ISSUE: December 2025

Power IC Vendor's Web Tools Streamline Power System Design

Analog Devices' ADI Power Studio is a comprehensive family of products that offers advanced modeling, component recommendations and efficiency analysis with simulation. In addition, ADI is introducing early versions of two web-based tools with a modernized user experience under the Power Studio umbrella: ADI Power Studio *Planner* and ADI Power Studio *Designer* (see the figure)

These new tools, together with the full ADI Power Studio portfolio, including LTspice, SIMPLIS, LTpowerCAD, LTpowerPlanner, EE-Sim, LTpowerPlay and LTpowerAnalyzer, streamline the entire power system design process. The Power Studio tools support engineers from initial concept through measurement and evaluation, empowering engineers to design with confidence and efficiency.

Today's electronic systems require more power density than ever, with dozens or even hundreds of power rails and interdependent voltage domains. That complexity creates bottlenecks and requires rework during architecture decisions, component selection and validation.

Power Studio addresses these challenges by providing a unified, intuitive workflow that helps engineering teams make better decisions earlier by simulating real-world performance with accurate models and automating key outputs, such as bill of materials and report generation. Together, the family of tools can facilitate shorter development cycles, reduce rework and increase speed at which engineers bring power-dense systems to market.

"ADI Power Studio is more than a set of tools—it's a design ecosystem," said Robert Reay, vice president and fellow, Power Products, ADI. "By integrating new system-level and IC-level design capabilities into a single product family, we're enabling engineers to streamline power management design and optimization so they have the potential to get solutions to their customers faster."

The next-generation, web-based tool for system-level power tree planning, Power Studio *Planner* gives engineers an interactive view of their system architecture, providing clarity to model power distribution, calculate power loss, and analyze system efficiency with ease. With intelligent parametric search and tradeoff comparisons, teams can make faster, better architecture decisions from the start.

A powerful, web-based tool for IC-level power supply design, Power Studio *Designer* provides optimized component recommendations, performance estimates, and tailored efficiency analysis. Built on the trusted ADI power design architecture, Power Studio *Designer* offers guided workflows so engineers can set key parameters and move confidently toward simulation, configuration and evaluation. By guiding users through these steps, engineers can build accurate models to simulate real-world performance with support for both LTspice and SIMPLIS schematics before moving to hardware.

ADI remains committed to supporting its portfolio of existing desktop and web-based power management tools, including LTspice, SIMPLIS, LTpowerCAD, LTpowerPlanner, EE-Sim, LTpowerPlay and LTpowerAnalyzer, to ensure customer continuity.

Power Studio *Planner* and Power Studio *Designer* are available now as part of the ADI Power Studio. These tools represent the first phase of ADI's vision to deliver a fully connected power design workflow for customers, with ongoing updates and product announcements planned in the months ahead. For more information and to experience ADI Power Studio, see the Power Management Tools page.

Figure. ADI Power Studio brings ADI tools together in a holistic family of products to streamline power management design and optimization. The ADI Power Studio Planner tool enhances system-level power tree planning. The ADI Power Studio Designer tool offers guidance through the entire integrated circuit (IC)-level power design process.