

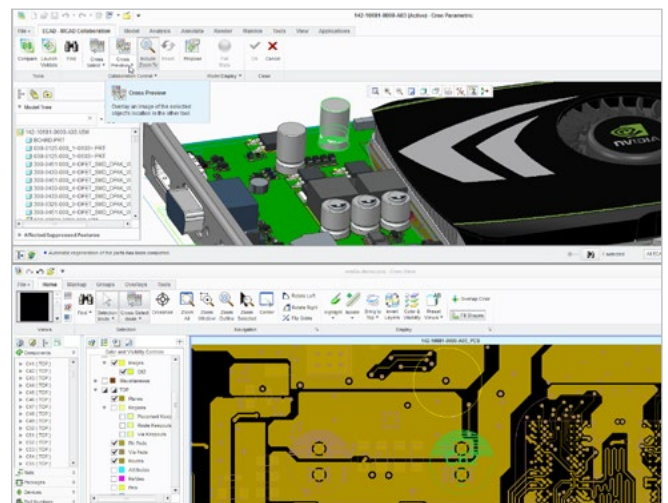
# PTC® Creo® ECAD-MCAD Collaboration Extension

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 PTC Creo 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.

PTC Creo 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® Creo® View ECAD™, PTC Creo View ECAD Compare and PTC Creo View ECAD Validate, you can collaborate more efficiently by electronically proposing, identifying, managing and retracing the history of changes across mechanical and electrical disciplines.

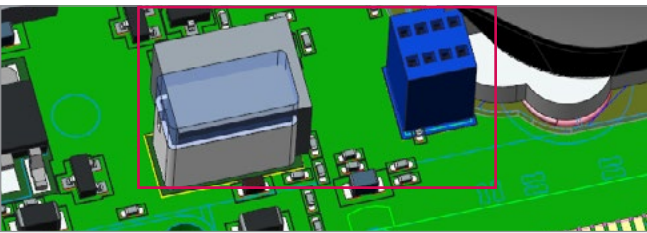


Cross highlighting between the MCAD Design and a view of the ECAD Design provides a more informative approach to design proposals.

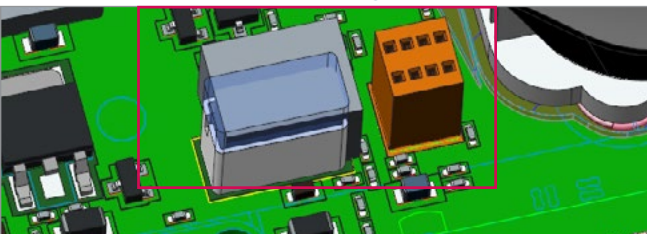
## Key benefits

- 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
  - Incremental data exchange enables mechanical and electrical engineers to communicate more frequently and efficiently
  - Provides a consistent way to communicate changes across disciplines
  - Enables you to quickly and easily identify, resolve and manage unanticipated consequences of a design change
- Improves design quality; seamless integration reduces errors and improves data integrity
- Enhances traceability of the design IP, for knowledge capture and design reuse

Before change



After change



PTC Creo ECX helps you quickly investigate the effects of ECAD change proposals on your MCAD design and record design decisions. For example, comparing a before/after look at the design impact of moving an electrical component further away from a heat sink.

PTC Creo ECX derives its cutting-edge capabilities from the EDMD (also referred to as IDX) standard driven and maintained by the ProSTEP iViP Association's ECAD/MCAD Collaboration Project Group. The EDMD standard includes a data model and protocol developed with some of the leading ECAD software providers 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 other design tools used in your product development process.

## 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 for electronic cross-team collaboration
- Capture the history of changes for future reference
- Leverage the capabilities in PTC Creo View ECAD, PTC Creo View ECAD Compare and PTC Creo View ECAD Validate

### PTC Creo View ECAD capabilities

- Next-generation, truly heterogeneous visual collaboration environment for both ECAD & MCAD
- Enables unique functions, such as cross-highlighting between ECAD/MCAD abstractions including to/from PTC® Creo® Parametric™ and PTC® Creo® View™
- Ability to accept/reject Preview messages from PTC Creo Parametric to show impact of component location proposals
- Browse intelligent neutral view of ECAD design data and verify design intent
- Facilitates electronic design collaboration from author to author and with extended design team members

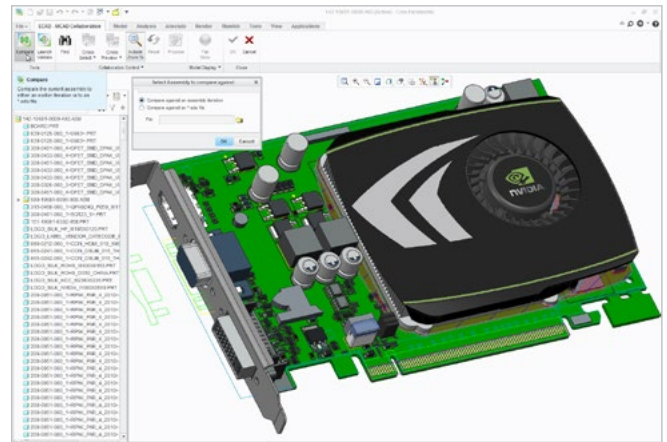
- Query, measure, highlight, and isolate detailed net and component data
- Communicate changes, ideas, or redline markups back to other users, using the bookmarked views of your markups
- Integrate with PTC® Windchill®, for managing ECAD data in a neutral format

#### PTC Creo View 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 PTC Windchill for managing results, profiles and design data

#### PTC Creo View ECAD Validate capabilities

- View, analyze, change and compare results through a simple interface
- Access the history of changes and differences, including their disposition
- Electrically capture who changed what, when and why, and retain for future reference



Allows you to compare two iterations of a design to identify delta for incremental data exchange to the other domain.

#### Language support

English, Japanese, Chinese (Traditional), Chinese (Simplified)

#### Platform specifications

Microsoft® Windows®

For specific operating system levels, please visit: [PTC.com/partners/hardware/current/support.htm](http://PTC.com/partners/hardware/current/support.htm)  
Select PTC Creo View Clients from the product drop down box

For more information, please visit:  
[PTC Creo ECAD-MCAD Collaboration Extension](#)  
and [PTC Creo View ECAD](#) product pages.

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