per-use FlexEDA licensing model and latest compute resources
- **Shift Left:** With faster results, more iterations executed, and issues discovered and fixed early in design
- **Latest Advanced Compute Resources:** On-demand access enhanced productivity
- **Availability:** Access to the entire portfolio of Synopsys EDA tools and high-quality, silicon-proven IP

“We ran physical verification for our entire SoC and got results 5x faster. Combined with the reduction in license server management overhead, we are able to focus on improving the quality of the design and meeting project schedules.”

~ Chris Pelosi, Vice President, Hardware Engineering, Achronix

Synopsys Cloud Solution

"With aging compute and scalability challenges, existing on-premise resources were not sufficient for peak compute requirements during various stages of the SoC design," said Chris Pelosi, Vice President, Hardware Engineering, Achronix. "We wanted a scalable, secure, and reliable cloud-based design environment that we could leverage along with our existing on-premise environment. Synopsys Cloud provided us with complete flexibility and scalability to leverage cloud for EDA tools and infrastructure when needed. To complement cloud's scalability and elasticity, Synopsys Cloud also offers true pay-per-use FlexEDA licenses. With unlimited, on-demand licenses of Synopsys IC Validator® running on Synopsys Cloud, our full-chip SoC physical verification got completed in 16 hours instead of 80 hours. Other key benefits include being able to run EDA tools from on-premises without having to manage license servers and taking advantage of bursts on demand for scalable, elastic EDA workloads. These are among the many features that make Synopsys Cloud a true differentiator and leader for EDA on cloud."



Achronix's Speedster7t FPGA family targeted for high-performance AI/ML and networking applications leveraged Synopsys Cloud for development.

About Synopsys Cloud

Synopsys Cloud combines the availability of advanced computing and storage infrastructure with unlimited access to EDA software licenses on demand so you can focus on what you do best—design chips—faster. With cloud-native EDA tools and pre-optimized hardware platforms, an extremely flexible business model, and a modern customer experience, Synopsys has reimagined the future of chip design on the cloud that doesn't disrupt proven workflows.

The Synopsys Cloud FlexEDA business model offers two licensing options: pay-per-use (PPU) and cloud subscription license (CSL). PPU is an industry-first, true usage based licensing approach for EDA tools. Synopsys Cloud FlexEDA provides access to unlimited, on-demand EDA software licenses which is a transformational change compared to traditional EDA software licensing models. With Synopsys Cloud FlexEDA, many Synopsys tools are now available for use by the minute, providing customers with the granularity they need for peak usage bursts in the cloud. This helps reduce time to results significantly and deliver a better quality design ahead of time.

Users can choose from two deployment options: Bring-Your-Own-Cloud (BYOC) and Software-as-a-Service (SaaS). Synopsys Cloud offers the flexibility to use either one or both deployment options, depending on customer requirements.

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