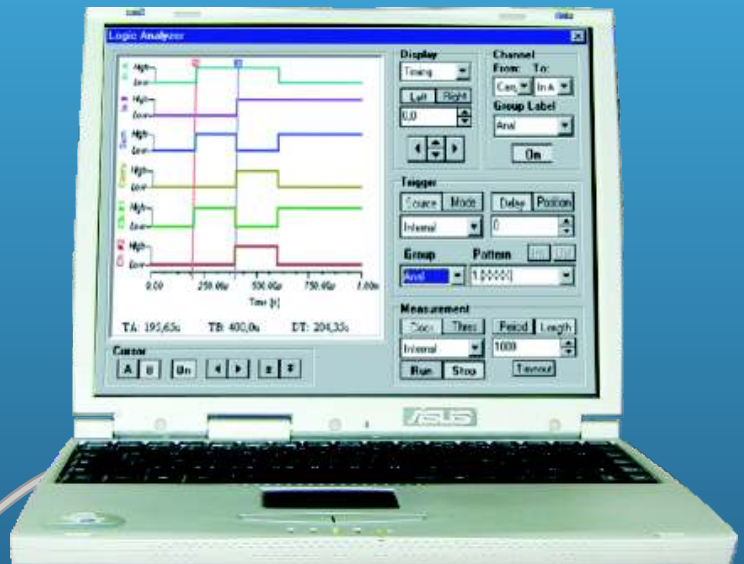# TINALab II

High Speed Multifunction PC Instrument

- Multimeter
- Oscilloscope
- Logic Analyzer
- Signal Analyzer
- Signal Generator
- Spectrum Analyzer

USB & RS232 interface

Slot for plug-in experimenter modules

Designed for

TINA

The Complete Electronics Lab

DesignSoft

www.designsoftware.com

TINALab II

High Speed Multifunction PC Instrument

With **TINALab II** you can turn your laptop or desktop computer into a powerful, multifuction test and measurement instrument. Whichever instrument you need multimeter, oscilloscope, spectrum analyzer, logic analyzer, arbitrary waveform generator, or digital signal generator it is at your fingertips with a click of the mouse. In addition TINALab II can be used with the TINA circuit simulation program for comparison of simulation and measurements as a unique tool for circuit development, troubleshooting, and the study of analog and digital electronics.
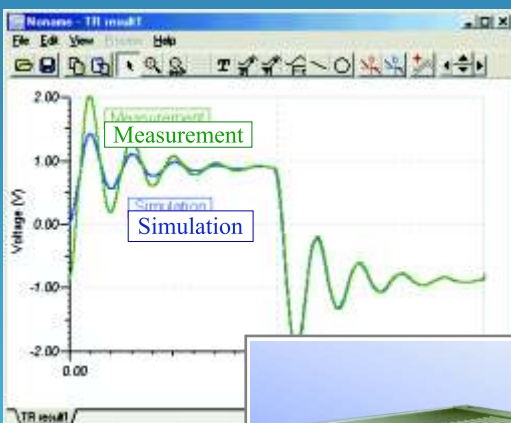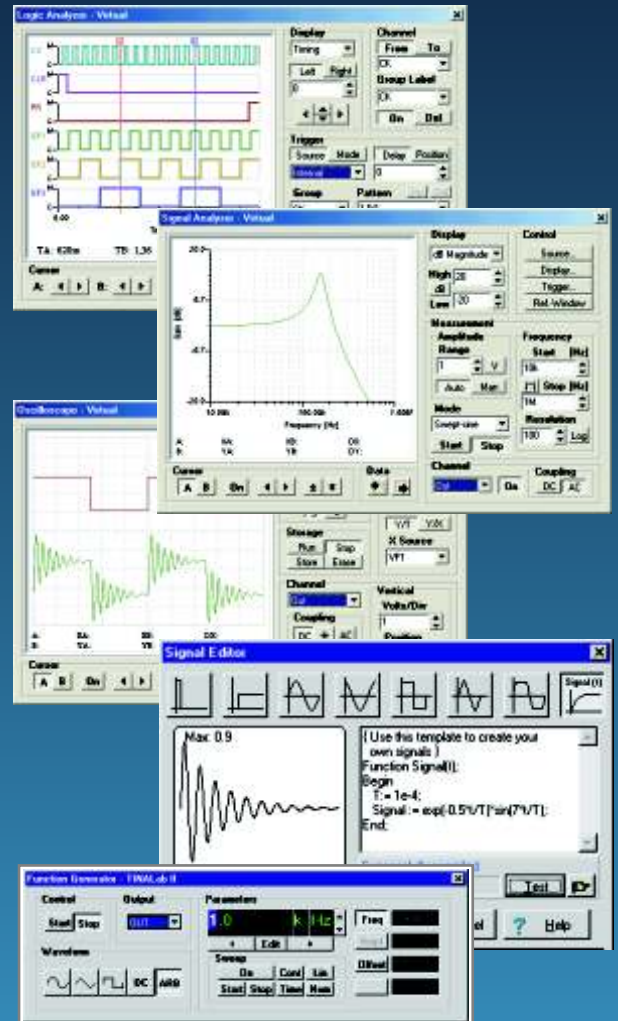
TINALab II includes a DC to 50MHz bandwith,10/12 bit resolution, dual-channel **Digital Storage Oscilloscope**. Due to its advanced equivalent-time sampling technology, TINALab can acquire any repetitive signal with up to **4GS/s equivalent sampling rate**, while in single shot mode the sampling rate is 20 MS/s. The full scale input range is ± 80 V, with 5mV to 20 V/div ranges.

The synthesized **Function Generator** provides sine, square, ramp, triangle and arbitrary waveforms from DC to 4MHz, with logarithmic and linear sweep, and modulation up to 10V peak to peak. Arbitrary waveforms can be programmed via the high level, easy to use language of TINA's Interpreter.

Working automatically in conjunction with the Function Generator, the **Signal Analyzer** measures and displays Bode amplitude and phase diagrams, Nyquist diagrams, and also works as a spectrum analyzer.
Digital I/O for the high-tech **Digital Signal Generator** and **Logic Analyzer** instruments allow fast 16-channel digital testing up to 40MHz.

The optional **Multimeter** for TINALab II allows DC/AC measurements in ranges from 1mV to 400V and 100µA to 2A. It can also measure DC resistance in ranges from 1Ω to 10MΩ.

Using TINALab II with **TINA PRO**, DesignSoft's popular circuit simulation program, gives you the unique capability to have circuit simulation and real time measurements in the same integrated environment. This provides an invaluable tool for troubleshooting and brings your designs to life by comparing simulated and measured results.

You can also plug **Experimenter Modules** into the slot on the front of TINALab II, allowing you to simulate, measure, and troubleshoot virtually the whole range of analog and digital electronics.