

Webinar

OrCAD X 23.1

What's New in OrCAD X

Agenda



OrCAD X Cloud



OrCAD X Capture & Demo



OrCAD X Presto & Demo

OrCAD X Cloud

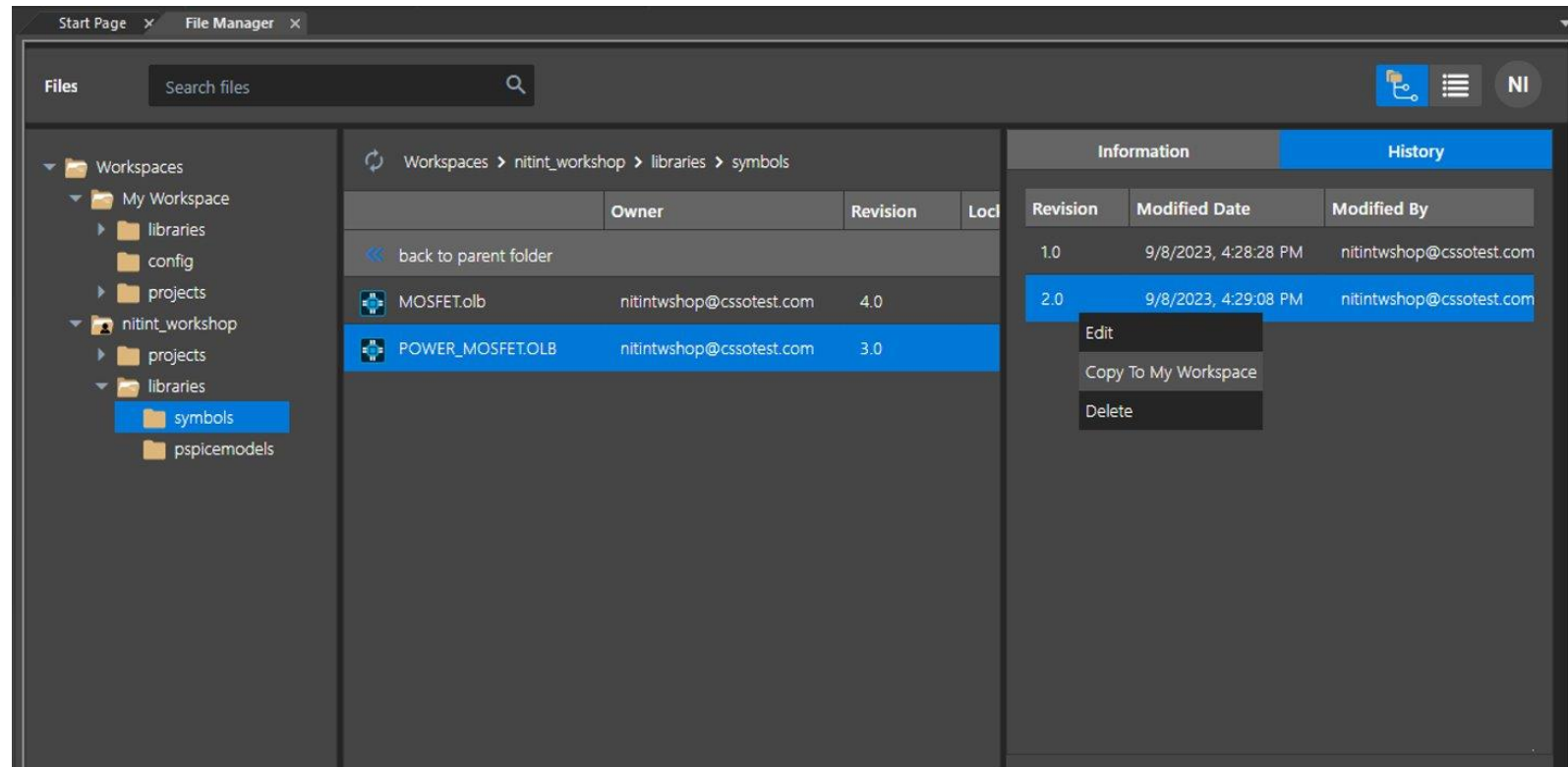
- Always have up to date libraries, projects, and components via Cadence's hosted cloud service
 - File and Library hosting and sharing within OrCAD Capture X
 - Additional services
 - Symphony
 - LiveBOM
 - **Optional to use**

OrCAD X Capture

- **Shared Workspace**
 - Cloud-based collaborative environment containing work-in-progress components, projects, libraries, and design files
- **Complete Part Authoring**
 - Creates new components from scratch or add from content providers
- **Live BOM**
 - Dynamic bill of materials with real-time data, cost, availability, and life cycle statuses in a design.

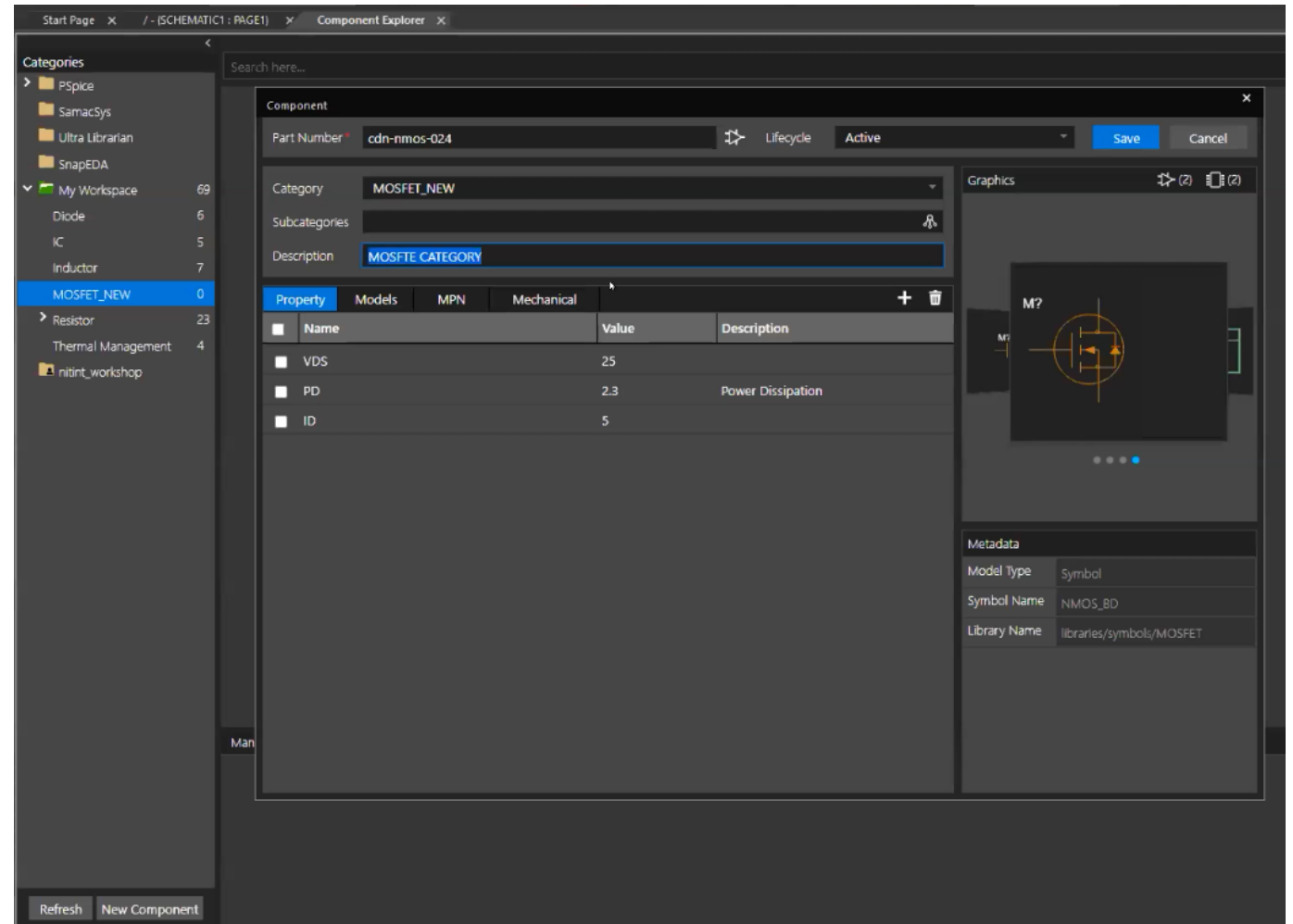
OrCAD X Cloud Workspace

- Cloud-based collaborative environment
- Can store libraries, components, and design files
- Can invite other users to cloud workspaces and assign roles



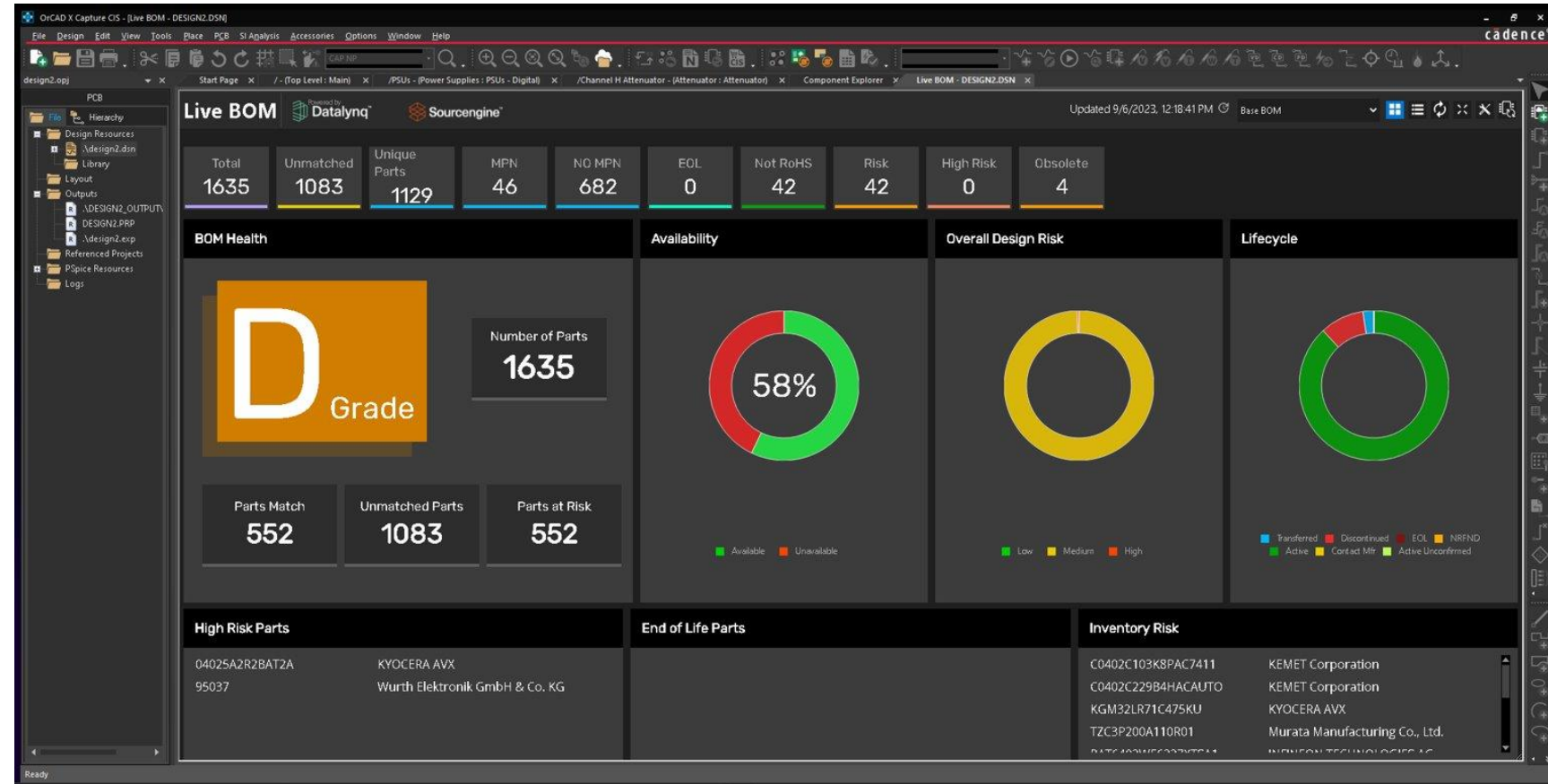
Complete Part Authoring

- Create a local library by searching and placing components from content providers in Capture designs
- Link a manufacturer part number (MPN) with an existing library component
- Publish components to shared workspaces

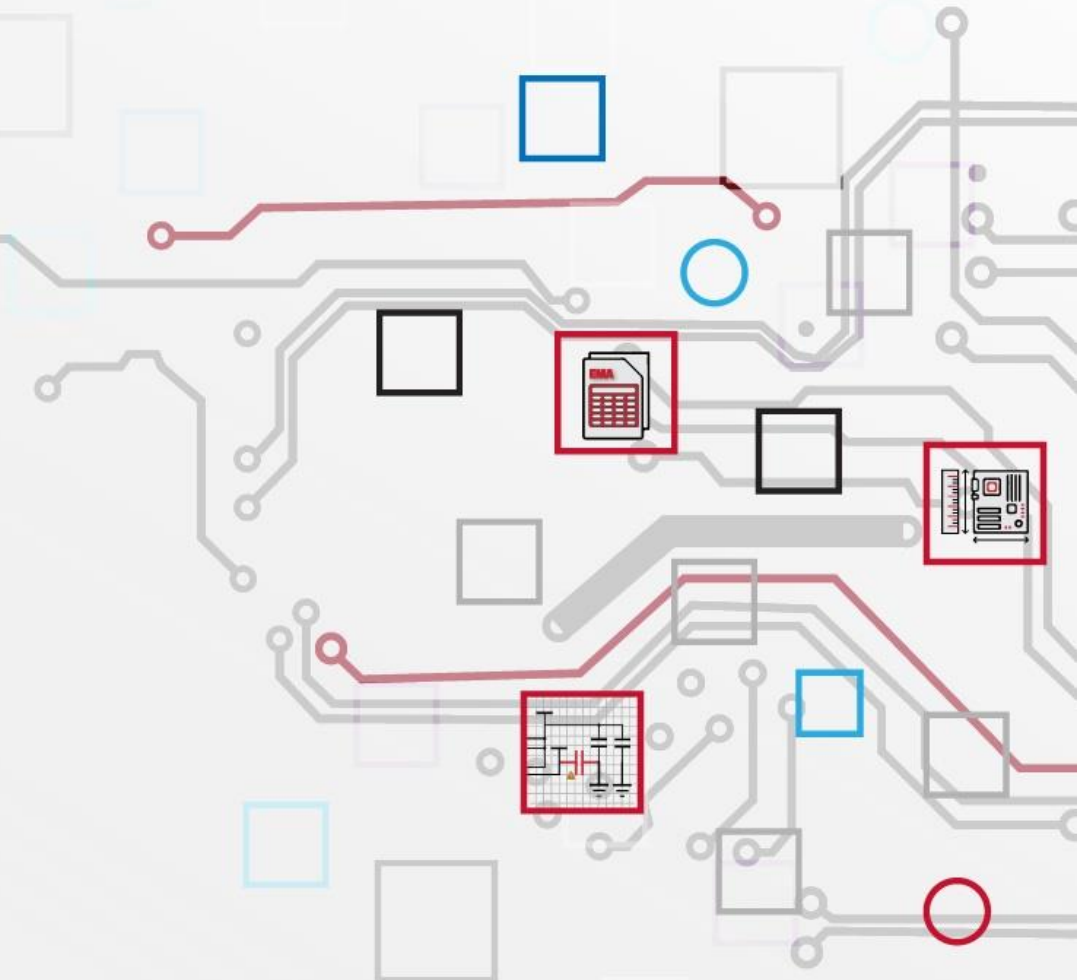


LiveBOM

- Dynamic Bill of Materials using supply chain data
- Overall BOM health with real-time data
- Search and place alternative parts



Capture Demo

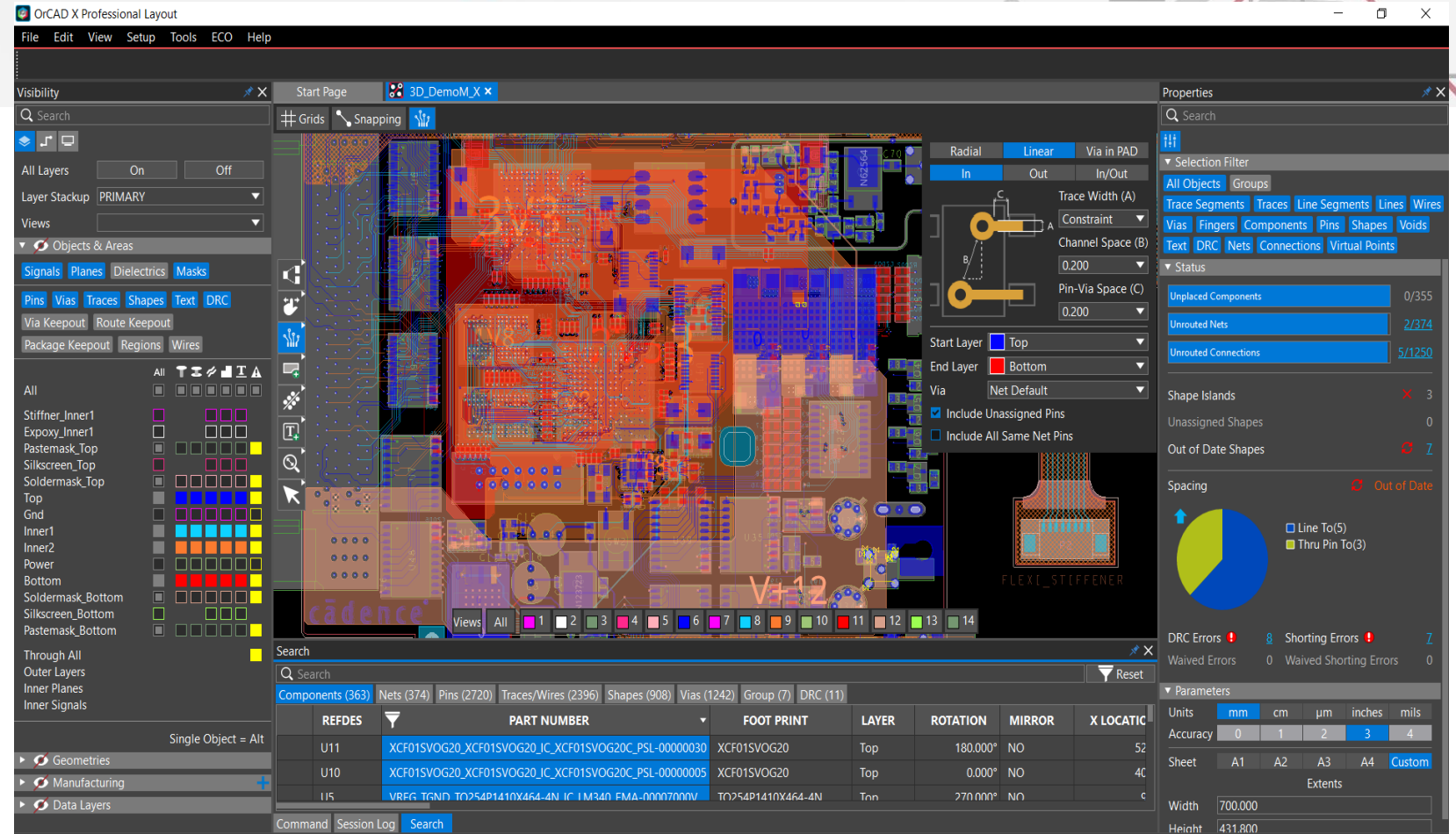


OrCAD X PCB

- OrCAD X Presto
 - New Layout environment
- Design Review & Markup
 - Review and track design changes that are stored in the design database
- LiveDoc
 - Automates documentation creation process
- 3D Viewer
 - Integrated 3D viewer
- Symphony
 - Cloud-based collaboration with up to 2 users
- MCAD X
 - ECAD / MCAD Collaboration
- X AI
 - Cloud-based, machine learning algorithms to help create designs

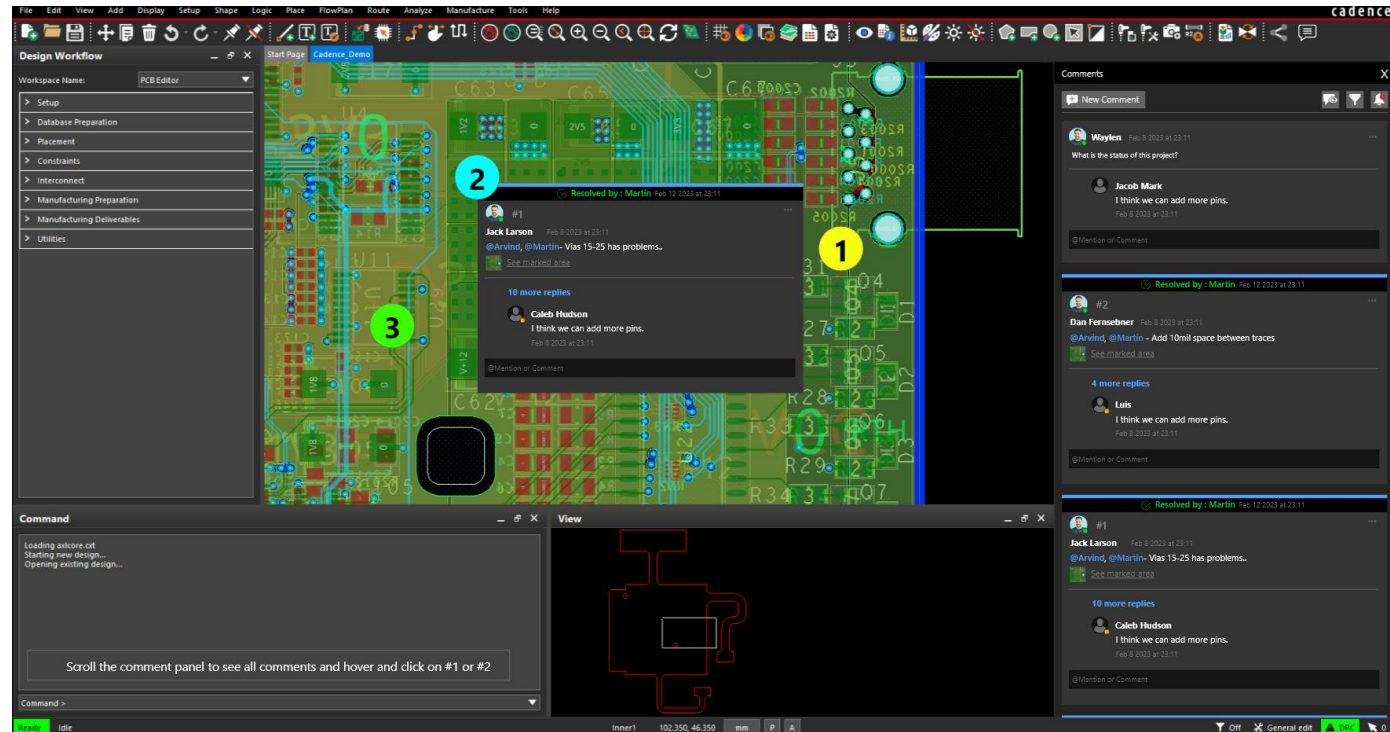
Presto

- New PCB editing experience
- Intuitive and efficient
- Fully compatible with PCB Editor



Review & Markup

- Review and track designs
- Data is stored in the board file for full traceability



LiveDoc

- Automated PCB documentation tool
- Real-time updates from board data



The screenshot displays the LiveDoc software interface. On the left, there are two 3D models of a PCB. The main area on the right shows a cross-section diagram of the PCB layers with labels for each layer and its material. Below the diagram is a table titled "Stackup Table" with columns for #, NAME, TYPE, MATERIAL, TOLERANCE, and THICKNESS. The table lists various layers including SURFACE, PASTEMASK_TOP, FILMMASTOP, SOLDERMASK_TOP, TOP, LYR2_DND, LYR3, LYR4, LYR4_PWK, BOTTOM, SOLDERMASK_BOTTOM, FILMMASTOP_BOTTOM, and PASTEMASK_BOTTOM. The total thickness is listed as 1.72776 mm.

#	NAME	TYPE	MATERIAL	TOLERANCE	THICKNESS
	SURFACE	SURFACE	AIR	±0.0	0
	PASTEMASK_TOP	MASK	SOLDER_PASTE_SAC	±0.0	0.0762
	FILMMASTOP	MASK	CARBON_PK_1ML	±0.0	2.54e-05
	SOLDERMASK_TOP	MASK	SOLDERMASK	±0.0	0.00254
1	TOP	SIGNAL	COPPER	±0.0	0.0606
		DIELECTRIC	FR-4	±0.0	0.0149
2	LYR2_DND	PLANE	COPPER	±0.0	0.0206
		DIELECTRIC	FR-4	±0.0	0.1184
3	LYR3	SIGNAL	COPPER	±0.0	0.0206
		DIELECTRIC	FR-4	±0.0	0.0149
4	LYR4	SIGNAL	COPPER	±0.0	0.0206
		DIELECTRIC	FR-4	±0.0	0.1184
5	LYR4_PWK	PLANE	COPPER	±0.0	0.0206
		DIELECTRIC	FR-4	±0.0	0.0149
6	BOTTOM	SIGNAL	COPPER	±0.0	0.0606
	SOLDERMASK_BOTTOM	MASK	SOLDERMASK	±0.0	0.00254
	FILMMASTOP_BOTTOM	MASK	CARBON_PK_1ML	±0.0	2.54e-05
	PASTEMASK_BOTTOM	MASK	SOLDER_PASTE_SAC	±0.0	0.0762
	SURFACE	SURFACE	AIR	±0.0	0
TOTAL THICKNESS					1.72776

3D Viewer

- Integrated 3D Viewer
- 3D constraints and DRCs
- Import and place Mechanical parts

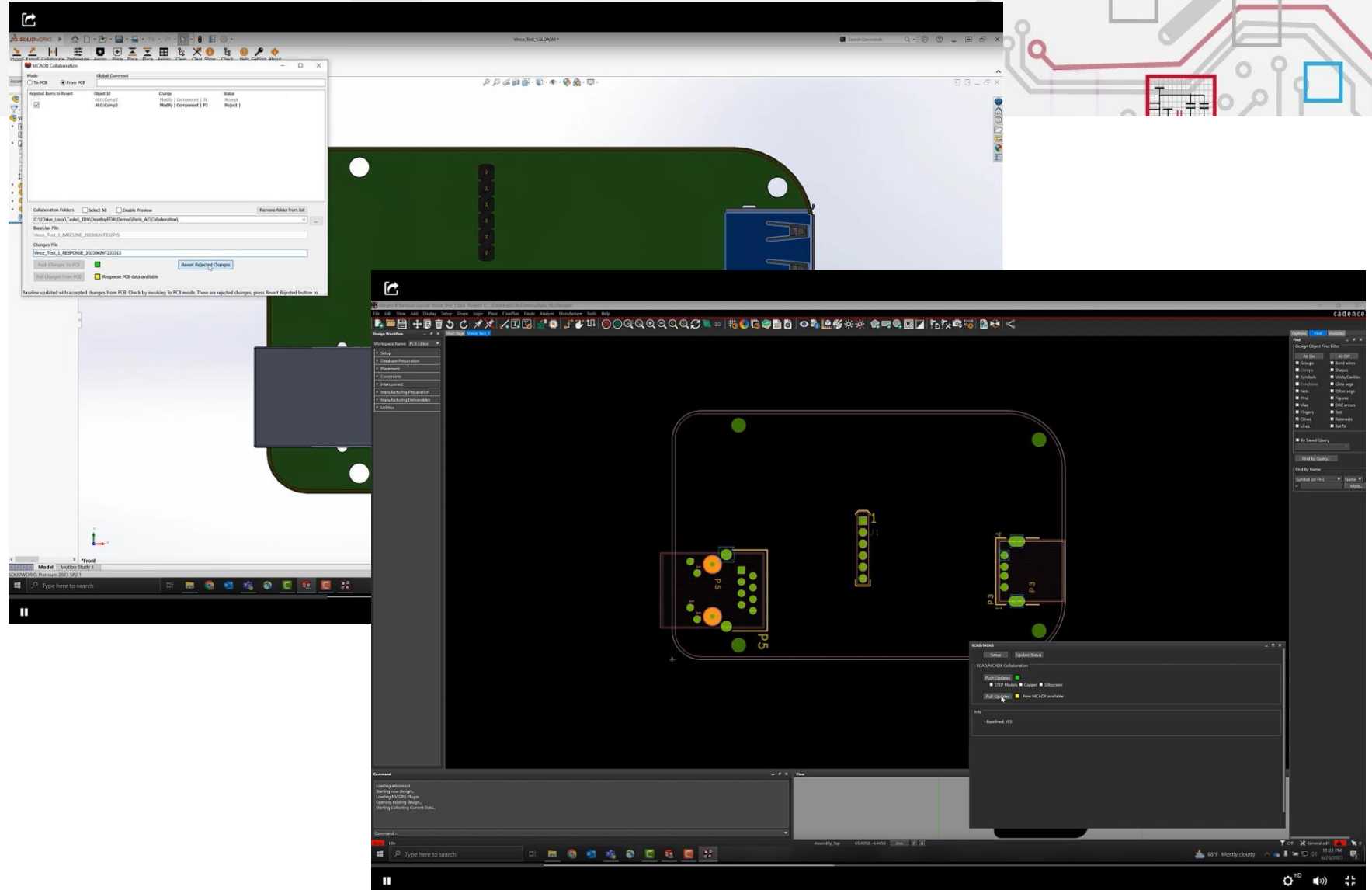
Component	Geometry to Check			3D Clearances	
	3D	Place Bound	DFA Bound	Drill/Slot	Board Edge
				mm	mm
*	*	*	*	*	*
C_1_1473005_1_J1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.050	0.050
Lcd_Ea_B081-A3n-b	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.050	0.050
Molex_53261-8_Fin...	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.050	0.050
Samtec_Tst_107-xxx...	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.050	0.050
Sot343n	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.050	0.050
Usb3a_Female	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.050	0.050

Symphony

- Same as Allegro symphony but for 2 people only
- Leverages cadence cloud to manage co-design sessions

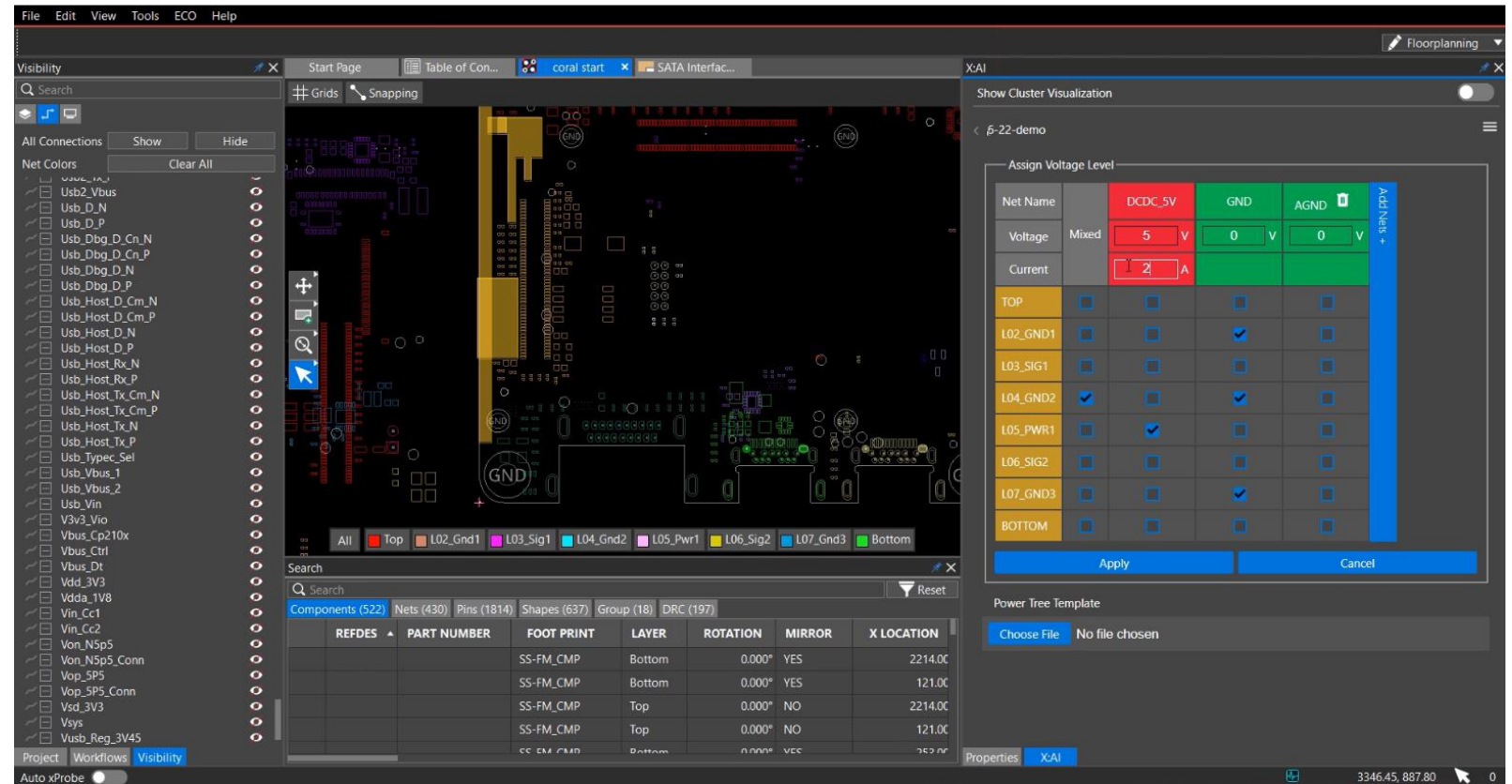
MCAD_X

- MCAD_X enables on-demand collaboration between OrCAD and SOLIDWORKS



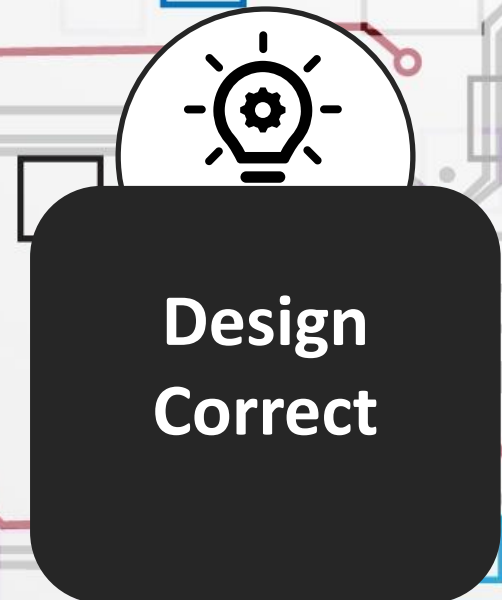
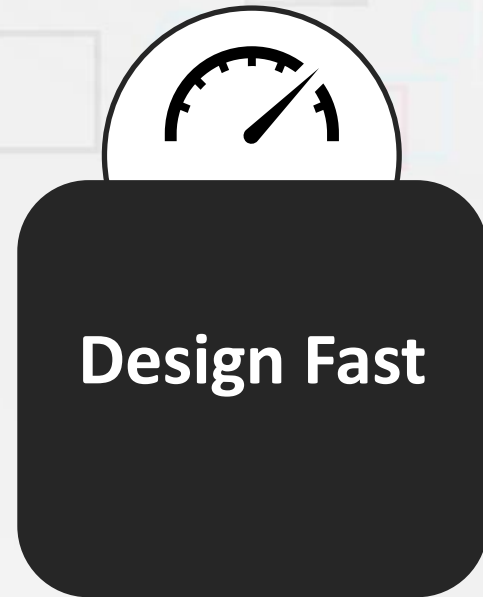
X AI

- AI circuit design for placement and routing
- Automated placement
- Auto-synthesis of power and ground planes
- Critical net auto-routing



Presto Demo

OrCAD X



Questions?

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