

# PADS Standard

## Affordable PCB design

### Benefits

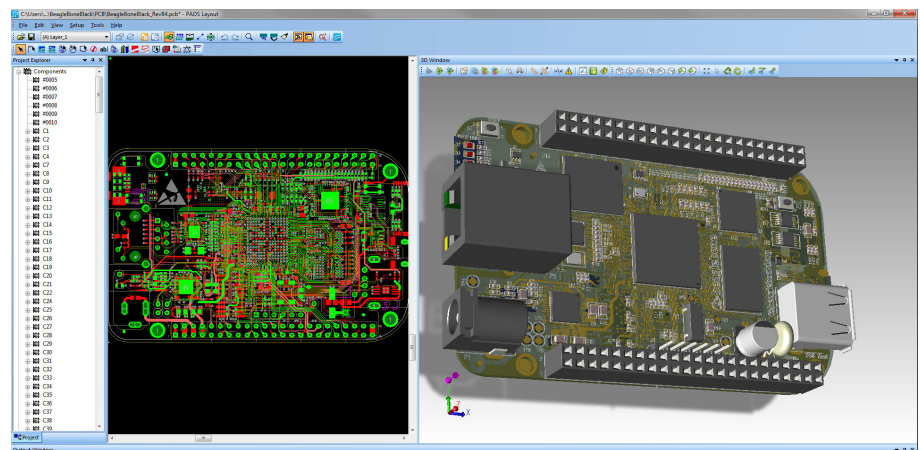
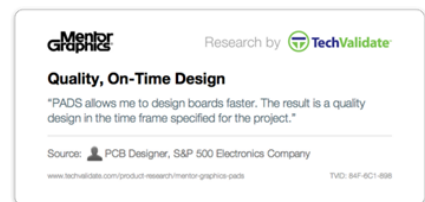
- Easy to learn and use
- Proven technology for schematic capture and PCB design
- Accurately handles your tough design problems
- Reduces design time
- Verified libraries ensure fast design starts
- Full 3D visualization prevents assembly errors and conflicts
- Enables collaboration with MCAD environment

### Overview

PADS® Personal Automated Design Solutions provide a powerful environment that helps solve the PCB design challenges you meet every day. Using PADS, you will get your job done faster and better, while saving costs.

Geared toward the engineer looking for high value, production-proven tools, PADS Standard provides schematic design and layout capabilities in an intuitive and easy-to-use environment. PADS Standard is ideal for less complex board design, and where cost savings is a high priority.

Easy-to-use schematic and layout translators help import libraries and designs from your current toolset, whether it's Allegro®, Altium® Designer, CADSTAR®, OrCAD®, P-CAD®, or Protel®.



PADS Standard is an easy-to-use desktop PCB design flow for the individual engineer and designer.

# PADS Standard

## Schematic Design

PADS includes broad capabilities for system design capture and definition. Intuitive project and design navigation, complete hierarchical support, a starter library, and advanced design attribute and design rules management make it easy to capture and define your schematic.

Achieve efficiency and productivity with full forward and backward annotation to layout and routing.

PADS includes all design rules and constraints with online DRC. The multi-level hierarchy guides you through the process of capturing rules in a dialog-box-driven user interface. Default, class, net, group, pin pair, layer, conditional, and component rules are included.

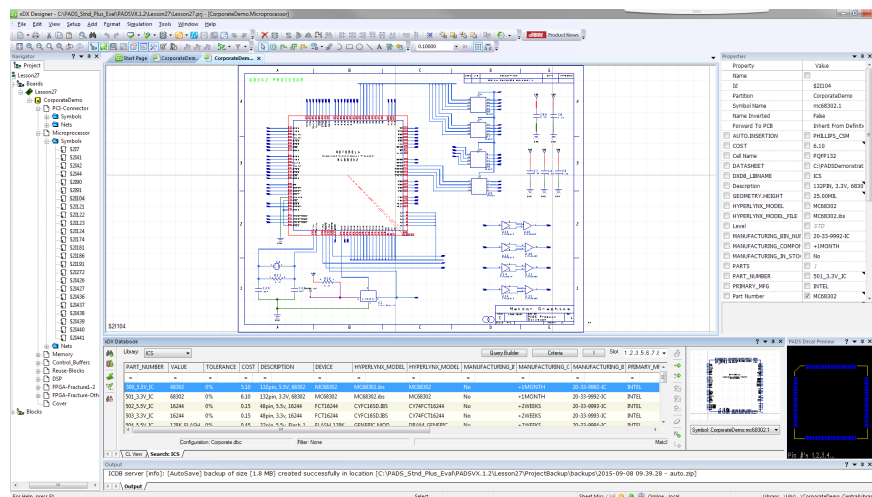
## Component Management

With PADS component management, you have access to all component information from a single spreadsheet, without concern for data redundancy, multiple libraries, or time-consuming tool overhead. PADS easily integrates with corporate component and MRP databases through industry-standard ODBC (Open Database Connectivity), enabling geographically dispersed design teams to access central component information.

With PADS component management, databases are kept in sync and up-to-date, thus avoiding costly redesigns and quality problems that otherwise might be undetected until late in the design cycle.

## PartQuest™

Use PartQuest, <https://partquest.com>, to research, identify, and purchase the right parts for your design. Then download the schematic symbol, footprint, 3D STEP model, and parametric information directly into your PADS library. All part models not readily available through search can be built for free and added to your library within 24 hours.



Select and place parts from the component manager as you design your schematic.

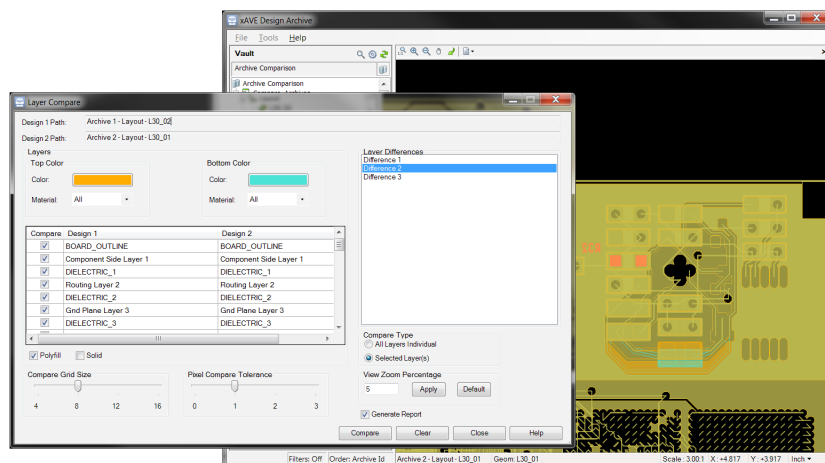
## Archive Management

PADS archive management does much more than take project snapshots. PADS saves all design information in a secure vault on your PC or network and adds collaborative tools for streamlining and improving engineering design reviews.

With PADS, you can create multiple backups of your project data and easily retrieve that data later for review and modifications. You don't have to worry about losing design data while performing different scenarios (e.g., constraint management, simulation and analyses, different placement options), as PADS

automatically creates archives of each scenario, saving you time and costs.

View and search the vaults to see contents quickly and easily with graphical preview. Use the vault to restore backups, create a new project from existing archives, and compare versions. Improve team collaboration with archive searching, report generation, and comparison. Add comments and information easily with intelligent red-lining that associates specific design objects and organizes comments logically by issue or topic.



View reports graphically to compare differences, easily generate reports, and add red-lining and markings for future reference.

## PCB Layout

The advanced layout and routing capabilities in PADS save countless hours of design time.

The combination of design rules with real-time design rule checking and bi-directional cross-probing ensures that boards adhere to your design specifications, thus eliminating costly fixes after prototype and manufacturing.

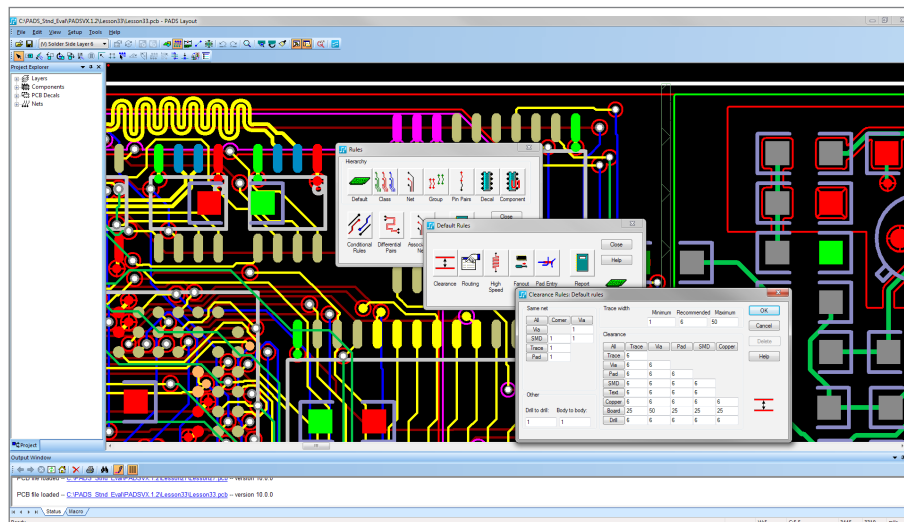
Dynamic copper planes are easy to create and edit for split and mixed planes as well as copper areas on signal layers.

RF capabilities include via-stitching for easy creation of co-planar wave guides and the ability to flood a region with vias according to your rules. The import of complex RF shapes and chamfered corners is also supported.

Auto-dimensioning, direct DXF import into the board and part library editor, advanced fabrication verification tools, STEP and IDF link to third-party mechanical tools, and 3D viewing are also included.

With PADS Standard, you have a photo-realistic visualization of your PCB, helping you eliminate costly and time consuming errors by visualizing the PCB in 3D, and identifying conflicts with mechanical objects. The 3D visualization includes components, pads, traces, vias, and planes. You also have realistic silkscreen and solder mask, and dynamic object synchronization. In your 3D view, you can measure distance, and object-to-object minimum distance.

Easily import STEP models to add 3D item to your layout view, i.e. components, enclosure, board assembly, etc. You can also export your 3D assembly into STEP, 3D PDF, JPG, BMP, and more in a few simple mouse clicks.



PADS is easy to deploy, learn, and use, making it ideal for both the casual or occasional user, as well as the power user.

## Routing

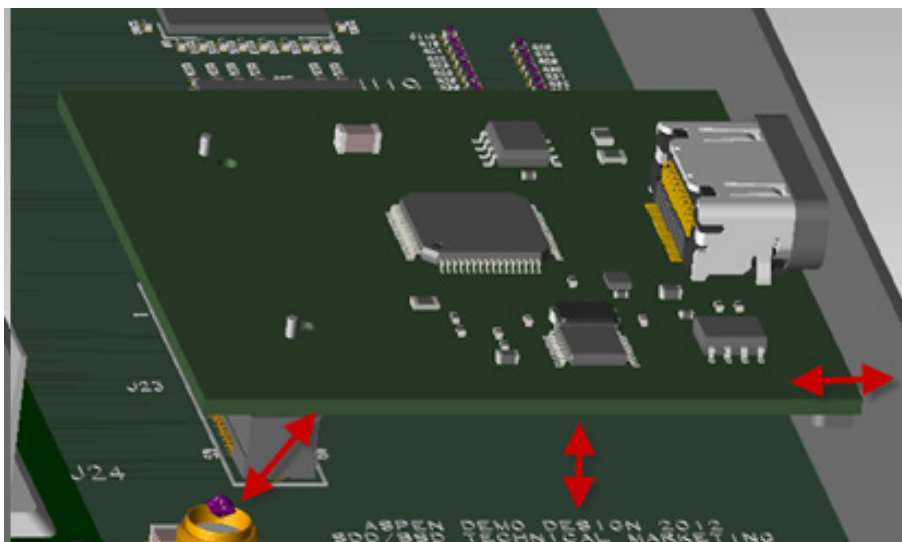
Easily and interactively route all your design elements, including analog, digital, and mixed-mode, with PADS. With PADS you have control over all routing aspects and can choose between orthogonal, diagonal, and any-angle styles. Proven routing algorithms let you apply design rules between objects or groups of objects, such as components, layers, nets, and vias.

Operations best suited to an autorouter include fanout and routing by individual components or groups of components.

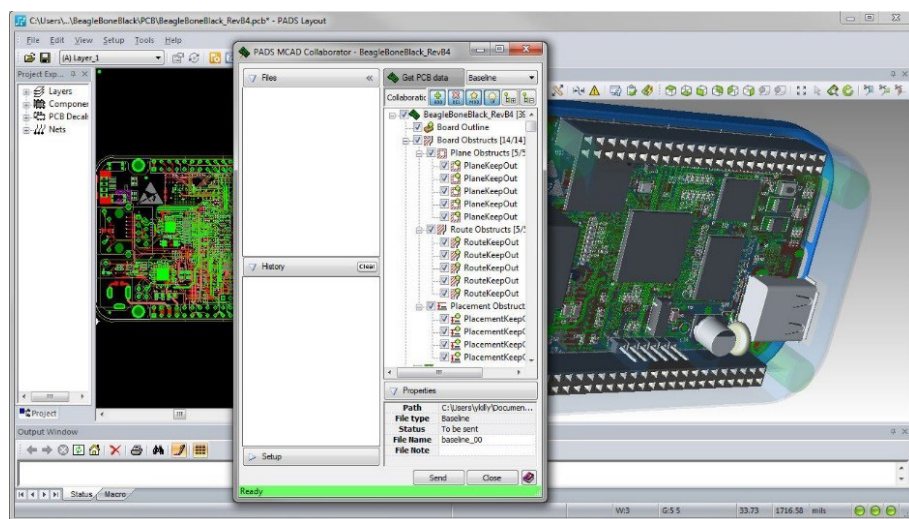
### Collaboration with MCAD

Collaborate with your mechanical CAD system using IDX data exchange files to communicate design intent between electrical and mechanical CAD systems. You can preview and consider design proposals, then accept, reject, and counter-propose design proposals between disciplines at any time throughout the design process. PADS keeps you and the MCAD designer in your respective system's comfort zone, making collaboration effective and convenient.

With PADS you can easily collaborate within your own environment, consistently and iteratively, with an intuitive 3D visualization of both the PCB and enclosure. With fast and effective communication between you and the mechanical engineer, you can get products to market faster, while keeping development costs low.



Take measurements in PADS Standard in a full 3D photorealistic view of your PCB assembly to know the exact distance between objects.



Connect electrical and mechanical domains with PADS Standard.

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