

XRAY Debugger Simulator



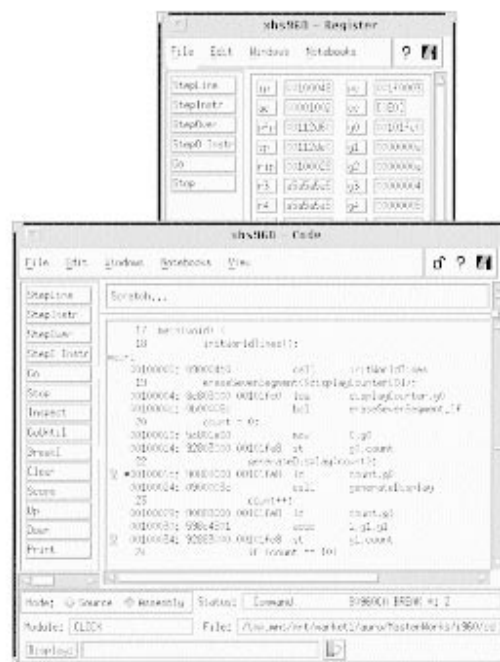
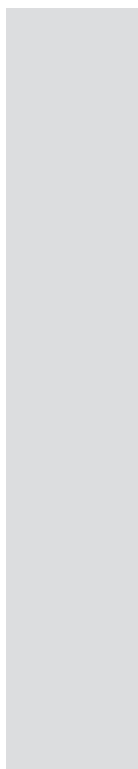
- Simulates i960[®] Kx, Sx, Cx, Jx, and Hx Processor Instruction Sets
- Displays Cycle Counts During C/C++ or Assembly Level Simulation
- Simulate Interrupts and Peripheral Devices
- Supports Microtec C/C++ and Intel C i960 Processor Compilers

The Microtec Research XRAY Debugger Simulator allows you to run programs generated for the i960 processor family, including the Jx and Hx processors, on a host system. The simulator accurately reproduces the processor's reset and interrupt behavior. This allows you to develop low-level programs, such as initialization code, interrupt service routines, and device drivers prior to target hardware availability. XRAY Simulator is also useful when porting native code to an embedded target. You can use the simulator to discover problems relating to architectural assumptions, such as word size, without having to download to a real target. An executable created for the XRAY Monitor using the Microtec Research C and C++ compilers, or Intel (iC960 and gcc960) C compilers can be run using the XRAY Simulator providing a common user interface for both development environments.

Since XRAY Simulator accurately reproduces the instruction cycles of the i960 processor, it supports performance analysis and code coverage without having to run the code on an actual target.

Performance analysis reports include minimum/maximum/average execution times for each function, percentage of total execution time, frequency of calls to a function and distribution of execution times displayed by a function. In addition, XRAY Simulator simulates pipeline, instruction cache, memory wait states, burst mode memory access, and superscalar behavior for better cycle-count accuracy.

In conjunction with XRAY Debugger's macro facility, XRAY Simulator can even



XRAY Debugger can show the intermixed C/C++ and assembly statements in situations where assembly language debugging is required.



be used to simulate the most complex I/O, further accelerating application development. Macros can be created which contain complex user commands, pass parameters to the macro, associate breakpoints with the macro and execute the macro by entering the macro name on the command line.

HOST SYSTEMS SUPPORTED:
Sun SPARCstations, MS Windows,
and HP9000 Series 700.

PROCESSORS SUPPORTED:
i960 Sx, Kx, Cx, Jx and Hx Processors

AVAILABILITY:
Now

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