

MCAD CoDesigner Feature Matrix



Feature/Functionality

MCAD CoDesigner App

BASIC
ADV
Basic ECAD-MCAD Communication [Learn more: Technical Doc | Video](#)

Enable bi-directional communication between ECAD and MCAD domains, allowing changes to be reflected and updated on either side.



Supported MCAD tools:

SOLIDWORKS®, PTC Creo®, Autodesk Inventor®, Autodesk Fusion 360®



Supported MCAD tool:

Siemens NX [Available with Enterprise tier only](#)

Sync Keepouts and Rooms [Learn more: Technical Doc | Video](#)

Synchronize and update PCB keepout and room areas in both ECAD and MCAD environments.


Advanced Copper Geometry [Learn more: Technical Doc | Video](#)

Create precise copper 3D models in MCAD (including vias and plated pad barrels) for FEA purposes, advanced mechanical checks, etc.

Available for SOLIDWORKS®, PTC Creo®, Autodesk Inventor®, Siemens NX


Rigid-Flex Synchronization [Learn more: Technical Doc | Video](#)

Collaborate with mechanical engineers on the design of rigid-flex boards.

Available for SOLIDWORKS®, PTC Creo®


MCAD-driven Component Placement [Learn more: Technical Doc | Video](#)

Place components in MCAD so that they are recognized in ECAD (available for SW, Creo, Inventor), or use the native MCAD components when transferring PCB from ECAD to MCAD.

Available for SOLIDWORKS®, PTC Creo®, Siemens NX


Enclosure Exchange [Learn more: Technical Doc | Video](#)

Send a mechanical enclosure from MCAD to ECAD directly from your device assembly and simplify the design process in ECAD.


Advanced History [Learn more: Technical Doc | Video](#)

View the detailed history of accepted and rejected changes between the electrical and mechanical teams, along with the rejection comments.


Pull a Previous Revision [Learn more: Technical Doc](#)

Ability to select which revision to Pull from a list of previous Pushes in MCAD.


Multiboard Assembly Synchronization [Learn more: Technical Doc | Video](#)

For Multiboard projects, synchronize the entire Multiboard Assembly (the full set of PCBs and the mechanical enclosure) at once and simplify checking the overall product layout in ECAD.

Available for SOLIDWORKS®, PTC Creo®, Siemens NX


Harness Design Synchronization [Learn more: Technical Doc | Video](#)

Transfer the source data for 3D routing of Harness from ECAD to MCAD (connectors, wires, splices, connectivity, and harness topology) and get the physical length of wires, cables, and harness segments in ECAD.

Available for SOLIDWORKS®, PTC Creo®

