PRODUCT DATASHEET

Arium LX-1000 JTAG Emulator with Serial and Parallel Trace

Supports the following ARM® Processor Cores: ARM7, ARM9, ARM9E, ARM11, XScale, OMAP, Cortex-M1, Cortex-M3, Cortex-R4 and Cortex-A8

Supports the following Intel® Core™, Atom™, Pentium®, Celeron®, and Xeon® Processor Families

The LX-1000 is a modular emulator design supporting both ARM and Intel devices. Three modules are available depending on the needs of the user. The LX-INT module supports various Intel devices.* The LX-PAR and LX-SER support ARM devices with parallel ETM and serial trace (both Marvell SETM3 and ARM HSSTP) respectively.

Common to either ARM or Intel support, the LX-1000 comes standard with 2 GBytes of trace memory (upgradable to 4 and 8 GBytes). The trace capture engine traces instructions/data at rates up to 680 MHz and is wide enough to support up to 6 lanes of serial trace packets up to 6.25 GHz. The LX-1000 represents the fastest trace port analyzer on the market, giving Arium customers a valuable investment to support future devices. Communication interfaces include USB 2.0 and 10/100/1000 Ethernet. Trigger in/out is also standard.

Arium tracks both ARM and Intel roadmaps supporting the latest processor offerings.

Key Benefits

- ***Fastest Trace Capture Rate in the Industry*** - The LX-1000 offers real-time trace with a 680 MHz acquisition rate for faster detection of software and firmware bugs.
- ***Integrated & Intuitive*** - The LX-1000, with its companion software debugger, delivers a highly integrated, intuitive environment designed to help you minimize iterative steps and shorten your debug cycle.
- ***User-friendly*** - The LX-1000 is easy to install and configure. Downloads are fast, and the debugging solution is reliable.
- ***Flexible*** - The LX-1000 works with multiple ARM® architecture and Intel® processor cores on both Microsoft Windows and Linux hosts. Unlike some debuggers, you don't need a different emulator or license for each processor type or family.
- ***Fully Supported*** - All Arium units produced for the embedded market are fully supported by our highly trained staff of applications engineers.

Contact Information
For more information, contact: sales@arium.com

ARM Debug Support:

- Non-intrusive debug
- Real time operation
- Multi-core and heterogeneous-core support
- Support for different ETM trace configurations on a single processor
- Serial wire debug
- XScale trace support
- RealMonitor™ support
- High speed downloads
- Independent processor control
- Reliable breakpoint control
- Semihosting support
- PLD programming
- Flash programming

ARM Toolchains Supported:

- ARM Development Suite 1.2
- ARM RealView® Developer Suite
- Green Hills® C/C++
- GNU C/C++
- IAR Embedded Workbench®

Intel Debug Support:

- Works in real-time (maximum device frequencies)
- Instruction execution trace (LBR, CAR, DRAM, LX-1000 RAM)
- Multi-processor support (SMP)
- Source code/symbolic debug for popular C tool chains
- Breakpoints (hardware, software, SMM, special cycles, reset, trigger in/out)
- Streaming SIMD Extensions 2 (SSE2) support
- Address translation (real, virtual-86, bigreal, protected, SMM)
- Access to all registers

Intel Toolchains Supported:

- Green Hills® Multi Optimizing Compiler
- GNU C/C++
- Intel® C/C++ Compiler Professional Edition
- Microsoft® Visual Studio®
- Borland C++ Compiler
- Wind River® workbench

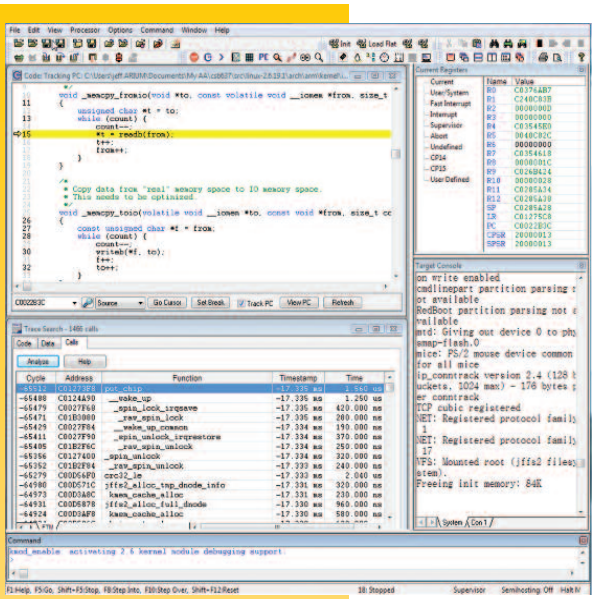
* contact sales@arium.com for a list of currently supported devices

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 Intel® processors.

Arium is a proud member of the ARM Connected Community and supplies JTAG Emulators to engineers using ARM core-based processors from Marvell, Texas Instruments, FreeScale, NXP, Atmel, and others.

arium

Arium LX-1000 JTAG Emulator with Serial and Parallel Trace



SourcePoint™ Interface

Included with the LX-1000 is Arium's SourcePoint debugging software. The debugger interface is part of the company's core technology, developed specifically for SoC design and debug. The 32/64-bit application runs on Microsoft® Windows® /XP/Vista™/7 and numerous Linux platforms. SourcePoint offers UEFI and Linux OS-aware features.

Key features include:

- Support of all popular compilers
- Integrated, real time trace
- Innovative, seamless approach to Linux kernel, device driver, and applications debug
- UEFI Source Code debugging
- Multi-core and heterogeneous-core debug
- Independent processor control via the software
- Serial wire debug
- Robust, user-friendly C-like command language

The Company

Arium has been a major supplier of emulator debugging tools for more than 20 years, servicing both the embedded and PC markets. Arium hardware-assisted solutions support ARM®-based processor cores, XScale, and TI OMAP™ processors, as well as Intel® embedded, laptop, desktop, and server processors.

Arium's mission is to meet and exceed the needs of firmware and software developers by providing them with the best 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
10/100/1000 Base-T Ethernet
USB 2.0

Download Speed
>100 MBytes/sec

BNC Trig In
>50 Ohm, 155 ns maximum delay

BNC Trig Out
>50 Ohm, 125 ns maximum delay

JTAG
1 KHz - 40 MHz

JTAG Logic Levels
1.2 - 3.3 nominal

Dimensions (inches)
(W) 5.25 / 13.34
(L) 5.5 / 13.97
(H) 1.63 / 4.14

PC Host Requirements

- PC host (Intel or AMD processor)
- Microsoft Windows XP/Vista/7 or Linux (Validated on popular Linux distributions. Contact Arium at sales@arium.com for the latest versions supported).
- SVGA monitor (1024 x 768 or higher)
- 60 MB hard disk space, 128 MB RAM
- 10/100/1000 Base-T Ethernet or USB 1.1

Ordering Information

Standard:

Includes base unit with 2 GBytes trace. Includes JTAG, SWD and trace cables, SourcePoint debugger (Microsoft Windows), power supply, documentation, and one year service agreement.

LX-1000	JTAG/SWD/ETM trace emulator

Options:

SP-LNX-A	SourcePoint for Linux hosts
DPA-2014	20-14 pin JTAG adapter
LX-SER	Marvell SETM3 & ARM HSSTP Serial Trace
LX-PAR	ETM Parallel Trace
LX-INT	Intel Trace Module
LX-4GB	4 GBytes Trace
LX-8GB	8 GBytes Trace
STAR-1	Extended service agreement

14811 Myford Road, Tustin, CA 92780 Voice: 877-508-3970 toll free in the US or 714-731-1661 outside the US Fax: 714-731-6344
E-mail: info@arium.com Web: www.arium.com