ANALOG DEVICES
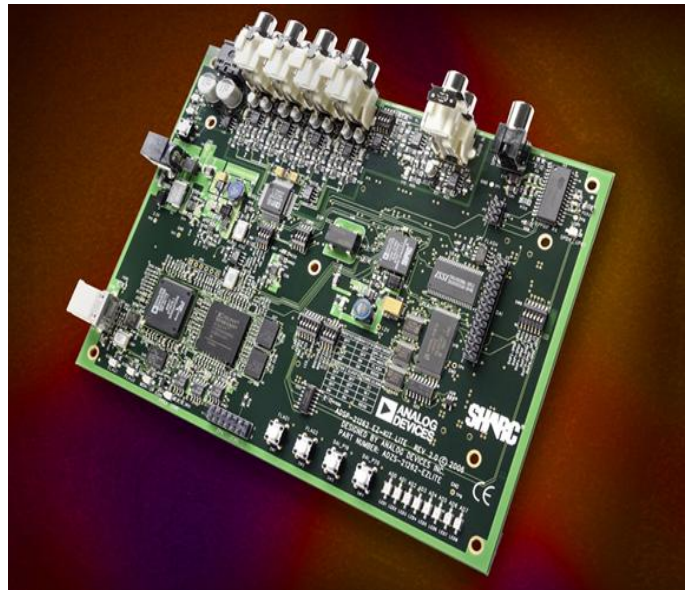
ANALOG DEVICES - ADSP-21262 EZ-KIT EZ-KIT Lite Evaluation Kit

Product Overview:

The ADSP-21262 EZ-KIT Lite provides developers with a cost-effective method for initial evaluation of the ADSP-21262 SHARC Processor architecture for audio applications via a USB-based PC-hosted tool set. With this EZ-KIT Lite, users can learn more about ADI's ADSP-21262 hardware and software development and quickly prototype applications.

The evaluation system is designed to be used in conjunction with the VisualDSP++® development environment to test the capabilities of the ADSP-21262 SHARC processors. The VisualDSP++ development environment gives you the ability to perform advanced application code development and debug, such as:

- Create, compile, assemble, and link application programs written in C++, C, and ADSP-21262 assembly
- Load, run, step, halt, and set breakpoints in application program
- Read and write data and program memory
- Read and write core and peripheral registers
- Plot memory

Kit Contents:

The ADSP-21262 EZ-KIT Lite evaluation system package contains the following items.

- ADSP-21262 EZ-KIT Lite board
- VisualDSP++ Installation Quick Reference Card
- CD containing:

  ✓ VisualDSP++ software

- ✓ ADSP-21262 EZ-KIT Lite software
- ✓ USB driver files
- ✓ Example programs
- ✓ ADSP-21262 *EZ-KIT Lite Evaluation System Manual* (this document)

- Universal 7V DC power supply
- USB 2.0 cable
- Registration card

Key Features:

- Analog Devices ADSP-21262 processor

  - ✓ 136-pin BGA package
  - ✓ 300 MHz core clock speed

- Synchronous random access memory (SRAM)

  - ✓ 512 Kbit x 8-bit

- Flash memory

  - ✓ 1M x 8-bit

- Serial peripheral interconnect (SPI) flash memory

  - ✓ 2 Mbit

- Analog audio interface

  - ✓ AD1835A codec
  - ✓ 4x2 RCA phono jack for 4 channels of stereo output
  - ✓ 2x1 RCA phono jack for 1 channel of stereo input
  - ✓ Headphone jack for 1 channel stereo output

- Digital audio interface (DAI)

  - ✓ CS8416 Sony/Philips Digital Interface (S/PDIF) receiver
  - ✓ RCA phono jack input

- LEDs

  - ✓ Twelve LEDs: one power (green), one board reset (red), S/PDIF (amber), one USB monitor (amber), and eight general-purpose (amber)

- Push buttons

  ✓ Five push buttons: one reset, two connected to DAI, two connected to processor FLAG pins

- Expansion interface (type A)

  ✓ Parallel port, FLAGs, DAI, SPI

- Other features

  ✓ JTAG ICE 14-pin header
  ✓ 0-ohm resistors for processor current measurement
  ✓ SPI header
  ✓ DAI header

Ordering Information:

Products:

Part Number	Manufacturer	Farnell P/N	Newark P/N
ADZS-21262-EZLITE	ADI	1608852	30M0497

Associated Products:

Part Number	Manufacturer	Description	Farnell P/N	Newark P/N
PJRAN2X1U01	Switchcraft	Phono Connector	4480338	16C1862
416-0500	Deltron	Gold/Red Phono Plug	1194046	02M0239
PSG01534	Pro Signal	Gold/White Phono Plug	1280783	NA
ADSP-21262	ADI	Generation Low Cost 32-bit Floating-Point SHARC DSP	1439061	21M6777
AD1835A	ADI	2 ADC, 8 DAC, 96 kHz, 24-Bit Codecs	8396540	NA
AD8606A	ADI	Precision Low Noise CMOS Rail-to-Rail Input/Output Operational Amplifiers	9994343	64M7588
ADM708	ADI	Low Cost Microprocessor Supervisory Circuits	1661074	59K2283

Similar Products:

Part Number	Manufacturer	Description	Support Device	Farnell P/N	Newark P/N
ADZS-21364-EZLITE	ADI	ADSP-21364 Evaluation Board	ADSP-21364	1608853	30M0499
ADZS-21369-EZLITE	ADI	ADSP-21369 Evaluation Board	ADSP-21369	1608854	28M3966
ADZS-21375-EZLITE	ADI	ADSP-21375 Evaluation Board	ADSP-21375	1608855	30M0500

Document List:

Datasheets:

Part Number	Description	Size
ADSP-21262	SHARC Embedded Processor	637KB
AD1835A	2 ADC, 8 DAC,96 kHz, 24-Bit Codecs	276KB
AD8606A	Precision, Low Noise, CMOS, Rail-to-Rail, Input/Output Operational Amplifiers	723KB
ADM708	Voltage Monitoring uP Supervisory Circuits	128KB
Am29LV081B	8 Megabit (1 M x 8-Bit) CMOS 3.0 Volt-only Sector Erase Flash Memory	43KB
AT25F2048N	2Mbit High Speed SPI Serial Flash Memory	290KB
CS8416	192 kHz Digital Audio Interface Receiver	988KB
IS61LV5128AL	512K x 8 High-Speed CMOS Static RAM	99KB
sn74lvc14a	SN74LVC14A Hex Schimitt-Trigger Inverters	943KB
sn74lvc138a	SN74LVC138A 3-Line to 8-Line Decoders/Demultiplexers	1.07MB
sn74lvc373a	SN74LVC373A Octal Transparent D-Type Latches With 3-State Outputs	1.15MB

Application Notes:

File Name	Size
AN339 C8416 Delivers Performance Gains Over CS8413-14	267KB

Connecting Character LCD Panels to ADSP-21262 SHARC DSPs	94KB
Designing and Debugging Systems with SHARC® Processors	152KB
Interfacing NAND Flash Memory with ADSP-2126x SHARC Processors	1.09MB
Using External Memory with ADSP-2126x SHARC DSPs	81KB

Hardware & Software:

File Name	Size
Connecting Character LCD Panels to ADSP-21262 SHARC DSPs	5KB
Interfacing NAND Flash Memory with ADSP-2126x SHARC Processors	490KB