ADSP-BF538F EZ-KIT Lite
for Blackfin Processors

Key Features
- ADSP-BF538F Blackfin Processor
- 64 MB (32 MB × 16) SDRAM
- 4 MB (32 MB × 16) flash memory
- UART—ADM3202 RS-232 line driver/receiver

Audio
- AD1871 96 kHz stereo ADC
- AD1854 96 kHz stereo DAC

CAN®
- TJA1041—transceiver
- 2 RJ10 connectors
- 9 LEDs

Minimum Requirements
- Pentium® 166 MHz or higher, minimum of 32 MB of RAM
- Windows® 2000, Windows XP
- One available USB connector

Overview

The ADSP-BF538F EZ-KIT Lite® provides developers with a cost-effective method for initial evaluation of the ADSP-BF538F Blackfin® Processor via a USB-based, PC-hosted tool set. With this EZ-KIT Lite, users can learn more about the Analog Devices (ADI) ADSP-BF538F hardware and software development, and quickly prototype a wide range of applications.

The EZ-KIT Lite includes an ADSP-BF538F Blackfin Processor desktop evaluation board along with an evaluation suite of the VisualDSP++® development and debugging environment, including the C/C++ compiler, assembler, and linker. The evaluation suite of VisualDSP++ is designed to only be used with EZ-KIT Lite.

Additionally, the ADSP-BF538F EZ-KIT Lite contains the National Instruments (NI) Educational Laboratory Virtual Instrumentation Suite (ELVIS) interface. This interface will allow using the dc voltage and current measurement modules, oscilloscope and bode analyzer modules, function generator, arbitrary waveform generator, and digital I/O. NI ELVIS is a LabVIEW™-based design and prototype environment for university science and engineering laboratories' curricula. For more details, visit *www.ni.com*.

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The VisualDSP++ development and debugging environment, along with the advanced on-board USB-based debug agent interface that operates up to 12 Mbps, 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, 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 ADI.

Analog Devices has EZ-Extender® products (sold separately) that plug into the expansion interface of the ADSP-BF538F EZ-KIT Lite for additional functionality. The Blackfin EZ-Extender daughterboard allows developers to connect to a number of Analog Devices high speed converter (HSC) evaluation boards, the OV6630 OmniVision camera evaluation board, and an external LCD display. The Blackfin USB-LAN EZ-Extender daughterboard contains a USB 2.0 interface and 10/100 Ethernet MAC. The Blackfin A-V EZ-Extender daughterboard contains advanced audio and video circuitry, as well as connectors that allow connection to three camera sensor evaluation boards (Kodak®, Micron®, and OmniVision®), and a flat panel display (FPD) module.

The Blackfin FPGA EZ-Extender extends the capabilities of the evaluation system by providing a Xilinx® FPGA with external memory, IDC connectors for off-board connections, and a small breadboard area.

The Blackfin Audio EZ-Extender expands the capabilities of the evaluation system by providing an interface for eight channels of analog audio input and 16 channels of analog audio output, along with an interface to digital audio I/O through a Sony®/Philips Digital Interface (S/PDIF) transceiver.

CROSSCORE Development Tools

The ADSP-BF538F EZ-KIT Lite is a part of the ADI CROSSCORE® Development 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 daughterboards
- 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 ADI's family of embedded processors and DSPs. EZ-Extender daughterboards give developers access and the ability to connect various peripherals from Analog Devices and third parties to the expansion interface of the EZ-KIT Lite evaluation kits. USB emulators are available for rapid on-chip debugging.

Embedded Processors and DSPs

Analog Devices is a leading supplier of digital signal processing solutions, from the high performance Blackfin Processors, TigerSHARC® Processors, and SHARC® Processors to integrated mixed-signal DSPs for an increasing spectrum of applications. Our advances in design provide faster processing, more memory, lower power consumption, and simplified system integration.

Analog Devices gives you a competitive edge by providing a complete solution, including expert technical support, comprehensive development tools, and an independent network of third-party developers called The Collaborative.™ For more information about ADI processors and DSPs, visit *www.analog.com/processors*.

CROSSCORE Tools Support

Tel: 1.800.ANALOGD
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 your local ADI sales representative or distributor for pricing and ordering information for part number: ADZS-BF538F-EZLITE.

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www.analog.com/blackfin

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