

HMI Low-Cost Background Mode Debugger Tools

HMI's Background Mode Debuggers interface to the debug port on your development board or target system. Packaged with SourceGate II, HMI's acclaimed source-level debugger software, HMI BMDs provide you with the most powerful, low-cost development tool on the market today. Now, for a limited time, HMI is offering you this power for only **\$499 for Windows/\$599 for Sun or HP!**



HMI Background Mode Debuggers (BMDs) provide a powerful, low-cost solution to your development tool needs. Prices include the SourceGate II debugger.

PROCESSOR CONTROL

- ◆ Start emulation, stop emulation, and single-step your code at the source, assembly, or mixed level
- ◆ Control processor operation by setting multiple breakpoints on any memory address
- ◆ View/Change processor registers and memory locations

DATA MONITORING

- ◆ A Watch window allows monitoring of variables and memory locations. View/Change most variable values directly from the Watch window.
- ◆ Full data structure and local variable support
- ◆ Stack Trace window shows functions/variables on stack
- ◆ Full C++ support for class objects including data/function member demangling, and a graphical object class hierarchy browser

SOURCE-LEVEL DEBUGGING FEATURES

- ◆ Control processor operation directly from your source or assembly language files
- ◆ Single-step into or over called modules
- ◆ View multiple CodeView windows on the screen at any one time in any combination of source and assembly
- ◆ Set breakpoints on first occurrence of multiple source lines or run to a highlighted line and then break

COMPILER SUPPORT

- ◆ SourceGate II is compatible with all major C and Ada compilers which produce industry standard file formats such as IEEE-695, COFF, Elf/Dwarf, and others.

ON-LINE HELP

- ◆ Extensive context sensitive help is provided for all windows providing an on-line operational reference

BACKGROUND MODE DEBUGGER PRODUCT INFORMATION

HMI Background Mode Debuggers (BMDs) provide a powerful, low-cost solution to debugging those processors equipped with a debug port. HMI BMDs consist of hardware that interfaces to the processor's debug port and sends commands via this port which control processor operation. All HMI BMDs are powered by HMI's SourceGate II software which provides a fully integrated source-level debugger and user interface. The BMD and SourceGate II communicate via a high-speed serial link.

Since SourceGate II is designed for debugging at the source code level, variables and symbols may be referenced directly by name. In the Watch window, for example, variable types and data structures are properly displayed as defined in the source code. The Watch window allows most variable values to be changed simply by highlighting the value of interest and then entering the new value. This eliminates cumbersome cross-referencing to determine where a variable resides in memory.

After executable target code is downloaded, commands to start, stop, and single-step are easily initiated using point and click mouse control. When the target code is working as desired, commands are available to upload memory contents to a file on the host which can then be used to program non-volatile memory devices for final system test.

A versatile CodeView window allows you to control BMD operation directly from your source code and supports "Step In" and "Step Over" functions at either the source level, assembly level, or combination of the two. Breakpoints are easily set by simply highlighting a line of code or by pressing a supplied "BP" button.

Multiple CodeView windows can be opened at any time and user-defined breakpoints can be set across any open CodeView window. Tracking windows can be enabled which track the program counter or current assembly.

A Register window allows the user to view/change the value of the processor registers. This window is updated after each single-step and when emulation is stopped.

Compiler Support

SourceGate II is compatible with all major C and Ada compilers which produce industry standard file formats such as IEEE-695, COFF, Elf/Dwarf (EABI), and others.

Platform Support

SourceGate II provides a common user interface for all HMI products including SPS 2000 Series emulators, 200 Series emulators, Background Mode Debuggers, and CPU Simulators with full native GUI environment support for Windows 3.1/95/NT, Sun/Sparc, and HP workstations.

Processor Support

HMI BMDs are currently available for CPU32 (68330, 68331, 68332, 68333, 68340), CPU32+ (68349, 68360), PowerPC (MPC505, MPC801, MPC821, MPC823, MPC860), ColdFire, and IBM4xx processors.



Huntsville Microsystems, Inc.
P.O. Box 12415
Huntsville, AL 35815
Tel: (205) 881-6005
FAX: (205) 882-6701
sales@hmi.com
<http://www.hmi.com/>

