

SMARTPROBE

FOR AMD PLATFORMS



PRODUCT OVERVIEW

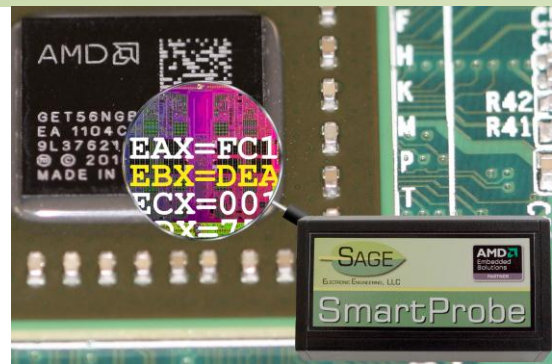
The Sage SmartProbe is a powerful addition to any software engineer's toolbox. SmartProbe for AMD platforms endows the developer with the power to comprehensively and efficiently query and manipulate the inner workings of the processor, chipset and peripherals. This control leads to greater creativity and productivity.

FEATURES

- ✓ Support for all current AMD processors
 - Sockets: AM2, AM2+, AM3, ASB1, ASB2, C32, F (1207), Fr5 (1207), Fr6 (1207), G34, S1g1, S1g2, FT1 & beyond
- ✓ USB and Ethernet Host Interface
- ✓ GDB Remote Serial Protocol Interface
- ✓ Low-cost/Easy-to-Use Target Connection
 - Legacy AMD HDT and HDT+
 - Embedded Debug Interface
- ✓ 'Bare-Metal' Bring-up
 - Complete System Control from Reset Vector
 - Direct program download to Flash or RAM
- ✓ Target Adaptive Clock Rate and Voltage
 - Up to 40MHz JTAG Clock
 - 3.3V to 1.35V JTAG Voltage
- ✓ Field Upgradable
- ✓ Concurrent Multi-core Debugging[†]
 - Automatic JTAG Chain Detection
 - Up to 4 Processor Sockets (nodes)
 - Up to 128 Simultaneous Cores
- ✓ Supports Execution Using Cache as RAM
- ✓ Direct support for GPGPU development
- ✓ Legacy x86 Debug Support[†]



[†] Q2'11 planned availability.



DEVELOP FASTER

The Sage SmartProbe is designed to increase engineering productivity, minimize development risk and decrease program costs throughout the product development life cycle. Automated yet configurable, SmartProbe allows the developer to immediately get to work confidently and accurately. Fast and powerful, SmartProbe minimizes the time that the developer must spend configuring tools. In-depth capability, but with low impact, SmartProbe gives an engineer the most complete system view possible, while requiring nothing more in the way of system resources than a simple connector. Extensible and flexible, SmartProbe also enables test and production teams to do their job quickly and efficiently.

CREATE MORE

With SmartProbe, the tools and techniques required to rapidly get the most out of your product are at your fingertips. On its own, SmartProbe enables productivity gains that allow developers to focus more on project objectives and less on schedule trade-offs. These gains are amplified when SmartProbe is paired with the Sage Embedded Development Kit. With this combination of tools, the developer is able to graphically visualize all aspects of system operation including: code flow, register access, memory movement, multi-core/ multi-node execution, peripheral access and much, much more.

DEVELOPMENT PHILOSOPHY

At Sage, we believe that having the right tools can make the difference between doing a good job and doing a *great* job. We appreciate that tools do not take the place of the developer, but they can:

- ✓ Increase the creativity, productivity and consistency of any engineer.
- ✓ Enable development teams to better meet schedules without sacrificing deliverables.
- ✓ Permit projects to accomplish more with less by making development more efficient.

Sage is committed to enabling engineers with the right tools. We strive to create the highest quality, most productive tools available for the systems we support, at a sensible cost.

SAGE DEVELOPMENT SOLUTIONS

Sage offers an extensive set of development and debug solutions for AMD platforms. These include:

Sage Embedded Development Kit (EDK)

The Sage EDK is an Eclipse based integrated development environment (IDE) optimized for use with AMD processors and chipsets. This IDE encompasses the entire development process, including: editing, building and debugging. All in a streamlined graphical user interface that can operate standalone or in conjunction with SmartProbe by Sage for maximum debug capability.

SmartProbe for AMD Platforms

SmartProbe provides the developer with a comprehensive hardware interface for controlling the system under development with zero system overhead. The probe works well in standalone environments, such as GDB, EMACS and VIM, but provides maximum benefit when used in conjunction with the Sage EDK.

Engineering Services

The Associates at Sage are ready with the technical experience necessary to turn a concept into reality. Sage is dedicated to helping our customers get their products to market by providing a broad range of hardware and software development services concentrating on enabling your team.

SUPPORTED AMD COMPONENTS

Processor Models	
AMD Athlon™	AMD Phenom™
AMD Athlon™ II XLT	AMD Phenom™ II XLT
AMD Athlon™ II Neo	AMD Turion™
AMD Sempron™	AMD Opteron™
AMD Embedded G-Series	

Family	Revision
0Fh	F & G
10h	ALL
11h	ALL
12h	ALL
14h	ALL

Chipsets	
M690x	SB600
780E	SB7x0
785E	SB8xx
SR56x0	SP5100
A55E	A50M

