



TARGET 3001! PCB Layout CAD Software

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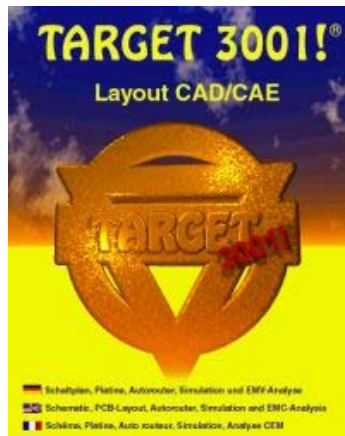
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TARGET 3001! represents a new generation of CAD/CAE software for circuit design. TARGET 3001! has been created to meet the requirements of professional design engineers. TARGET 3001! incorporates the functions of schematic capture, simulation, PCB layout, autoplacer, autorouter, 3D-view, EMC analysis and frontpanel engraving all through **one** Windows user interface. The integration of the entire project data in **one** common database accelerates the development process enormously. Easy generation of **all** required manufacturing data minimises your projects time-to-market.

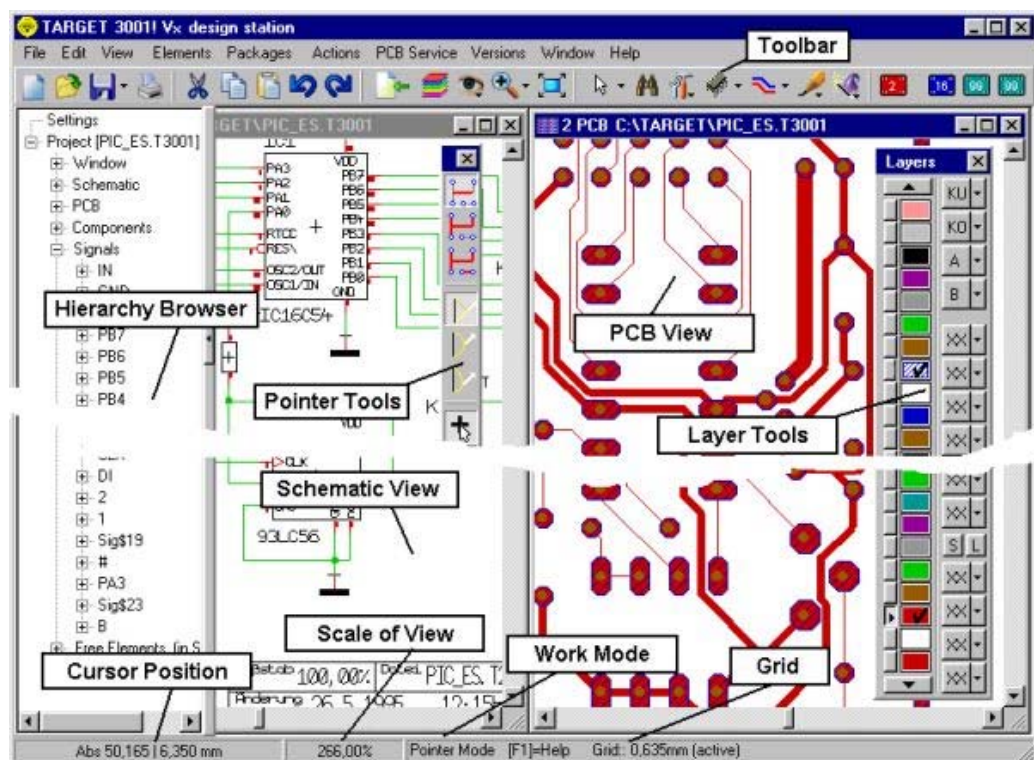
TARGET 3001! includes:

- Schematic
- Mixed Mode Simulation
- Shape Based Contour Autorouter
- PCB Layout (featuring 3D view)
- AutoPlacer
- EMC Analysis
- Frontpanel engraving tool

System requirements

- Operating system: Windows 98/ME/NT4/2000/XP/Vista
- Processor: AMD Athlon or Pentium III recommended
- 128 MB RAM
- Graphics: 1024x768 pixels, 256 colors, Open GL supported (for 3D view)
- CD-ROM drive
- Internet access needed for some functions: update management (versions and libraries), online libraries, datasheet service, distributors informations on the components...

PCB Layout CAD/CAE for Windows



Complete design flow in one program:

- Intuitive and easy to use commands
- Single data file for entire project - no data conversion problems
- Common Windows interface for all program functions
- Live forward/backward update between schematics and layout
- Simulation from schematic with one click - no separate simulation schematic
- Various automated tools such as component AutoPlacer & PCB AutoRouter
- EMC analysis to help guide you to a successful PCB layout
- Generation of all necessary manufacturing data
- Excellent data import/export capabilities
- True scale representation on the display, 1 inch on the screen equals 1 inch on the printout (world coordinates).
- Automatic generation of ground planes, changes online possible (real-time ground planes).
- Flexible use (All components can be edited at any time).
- All Windows-Fonts can be used (except Gerber output).
- Exchange of modules between different projects using the clipboard.
- Easy export of graphics in metafile-format using the clipboard for documentation purposes (example: export into MS-Word allows flexible use without loss of resolution).
- Independent from video cards and printer drivers.
- Program and manual have been developed and used in Germany, Austria and Switzerland since 1985

The following versions are available:

TARGET 3001! "discover" 250 Pins/Pads, 2 copper layers, simulation capable of 30 signals (free download)

TARGET 3001! "light" 400 Pins/Pads, 2 copper layers, simulation capable of 30 signals

TARGET 3001! "smart" 700 Pins/Pads, 2 copper layers, simulation capable of 50 signals

TARGET 3001! "economy" 1,000 Pins/Pads, 4 copper layers, simulation capable of 75signals

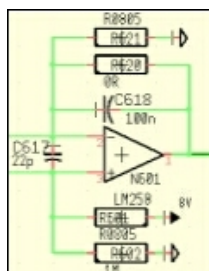
TARGET 3001! "professional" unlim. # of Pins/Pads, 100 copper layers, simulation capable of 100 signals

TARGET 3001! "design station" unlim. # of Pins/Pads, 100 copper layers, simulation capable of unlim. # of signals

The TARGET3001! program features are entirely active in any version. Price differences are based on the pin/pad and layer capabilities as well as the number of signals to be simulated. Nothing else.

We supply special offers for schools and students. Please ask for a quote.

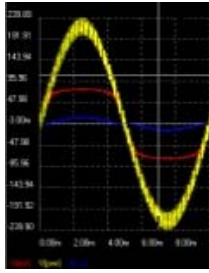
Schematic



Easy start with [flash animations](#).

- Hierarchical Design - use existing designs as modules for other designs
- Multiple schematics open at once - allows easy cut&paste between designs
- Schematic symbols editable, even when already in use & independently from library
- Gate and pin swap
- 1,000 common components provided locally
- Extensive library of over 36,000 components supplied by a server (internet access needed)
- Library browser for easy component management
- Component management system with direct internet access to related data sheets
- Up to 100 pages in one schematic, each 1.2m x 1.2m in size (equals 47.24 x 47.24 inches)
- Variants of assembly supported

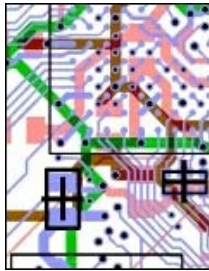
Simulation



[Detailed information...](#)

- Mixed mode simulation from design schematic with a single click - no need to enter separate simulation schematic!
- Components inserted in schematics will automatically have their model associated with them - reduces need for designer to work with SPICE simulation language
- View simulation results in graphical oscilloscope
- Analogue & digital simulations realized simultaneously
- Digital simulations carried out in fast digital mode rather than at the transistor level
- Parameter controlled standard models available: passive components, bipolar transistor, diode, JFET, MOSFET, switches, controlled sources, logic gates, flip-flops and much more
- Many TARGET components already include simulation models
- All simulation models and parameters easily editable through a graphical user interface
- Directly use SPICE models supplied by component manufacturers
- Import any Berkley-SPICE and PSPICE compatible models

PCB Layout



Easy start with [flash animations](#).

- Conventional and SMD components supported
- Resolution to 1/1,000,000mm (1nm)
- World coordinates - 1 inch on screen equals 1 inch on PCB
- 100 copper layers
- Blind and buried vias supported
- FPGA's supported
- BGA's supported
- Rotate components by any angle
- Solder pad shapes - circular, octagonal, oblong etc. -freely definable pad stacks
- Track features - any track width, circular track, beziér curves, spirals, teardrops etc.
- Components editable, even when already in use & independently from library
- Component AutoPlacer
- Component Management System (provides Shop-links of several distributors as well as datasheet-links)
- Hybrid AutoRouter (gridless/shape based). Routing strategy defined by the user
- Contour AutoRouter (gridless), using a different algorithm. Routing strategy defined by the user
- Electrical Rule Check (ERC) - automatically check design for various logical errors such as shorts, opens, power supply connections and assignments, pads present at pins, unconnected signals etc.
- Design Rule Check (DRC) - apply design rules to ensure conformity to board house requirements. Specify minimum track widths, track spacing etc.
- Creation of testing points
- Automatic or user-defined ground planes (copper pour) updated on screen, in real-time
- 3D view of your layout
- Alignment assistant (allows geometrical alignment of identical components in line, matrix or circle)

Electro Magnetic Compatibility (EMC check)

- User defined EMC design rules are verified against your current layout
- Specified tracks are checked regarding their emissions and self-interference
- EMC check of any routed tracks - galvanic, inductive, capacitive and radiation coupling
- Computation of the coupling factor, wave resistance and maximum track length
- Lots of design tips for successful EMC design

Data processing and generation of manufacturing data

- Gerber input and output
- XGerber input and output
- Excellon & Sieb Meyer drill files
- Postscript output
- DXF input & output
- HPGL output
- Isolation outlines for milling machines in HPGL format and isel NCP-format
- Export TARGET design in ASCII format for custom modifications
- Import designs from Eagle or export them to Eagle including schematic, board and libraries
- Import designs from PROTEL including schematics, boards and libraries
- Import of Mentor and Orcad netlists and output of component lists and netlists in Protel, Orcad and Calay- format
- BOM (bill of materials) with user definable fields including RoHS information
- Support of cable harnesses (automotive industries)
- Drilling plan with pictograms
- Schematic/Layout via WMF in Word etc.
- TIFF Tagged Image File Format
- IDF-export (3D)
- Flying probe formats of "digitaltest"- and "Polar Instruments" testers supported

Frontpaneldesign



[Detailed information...](#)

- Design your frontpanel in TARGET 3001!
- No double entering of coordinates
- Use all drawing functions you are familiar with
- Library with lots of milling elements
- Scales
- Lettering
- Drillings
- Countersunked drillings
- Threads
- Breakouts
- Flat millings
- Price calculation
- Ordering routine