



## CADSTAR Express

### TOP FEATURES AND BENEFITS

- Award winning download software
- Limited version, but complete software package
- Updated to meet the newest version of CADSTAR

### Introduction

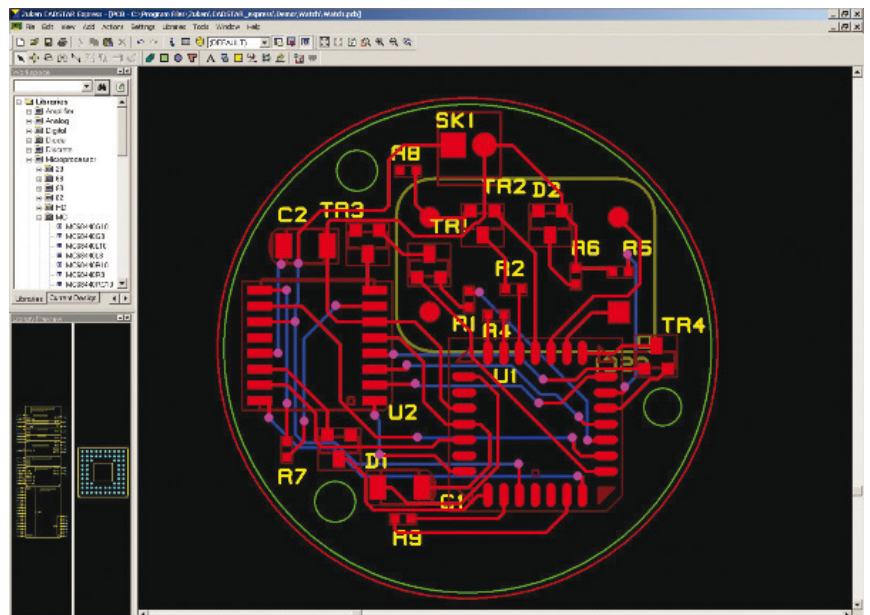
CADSTAR Express is a FREE Schematic & PCB Design solution from schematics to manufacture within a single, easy to use Windows design environment. It offers all the functionality of the full CADSTAR Design Suite with a limit of 50 components and 300 pins.

### Total Flexibility for your EDA Environment

As well as offering 'state-of-the-art' Schematic & PCB design capabilities, CADSTAR Express provides tools for schematic capture, PCB smooth Push-a-Side Placement and Routing, advanced manual, interactive and automatic routing, manufacturing outputs and FPGA design (in combination with the evaluation software CADSTAR FPGA, which you will need to download separately). CADSTAR has superior integration features, providing customers with maximum flexibility in developing their EDA environment.

### Personalized Working Environment

Throughout CADSTAR, user-defined function keys, user-configurable toolbars and Workspaces dramatically increase the speed of use as well as allowing the creation of a personalized working environment. CADSTAR's latest Windows motif provides modern toolbar appearances and Tabbed Multi-document interface. Macros further automate repetitive tasks and context sensitive menus simplify command choices. Stroke Commands are available for Panning and Zooming. OLE Automation further enhances the customization capabilities of CADSTAR, allowing programmatic access to an application from external tools.



## Graphical Library Manager

All components, symbols and parts can be created and managed using the graphical library manager. Fully customizable library hierarchy and version control make part library management easy. All the components, symbols and parts can be divided into separate folders. Parts can be found quickly, then previewed and added to the design by "drag and drop". Parts Libraries can be configured as sharable files or ODBC databases for even greater multi-user editing and sharing capabilities.

## Integrated Schematic Capture

CADSTAR's schematic capture front-end, which complements the CADSTAR PCB Design Editor, is the natural system for a complete and totally integrated solution. CADSTAR provides a smooth and error-free transition in both directions between schematics and PCB design supporting full forward- and backward annotation.

## Integrated PCB Design tools

The CADSTAR PCB Design Suite delivers one of the most powerful solutions in the world of PC-based PCB design.

## Placement

For designers who prefer to place components by hand, options that emulate the manual process have been incorporated to offer optimum design capabilities. The 'Arrange Component' Wizards allow you to place components around the board outline or place components in rows/columns or radial polar array with user-defined criteria. Moving components using the cursor is simply a case of picking and dragging on the design. Push-A-Side functionality is available within the CADSTAR Place and Route Editor for even greater flexibility. Selection for multiple moves or sequences is provided, as is the ability to dynamically optimize the connection length during a move.

## Routing

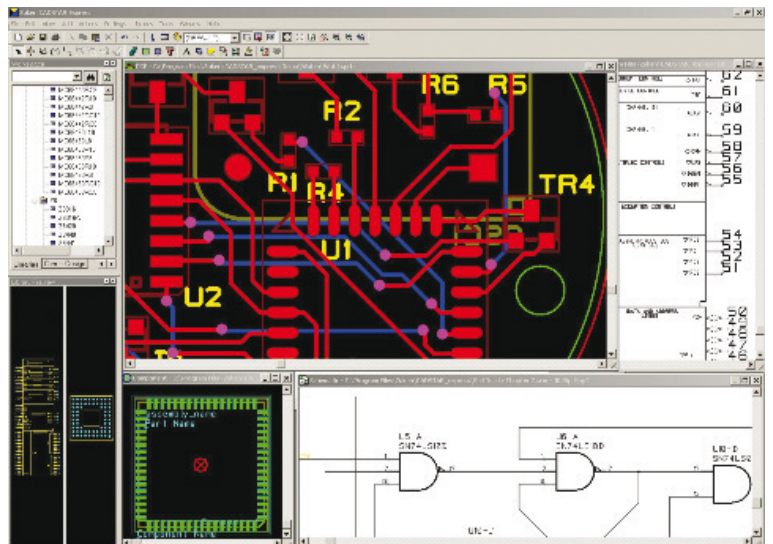
At the heart of CADSTAR's core technology is the CADSTAR Place and Route Editor (P.R.Editor XR2000 E). With complete control over the placement and routing even the most complex designs can be routed in the shortest possible time. The latest grid-free, spatial data-structure technology and rules-driven architecture, coupled with ease-of-use makes CADSTAR a powerful productivity tool for design engineers.

## Digital Design

With the advanced routing tool set that contains the multi pass auto routing and special algorithms for memory, trunk (bus) and river routing, even the most difficult digital design can be completed with ease.

## Analog Design

With advanced copper filling and split, partial and full copper WYSIWYG power-planes possible, analog design is made easy where precise control is required. These advanced features are incorporated into standard tools that also include curved and mitered cut-outs, hatching with flexible angles and variable spacing. User defined teardrops can be placed on tracks, vias and pads, moving and rotating dynamically to maintain intelligent drops of copper. Curved tracks and automatic track fattening complete the professional analog capabilities.



## Documentation

CADSTAR Express includes a full set of tools to assist in the documentation of the design. The snap tools allow any drawn shape or dimension to be added with precision to other objects in the design. The dimension tools allow dimensions to be added and interactively updated quickly and efficiently. The dimension styles are fully customizable to match the users own standards. Hyperlinks can be added in the design to any other document or website.

## Manufacturing

CADSTAR provides many manufacturing output formats, such as extended Gerber (RS274x), extended NC Drill (Excellon), Bill of Materials, Testlands for DFM, ODB++, IPC 356-D and DXF.

All devices with a Windows compatible driver are supported.

PDF formats are searchable and contain tags for key attributes (such as reference designators).

The DXF format can be output using the post-design processor and the DXF design input and output capabilities.

The batch post processor, an easy to use spreadsheet style dialogue, allows all post processor outputs to be produced at the push of a button.

For assembly machine drivers and simple or complex bills of materials, a unique report generator facility is provided allowing you to customize reports and outputs using simple everyday language, without the need for programming skills.

## Limits

CADSTAR Express is limited to 300 pins and 50 components.

## Availability

FREE CADSTAR Express is available for download from [www.zuken.com/cadstar/downloads](http://www.zuken.com/cadstar/downloads)

## Minimum Configuration required

- 1 GHz INTEL Pentium Processor (2 GHz recommended)
- 2 GB hard disc (NTFS format)
- 250MB disk space required for full CADSTAR installation and libraries
- 1GB RAM (2 Gb recommended)
- 512MB virtual memory / paging file
- 1280 x 1024 display, 256 colours
- CD-ROM drive
- 3 button mouse
- USB port (not needed for CADSTAR Express)
- Microsoft Internet Explorer 4.5, or later

## More

CADSTAR is a fully featured PCB Design System renown for its excellent price-performance ratio. From simple single-sided through-hole designs to multi-layer, surface mount, high-speed digital and analogue designs, CADSTAR is capable of designing today's most demanding Printed Circuit Boards.

From schematics, board- and FPGA level system design, PCB layout, high-speed signal integrity, power integrity, analysis, 3D, creation of manufacturing output, to complete data management capabilities and extensive internet-accessible libraries containing over 250,000 Parts, CADSTAR provides you with all technologies necessary for a complete electronic development process in one environment.

To enhance your experience with CADSTAR Express a "Do it Yourself" guide is provided with easy to follow instructions and links to video demonstrations.