

# HMI Unleashes The Ultimate In Emulation Power...

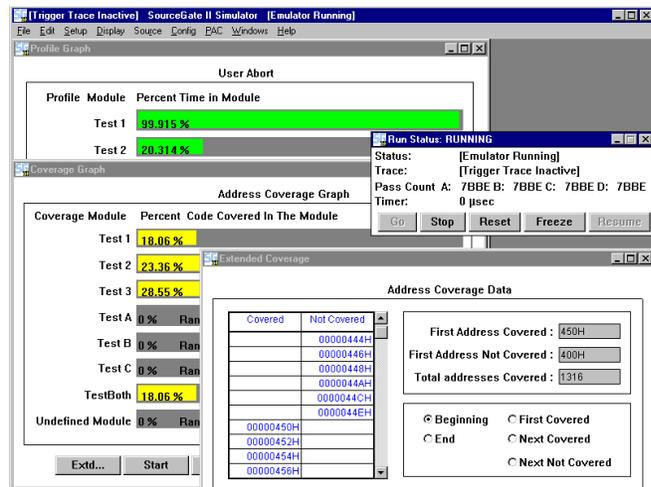
with HMI 200 Series emulators! Combined with SourceGate II, HMI's acclaimed source-level debugger, HMI 200 Series emulators provide the industry's most powerful microprocessor development system. Of course, you would expect nothing less from the company that consistently produces the best development tools in the industry. That company is HMI!



HMI 200 Series emulators are high performance development systems which combine the control of an in-circuit emulator with the power of a logic analyzer to provide a complete debugging environment for hardware and software.

- ◆ Real-time emulation up to 66MHz
- ◆ Up to 4MB of emulation overlay memory available. Shadow RAM\* for real-time data monitoring.
- ◆ Support for up to sixteen memory banks\*
- ◆ Single-step, 4 hardware, and 4 address breakpoints
- ◆ Four Events consisting of bit patterns or address ranges, data values, status bits, external trace leads, and pass counters
- ◆ Hardware breakpoints or trace trigger points based upon sequences of defined events; e.g. A THEN B THEN C THEN D
- ◆ Two 4K - 16K\* deep independent trace buffers

- ◆ Trace qualification to allow selective tracing. Freeze trace allows viewing of trace buffers and changing of events during emulation.
- ◆ High-speed host communications via 115.2KB RS-232 serial port. Parallel port for faster code downloads.
- ◆ **PERFORMANCE ANALYSIS CARD:**
  - ◆ Real-time hardware implementation
  - ◆ Analysis of up to 8 test modules
  - ◆ Minimum, maximum, and average execution time displays
  - ◆ Histograms and code coverage displays
  - ◆ Trace data time stamping



## PRODUCT INFORMATION

HMI-200 Series in-circuit emulators represent the best in emulation technology and provide the most accurate and complete microprocessor development systems available.

Primary communication with the host computer is provided using a high speed serial port or an optional Ethernet\* port. A parallel port is provided for high speed code downloads.

The overlay RAM provided with each emulator may be mapped in small blocks throughout the memory address space of the target system.

Breakpoint, trigger point, and interval timing functions are activated by referencing a set of user defined events (A, B, C, and D). Each event can be based upon address ranges, data patterns, control signals (BERR', R/W', etc.) or the status of external trace bit lines. These events may then be logically combined (e.g. "IF A OR B THEN C") to initiate emulator actions.

Trace buffers capture bus activity parameters including addresses, data, control signals, and external trace bits. A Freeze Trace command may be issued to capture a snap shot of a trace buffer which can then be viewed without stopping processor execution.

\* - Not available on all systems

A real-time hardware implemented Performance Analysis system is offered for all HMI-200 Series emulators. This premium system graphically displays accurate execution timing data for detailed analysis of system performance. Trace time stamping and code coverage profiling are also provided.

### Source-Level Debugger Support

SourceGate II, HMI's acclaimed source-level debugger software, is supplied with all HMI-200 Series emulators and provides full native GUI environment support for Windows 3.1/NT/95, SUN/SPARC, and HP platforms.

### Processor Support

HMI 200 Series emulators provide support for the 64180, 6809, 68HC11, 68HC16, 68000, 68020, 68030, 68040, 68060, 68302, 68306/307, 68356, 8051, 8085, 8096, CPU32/32+, MPC505, MPC821/860, Z80 and more!



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