

**Supports**  
**Intel® Core™**  
**Pentium®,**  
**Celeron®, and**  
**Xeon®**  
**Processor Families**

# Arium ECM-700 JTAG Emulator

## 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-700 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-700, 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.

The ECM-700 is Arium's latest emulator for targets employing Intel® laptop, desktop, or server processors\*. Developed specifically for ITP-700 debug ports, the ECM-700 supports BIOS, EFI framework, device drivers, OS kernels, and embedded applications debug. The in-target probe delivers reliable run control and execution

trace\*\* functionality for superior visibility to and manipulation of source code for a faster time to market.

### 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
- Interrupt acknowledge
- Special transition
  - Shutdown
  - Flush
- Three-level complex events
  - Includes break on data values\*\*

### 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:

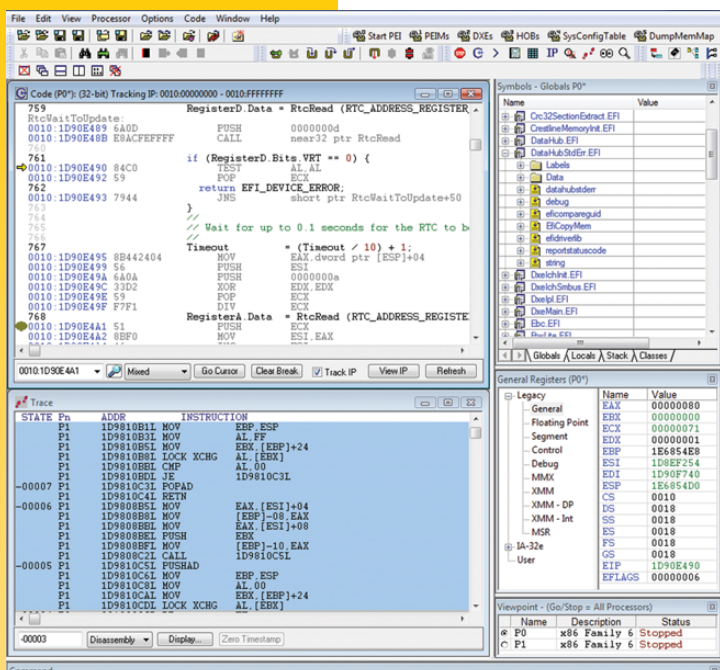
- Execution trace\*\*
- Real time operation
- Multi-processor (SMP) support
- C-like command language
- Code/data search and replace
- Self-diagnostic test suite
- Designed to accommodate all ITP-700 debug port configurations

Arium is a proud member of the Intel Embedded and Communications Alliance, and for over 15 years has teamed with Intel Corporation to develop in-circuit emulation tools to support the Intel® Pentium® and other processors.

\*Excluding Intel® Itanium® processors  
 \*\*Not available on some processors



# Arium ECM-700 JTAG Emulator



## SourcePoint™ Interface

Included with the ECM-700 is 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 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

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

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 75 MHz max

### Download Speed

>200 KBytes/sec

### Dimensions (inches)

(W) 5.25  
(L) 5.50  
(H) 1.89

## PC Host Requirements

- PC host (Intel Pentium III or higher 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-700** Base unit with ITP-700E debug port connector

**Warranty** 1 year service agreement

### Options:

**STAR-1** Extended service agreement

