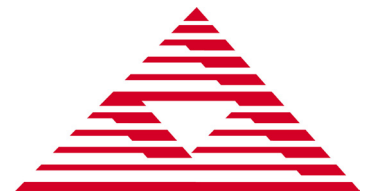


# AMIBIOS®8

## AMI Debug for AMIBIOS®8



Debug facilitates AMIBIOS8 software development by enabling rapid, precise debugging of the code, represented with a friendly GUI. AMI Debug allows complete debugging of the BIOS code, including boot block routines. AMI Debug yields savings for thousands of dollars, because it performs many functions of an expensive in-circuit emulator for a fraction of the cost. The development system is connected to the target just by a standard serial or parallel port, as well as through a USB 2.0 debug device.

### HOST-TARGET CONFIGURATION

Operating under Microsoft Windows, AMI Debug for AMIBIOS8 uses a flexible host/target configuration. The system being debugged, or target, communicates to a remote system via a standard serial, parallel or USB 2.0 port. The host uses a Windows-based GUI to control the target system. Utilizing the debug features of the target system, the host program can perform a number of tasks:

- Single step debugging
- Trace through/over routines
- Start/Stop target anytime during POST
- Read/Write PCI configuration space
- Read/Write I/O ports
- Read/Write memory locations
- Disassemble code on target system
- Set/Clear execution breakpoints
- Set/Clear I/O access breakpoints
- Set/Clear memory access breakpoints
- Set/Clear viewpoints
- Read/Write CMOS and other indexed I/O
- Read/Write any CPU register (including MSR & MMX)
- Debug runtime services under DOS
- Debug interrupt hardware routines
- Debug SMI code
- Multi-function Windows host

AMI Debug for AMIBIOS8, available as a Windows based GUI application, gives developers functionality similar to hardware-based development tools, including:

- Source-level symbolic debugging
- View/Edit variables of all types
- Trace through disassembled code
- Workspace with all BIOS function tree
- View/Edit any CPU register, including MSR and MMX
- Set/Clear/View breakpoints
- View/Edit Memory, I/O, CMOS and other indexed I/O
- Command Window
- Source Code Integration

AMIBIOS projects utilizing the integrated debugger target construct a Debug Information (DBI) file at build time. This allows AMI's Windows-based GUI to debug at the source level.

### COMPLETE MODULARITY

The AMIBIOS debug target is completely modular, making it easy to include in any project. AMIBIOS8 projects import an eModule to enable debug capabilities. After system debugging is complete, the module is removed using a simple build option.

## HIGHLIGHTS:

### COMPLETE DEBUGGING OF AMIBIOS8 CODE

*Enables rapid and precise debugging of AMIBIOS8 code through an easy-to-use graphical interface*

### MODULAR, EASILY INCLUDED IN ANY PROJECT

- Host/Target configuration via serial, parallel or USB 2.0 port
- Multi-function Windows Host
- Functionality similar to hardware-based development tools

### COMPREHENSIVE ACCESS TO THE BIOS

- CPU registers, memory, I/O, PCI configuration space, CMOS and other indexed I/O
- SMI code
- BIOS runtime services
- BIOS boot block

### BREAKPOINTS, VIEWPOINTS, TIMEPOINTS DEFINITION

- Breakpoint history

### ENHANCED FEATURES

- Integrated transport for AMIBIOS8 debugger
- USB and LPT support
- Optimized boot block support
- Single module for all transport
- Reduce target code size



American Megatrends Inc. | [ami.com](http://ami.com)  
5555 Oakbrook Parkway, Bldg. 200  
Norcross, GA 30093 | 770.246.8600

For more information: <https://ami.com>