EMUL51-PC Supporting Atmel Semiconductors

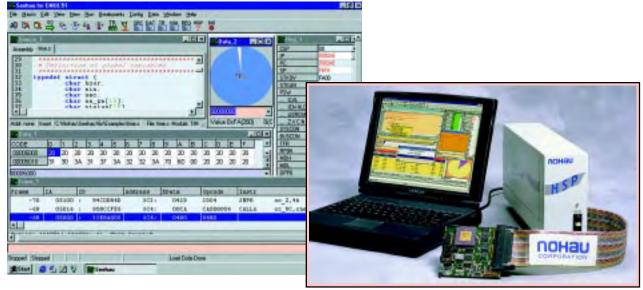## In-Circuit Emulator

Key Benefits

¨ Supports Atmel Semiconductor 8051 based parts.

  T89C51RD2, T89C51CC01/02, T89C51AC2, T8xC51101/02, T89C5111/12, TS80C31X2/32X2, TS8xC51RB2/RC2/RD2, TS8xC51U2, TS8xC52X2/54X2/58X2

¨ Full 60 MHz operation

¨ Choice of User Interfaces: Seehau from Nohau or ChipView-x51

¨ Facility to debug FLASH programming algorithms

¨ Seehau: runs under Windows 95, 98, ME, NT and 2000, XP

¨ Emulation and trace ISA boards install in your PC or in the Nohau box (shown) via the PC LPTx port or USB port

¨ Optional trace board can be installed or upgraded later

¨ Trace memory is real-time: up to 256K deep by up to 96 bits, 8 trigger levels, with timestamp, filtering and an external trigger output. Ports P1 and P3 are also recorded

¨ High Level Language (HLL) support for C compilers

¨ 64K hardware breakpoints, Bank Switching, Program Performance Analysis, and Code Coverage

Product Overview

The ISA emulation and trace boards can reside in your PC, in the optional High Speed Parallel (HSP) box, or USB box. The trace is optional and can be added later. Most pods handle multiple derivatives increasing the emulator's versatility. Nohau emulators are designed and Made in the USA.

Trace and Triggers

There are many trace boards available to suit every budget and technical need. Trace recording is real-time without waitstates. Opcodes, data, addresses, ports and more are recorded in the 96 bit wide trace. The trace and triggers can be configured in real-time. The up to 256K trace memory can be filtered with the triggers.

Shadow RAM

Shadow RAM allows data writes in real-time to be displayed in the Data window. The data can be displayed in many numerical and graphical formats. This data can also be saved to a file.

In-line Compiling, Assembling and Macros with Seehau

Seehau allows in-line compilation. Modify your C or assembly code in the appropriate window and Seehau uses its powerful macro language to recompile, reload and rerun. In one step. Seehau can perform many more sophisticated operations with its versatile macro system which can use powerful IF..Then statements and Boolean functions.

Running Programs and RTOS Support

You can load and run OMF51, IEEE695 and other format object files from compilers such as Keil, Altium, IAR, PLC and Raisonance. You can set breakpoints, run/stop, single step, step over functions, set triggers and trace options and more from the user interface you have chosen: either Seehau or ChipTools ChipView-x51. Both are advanced HLL debugging tools offering superior user control and power. Seehau can display RTOS modules from commercial and "home-brewed" RTOSs.

Single Chip and External Mode

We support the Atmel Semiconductor family for both external mode (ROMless) and internal mode (internal ROM) using standard production, Enhance Hooks chips as appropriate. Nohau emulators can operate stand-alone allowing debugging before your hardware is available.

Visit the Nohau web site for more information and contact Nohau today for the name of your local Nohau representative. Nohau is a world leading supplier of quality 8051 emulators with over 18,000 units delivered since 1986.

C E