Overview
HCL Tech, a leading global technology company, is at the forefront of digital transformation, engineering and cutting-edge software products and services. With an extensive network of delivery centers and innovation labs, HCL Tech drives innovation across diverse industries. Home to more than 224,000 people across 60 countries, delivering industry-leading capabilities centered around digital, engineering, cloud, AI and software, powered by a broad portfolio of technology services and products. We work with clients across all major verticals, providing industry solutions for Financial Services, Manufacturing, Life Sciences and Healthcare, Technology and Services, Telecom and Media, Retail and CPG, and Public Services. Consolidated revenues as of 12 months ending December 2023 totaled $13.1 billion. To learn how we can supercharge progress for you, visit hcltech.com.

Challenges
Navigating the Semiconductor Landscape
The escalating demand for customized silicon solutions presents the semiconductor industry with unprecedented challenges. Non-traditional semiconductor players and startups face obstacles such as formidable entry barriers, complex design processes and unpredictable development timelines. The HCL Tech in-house design team was developing a new product and needed a complete chip design platform that could be elastic and flexible for both electronic design automation (EDA) licenses and compute options. The following pain points needed to be addressed:

• **Infrastructure deployment:** Long set-up times for EDA environment with limited capacity and scalability
• **Performance and productivity bottlenecks:** Unable to leverage leading-edge infrastructure quickly
• **License management overhead:** Lost time and productivity in deploying and managing license servers

Solutions Offered
Transforming SoC Design with Synopsys Cloud Collaboration
HCLTech and Synopsys are collaborating to accelerate the development of complex silicon solutions for clients by leveraging the capabilities of Synopsys Cloud deployment, providing a seamless browser-based SoC design experience. Through this collaboration, HCLTech aims to minimize integration risk and time-to-market by delivering high-caliber, silicon-proven IP for clients. This approach facilitates the delivery of better designs faster, enabling quicker results, more iterations, enhanced quality and reduced operating costs through on-demand computing and unlimited pay-per-use EDA software access.

A significant aspect of this collaboration is the adoption of Synopsys Cloud, a platform that provides unparalleled flexibility and on-demand access to EDA tools. It enables accelerated design delivery, ensuring that SoC projects are completed on schedule without being hindered by EDA or infrastructure constraints. Additionally, the pay-per-use licensing model under the Synopsys Cloud FlexEDA approach provides budget control, making it cost-effective for design teams.
Benefits Delivered

Unlocking Operational Excellence through Transformative Outcomes

The collaboration empowered HCLTech to develop next-gen SoC platforms, unleashing efficiency and reducing OpEx. Key benefits included:

- Up and running production environment in two days
- Accelerated time to results, enabling more iterations and improved quality
- Cost-effective with on-demand computing and unlimited pay-per-use EDA software access
- Access to the latest compute resources and standardized EDA flows
- End-to-end license and user management through built-in CAD/IT controls

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.

“**This collaboration between HCLTech and Synopsys marks a significant milestone in the semiconductor industry. HCLTech’s Silicon and System software division have a legacy of success and a strong foundation of trust, having served over 100 satisfied customer and consistently delivered intricate and transformative solutions. HCLTech has been working on several turnkey projects based on both Arm and platforms based on RISC-V where Synopsys EDA tools and Synopsys IP are leveraged. Synopsys sales, technical support and R&D teams worked together on the projects to help us deliver high-quality results for our clients.**”

~Ravi Kumar Chirugudu, Senior Vice President of the Semiconductor division at HCLTech