

Classic CADSTAR to eCADSTAR Migration in 15 Minutes or less



Empowering Your Transition to Modern EDA Technology

The technical support of Zuken's Global Network stands ready to assist you before, during and beyond your free 30-day trial period, turning the proven functionality into your new business potential. This is ensured by safeguarding your migration steps in every aspect and showing in a live session via an online meeting that a successful migration process with your own project data takes only about 15 minutes.



- Run both software systems independently and simultaneously on the same computer, making it easy to perform cross-comparisons between them and ensure full transparency for all your clicks.
- Uncover hidden and unnoticed design mistakes by using a more structured framework with modern tools and new features, bringing major optimization opportunities for existing and upcoming projects.
- Benefit from special offers as Zuken rewards license conversion with exclusive upgrade discounts and the parallel support program, meaning you receive full updates and technical support for both systems.

1. Classic CADSTAR Data Preparation

What

Check the integrity of your Classic CADSTAR data by running a full CSA (Schematic) and CPA (PCB) archive export for validation. Then, synchronize the Schematic Design, PCB Layout and the Component library, by performing an ECO Update. Finally, reload all library components by using the part reload function.

Why

Old source files often have hidden connection errors, sheet differences or broken library links. Exporting archives isolates data from temporary memory to find database fragmentation, while reloading parts ensures you do not use outdated, locally cached components.

Goal

Analyze all database warnings to achieve a completely error-free export, a 'No differences found' status for both the forward and backward annotation and a completely updated component synchronization.



2. Classic CADSTAR Library Adjusting

What

Open the Parts Library Manager to build a complete Parts Index while making sure all Parts.lib files are located in one single folder. Completely ignore any Parts.lst files during this process. Then, export your Schematic (CSA), PCB Layout (CPA) and Documentation (CSA) libraries and re-import them using the text-based archive option to validate their integrity. Finally, save time for the upcoming eCADSTAR Import by adding a lowercase 'v' prefix to pad-stack names within the Classic CADSTAR PCB library that are intended to be used as vias in eCADSTAR later, and create Inner layers as placeholders for upcoming functional pads and Inner Suppress layers as placeholders for upcoming non-functional pads.

Why

eCADSTAR supports multiple concurrent libraries, such as Production, Obsolete and Prototype, but strictly prohibits cross-boundary links, requiring all Classic CADSTAR part descriptions to be located in one place while migrating. The export and immediate re-import of the libraries within Classic CADSTAR itself isolates library data to catch hidden database corruption early. Finally, because libraries might be migrated multiple times, pre-defining via rules and placeholder layers helps the system identify vias automatically and insert definitions for suppressed and unsuppressed layers of all pad-stacks automatically.

Goal

Achieve a unified parts index that matches eCADSTAR's multi-library structure without data loss. Secure completely error-free archive files of the SCM, PCB and DOC Libraries so they can be smoothly processed in the upcoming migration stages. Save a massive number of manual operations during the final eCADSTAR Import by automating definitions for Vias and Pad-Stacks.

3. eCADSTAR Data Adjusting

What

Start the eCADSTAR Migration Wizard and select your prepared CSA and CPA archive files, link the master library path and set up the layer mapping by file or manually. Then, reconstruct electrical nets (E-Nets) in the Constraint Browser, run a global library reload in SCM, and execute a forward annotation followed by a backward annotation for user-defined global symbols.

Why

Layer mapping fixes undefined legacy sub-layers, while reconstructing E-Nets prevents the system from automatically deleting net prefixes. A global reload decouples your design from temporary data. The forward annotation isolates and prioritizes routing connections between SCM and PCB to achieve no conflicting constraints while automatically showing warnings about obsolete parts, sheet connectors and restricted legacy common pins. Finally, the backward annotation aligns local instances with the master library rules.

Goal

Move your Classic CADSTAR data into eCADSTAR and create a local project library. Match it with the unified eCADSTAR master library rules to achieve a full synchronization for Electrical Nets, Symbols, Parts, Netlists and routing topologies while fixing pin grid anomalies, sheet connector warnings, restricted common pins or automated hierarchical block prefixes.



4. First Library Migration from Classic CADSTAR into eCADSTAR

What

Import the Classic CADSTAR Data by completing the Migration Wizard Steps in the eCADSTAR Library Editor to create an eCADSTAR Local Project Library. Prepare all required DOC Symbols in Classic CADSTAR by saving them first in a Schematic Diagram and then in a PCB Layout with a board outline. Import those DOC Symbols into the newly created eCADSTAR Local Project Library and finally copy and paste this Local Project Library into the eCADSTAR Master Library.

Why

As eCADSTAR automatically classifies any migrated Classic CADSTAR object missing electrical connections as a documentation symbol, it is necessary to first create a temporary eCADSTAR Local Design Library to import the correct documentation symbols in a second step. This enables a full transfer into the eCADSTAR Master Library without corrupted data by automation.

Goal

First Library Migration of the Classic CADSTAR Data, containing also all required Classic CADSTAR Doc Symbols, into an eCADSTAR Local Project Library. Finally, transferring the eCADSTAR Local Design Library into the eCADSTAR Master Library.

5. Importing Technologies and Design Rules into eCADSTAR

What

Prevent manual rework in your eCADSTAR Master Library by importing the Technologies and Design Rules of the already created eCADSTAR Local Project Library that contains the previously migrated Classic CADSTAR Data.

Why

A Design Technology is a prerequisite for a Design Rule Set, and both are needed to make eCADSTAR run multiple automated validation routines to check that all minimum required rules are fully maintained. While the Technology File contains the core physical layer definitions and mapping configurations, the Design Rule File contains attributes like electrical boundaries, trace widths and spacing classes. When importing both areas, it is easy to delete old unnecessary Classic CADSTAR content and prepare new content with greater flexibility for eCADSTAR - such as specific inhibit layers and Conductor Grid Definitions.

Goal

Save Design Technologies with verified layers only to reach correct Design Rules without any missing attributes. This enables all Design Rule Sets to be filled with fully correct values only, allowing you to reach a validated database for your eCADSTAR Master Library.



15 Optional Steps for Modernization to Go Beyond

- **Template Area Setup:** Create and link new template areas to accurately transfer geometric shapes from Classic CADSTAR into modern eCADSTAR layout environments.
- **Technology Re-Import:** Reload the technology data from the Master Library and refresh all components to overwrite outdated layer structures and remove incorrect elements from the layout.
- **Partial Design Rule Import:** Perform a partial import of the design rules in the Constraint Browser to correctly integrate eCADSTAR parameters, such as specific clearance rules, into your legacy data.
- **Local Board Library Cleanup:** Clean up the local board library in sequential steps by removing unused parts, footprints and pad-stacks to completely clear the local data cache of old data.
- **Master Library Component Reload:** Run a targeted reload of components from the Master Library to safely bring all component properties and additional information up to date.
- **Final Database Synchronization:** Execute a final forward annotation and backward annotation to match all data and complete the final synchronization between the schematic and layout databases.
- **Predefined Workspace Loading:** Load predefined views and selection filters to instantly provide a familiar and highly efficient working environment for your entire team.
- **3D STEP Import:** Start the bulk import of three-dimensional geometries into the Mechanical Object Organizer (M.O.O.), which automatically keeps the correct orientation from your old systems.
- **Manual 3D STEP Assignment:** Link 3D models in the footprint view using the attributes window or the 3D manager. For large datasets, automate this process with a custom application via the Windows API.
- **Automated 3D STEP Assignment:** Alternatively, use a prepared CSK script that uses a table file (CSV file) to automatically link hundreds of 3D models to the matching footprints all at once.
- **Wizard - Customization & Setup:** Adjust the central migration control file before the first run to automatically include company-specific standards and custom layer assignments right from the start.
- **Wizard - Layer Matching:** Activate custom control commands to ensure that legacy geometries are directly assigned to the correct layer names of the eCADSTAR Master Library during import.
- **Migration File - Pin Correction:** Use the automated pin correction to ensure that parts without physical pins or with incomplete descriptions are automatically prepared for forward annotation.
- **Migration File - Case Mode Adjusting:** Change all alphanumeric pin names automatically to upper-case, lower-case or camel-case letters to maintain a clean and error-free database structure.
- **Migration File - Connector Transformation:** Clean up incorrect connector descriptions in the old Parts Index before the migration so that eCADSTAR generates a separate symbol for every single pin.