Analog Devices USB-Based Emulator and High Performance USB-Based Emulator

USB-Based Emulator Key Features

- Full speed USB 1.1 interface enabling download speeds of up to 150 KB/sec
- Support for all ADI JTAG processors and DSPs
- Multiple processor and DSP I/O voltage support with automatic detection
  - 1.8V, 2.5V, and 3.3V compliant and tolerant
  - 5V tolerant and 3.3V compliant for 5V processors and DSPs
- Multiprocessor support
- 14-pin JTAG connector
- 3-meter USB cable for difficult-to-reach targets
- CE-certified

HP USB-Based Emulator Key Features

- High speed USB 2.0 interface enabling download speeds of up to 1.5 MB/sec
- Background Telemetry Channel (BTC) support enabling nonintrusive data exchange at up to 2.0 MB/sec
- Support for all ADI JTAG processors and DSPs
- Multiple processor and DSP I/O voltage support with automatic detection
  - 1.8V, 2.5V, and 3.3V compliant and tolerant
  - 5V tolerant and 3.3V compliant for 5V processors and DSPs
- Multiprocessor support
- JTAG clock operation up to 50 MHz
- 14-pin JTAG connector
- 3-meter USB cable for difficult-to-reach targets
- CE-certified



Overview

Analog Devices' cost-effective Universal Serial Bus (USB)-based emulator and High Performance Universal Serial Bus (HP USB)-based emulator each provide an easy, portable, nonintrusive, target-based debugging solution for Analog Devices JTAG processors and DSPs. These powerful USB-based emulators perform a wide range of emulation functions, including single-step and full speed execution with pre-defined breakpoints, and viewing and/or altering of register and memory contents. With the ability to automatically detect and support multiple I/O voltages, the USB and HP USB emulators enable users to communicate with all of the Analog Devices JTAG processors and DSPs using either a full speed USB 1.1 or high speed USB 2.0 port on the host PC. Applications and data can easily and rapidly be tested and transferred between the emulators and the VisualDSP++™ development and debugging environment (available separately).

The plug-and-play architecture of USB allows the emulators to be automatically detected and configured by the host operating system. It can also be connected to and disconnected from the host without opening the PC or turning off the power to the PC. A 3-meter cable is included to connect the emulators to the host PC, thus providing abundant accessibility to hard-to-reach targets.

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The HP USB emulator also supports the Background Telemetry Channel (BTC), a non-intrusive method for exchanging data between the host and target application without affecting the target system's real-time characteristics.

CROSSCORE Development Tools

The USB-based and High Performance USB-based emulators are part of the Analog Devices CROSSCORE® Tools product line, which is composed of a comprehensive set of development tools providing engineers with easier and more robust methods for developing and optimizing systems.

The CROSSCORE components include:

- VisualDSP++ development and debugging environment
- EZ-KIT Lite™ evaluation kits
- Emulators

The easy-to-use VisualDSP++ integrated development environment speeds development, debugging, and deployment while shrinking product development cycles and improving time to market.

The EZ-KIT Lite evaluation kits provide an easy way to investigate the performance of Analog Devices' family of embedded processors and DSPs.

Emulators are available for both PCI and USB host platforms for rapid on-chip debugging.

Embedded Processors and DSPs

Analog Devices is a leading supplier of embedded and digital signal processing solutions, from the low power ADSP-21xx DSP families to the high performance Blackfin® and TigerSHARC® Processors, and from low cost SHARC® DSPs to integrated mixed-signal DSPs that are ideal for an ever-increasing spectrum of applications. ADI's advances in design provide faster processing, more memory, lower power consumption, and simplified system integration. ADI products and technology provide a competitive edge, complete with expert technical support, comprehensive development tools, and the DSP Collaborative™, an independent network of third-party developers. For more information about Analog Devices' processors and DSPs, visit www.analog.com/processors.

CROSSCORE Tools Support

Tel: 1-800-ANALOGD
Email: dsptools@analog.com
Web: www.analog.com/processors/tools

Analog Devices is committed to providing high quality, timely, accurate, and free technical support and software upgrades.

Ordering Information

Please call Analog Devices CROSSCORE Tools at 603-883-2430 or your local Analog Devices sales representative or distributor for pricing and ordering information for part number:

USB-Based Emulator
Part Number: ADDS-USB-ICE

High Performance USB-Based Emulator
Part Number: ADDS-HPUSB-ICE

Embedded Processing Support

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