

## Processors Supported

Call for the most current information

### Freescale Semiconductor

PowerPC 5xx/8xx, 6xx/7xx/82xx/83xx, 7400/7410, 86xx, MPC85xx, P10xx, P20xx, MPC55xx  
MGT5100, MPC51xx, MPC5200

QorIQ P3/P4/P5/T1/T2/T4 AMP Series & MCF  
Coldfire series

Legacy CPUs to include M-Core, 68K, PU16/32/32+

### IBM

PPC4xx Cores in Xilinx FPGAs and other SoCs

### Advanced Rise Machine & All ARM

Licensee SoCs

ARM7/9/9E, ARM11, Cortex-A8/A9, Cortex-M0,  
M3, M4, R4

### Intel & Marvell Semiconductor

X-Scale IOP, IXP & PXA series of CPUs

### MIPS32/64 based CPUs

Broadcom Au1x00, XLS/XLR & XLP (MIPS64)  
Cavium Networks cnMIPS (Octeon I/II & III) CNS  
(ARM11) CNW (ARM11)

### Texas Instruments

TMS320, C3x, C4x, C5x, C2000, C5000, C6000,  
OMAP, DaVinci, TMS470 (ARM), VC33 & NETV  
(MIPS32) Controllers

## Contact USI

### Corporate Office

### Ultimate Solutions, Inc.

10 Clever Drive  
Tewksbury, MA 01876-1580 USA  
Phone: 978.455.3383  
Toll Free: 866.455.3383  
Fax: 978.926.3091  
Email: [info@ultsol.com](mailto:info@ultsol.com)  
Web: [www.UltSol.com](http://www.UltSol.com)

**Ultimate Solutions, Inc.**  
10 Clever Drive • Tewksbury • MA 01876-1580 • USA



## Professional Grade Development Tools and Design Services



## About USI

Ultimate Solutions, a Massachusetts based company, was founded in 1999 with the vision to provide developers of embedded systems with a single channel to procure a wide spectrum of professional development tools. USI's product lines target the most commonly used general purpose CPUs and programmable DSPs available in the market today. Over the years, USI has established itself as the leading supplier of development tools for the embedded Linux market. In 2007, the company developed and released the industries first Eclipse based debugger optimized for use with GDB and Abatron's BDI2000/3000 series of BDM/JTAG probes. In the years to follow, USI is committed to expanding its products and support services to meet the demands of tomorrow's embedded developers.

With all the vendors and tools available to embedded developers today, the task to select the right tools for the job can be time consuming and for many, overwhelming. At USI, we have done the legwork for you to insure that as developers, you will spend your time debugging your embedded platform, not your tools.

*Buy tools from the tools guy, not the semi guy!*

Unlike many semi-distributors whose core competency is to sell chips, USI's knowledgeable Sales Engineers are well versed in selling development tools. They understand what questions to ask to properly configure the right tools at the right price for your embedded development environment. For those of you who wait until the last minute to buy your tools, USI is a stocking distributor and in most cases can ship product off the shelf. To speed the purchasing process, USI accepts all major credit cards, such as Master Card, Visa, Discover and American Express.

## USI Manufacturers

**Abatron AG**  
**Blackhawk (EWA)**  
**Mentor Graphics**  
**Texas Instruments**  
**Ultimate Solutions**

## In-Circuit & BDM/JTAG Emulators

### Abatron AG



### Blackhawk (EWA)



### USI ZY1000



## Development Boards

### Development Boards/Kits



#### Abatron

The BDI series of high-speed BDM & JTAG Debug Interfaces from Abatron provide a feature rich and robust connection to a wide range of 16, 32 & 64 bit embedded processors. The BDI3000 is an excellent choice when coupled with GNU/GDB tools commonly used to support NetBSD & Linux kernel debugging and board bring up. The BDI series can be hosted to a network via a 10/100 BASE-T interface. Host development environments supported include Linux, Windows, Solaris and other UNIX like environments.

#### Blackhawk

Blackhawk offers the industry's first USB based JTAG interfaces that are XDS510 and XDS560 compliant. Blackhawk offers the USB560v2 JTAG Emulator that can be powered from either the USB or POE (power over Ethernet) connectors. For LAN operation, the BH560v2 offers a 802.11 POE connector that can be powered from a POE enabled switch or available POE injector supply. The XDS560 Trace System is a non-intrusive, hardware-based tool for debugging and profiling high-performance, DSP-based applications providing developers with advanced visibility to debug specialized problems that occur. Blackhawk also supplies the industry's first POSIX compliant Real-Time OS specifically designed to support Texas Instruments' line of TMS320 DSPs.

#### Mentor Graphics

Sourcery CodeBench a complete development environment for embedded C/C++ development on ARM, Coldfire, MIPS, Power, X86, and other architectures. Install, flash and debug in minutes! With Sourcery CodeBench you can develop embedded systems on microcontrollers and microprocessors for bare metal and Linux based applications. Sourcery CodeBench is a validated and robust development toolchain based on open-source components, including gcc and gdb, enables C/C++ development on ARM, ColdFire, MIPS, Power, X86, and other architectures.

#### Texas Instruments

TI continues to improve upon its real-time software technology with the release of Code Composer Studio™ IDE. CCSv5x is an Eclipse based development suite that integrates all the tools necessary to take an application from beginning to end. The real-time foundation provided by DSP/BIOS II™, enabled by HS RTDX™ provides key features, such as real-time analysis and advanced data & system visualization.

#### Ultimate Solutions (USI)

USI's ZY1000 is an easy to use stand-alone JTAG Debugger and flash programmer optimized for use with OpenOCD & GCC/GDB. It communicates with any host computer over Ethernet. This enables the ZY1000 to be used with any operating system (Windows, Linux, Mac OS, Solaris and others). It provides a robust web interface that runs on Altera's NIOS Linux OS to setup and control the probe and target hardware. The ZY1000 supports all variants of the ARM7/9/9E, ARM11, XScale and Cortex-A/M/R series of processors. Because it is built on an open source framework, the ZY1000 is an excellent choice for SoC vendors who would like to OEM the probe to deliver a JTAG solution optimized for user with their custom chips and toolchain. All that is required is a functional driver to OpenOCD to effectively communicate with any CPU architecture.

USI's LinuxScope-JTD™ (JTAG Target Debugger) is a plug-in debugger for the Eclipse IDE that has been optimized for use with Abatron's BDI2000/3000 BDM/JTAG probe. LinuxScope-JTD™ leverages the capabilities of the BDI probe, which already supports a wide range of embedded CPUs to provide a complete software debugging solution for the Linux kernel and Modules. LinuxScope also provides users with the ability to program a wide range of common flash and strata flash devices. Because it is built on Eclipse, it is easy to add in a user defined tool chain to support application building and debugging.

## Cross Compilers/ Debuggers

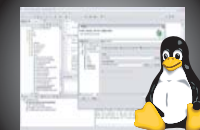
### Texas Instruments



### Mentor Graphics



### USI LS-JTD



Your Single Source For Professional Grade Development Tools & Design Services