

LC-500 EMULATOR

The LC-500 represents American Arium's latest integrated debug solution for ASICs and ASSPs with ARM® cores. The LC-500 offers superb run control with accurate breakpointing and intuitive stepping features. It's designed for speed, too, with fast file and image downloads, quick stepping through code, and rapid returns after stop or halt. A handy symbols finder makes locating symbols and their values quick and easy. And memory and registers windows can be displayed and modified, too. When coupled with Arium's flagship debugging software, the LC-500 operates on Microsoft® Windows® and Linux platforms and gives developers an outstanding run control tool designed to help them minimize their time in the debug cycle.



The LC-500 uses an ARM-powered® Intel® IXP420 processor for robust performance and throughput.

ARM JTAG DEBUG SUPPORT:

- Non-intrusive debug
- Real time operation
- JTAG rate up to 20 MHz
- Excellent run control
- Exceptional breakpoint control
- Semihosting support
- RealMonitor™ support
- PLD programming
- Flash programming
- Linux C/C++ kernel debug

CONNECTION TYPES:

- USB 1.1
- 10Base-T/100Base-T ethernet

SUPPORTED TOOLCHAINS:

- ARM ADS 1.1 and 1.2
- ARM RealView™ CT
- Green Hills® C/C++ (DWARF2)
- GNU C/C++

SUPPORTED PROCESSORS:

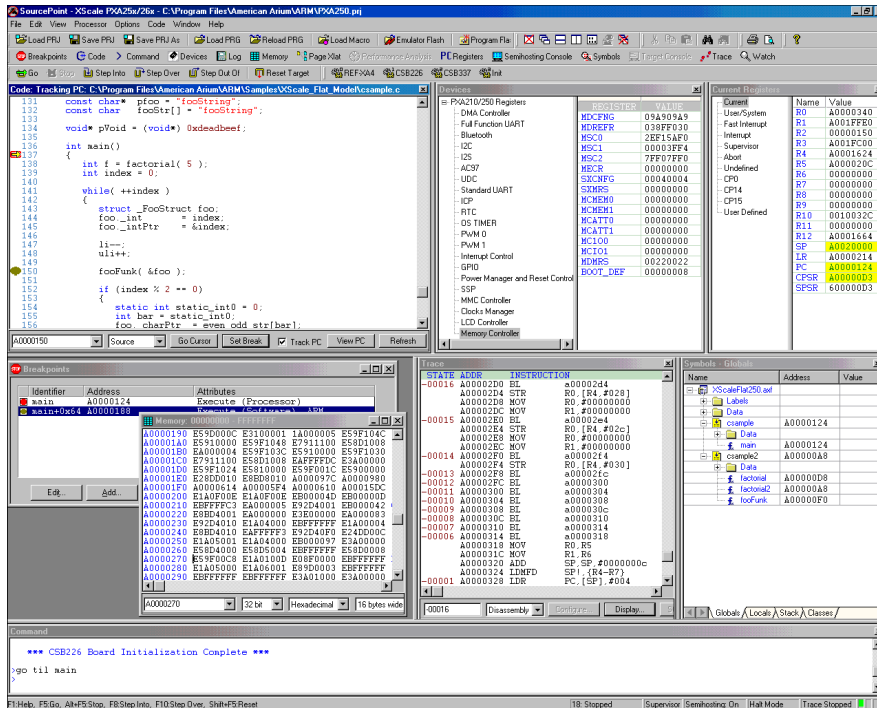
- **ARM RISC CORE ARCHITECTURE:**
 - ARM7TDMI™
 - ARM720T
 - ARM920T
 - ARM922T™
 - ARM926EJ-S™
 - ARM940T™
 - ARM946E-S™
 - ARM966E-S
- **INTEL XSCALE PROCESSORS, INCLUDING:**
 - Intel® PXA21X/25X/26X application processors
 - Intel® 80200/IOP321/IOP331 I/O processors
 - Intel® IXC1100 control plane processor
 - Intel® IXP4XX/24XX/28XX network processors
- **TEXAS INSTRUMENTS PROCESSORS**
 - OMAP



KEY BENEFITS

- **POWERFUL** - The LC-500 offers unparalleled run control functionality and execution processing for ARM-architecture processors.
- **INTEGRATED & INTUITIVE** - The LC-500, 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 LC-500 is easy to install and configure, giving you a fast start to your debug project.
- **FLEXIBLE** - The LC-500 works with a number of ARM7/9, Intel XScale, or TI OMAP cores. No additional changes are required from one architecture to another.
- **VALUE PACKED** - Full ARM and Thumb instruction set debug at a competitive price.
- **FULLY SUPPORTED** - All Arium units produced for the embedded market are fully supported by our highly trained staff of design engineers.

LC-500 EMULATOR



SOURCEPOINT INTERFACE

Included with the LC-500 is American 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-bit application runs on Microsoft® Windows® NT/2000/XP or Linux platforms.

Key features include:

- Full ARM and Thumb instruction set support
- Performance analysis without a compiler
- SourcePoint IDE powered by Visual SlickEdit®
- Customizable views
- Handy symbols finder
- Robust, user-friendly command language
- Single view of all I/O-mapped devices
- Multi-core debugging
- Sophisticated scripting language
- Support of multiple file formats

SPECIFICATIONS

Environmental

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

Communications

10/100Base-T ethernet
USB 1.1

JTAG Frequency

Up to 20 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 or AMD processor)
- Microsoft Windows NT 4.0 (SP4 or later)/2000/XP or Linux platform
- SVGA monitor (1024 x 768 or higher)
- 60 MB hard disk space, 128 MB RAM
- 10/100Base-T ethernet or USB 1.1

ORDERING INFORMATION

STANDARD:

- LC-500** Base unit
JTAG 20-pin JTAG port connector*
Warranty 90-day service agreement

OPTIONS:

- SP-IDE** Integrated development environment powered by Visual SlickEdit®
DPA-2014 20-14 pin JTAG adapter
STAR-1 Extended service agreement

*14-pin JTAG debug connection available with DPA-2014 adapter

THE COMPANY

American Arium has been a major supplier of emulator debugging tools for more than 20 years, servicing both the embedded and PC markets. The company supports Intel® XScale™, TI OMAP™, and ARM®-based processor debug. Arium also supports products for Intel® Pentium® and Itanium® processor families.

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

**It's Hard to Compete
Without the Right Tools**

LOGIC
TECHNOLOGY

PO Box 7054, 5980 AB
Panningen, The Netherlands
Tel: +31 77 307 8438
info@logic.nl www.logic.nl