



## OVERVIEW

We all seek to ascend to the greatest heights of our engineering potential, pushing our design complexity beyond its perceived limitations. Yet our design tools often hold us back, providing barriers to innovation and realization of our complete design intent. Altium Designer enables you to activate the peak of your engineering efficiency with the most advanced PCB design technology available in a unified design environment.

## KEY FEATURES & BENEFITS

### Effortless Design Automation

Your design efficiency is measured in precise layouts and crystal-clear manufacturing documentation. Altium Designer keeps you at the highest peak of productivity in your design workflow with powerful routing tools, flexible design reuse options, and advanced release management and documentation capabilities.

- Design the highest quality PCB layouts in a fraction of the time with an optimized routing workflow and high-performance, guided routing technology.
- Get a head start on your next design project with powerful design reuse tools including snippets, managed schematic sheets, and component library templates.
- Clearly communicate design intent to manufacturing with powerful release management and automated documentation tools in Altium Designer.

### Intuitive Team Collaboration

Collaboration and communication are essential elements for a successful design process. Altium Designer connects your PCB design workflow to the complete product design ecosystem with powerful ECAD/MCAD collaboration features, fully managed library management systems, and rigid-flex design capabilities.

- Ensure that your board fits the mechanical enclosure right the first time with powerful ECAD/MCAD collaboration tools including Native 3D clearance checking.
- Always work with trusted component data with flexible library management options including complete lifecycle management and part approval requests.
- Remain competitive and at the forefront of innovative design trends with the world's first support for flex and rigid-flex PCB design.

### Endless Engineering Reach

Your PCB design exists as a series of intimately connected systems, all fully dependent on their connections with the outside world. Altium Designer allows you to connect directly to the global world of engineering knowledge and manpower with real-time supplier data, powerful data management tools, and expertly crafted design content.

- Save time creating components by tapping into the extensive source of expertly crafted design content from the experts at Altium including over 300,000 ready-to-use parts.
- Efficiently manage your design data with the comprehensive data management options including a complete version control system and lifecycle management system.
- Always meet your time-to-market and budget goals with real-time pricing and availability data from your most trusted parts suppliers.



## FEATURE HIGHLIGHTS

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<b>Unified Design Environment</b>	Stay at your most productive with a streamlined and unified interface for all areas of your design process. Easily switch between schematic capture and board layout in the same intuitive design environment.
<b>Interactive &amp; Guided Routing</b>	Design the highest quality PCB layouts in a fraction of the time with high-performance, guided routing technology that adheres to your design constraints. Clearly visualize clearance boundaries between objects in real-time as you route.
<b>Dynamic Copper</b>	Save time customizing your copper polygons with Dynamic Copper. Easily modify existing shapes by adding/subtracting overlaying copper, and customize copper borders with easy-to-use editing modes.
<b>Automated High-Speed Design Tools</b>	Easily plan and constrain your high-speed design with back drilling and automated configurations of length-matching rules, signals pairs, and signal groups for today's advanced technologies including DDR3 and USB 3.0.
<b>Powerful Native 3D PCB Editing &amp; Rigid-Flex Support</b>	Design flex and rigid-flex PCBs that fit mechanical enclosures right the first time with Native 3D PCB editing and clearance checking. Easily define folding lines and material selections for your rigid-flex circuitry with rigid-flex coverlay support.
<b>Seamless ECAD/MCAD Collaboration</b>	Ensure your board fits your mechanical enclosure right the first time without the need for costly prototypes. Check fitting with real-time clearance checking in Native 3D and automatically generate 3D STEP models.
<b>Flexible Design Variants</b>	Save time creating variations of your original design with flexible variant options. Easily create multiple versions of a design that can be swapped out instantly with modified components and version-specific variations.
<b>Automated Design Reuse Tools</b>	Get a head start on your next design project by easily reusing trusted design assets including circuitry, parts libraries, and pad and via library templates
<b>Automated Release Management</b>	Ensure your board gets manufactured right the first time with a centralized and controlled release system for all of your required design documentation.
<b>Draftsman® Integrated Documentation Workflow</b>	Save time creating and updating assembly and fabrication documentation with a set of powerful and easy-to-use documentation tools integrated in Draftsman®.
<b>Integrated Version Control</b>	Understand exactly who made changes to your design and when with integrated version control. Check files in and out of a central repository with detailed change logs and commenting system.
<b>Comprehensive Library Management Tools</b>	Easily re-use trusted component and design data with the powerful library management options. Add existing component, schematic, and pad & via library templates to your projects and work from a unified and centralized source of design data.

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## PCB Component Parameters

Automatically translate parameters from your schematic to PCB with Complete Component Parameters. Define specific design rule scopes and communicate intent to manufacturing based on specific part parameters.

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## Fully Customizable Design Rules & Constraints

Create the most advanced design rules that allow you to remain in full compliance with your specific manufacturing guidelines. An intuitive and streamlined design rule query editor allows you to easily organize the query relationships.

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## Real-Time Supplier Links

Make the most informed part selections with real-time supplier links that connect directly to your most trusted suppliers or internal ERP. Pricing and availability are instantly available in real-time, allowing you to get the best price on the market.

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## Embedded Software Development Integration

Share design data between your PCB and embedded software project with the integrated TASKING Pin Mapper. Instantly translate pin assignments, processor chip identifiers, and symbol names between Altium Designer and your TASKING toolset.

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## ALTIUM SUBSCRIPTION

Wherever you work, and whatever you create, you'll always need the best technology to remain competitive. Altium Subscription enables you to stay at the top of your productivity and design potential.

**Invest in Your Skills** - Maintain your competitive edge with access to the newest design methodologies, content and resources.

**Invest in Your Company's Success** - Deliver the best products to market first at the lowest possible cost and continue to drive your industry forward.

**Invest in Your Tools** - Equip yourself to design the technologies of the future with the latest EDA innovations in Altium Designer.

## LICENSING VERSIONS

- **Altium Designer** - Access to complete board design and manufacturing capabilities. Includes front-end engineering design and verification system for both board-level and programmable logic design and Native 3D PCB design/editing capabilities.
- **Altium Designer SE** - Access to complete front-end schematic design capture solution for both board-level and programmable logic design. Includes analog/digital mixed SPICE simulation, VHDL/Verilog verification and Embedded-System-on-FPGA implementation features.
- **Altium Designer Viewer** - Provides free access to Altium Designer, allowing you to manage read-only access rights to design documentation. Anyone on a design team can use the Viewer to review design files created in Altium Designer including schematics, PCBs, and fabrication files.



## LICENSING TYPES

There are several licensing methods available to meet your workflow needs, including:

- **Standalone License:**  
Ideal for a single workstation and solo designer. Can be saved, copied, and backed-up as needed.
- **On-Demand License:**  
Let us manage your licenses with the Altium On-demand license server.
- **Private Server License:**  
Share licenses inside a personal network with the Altium Private License Server.

## ABOUT ALTIUM

Altium LLC (ASX:ALU) is a multinational software corporation headquartered in San Diego, California, that focuses on electronics design systems for 3D PCB design and embedded system development. Altium products are found everywhere from world leading electronic design teams to the grassroots electronic design community.

With a unique range of technologies Altium helps organisations and design communities to innovate, collaborate and create connected products while remaining on-time and on-budget. Products provided are Altium®, Altium Designer®, Altium Vault®, Autotrax®, Camtastic®, CircuitMaker®, CircuitStudio®, Codemaker™, Common Parts Library™, DXP™, Easytrax®, NanoBoard®, Octopart®, PCBWORKS®, P-CAD®, Protel®, Ciiva™, PDN Analyzer™, SmartParts™, ActiveRoute™, Draftsman®, Situs® and the TASKING® range of embedded software compilers.

Founded in 1985, Altium has offices worldwide, with US locations in San Diego, Boston and New York City, European locations in Karlsruhe, Amersfoort, Kiev and Zug and Asia Pacific locations in Shanghai, Tokyo and Sydney. For more information, visit [www.altium.com](http://www.altium.com). You can also follow and engage with Altium via Facebook, Twitter and YouTube..