



3DEXPERIENCE™

SOLIDWORKS PCB



BRIDGE THE GAP BETWEEN PCB AND MECHANICAL DESIGN FOR ELECTRONIC PRODUCTS

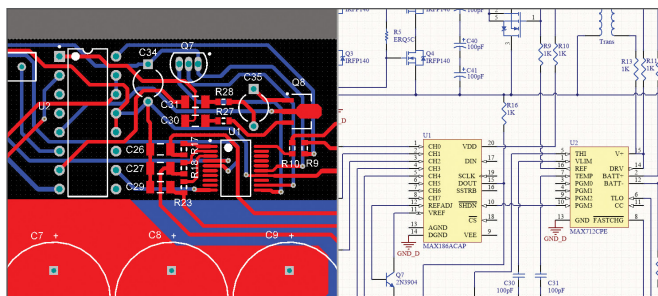
Take advantage of intelligent ECAD-MCAD codesign early in—and throughout—the design process to avoid costly design rework and minimize potential defects, saving time and money.

OVERVIEW

SOLIDWORKS® PCB—powered by Altium®—is a mechatronics/electronics design and mechanical collaboration solution jointly developed by Dassault Systèmes SOLIDWORKS Corporation and Altium Limited, both leaders in the development of electronic and mechanical design solutions. SOLIDWORKS PCB combines a powerful electronics design solution with a first-of-its-kind electro-mechanical collaborative workflow that is natively integrated with SOLIDWORKS 3D for electronic product codesign.



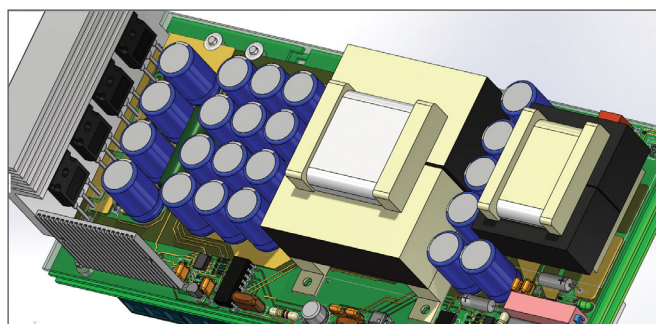
CAPABILITIES OF SOLIDWORKS PCB



- **PCB Design Engine:** Place and route printed circuit boards with industry-proven design engine.
- **Modern Schematic Entry:** Employ full-featured schematic capture tool with extensive drafting capabilities, libraries, and electrical rules.
- **Real-Time 3D Clearance Checking:** Visualize the PCB with components inside of the mechanical enclosure to reduce costly prototypes by ensuring that the board and components fit the mechanical enclosures with real-time 3D clearance checking.
- **Rigid-Flex:** Define rigid-flex regions, layers, and stack thicknesses enabling single-board rigid-flex PCB design. The rigid-flex layer stack regions can be defined with bend lines and angles and validated with 3D folding and component clearance-checking to ensure layout correctness.
- **Supplier Links:** Search online supplier databases and link your design components to match real-time device parametric data, pricing and availability. Put the most up-to-date information at your fingertips throughout the entire design process to make immediate decisions and meet electrical requirements, budget, and deadlines.
- **Component Parametric Database:** Place component parametric data directly from a corporate database, keeping the components used in your design synchronized with data stored in the database.
- **Design and Data Management:** Manage project design files and documentation with SOLIDWORKS PCB-PDM Connector and the SOLIDWORKS PDM-based design and data management workflow. Securely store and index design data for fast retrieval, eliminate concerns over version control and data loss, and collaborate on design data from multiple locations.

CAPABILITIES OF SOLIDWORKS PCB CONNECTOR

SOLIDWORKS PCB Connector, included inside SOLIDWORKS PCB, takes the guesswork out of electrical and mechanical design synchronization, providing a managed workflow for design collaboration between the SOLIDWORKS PCB and SOLIDWORKS 3D CAD environments. It easily links data between both environments, sharing critical design elements between electronic and mechanical design teams. With the SOLIDWORKS PCB Connector, everyone remains on the same page throughout the design process, helping to meet critical time-to-market goals and reducing the well-known costs associated with hardware re-spins.



- ECAD-MCAD Design Collaboration: Unmatched ECAD-MCAD integration and collaboration between SOLIDWORKS PCB and SOLIDWORKS 3D CAD eliminates the need for STEP, DXF™, and IDF file exchanges.
- Managed ECAD-MCAD ECO Process: A managed ECO process to and from SOLIDWORKS PCB and SOLIDWORKS 3D CAD takes care of design changes, including board shape, component placement, mounting holes, and cutouts, keeping designs in sync.
- SOLIDWORKS File Support: Provide the most precise and pure version of component models and enclosures, ensuring that your 3D clearance check process delivers a clear picture of board fit.
- Design Commenting and Revision Management: Take complete control of your design process and understand exactly what changes were made to your board design and when. Detailed revision comments allow you to see a clear change history with the ability to accept or reject the changes.

Our **3DEXPERIENCE®** platform powers our brand applications, serving 11 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the **3DEXPERIENCE®** Company, provides business and people with virtual universes to imagine sustainable innovations. Its world-leading solutions transform the way products are designed, produced, and supported. Dassault Systèmes' collaborative solutions foster social innovation, expanding possibilities for the virtual world to improve the real world. The group brings value to over 250,000 customers of all sizes in all industries in more than 140 countries. For more information, visit **www.3ds.com**.



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