# TARGET 3001! V11 data sheet

- 32-bit-windows-power program and manual completely in English and German language toggle between schematic and PCB
- realtime data integration (forward-/back-annotation) realtime ground plane computation realtime air wire optimization autoplacer contour autorouter (shape based, gridless) drag & drop library browser drag & drop component placement clipboard as a documentation interface intuitive windows user interface discover version as free viewer software undo/redo (50 steps) interfaces: Gerber IN/OUT, XGerber, Excellon, Sieb & Meyer, DXF, PostScript, Bitmap In, ASCII In/Out ("open data-interface"), XML in/out, generic HPGL out insulation milling as outline engraving (directly from the program!) maximum accuracy: vector graphics, resolution: 1nm = 1/1.000.000mm = 1/25.400.000 inch world coordinates: 1 inch on screen = 1 inch on PCB (when zoom = 100%) 1m x 1m PCB-/schematic area, 100 PCB layers, 100 schematic pages components in current project directly editable: change pad, modify package etc. flip-chips and ball-grid-arrays (BGAs) possible rotate by any angle e.g. for COB technology (chip on board) freely displacable tools

### In schematic mode:

• permanent "forward-annotation" to PCB • more than 5000 logic components (DIN/IEEE and old norm) • automatic component numbering • inserted symbols can still be edited or adapted (independently from library) • library browser for easy library management • Component Management System (CMS) • import of Mentor and Orcad netlists if needed and output of individual component lists and netlists (also in Protel and Orcad format) • BOM (bill of material) with item number, purchase prices, deliverer etc. and fields to be individually defined • up to 100 schematic pages each up to 1m² • electrical design check FRC

### In PCB mode:

• permanent "back-annotation" to schematic • component packages in the layout can be edited freely at any time • air wires continually updated in display to aid placing • up to 100 layers (copper, solder stop, solder paste, gold etc.) • any solder pad shapes: circular, octagonal, oblong, etc. • any width of track, circular track, bezièr-curves, spirals, teardrops and freely defineable padstacks • configurable autoplacer • interactive and automatic routing, gridless shape based contour auto router with t-connections (copper sharing) and maintaining of all design rules, single-, double- and multilayer routing, routing of SMDs, of components and of solder pads rotated at any angle • floating ground planes calculated in real-time - without computation delay • configurable design rule check (DRC) • PCB generation and routing without schematic • gerber-file import for further editing (from other design software programs). • lots of PCB manufacturers directly accept \*.T3001-files from TARGET

## System requirements:

● 486DX-processor, recommended is an AMD K6 or an Intel Pentium II ● 32MB RAM, recommended is 64MB ● screen resolution: minimum 800x600 pixels and 256 colours ● CD-ROM- and 3.5" drive for installation neccessary ● Windows 95/98/ME/NT4/2000/XP

## Mixed mode simulation:

- completely reviewed new graphical user interface
   no longer Spice blocks
   dialogues as assistants
   help in dialogues- with graphical explanations
   eased model edition
   modelbrowser enlarged (with Syntax-Error messages also)
   Subcircuit Generator enlarged
   Level ("Simulation-group") new defined, generalized
   all basic elements of the
- simulator available in the library, virtual components too 

  Component import (with model) in tree view technique possible

  PWL-Editor 

  Graphical entry of PWL-curve 

  interactive elements self definable: 

  individual virtual instruments
- can be generated texts as value display filled objects as flashing elements rectangles as oscilloscopes MOSFETs: parameters L and W also implemented into the model card (PSPICE-Syntax), so MOSFet-Models from manufacturers (Internet, gen PSPICE-Syntax) can be imported SPICE3F5 and PSPICE compatible Graphical entry of the circuit circuit simulation interactive circuit symbols mixed mode simulation (analog + digital) Analyses: DC sweep, AC sweep and transient automatical control of step widths in transient analysis event driven digitalsimulator delay, setup, hold, ... times for digital basic elements postprocessor (oscilloscope) for view and analysis graphical subcircuitgenerator

## EMV-analysis:

• elektromagnetic compatibility (EMC) • From the beginning of your design you should be sure of all EMC- options. In the EMC-Analysis you first have to define several parameters concerning the PCB and concerning the already placed tracks. Critical tracks are automatially highlighted and checked with respect to their emissions and self interference. **Don't fear EMC!** By using EMC-Analysis the PCB is checked against all EMC design rules whilst designing. The handling and evaluation of the results are realized by the Windows tree-view-technique. The following calculations are implemented: ● galvanic, inductive, capacitive and radiation coupling ● computation of the coupling factor, the wave resistance and maximum track length ● numerous tips for successful EMC-adequate PCB design.

## What's now in V11

new Hybbrid Autorouter
 generating panels
 generating testing points for measurments
 selection assistant
 (logical selection of Elements for properties)
 Eagle Export
 frontpanel engraving tool
 automatic PCB enquiries and -orders
 listing the last 20 components used

Version 11 is steadily developing! Be sure having downloaded your latest release free of charge. See TARGET menu Help/Free Update. Within V11 an online DRC is planned as well as the generation of ground planes as grid.