

Moving from P-CAD to Altium Designer

P-CAD customers can 'future-proof' their organizations by migrating to Altium Designer, the industry's first unified electronic product development system.



Electronics design is rapidly evolving

P-CAD is a widely-used and fully-featured board-level design suite. While it offers an extensive set of features for PCB design professionals, its architecture is based on a point-tool approach to product development. New device technologies such as programmable logic, faster data transfer speeds and increasing component densities are forcing the convergence of traditionally separate design disciplines. In addition, the availability of high-capacity, low-cost programmable devices is opening up new ways of thinking about design, allowing more intelligent, lower-cost products to be designed within shorter development cycles.

In order to maintain a competitive advantage in today's fast evolving market, it's crucial to have product development tools that allow you to harness the opportunities created by this change. Altium Designer supports these developments at a fundamental level by offering a new approach to electronic product development that exploits the latest technology and methodologies in an intuitive, efficient design environment.

The future is unified

Traditionally, board-level design, FPGA design and software development have been treated as independent processes each carried out in separate design environments. Moving into the future, this point tool approach will increasingly present a barrier to efficient electronic product development.

By unifying design, engineering teams can collaborate more effectively with each other, as well as others within and outside the organization, speeding up the overall design cycle. A unified design environment gives the freedom to innovate and to approach electronics design in new ways, allowing you to fully capitalize on the latest technology developments and devices, both today and in the future.

Future proof your organization

As an Altium customer, we are committed to your success both now and over the long term. We recognize the investment you have made in your P-CAD design system. We believe the best way to protect this investment is to allow us to continue to service your design needs through Altium Designer and help you benefit from a unified approach.

Many companies have already made this migration and are benefiting from it. We have the experience and technical backup necessary to make the change as smooth as possible for you, and to minimize downtime and disruptions. We have specially tailored training packages to help your engineers get up-to-speed with Altium Designer, and our R&D resources are dedicated to making file and project transitions seamless.

Once you have moved to the unified Altium Designer platform you will immediately benefit from new design capabilities, such as the ability to apply your board-level design skills to targeting programmable devices. You'll have access to advanced features such as interactive routing of high-speed differential signal pairs and automatic optimization of the pin configuration of programmable devices for simpler routing.

Best of all, you will open the door to completely new and innovative ways of harnessing the latest devices and technology to create more intelligent products and bring them to market faster. This ensures you and your organization remain competitive into the future.

- Unifies hardware, software and programmable hardware design within a single application
- Is equipped for using the latest design technology
- Has hardware/software co-design and highly developed transitioning tools built in
- Has sophisticated document and design data sharing capabilities and centralized project management
- Is continuously developed and updated with Altium's latest technology
- Has full database library capabilities and is version control ready
- Provides ONE solution to take a design from concept to completion.

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Benefit from an intuitive, unified design process

Altium Designer has been developed as a productive, unified design solution. Like P-CAD, Altium Designer's board-level design capabilities are first rate and allow you to fully define and implement all physical elements of your design. The system features hierarchical, multi-channel design capture, mixed-signal circuit simulation, pre- and post-layout signal integrity analysis, rules-driven board layout and editing, manual, interactive and next-generation Situs Topological Autorouting, complete CAM editing capabilities and an extensive range of integrated physical component libraries.

Going beyond the capabilities of P-CAD, Altium Designer brings board design together with embedded software development and programmable hardware design within a single, unified design environment. This allows you to extend your current board-level design skills into new areas and harness the potential offered by high-capacity programmable devices and 'soft' design methodologies. This unified approach will ensure that you will always be ready to make full use of the latest electronics technology – both now and into the future.

Smooth transition

Altium has put considerable development into creating systems and features within Altium Designer that make transitioning from P-CAD as easy as possible, with a minimum of disruption to productivity. The highly-developed Wizard-based design files guide you through the import process for all design documents – including libraries – while managing the project-level relationship between them.

With a series of simple, interactive steps the Import Wizard processes all file types to automatically create ready-to-use Altium Designer projects and integrated library files, while accurately processing essential design elements such as polygon pours, text positioning, simulation data, design rules, layer mapping, project structure, and schematic/PCB synchronization.

Committed to your success

As part of our commitment to your ongoing success, we can provide you with a wide range of resources and training options to help you become productive with Altium Designer in the shortest possible time. What's more, because our support staff understands both the P-CAD and Altium Designer environments, issue turnaround time is minimized. You will have all the backup you need to ensure a successful transition to Altium Designer.



We believe Altium Designer represents the best and most logical path forward for our P-CAD customers. It provides all the capabilities currently covered by the P-CAD design system with the added benefit of fully supporting the design unification and convergence necessary to move into the future with confidence.

- Confidence that you can work with the latest devices and design methodologies;
- Confidence that your design system will be continuously updated to keep up with changing technology; and
- Confidence that you can remain competitive, both now and into the future.

Altium Designer free web-based resources include:

- Extensive Knowledge Base giving you instant access to an expanding database of current technical tips and other up-to-date information
- Forums link you directly to other Altium customers, developers and engineers
- Learning Guides giving you step-by-step explanations on how to get the most out of your design environment
- DEMOcenter that hosts a wide selection of Altium Designer demonstration videos
- TRAININGcenter that includes training videos, training manuals and Altium's comprehensive training courses.