

**Zuken News**

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**Zuken Introduces AIPR for CR-8000: Empowering PCB Designers with Innovative AI-Powered Place and Route Technology**

*Three-stage approach improves design efficiency and accuracy*

**YOKOHAMA, JAPAN, WESTFORD, MA, USA and MUNICH, GERMANY, SEPTEMBER 19, 2023 -** Zuken Inc., an industry-leading provider of electronic design automation solutions, is pleased to introduce an innovative three-stage approach to AI-powered PCB design within its flagship CR-8000 platform. This forward-looking approach demonstrates Zuken's commitment to delivering heightened efficiency, accuracy, and technological progress to address the ever-increasing challenges of electronic design.

**Autonomous Intelligent Place and Route (AIPR)**

The Autonomous Intelligent Place and Route product line introduces a new platform for AI-based place and route, which evolves in stages. This product enables Mimic Route and Smart Autorouter together with Zuken's AI-based products detailed below.

**Basic Brain: Elevating Design**

Zuken's *Basic Brain* revolutionizes PCB design at the foundational stage by learning from Zuken's library of design examples and existing design expertise. Seamlessly integrated into the robust CR-8000 platform, Basic Brain enhances the user experience by routing the design utilizing the *Smart Autorouter* based on learned approaches and strategies.

**Dynamic Brain: Fusing AI with Your Design Experience**

In the second stage, Zuken's *Dynamic Brain* learns from your PCB designers, utilizing past design examples and integrating them into AI algorithms. Combining customers' best practices with AI insights results in accelerated design iterations and notable enhancements in overall productivity, all within the framework of the CR-8000 platform.

**Autonomous Brain: Redefining AI Evolution**

The third and final stage is the *Autonomous Brain*, an AI-driven powerhouse in continuous learning mode, pushing the boundaries of creativity. The Autonomous Brain's capability to self-improve with each project heralds a new era of AI-driven innovation and is available exclusively within Zuken's CR-8000 platform.

"Kazuhiro Kariya, Sr. Managing Executive Officer, and CTO of Zuken Inc., remarked, "Our three-stage AI approach empowers designers with an enhanced toolkit within the CR-8000 platform, accelerating design cycles and unlocking new dimensions of creativity."

Key Advantages of Zuken's Three-Stage AI Approach within CR-8000:

* Learning sources transfer best practices to new projects
* Enhanced collaboration between AI insights and human expertise
* Accelerated design iterations and reduced time-to-market
* Continuous self-improvement and evolution of AI capabilities
* Seamless integration into Zuken's advanced CR-8000 platform

The Autonomous Intelligent Place and Route and Basic Brain products will be available in Q1 2024. The Dynamic Brain and Autonomous Brain products will be available in future releases.

For more information on Zuken's pioneering AI-powered PCB design approach and its integration into the CR-8000 platform, please visit <https://www.zuken.com/us/products/cr-8000/ai-pcb-design/>

**Press Kit**

Text and images are available for download.

**Images**

Z0586-1-Zuken-Smart-Autorouter.png

Caption: Zuken's Smart Autorouter uses machine learning to look at the board holistically and apply what it has learned to the design.

A blue circuit board with many colored lines

Description automatically generated

**About CR-8000**

CR-8000 is Zuken's 3D PCB design and analysis platform for electronic product development. With its cornerstone applications, System Planner, Design Gateway, DFM-Center, and Design Force, CR-8000 delivers a robust suite of applications that span the entire PCB subsystem design process, including architecture verification, multi-board design, digital twin, IC packaging, connected manufacturing, and extensive SI/PI analysis. CR-8000 is the only PCB design environment with engineering data management capabilities, providing extensive library management, design reuse, and change management with comprehensive PLM and supply chain integration.

**About Zuken**

Zuken is a global software company delivering electrical and electronic design solutions. Founded in 1976, Zuken has a consistent track record of technology innovation and financial stability in the electronic and electrical design automation (EDA) industry. With its CR-8000 and E3.series product families, Zuken provides a robust lineup of system-level 2D/3D electrical and electronic toolsets complemented by comprehensive design data and configuration management capabilities.

Most recently, Zuken has embraced digital transformation and, more specifically, digital engineering as the way forward with its entry into the Model-Based Systems Engineering (MBSE) industry. Today, Zuken delivers world-class design solutions, combining MBSE products and services with a mature, proven electrical and electronic design suite to address the needs of a broad range of industries across the globe. For more information about the company and its products, visit [www.zuken.com](http://www.zuken.com/),  [www.zuken.com/blog](http://www.zuken.com/blog), or [www.linkedin.com/company/zuken](http://www.linkedin.com/company/zuken)

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