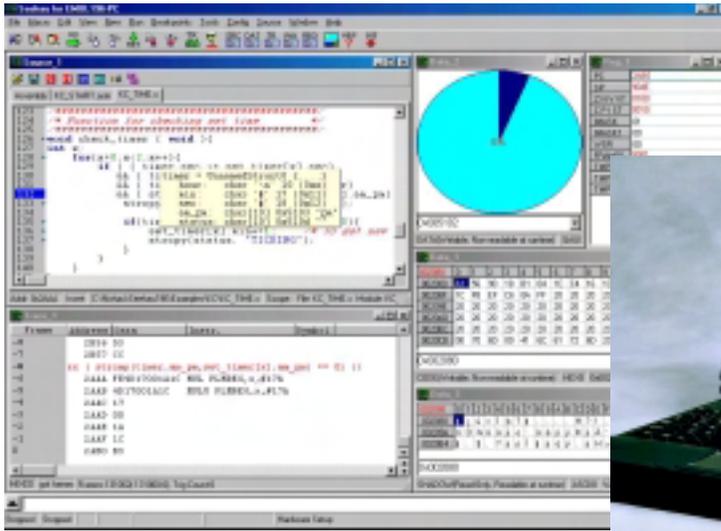


# EMUL196-PC In-Circuit Emulator for the Intel 196 Family



## Key Benefits

- 80C196 family supported in single-chip and external modes.
- Full feature ICE. 16 to 50 MHz.
- Seehau GUI: Windows 95, 98, NT and 2000.
- Emulation and trace ISA boards install in the Nohau HSP box (shown) via the LPTx or USB port or in your PC.
- A wide range of optional Trace buffers are available to fit any project and budget. 32K, 128K or 512K sizes.
- Bondout chip is used for accurate emulation of both internal and external modes. You can break on internal read and writes.
- The Trace and Triggers are configured and viewed in real-time.
- No-skid unlimited hardware and software breakpoints.
- Supports all major C compiler vendors.
- Designed and Made in the USA.
- Fast-Break-Write feature allows fast writes to memory areas.

## Product Overview

The EMUL196-PC Emulator supports the Intel 80C196 series microcontrollers and includes the 194 and 198 versions. The EMUL196-PC is a full featured real-time trace in-circuit emulator. We have delivered more than 18,000 emulators since 1986. The emulator consists of an emulation board, a trace board chassis and a pod. Pods are available for various 196 derivatives. The chassis communicates with the PC through a parallel or USB interface. Seehau, the Windows user interface provides exceptional debugging at any level from binary to C.

## Single Chip and External Modes

Nohau supports the 196 family for both external mode (ROMless) and internal mode (internal ROM). Access to the internal address and data bus is possible. All ports are intact and available for use. It operates in real-time and does not steal bondout CPU cycles. The emulator can operate stand-alone allowing debugging before hardware is available. Adapters can connect to any target board.

## Emulation Memory and Shadow RAM

The memory space of the 196 can be mapped with up to 2M of emulation RAM. The granularity is 1 byte offering mapping around any peripheral address. Shadow RAM (1M) allows data writes in real-time to be displayed in numerical and graphical formats.

## Trace Memory and Triggers: 32K to 512K x 104 bits

Trace memory and the triggers are configurable and viewable without stealing CPU cycles. Full pipeline decoding ensures only executed instructions and data read/writes are captured and no false triggering occurs. The trace can be saved to a file. Source and assembly code is displayed in the trace as Mixed Mode.

Triggers can be set on addresses and data ranges. They control trace recording or cause the emulator to stop the target depending on the options set. Trace and Triggering can record all internal and external accesses: and in genuine real-time due to the internal 25 MHz housekeeping CPU.

The EMUL196-PC is supported everywhere with a world wide network of offices. Visit the Nohau web site or contact Nohau for the name of your local Nohau representative. They are supported everywhere with a worldwide network of Nohau offices and local representatives.

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