ZUKEN®

CR-8000™

Top Benefits and Features

- Improve design cycle times with initial planning and downstream tool integration
- Easy drag-and-drop association of logical and physical circuits to save time with design reuse
- Access library of reuse block circuits for faster functional block design and reduce effort during detailed circuit design
- Promotes collaboration between disciplines enabling intelligent real-time trade-off analysis
- Reduce the size and/or number of PCBs by optimizing floor plans and partitioning between PCBs in the system
- Conduct multi-board SI simulation for upfront verification of signal quality issues and determine optimal termination and topology rules
- Early verification of 3D spacing requirements with interference checks and measurement tools
- Integration with ECAD library for accurate floorplanning with exact footprint shapes and part list creation
- Bidirectional exchange of STEP and IDF to 3D MCAD systems to share enclosures and complete system assemblies

System Planner -
System-level Design Planning

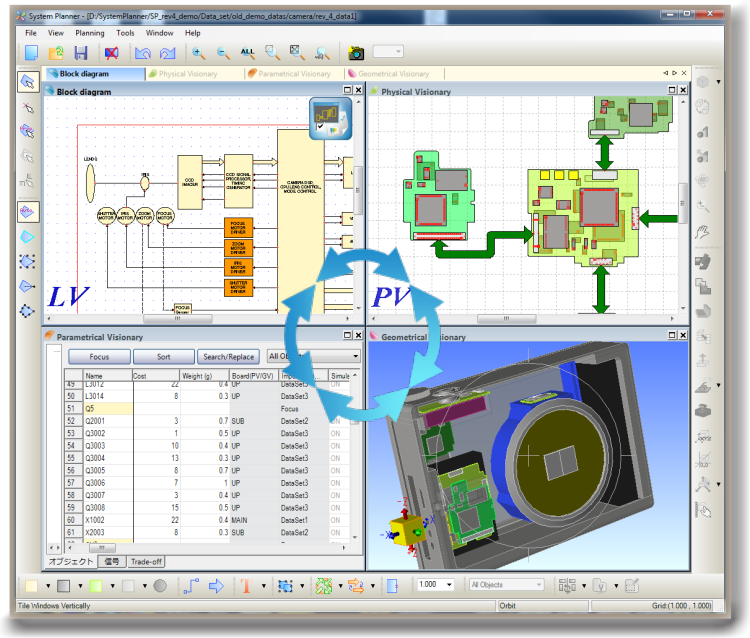
Introduction

System Planner is a system-level design environment for initial planning and partitioning of electronics systems. It enables engineers to optimize form, fit and function of single and multi-board systems, maximizing design reuse and eliminating the need to reenter up-front planning data into the design tools during detailed design. It is the starting point for concept and design creation, linking through to detailed design, enabling engineers and designers to smoothly flow through the design process reusing, sharing and synchronizing design data.

For many years, the PCB industry has needed a solution that provides a system-level design planning solution flowing seamlessly into the design stream. This is the first time that a software solution has fully realized this vision.

Initial planning to product design

Zuken's System Planner is used at the beginning of the design process where requirements are implemented in practical product designs. This is the stage where a product is configured and crucial design decisions are made such as how many boards are in the system and what functions are on each board. The user can evaluate and optimize the system through logical, 2D physical, 3D geometrical, and parametric views, and even preplan board manufacturing aspects such as panel arrangement; steps that were once disconnected are now intelligently brought together in one view. System Planner feeds all of the design information into Zuken's schematic, PCB layout and manufacturing tools, saving time and effort throughout the entire design process.



Make concurrent trade-offs during design planning

System Planner modules

System Planner's four main modules work together or standalone and may appear individually or simultaneously on your screen for real-time interaction with each other. When you change one view, the others automatically update.

- **Logical Visionary** – the logical aspect of the electronic system is defined using functional blocks and design reuse modules, showing the interconnections between them. Partitioning is accomplished as blocks are dragged and dropped from this view into the Physical Visionary.
- **Physical Visionary** – 2D PCB partitioning and floor planning. Blocks are dragged and dropped from Logical Visionary forming the placement plan for each board, optimizing the design partitions through trade-offs and what-ifs.
- **Geometrical Visionary** – accesses the 3D view of the product permitting you to check the fit of the boards in the overall system in the enclosure. The complete assembly is imported back to your 3D MCAD system.
- **Parametrical Visionary** – shows parametric values of the components, nets, and other elements in the design, allowing the user to optimize part usage, cost, availability, etc.

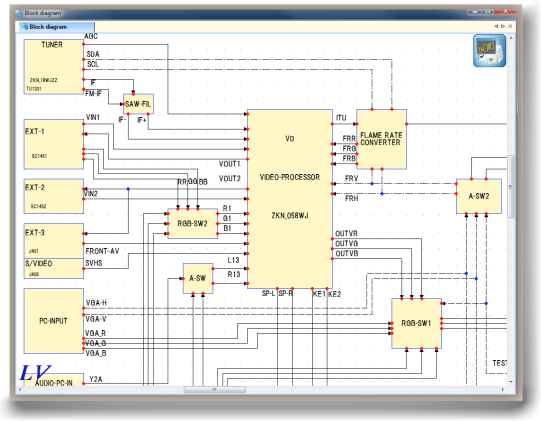
Data and design reuse

There are many ways to reuse data throughout the design process with System Planner. By utilizing design reuse modules in System Planner, you can harness the full power of this approach to save time and increase product quality. Design reuse can be employed from an existing library of reuse modules or by cutting and pasting design sections from existing known-good designs for use and/or modification in the current design.

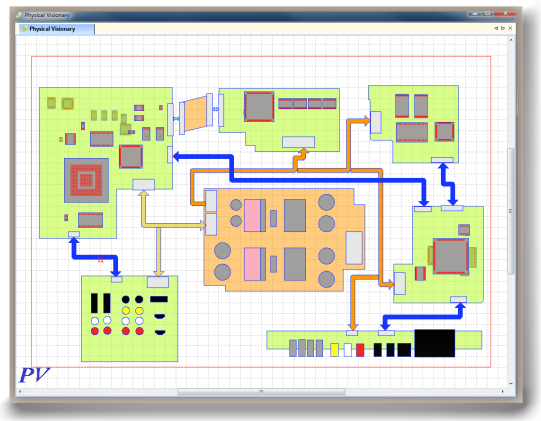
Support for any design flow

With support for many industry standard formats for 2D and 3D mechanical data exchange, such as IDF and STEP, System Planner can be used as part of any design flow. The Logical Visionary includes the ability to store logical circuit data within the functional blocks from any design system, along with datasheets, part lists, or other design instructions, enabling engineers to realize design reuse of known-good circuits and meet design specifications with their existing circuit design tools.

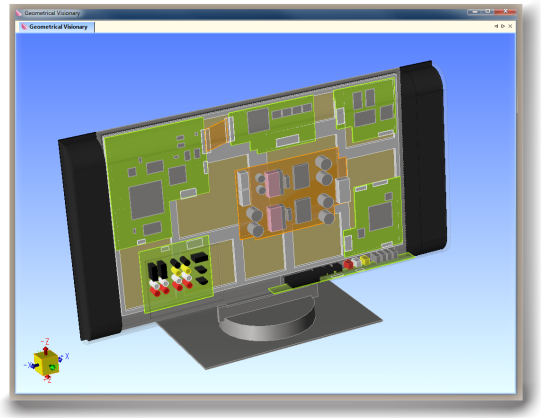
System Planner has been shown to reduce design throughput time by as much as 30% in companies who have adopted it in their design process.



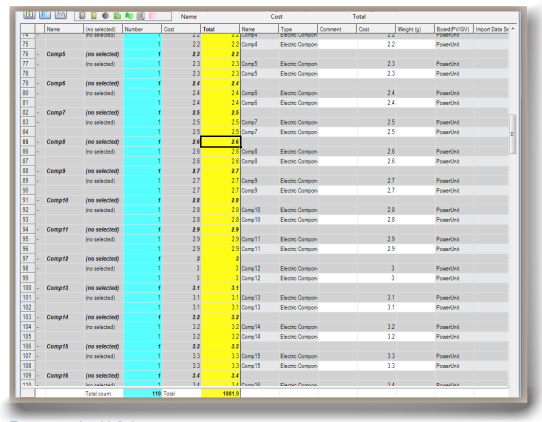
Logical Visionary



Physical Visionary



Geometrical Visionary



Parametrical Visionary