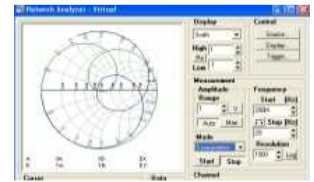
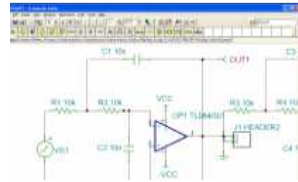
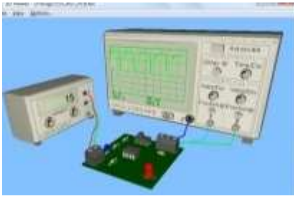
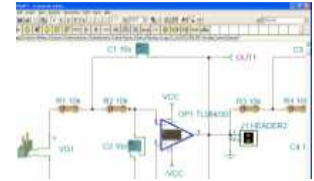


TINA
New features
of TINA v8
and TINA
Design Suite
v8

MATRIX



TINA Design Suite is a powerful complete electronics CAD solution.

TINA is used for analyzing, designing, and real time testing of analog, digital, VHDL, MCU, and mixed electronic circuits and their PCB layouts. You can also analyze SMPS, RF, communication, and optoelectronic circuits; generate and debug code and test microcontroller applications in a mixed circuit environment.

A unique feature of TINA is that you can bring your circuit to life with the optional USB controlled TINALab II hardware, which turns your computer into a powerful, multifunction T&M instrument.

Benefits

- Rapid design of PCB's with easy to use schematic entry
- Powerful analysis tools with real time measurement capability

Features

Interface included to build LabView based virtual instruments

- Display and animate circuits with 3D parts on a virtual 3D breadboard
- Powerful Spice-VHDL co-simulation including MCUs
- Finite State Machine (FSM) editor with VHDL generation

Easy to use schematic entry

Enter any circuit within minutes with TINA's

easy-to-use schematic editor. Enhance your schematics by adding text and graphics elements such lines, arcs arrows, frames around the schematics and title blocks. Choose components from the large library containing more than 20,000 manufacturer models. You can check schematics for errors with TINA's advanced ERC functions. The schematic editor supports complex hierarchical designs, team design and version control.

Powerful analysis tools.

Analyze your circuit through more than 20 different analysis modes or with 10 high tech virtual instruments. Present your results in TINA's sophisticated diagram windows, on virtual instruments, or in the live interactive mode where you can even edit your circuit during operation, develop, run, debug and test VHDL & MCU applications.

Integrated PCB design.

The new fully integrated layout module of TINA has all the features you need for advanced PCB design, including multilayer PCB's with split power plane layers, powerful autoplacement & autorouting, rip-up and reroute, manual and "follow-me" trace placement, DRC, forward and back annotation, pin and gate swapping, keep-in and keep-out areas, copper pour, thermal relief, fanout, 3D view of your PCB design from any angle, Gerber file output and much more.

Advanced presentation tools

Make stand-out reports and presentations of schematic diagrams, annotations, formulas provided by symbolic analysis, Bode plots, Nyquist diagrams, poles and zeros, transient responses, digital waveforms, and other data using linear or logarithmic scales. Customize presentations using TINA's advanced drawing tools to control text, fonts, axes, line width, color and layout. You can create, edit and print documents directly inside TINA or cut & paste your results into your favorite word processing or DTP package.

Importing Spice models

Create new TINA components from any Spice subcircuit, whether created by yourself, downloaded from the Internet, obtained from a manufacturer's CD or from portions of schematics turned into subcircuits. TINA automatically represents these subcircuits as a rectangular block, but you can create any shape you like with TINA's Schematic Symbol Editor. You can also use TINA's parameter extractor program to calculate model parameters from catalog or measurement data and then add the new devices into the catalog.

Educational tools

Educational tools. TINA also includes unique tools for testing students' knowledge, monitoring progress and introducing troubleshooting techniques. With optional hardware it can be used to test real circuits for comparison with the results obtained from simulation. With the Live 3D Breadboard tool you can automatically build a life-like 3D picture of a solderless breadboard. When you run TINA in interactive mode, components like switches, LEDs, instruments, etc. become "live" and will work on the virtual breadboard just as in reality. You can use this capability of TINA to prepare and document lab experiments. You can also use the integrated Flowchart Editor to Debugger to generate and debug the MCU code, learning and teaching microcontroller programming.

Virtual Instruments

Oscilloscope, Function Generator, Multimeter, Signal Analyzer/Bode Plotter, Network Analyzer, Spectrum Analyzer, Logic Analyzer, Digital Signal Generator, XY Recorder.

Real time measurements

TINA is far more than a simulation software with virtual measurements. You can install optional, supplementary hardware that allows real-time measurements controlled by TINA's on screen virtual instruments.

New features of TINA v8 and TINA Design Suite v8

- Vista style installation and folder scheme
- Behavioral building blocks, nonlinear controlled sources
- Powerful Spice-VHDL co-simulation including MCUs
- Finite State Machine (FSM) editor with VHDL generation
- Flowchart editor and debugger for controlling MCUs (in v8.0 for PIC MCUs only)
- Any number of MCUs in one circuit
- Extended MCU catalog including PIC18, CAN and more
- Execution time measurement and statistics for Transient Analysis
- Hyperlinks can be added to schematics and to the diagram window
- Extended semiconductor catalog
- Application examples from Texas Instruments
- Labview based virtual instruments
- Interface to build LabVIEW based virtual instruments
- Wave (.wav) files can be used as input
- New Open Examples command in file menu to open built in examples
- Autosave. Save your current schematic or PCB design at adjustable time intervals
- Parameter adding possibility to Spice subcircuits

- Detection of components or nodes linked with convergence or irregular circuit problems
- On line update possibility for libraries, program or both
- Post-processing formulas are stored with schematics, editable later
- Live 3D Breadboard (displaying and animating circuits with 3D parts on a virtual 3D breadboard)
- 3D virtual instruments to prepare and document lab experiments
- Integrated electronic design textbook with "live" circuits (optional)
- SMPS design templates from Christophe Basso (optional)

TINA Design Suite v8

Includes all TINA 8 features plus TINA's advanced PCB designer

- Creating "flex" PCBs including 3D display
- Creating PCBs of any shape including round edges
- Buried and blind vias
- Extended catalog
- Improved optimizing autorouter
- Distance measuring tool
- Display of complete 3D circuits including parts connected externally to the PCB
-

For more details and UK pricing contact Justin Waters, email:

Justin@matrixmultimedia.co.uk

Tel 01422 252 383.