

# Nohau Background



## *Who, What and Where*

Nohau was formed in 1981 as a Swedish consulting firm focusing on the embedded computing industry. Nohau has become the world's leading supplier of 8 and 16 bit in-circuit emulators. The company is now based in California with offices and representatives worldwide, and technical support centers in the USA, Europe and China.

## *Our Goals*

Nohau provides the tools for engineers of embedded systems to complete their development projects in an efficient and economical way. We strive to provide the highest in product quality together with maintaining our commitment to offer the best, in-depth customer support possible. We continuously improve our hardware and software to achieve optimal reliability and functionality with our state-of-the-art technology. In this way, we can help provide a "total solution" for all of our customers. Finally, with our worldwide distributor network, customers can receive immediate technical assistance when needed. We want to help you "Cut Development Time".

## *What is an emulator?*

Today, all electronic equipment of any complexity is controlled by a microcontroller. The microcontroller runs application specific software. One challenge faced by engineers who develop new products is to get their new software to work correctly, or "debugged".

An emulator is a tool designed to assist engineers with software debugging and verification during the hardware / software integration phase of their development project. Emulators have hardware that interfaces the application or target hardware, and software that simplifies the development process for the engineer. The more easily the debugging tool meets the needs of the engineers, the more quickly the engineers can complete their debugging, validate the integrated design, and introduce their product.

A Nohau emulator is a profitable investment and will pay for itself in shorter development time and faster system integration. With an emulator used in stand-alone mode, you can test your software even before application hardware is available. Nohau takes your compiler's output and allows High Level Language debugging. All popular compiler vendors are supported. Nohau emulators offer the latest chip technology for complete emulation by using standard, bondout and hooks mode chips.



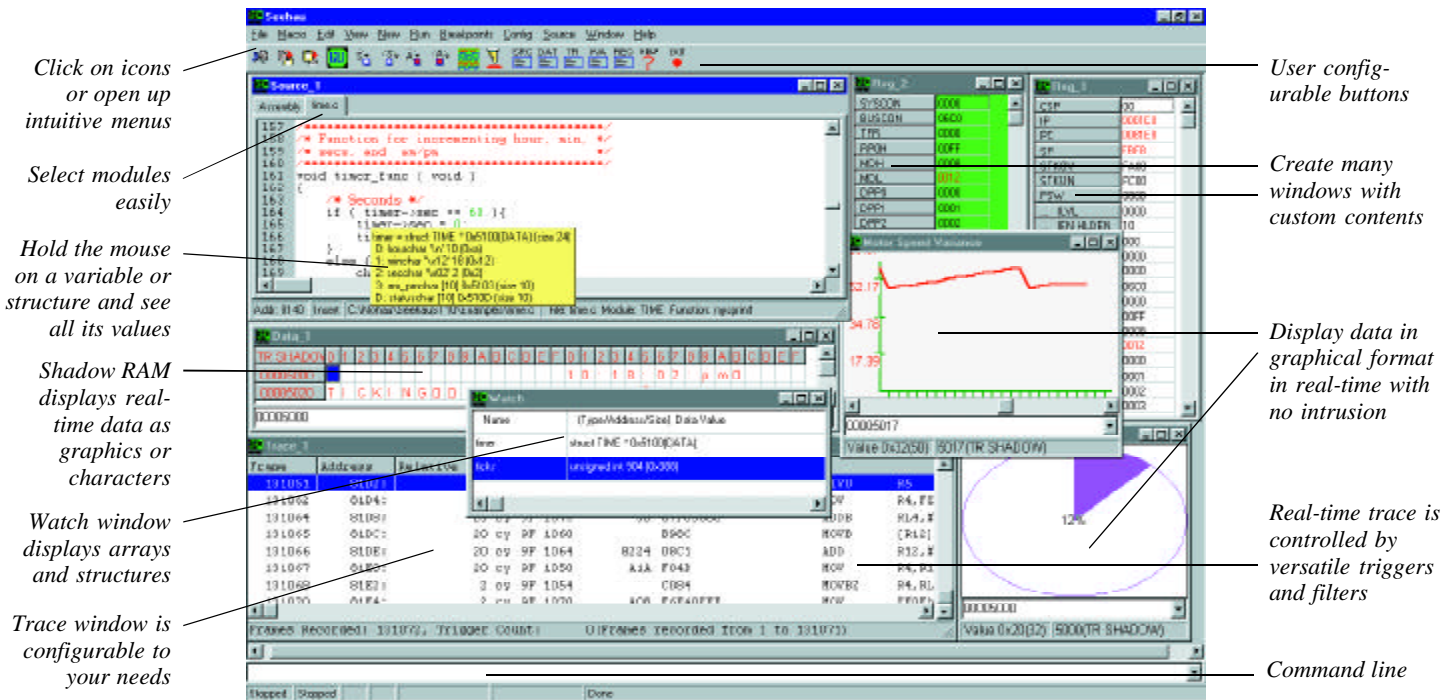
## *Our Customers*

Nohau supplies emulators worldwide to engineers looking for a cost effective method of debugging embedded software. Many of our customers are in the disk drive, automotive, medical or computer manufacturing industry, but emulators are valuable to anyone using a microcontroller in their design.

## *Our Partners*

Nohau supports major microcontroller manufacturers such as Intel, Motorola, Philips, Infineon (formerly Siemens), ST Microelectronics, TEMIC, Mitsubishi, and others. In addition, Nohau works with a number of third party software vendors who provide Real-time Operating Systems, Compilers, Assemblers and other tools.

# Seehau Debugger



## Seehau User Interface

The Seehau Macro based GUI is designed to provide a friendly user interface for all Nohau In-Circuit Emulators. Point and click on intuitive menu choices or use the powerful Macro (script) command language. Seehau provides a consistent user interface which facilitates the changing of processor families.

Seehau allows advanced features such as on-line editing of your C source files and re-compiling with one mouse click. You can start/stop, single-step, set trigger and trace conditions, examine/modify memory and all other emulator functions. Existing Nohau emulators are supported.

Data can be displayed graphically in real-time. Open multiple windows, each individually configurable. Seehau runs under Windows 95, 98 and NT.

Set the cursor on a variable or a structure and its components and values are displayed. Set a trigger or configure/view the trace memory all in real-time without cycle stealing from the controller.

## TCP/IP and OLE Capability

Seehau has the capability to run over a TCP/IP stack. Seehau is also an OLE Automation server. This means that Seehau based emulators can be manipulated from an application developed in any environment that supports OLE Automation. You can control Seehau from C++, Java, Delphi or Visual Basic. Details are on the Nohau website.

## RTOS Support

Nohau has opened access to Seehau and passed control to the RTOS developer. The developer now has the ability to write an application that creates a window in Seehau. You can also support the RTOS you wrote yourself. The appropriate information is given freely on the web at [www.nohau.com](http://www.nohau.com) under RTOS Support.

## Macro Language and Commands

Seehau is easily configurable to your preferences with the powerful Macro (scripting) language. Buttons can be created and attached to macros, commands or menus. These commands operate down to the layer that directly communicates with the emulator or can be made into higher level commands with subroutines. Macros can use powerful IF... Then statements and Boolean logic with the integrated Visual Basic for Applications (VBA) compatible interpreter.

A Macro editor and recorder provides an easy method to create and maintain your custom macros.

## Support and Sales

Seehau was designed in the USA and is supported everywhere via a worldwide network of technical representatives.

Nohau has a reputation for providing world class customer support and service.

