

EFFECT Photonics Improves Time to Market for DSP ASIC Design Using Synopsys Cloud

“To support our newly acquired ASIC development business unit from Viasat, we were looking for sustainable, scalable EDA and infrastructure resources that are up and running within few days, so that design engineers can start ASIC design quickly. Within a few weeks, we saw a 20% improvement in engineering productivity.”

~Russell Fuerst, VP-Digital Signal Processing, EFFECT Photonics



Business

Meets Digital,”

“Where Light

High Level Challenges/What Made us Look at Cloud Solutions?

- NO infrastructure resources and dedicated staff to manage it,
- had not used cloud for design development
- Limited Availability of EDA tools
- Where to start?

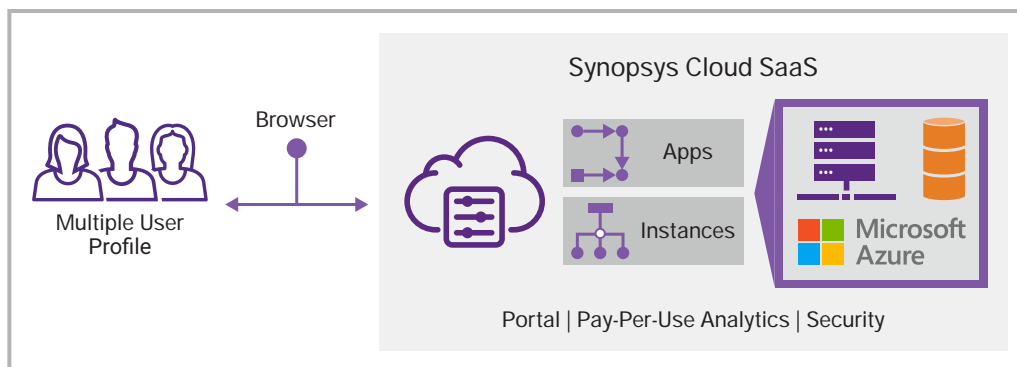
Selection Criteria	CAD	

“In order to start the evaluation and select our partner for ASIC development, we broke down our challenges into needs and wants and defined them based on CAD and engineers perspectives. Synopsys Cloud SaaS solution exceeded on all of these requirements by offering a carefully thought through complete end to end chip design environment.”

~Jeffrey Mogensen, Principal ASIC Engineer, EFFECT Photonics

Synopsys Cloud: Bringing EDA Flows, Compute, CAD/IT Management all Together

We started off with the [Digital Instance](#) solution on Synopsys Cloud SaaS providing a complete end-to-end digital implementation flow. This helped us jumpstart the design implementation process within a week. Synopsys demonstrated capabilities of the [Verification Instance](#) and the ASIC team, despite using 3rd party verification tools for over 6 years, decided to migrate the entire setup to work with Synopsys verification tools. Synopsys support was instrumental and ensured no major changes were needed for setup and testbenches. Finally, the RTL to signoff power analysis tools demonstrated excellent power estimation capabilities. Having the entire EDA and infrastructure solution available through Synopsys Cloud checked all the boxes for us, noted Jason Sheplak.



Benefits for CAD

Synopsys Cloud offers a plethora of features to increase the productivity of a CAD admin by providing capabilities to seamlessly manage EDA and hardware resources required at various stages of chip design. All the below features minimize the overhead to manage projects and design teams in an extremely simplified and effective way to strike out a balance between cost and/or time-to-results. In nutshell, CAD admin is fully equipped to support dynamic needs of the project and cater to needs of designers to boost their productivity, said Jason Sheplak, Senior ASIC Design Engineer.

“EFFECT Photonics’ vision is to unlock the power of light to make a difference in people’s lives. To realize this vision, EFFECT Photonics acquired the Coherent Digital Signal Processing ASIC business from Viasat to enable light and digitally powered solutions sustainable, affordable, and scalable. We needed infrastructure and CAD/IT resources to support this new development team quickly and jump-start our ASIC design. After doing exhaustive evaluations of multiple cloud and EDA vendors, we found the Synopsys Cloud SaaS solution is the one-stop shop for complete end-to-end ASIC development. It was the clear winner, exceeding our needs and wants.”

Benefits for Engineers

Key Takeaways

About Synopsys Cloud
