EZ-KIT Lite for Analog Devices ADSP-BF561 Blackfin Processor
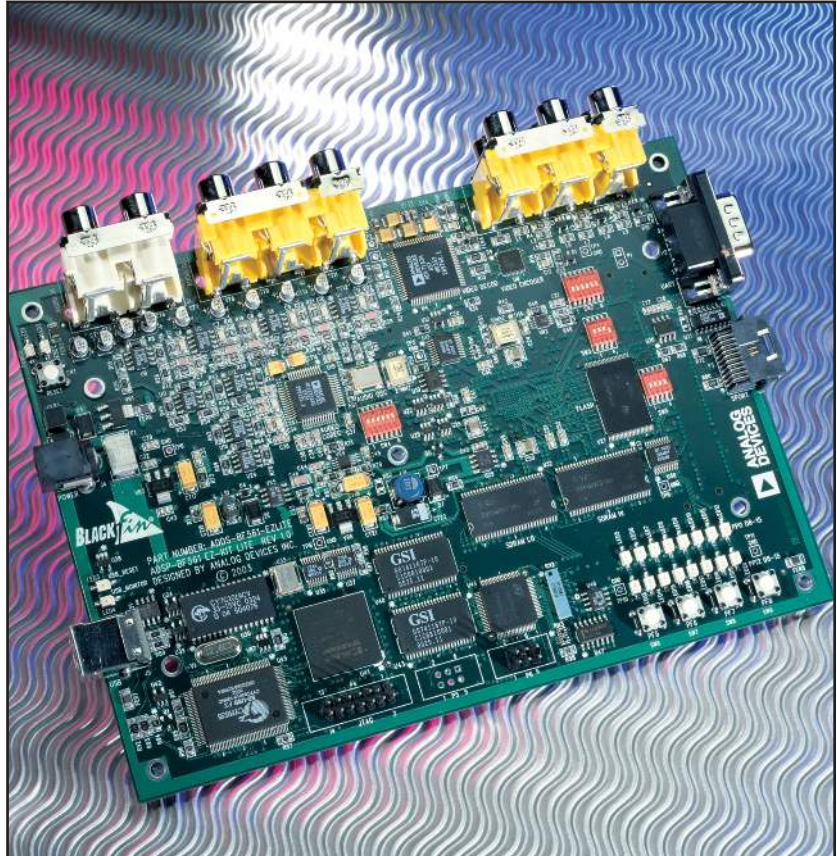
Key Features

- ADSP-BF561 Blackfin Processor
- 64 MB (16 M x 16-bit x 2) SDRAM
- 8 MB (4 M x 16-bit) FLASH memory
- AD1836 multichannel 96 kHz audio codec
  - 2 x 2 RCA jacks for two channels of stereo audio input
  - 3 x 2 RCA jacks for three channels of stereo audio output
- ADV7183A advanced 10-bit video decoder
  - 3 RCA jacks for composite (CVBS), differential component (YUV) or S video (Y/C) input
- ADV7179 chip scale NTSC/PAL video encoder
  - 3 RCA jacks for composite (CVBS), component (RGB), differential component (YUV) or S video (Y/C) output
- RS-232 UART line driver/receiver
- USB-based debugger interface
- JTAG ICE 14-pin header
- Evaluation suite of VisualDSP++ development tools
- Flash utility for downloading boot code to on-board Flash memory
- 16 general-purpose LEDs, 4 general-purpose push-buttons
- 3 expansion connectors for evaluating and interfacing with the processor's peripheral interfaces
- CE-certified

System Requirements

- Pentium® 166 MHz or higher
- Minimum of 32 megabytes of RAM
- Windows® 98, Windows 2000, or Windows XP
- One available USB connector

Overview

The ADSP-BF561 EZ-KIT Lite™ provides developers with a cost-effective method for initial evaluation of the ADSP-BF561 Blackfin® Processor for audio and video applications via a USB-based PC-hosted tool set. Evaluation of analog audio applications is achieved through the use of the AD1836 multichannel 96 kHz audio codec. By utilizing the ADV7183A advanced 10-bit video decoder and ADV7179 chip scale NTSC/PAL video encode, the user is able to evaluate video applications such as simultaneous input and output video processing enabled by the dual core architecture of the ADSP-BF561 Processor. With this EZ-KIT Lite, users can learn more about Analog Devices' ADSP-BF561 hardware and software development and quickly prototype applications.

The EZ-KIT Lite includes an ADSP-BF561 Processor desktop evaluation board along with an evaluation suite of the VisualDSP++™ development and debugging environment with the C/C++ compiler, assembler, and linker. It also includes sample processor application programs, CE-approved power supply, and a USB cable.

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The VisualDSP++ development and debugging environment, along with the USB-based debugger interface that operates up to 12 Mbits/second, enables users to perform standard debugging functions (such as read and write memory, read and write registers, load and execute executables, set and clear breakpoints, and single-step assembly, C, and C++ source code). The evaluation versions of the included software tools are limited to use with the EZ-KIT Lite. For faster and unrestricted debugging, a family of JTAG emulators and full versions of VisualDSP++ are available separately from Analog Devices.

An Analog Devices Blackfin EZ-Extender™ daughter board (sold separately) can attach to the ADSP-BF561 EZ-KIT Lite using the three expansion connectors, allowing a number of Analog Devices High Speed Converter (HSC) evaluation boards and the OV6630 OmniVision camera evaluation board to interface with the EZ-KIT Lite.

CROSSCORE Development Tools

The ADSP-BF561 EZ-KIT Lite is 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
- EZ-Extender daughter boards
- 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. EZ-Extender daughter boards give developers access and ability to connect various peripherals from Analog Devices and third parties to the expansion interface of the EZ-KIT Lite evaluation kits. Emulators are available for both PCI and USB host platforms for rapid on-chip debugging. Analog Devices is committed to continuous expansion of leading-edge development solutions for design engineers everywhere.

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 the low cost SHARC® DSPs to integrated mixed-signal DSPs that are ideal for an ever-increasing spectrum of applications. Analog Devices' advances in design provide faster processing, more memory, lower power consumption, and simplified system integration. Analog Devices 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

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Ordering Information

Please call Analog Devices CROSSCORE Tools at 603-883-2430 or your local ADI sales representative or distributor for pricing and ordering information for part number: ADDS-BF561-EZLITE.

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