

SB-USB2-ZSP Emulator

Fast JTAG Probe for the ZSP Family

Key Features:

- Powered by USB port
- JTAG interface
- Logic Levels: 3.3V, 2.5V, 1.8V
- TCK: 32kHz - 10MHz
- Integrates with:
 - ZViewIDE
 - ZSP Console GDB

Package Contents:

- Emulator
- USB cable
- Drivers for MS Windows
- Installation Guide

TRST	1	2	GND
TDI	3	4	GND
TDO	5	6	GND
TMS	7	8	GND
TCK	9	10	GND

Primary Connector

TRST	1	2	GND
TDI	3	4	GND
TDO	5	6	GND
TMS	7	8	GND
TCK	9	10	GND
EVT	11	12	OPT1
Reset	13	14	OPT2

Secondary Connector



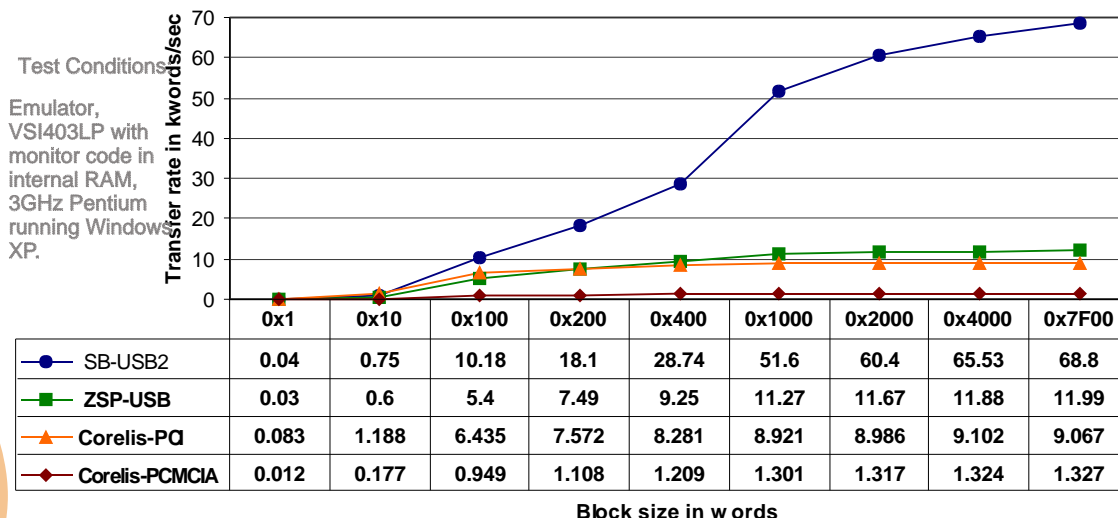
Overview

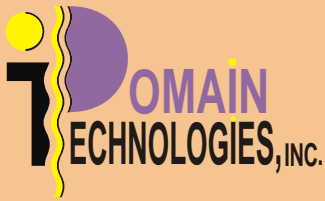
The SB-USB2-ZSP emulator enables efficient and productive embedded software debugging. This compact and portable probe utilizes the JTAG interfaces for debug and in-circuit testing supplied with the VeriSilicon ZSP cores with upload and download rates up to 5 times faster than comparable products. It integrates well with VeriSilicon's ZViewIDE. The emulator supports unlimited software breakpoints within all ranges of program memory implemented in RAM. In addition, the emulator supports accurate measurement of execution time with a 27 nanosecond resolution in hardware debug mode and a 5 microsecond resolution in software debug mode. When used with ZViewIDE's debugger, the SB-USB2-ZSP supports multi-core and multi-user debugging on a network over a TCP/IP connection, as well as JTAG boundary scan operations such as testing and flash memory programming.

Product Description

The SB-USB2-ZSP probe is powered by the USB connection, making it ideal for use by notebook computers or lab environments. A flexible ribbon cable provides the JTAG interface featuring both a primary and secondary connector. The optional secondary connector provides an extra control signal which can be used to reset the target. This pin is active low, and when not in use it is tri-stated; thus, it has no effect on the operation of the target circuitry. Execution of the *zspusbreset* program from a DOS prompt will assert a reset signal on the target ZSP. A command line parameter allows to customize length of the reset pulse. The JTAG interface can be configured to operate with logic levels of 3.3V, 2.5V, or 1.8V. The JTAG clock can be configured between 32kHz and 10MHz.

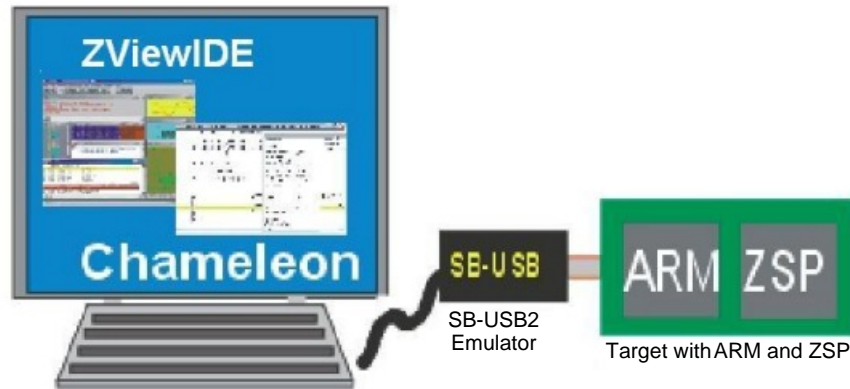
File I/O Transfer Rate - ZSP fwrite function





ZSP/ARM Development Package

Debug Multiple CPUs on a Single JTAG Scan Chain



PC with ZViewIDE, ZServer, Chameleon.

Package Contents:

- SB-USB2-ZSP Emulator
- ZSP-QUAD-JTAG Adapter
- Signum System's Chameleon Debugger

*Requires VeriSilicon's ZViewIDE

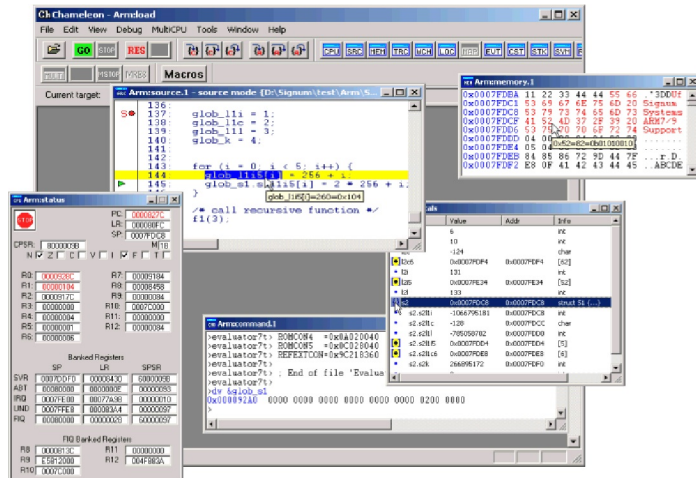
Overview:

The ZSP/ARM development system is your interface to embedded project development from CPU evaluation to production testing. Support different CPUs and DSPs (including ARM and ZSP) in plain or multi-core(SoC) targets through one package!

This multi-core development environment provides a debug interface running on a PC host connected to an emulator, which communicates with the ZSP/ARM targets. The package provides Signum System's Chameleon Debugger for ARM and Domain Technologies: SB-USB2-ZSP emulator and ZSP-Quad-JTAG adapter. It utilizes VeriSilicon's ZViewIDE and ZServer connectivity software. This multi-core/device development capability allows the user to start/stop/single-step selected devices simultaneously and independently. Access to multiple devices is provided from single or multiple workstations via TCP/IP connection.

Chameleon Features:

- Hardware and Software Breakpoints
- Step Into, Out, and Over
- Macro Script Language
- Virtual I/O
- Real-Time Trace(ETM)
- Flash Programming Utilities
- Registers and Peripherals Access



Chameleon:

Regardless of the number of CPUs being debugged, Chameleon offers the latest in debugger features: fly-over variable watch, drag and drop variables, virtual I/O, real-time DCC channel support, complex variable implode and explode, script language for automatic testing, symbol browsing, ETM trace display window, MMU and cache support, and much more. Step-into, Step-out and Step-over modes are supported for both C and assembly levels. The Flash programming plug-in allows easy programming of any on-chip or off-chip Flash memory. Chameleon's unique graphical interface is quick, intuitive and incredibly easy to use.