

## ECM-XDP3 EMULATOR

**T**HE ECM-XDP3 EMULATOR IS ARIUM'S NEW HARDWARE-ASSISTED DEBUG SOLUTION FOR TARGETS WITH XDP DEBUG PORTS AND THE LATEST INTEL PROCESSORS. DESIGNED TO DEBUG BIOS, UEFI, DEVICE DRIVERS, OS KERNELS, AND EMBEDDED APPLICATIONS, THE EMULATOR FEATURES RELIABLE DEBUG FUNCTIONALITY FOR SUPERIOR VISIBILITY TO AND MANIPULATION OF YOUR SOURCE CODE.

### SUPPORTED TOOLCHAINS:

- Wind River® Tornado® II C/C++
- Microsoft® Visual C/C++® V6/V7
- Borland® C
- CAD-UL C
- GNU C/C++
- Metaware® C

### BREAKPOINT TYPES:

- Up to 32 debug registers (depending on processor)
- Unlimited software
- SMM entry/exit
- Reset
- External trigger in/out pins
- Interrupt acknowledge
- Special transition
  - Shutdown
  - Flush
- Three-level complex events
  - Includes break on data values\*\*

\*Excluding Intel® Itanium® processors

\*\*Not available on some processors

### SOURCE CODE/SYMBOLIC DEBUG:

- Boot-loadable OMF-386
- DWARF2
- Intel Textsym
- Codeview
- a.out/Stabs

### DOWNLOAD FORMATS:

- BIN
- OMF-386
- ELF32
- DOS EXE
- Intel Hex
- PE32/PE32+

### CONNECTION OPTIONS:

- USB 1.1
- 10/100Base-T Ethernet

### ADDRESS TRANSLATION OPTIONS:

- Real
- Virtual-86
- BigReal
- Protected
- System Management Mode (SMM)

### REGISTER TYPES:

- 386
- System
- Control
- Debug
- MSRs
- Floating point
- MMX™ technology
- SSE

### OTHER IMPORTANT FEATURES:

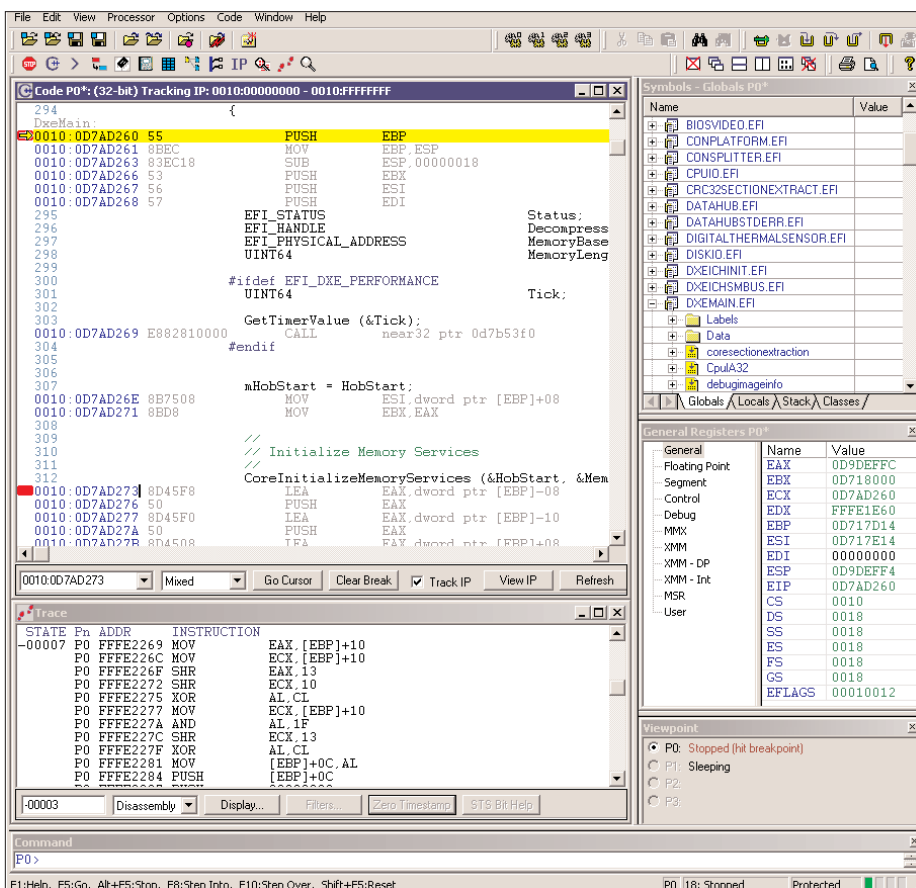
- Execution trace\*\*
- Real time operation
- Multi-processor (SMP) support
- In-line assembly
- Robust scripting language
- Code/data search and replace
- Self-diagnostic test suite
- Designed to accommodate future debug port requirements



### KEY BENEFITS

- **POWERFUL** - Arium emulators are the only debug tools that give you real time debugging solutions directly out of system reset.
- **INNOVATIVE** - Arium focuses on the user when crafting their tools. A quick symbols finder, a single view for displaying devices, current viewpoint tracking - the little things that add up to so much more.
- **FLEXIBLE** - The ECM-XDP3 offers a number of firmware- and software-related customizable options to provide you with the type of debug environment that best meets your needs.
- **INTEGRATED & INTUITIVE** - The ECM-XDP3, with its companion SourcePoint™ interface, provides a highly integrated, intuitive tool designed with your needs in mind.
- **FULLY SUPPORTED** - Our highly trained staff of design engineers provide telephone, e-mail, and web-based interactive support. In addition, installation guides, technical papers, and software downloads are available via our Web site.

# ECM-XDP3 EMULATOR



## SOURCEPOINT INTERFACE

Included with the ECM-XDP3 is American Arium's SourcePoint debugging software. The debugger interface is part of the company's core technology developed specifically for high-end 32/64-bit processor design and debug. The application runs on Microsoft® Windows® 2000, XP, and Vista.

SourcePoint is used with all American Arium emulators. Because the company designed and developed the software specifically for the equipment, the tight integration of the hardware and software gives you one of the most robust debug interfaces on the market. Easy to install and use, SourcePoint has a number of features that cannot be found in any other debugger. Multi-processor control, complex breakpoints, source-level visibility, and other key features all add up to make SourcePoint one of the most powerful tools in the industry today.

## THE COMPANY

American Arium has been the primary market supplier of hardware-assisted debug tools since 1992. The company supports Intel® and AMD laptop, desktop, and server processors (excluding Intel® Itanium® processors). Arium also supports a number of ARM®-architecture processors.

American Arium's mission is to meet and exceed the needs of hardware and software developers by providing them with the right tools to help them minimize their development/debug cycle.

**IT'S HARD TO COMPETE  
WITHOUT THE RIGHT TOOLS**

## SPECIFICATIONS

### Environmental

32-90° F (0-31° C)  
Maximum humidity - 85%

### Communications

10/100Base-T ethernet  
USB 1.1

### JTAG Frequency

Up to 28 MHz

### Download Speed

>200 KBytes/sec

### Trig In

>50 Ohm, 155 ns maximum delay

### Trig Out

50 Ohm, 125 ns maximum delay

### Dimensions (inches)

(W) 3.800  
(L) 5.004  
(H) 1.510

## PC HOST REQUIREMENTS

- PC host (Intel Pentium III or higher processor or equivalent)
- Microsoft Windows 2000, XP, Vista
- SVGA monitor (1024 x 768 or higher)
- 60 MB hard disk space
- 128 MB RAM
- 10/100Base-T Ethernet or USB 1.1 connection port

## ORDERING INFORMATION

### STANDARD:

**ECM-XDP3** Base unit with 60-pin XDP debug port connector

### Warranty

1 year service agreement

### STAR-1

Extended service agreement

