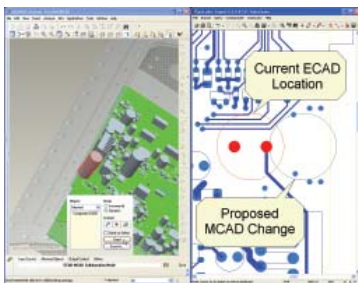


Pro/ENGINEER® ECAD-MCAD Collaboration Extension

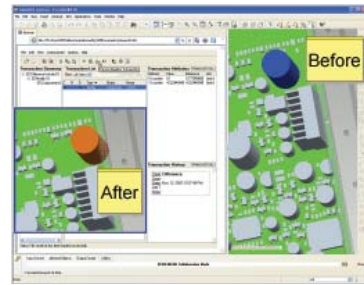
ACCELERATE YOUR ELECTROMECHANICAL DESIGN PROCESS

In today's competitive Electronics and High Tech market, ECAD and MCAD teams must work together seamlessly in order to get winning products to market faster. Traditional collaboration methods are no longer suitable. When design changes impact both ECAD and MCAD designs, more efficient tools are required to improve communication of design changes and proposals within each discipline's established comfort zone. The Pro/ENGINEER ECAD-MCAD Collaboration Extension (ECX) gives you the industry's most advanced capabilities to help you optimize your electromechanical detailed design process.

Electromechanical design is often plagued with inefficient processes due to isolated silos of functional disciplines that use an "over the wall" approach to collaboration, resulting in late-stage changes, minimal design optimization, little design traceability, and ultimately, sub-optimal quality. Increasing a designer's awareness of the other discipline's design constraints improves the quality and speed of change proposals. Understanding and capturing changes will simplify design investigation, expedite impact analysis, and accelerate the associated approval and rejection decisions.



Pro/ENGINEER ECX lets you see and understand the proposed MCAD changes and effects on corresponding ECAD designs.



Pro/ENGINEER ECX helps you quickly investigate the effects of ECAD change proposals on your MCAD design and record design decisions.

Pro/ENGINEER ECX gives you a fully integrated package that offers interaction with the ECAD view, fostering ECAD-MCAD design collaboration. By leveraging the capabilities in PTC's Pro/ENGINEER, InterComm™ Expert, ProductView™ ECAD Compare, and ProductView Validate, you can collaborate more efficiently by seamlessly proposing, identifying, managing and retracing the history of changes across mechanical and electrical disciplines.

Key Benefits

- Streamlines electromechanical design collaboration processes, reducing time-to-market and decreasing cost
 - Gives mechanical engineers better insight into the potential impact of changes on electrical designs--before the changes are proposed
 - Enables mechanical and electrical engineers to communicate more frequently, with less disruption
 - Provides a consistent way to communicate changes across disciplines
 - Enables you to identify, resolve and manage unanticipated consequences of a design change, faster
- Improves design quality; seamless integration reduces errors and improves data integrity
- Enhances traceability of the design IP, for knowledge capture and design reuse

Pro/ENGINEER ECX derives its cutting-edge capabilities from the standards proposed by the ProSTEP iViP Association's ECAD/MCAD Collaboration Project Group. The proposal includes a data model and protocol developed with some of the leading ECAD software providers

Faster ECAD-MCAD Design Collaboration

and global manufacturers confronting the challenges of cross-discipline collaboration. This innovative approach has been validated by leading companies in the industry and is designed to interact with the other design tools used in your product development process as the standard is adopted.

Feature and Specifications

Easy-to-use, integrated ECAD-MCAD collaboration capabilities

- Cross-highlight between ECAD and MCAD designs
- Propose, accept or reject changes
- Quickly identify and verify incremental changes
- Easily add comments on change proposals and responses
- Capture the history of changes for future reference
- Leverage the capabilities in Pro/ENGINEER, InterComm Expert, ProductView ECAD Compare, and ProductView Validate

InterComm Expert Capabilities

- Browse information in the PCB schematic, layout, manufacturing, or bill-of-materials ECAD databases
- Browse intelligent ECAD design data and verify design intent
- Query, measure, highlight, and isolate detailed net and component data
- Communicate changes, ideas, or redline markups back to other users, using the bookmarked views of your markups
- Cross-highlight between the schematic, layout and bill-of-materials
- Read-in manufacturing formats (e.g., Gerber) as overlays to the PCB data
- Integrate with PTC's Windchill®, for managing ECAD data in a neutral format

ProductView ECAD Compare Capabilities

- Analyzes and reports object and image differences:
 - Component (package, device, location, pins, properties)
 - Net (pins, length, width, vias, test points, properties)
 - Pin (padstack, location, properties)
 - Via (padstack, location, test point, properties)
 - Image (per layer and sublayer)
- Creates XML difference reports that can be shared with multiple users
- Integrates with Windchill for managing results, profiles and design data

ProductView Validate

- View, analyze, change and compare results through a simple interface
- Access the history of changes and differences, including their disposition

Language Support

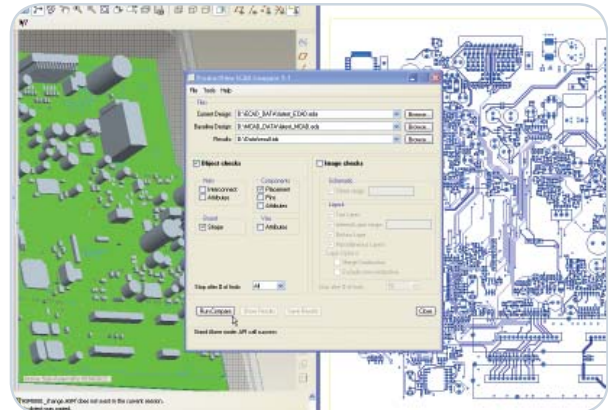
English and Japanese

Platform Requirements

Microsoft® Windows® (Vista and XP)

For the most up-to-date platform support information, please visit www.ptc.com/partners/hardware/current/support.htm

For more information, please visit [Pro/ENGINEER ECAD/MCAD Collaboration Extension](#) and [ProductView ECAD](#), including InterComm, product pages.



Pro/ENGINEER ECX lets you easily verify changes by automatically comparing the ECAD and MCAD designs.

The Pro/ENGINEER Advantage

Pro/ENGINEER is simple to learn and use, and is available in a variety of packages designed to meet your company's specific needs. Whether you need a cost-effective 3D CAD system that contains all the basic design capabilities, or a comprehensive Product Development System that seamlessly connects your extended supply chain, you'll find exactly what you need, in a single, fully scalable solution. Choose the package that fits your needs today, and as your needs change and grow, you can easily upgrade to the package that is right for you tomorrow, which leverages the same powerful platform – this means no data translation and a consistent user experience.

Pro/ENGINEER ECAD-MCAD Collaboration Extension (ECX) helps you streamline your electromechanical design processes. As part of the Pro/ENGINEER family of integrated 3D CAD/CAM/CAE solutions, it delivers a distinct advantage for engineers and designers because Pro/ENGINEER is fully associative. That means any change made to the design is automatically reflected in all downstream deliverables – without any translation of model information. By eliminating data translation, you not only save time, but you also avoid the possibility of translation errors in your design. Pro/ENGINEER gives you everything you need to create high-quality, winning designs.

Copyright ©2008, Parametric Technology Corporation (PTC) — All rights reserved under copyright laws of the United States and other countries. PTC, the PTC Logo, Pro/ENGINEER, and all PTC product names and logos are trademarks or registered trademarks of PTC and/or its subsidiaries in the United States and in other countries. Windows is a registered trademark of Microsoft Corporation.