

## LE402CS- 2 Channel Audio Development Kit

### Kit Features:

- › DT402EB Eval Board
  - 402ZX 200 MHz ZSP
  - 256Kx16 SRAM
  - 512Kx16 Flash ROM
  - 2X16 Character LCD Display
  - 16 LEDs Controlled by ZSP
  - 8 Push Button Switches
  - 12.288MHz Clock Oscillator
  - 2 20-pin Serial Ports (SPORT)
  - 3 26-pin Ports for User Signals
  - Dimensions 7"x5.5"
  
- › DT4218DB Audio Adapter
  - 16-bit Stereo Audio Codec
  - Delta-Sigma A/D, D/A Converters
  - Stereo Line In/Out
  - Dual MIC In
  - Sampling Rates 48-7.35kHz
  - Dimensions: 3"x2"



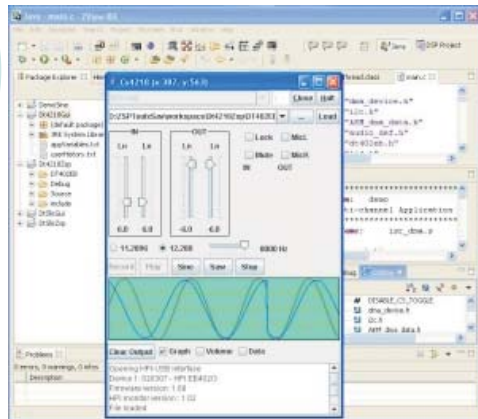
### Overview:

Enhance your ZSP based product development and testing using this two channel audio development system. The LE402CS provides stereo audio input and output for the advanced DT402EB evaluation board with access to all ZSP 402ZX peripherals and external memory. The kit also includes sample projects, necessary cables, and a helpful user guide.

### Product Description:

The DT402EB features the 402ZX 200 MHz ZSP with 256K words of external SRAM and 512K words of external Flash, a programmable CPLD (Lattice LC4128V) containing external memory decode logic, LCD and LED controllers, a 16-bit user I/O controller, and a rotary switch for ZSP operating frequency selection. Built in are two serial port connectors and an external host port interface. The DT402EB has either an external power supply or utilizes the USB.

The DT4218DB features the Cirrus Logic CS4218 16-bit stereo Delta-Sigma Codec. With two external clock sources, it supports sampling rates of 48 - 8 kHz and 44.1 - 7.35 kHz. It features stereo line level output and a user selectable option of stereo line level input/ dual microphone. The microphone circuit supports electret microphones with bias voltage and pre-amp module. The board features an 8-bit microcontroller providing an I<sup>2</sup>C interface to the ZSP, a controlling oscillator selection as well as programming of the codec operating features.



### Demo Software:

Pre-programmed, sample applications are provided for the ZView Integrated Development Environment; the IDE is a windows based, open, industry supported, extensible software development environment which provides a compiler, linker, code project manager, editors, and a ZSP target debugger.

Utilize the demo software, sources included, to test the CS4218 chip on the DT4218DB audio daughterboard. The demo's Graphical user interface monitors incoming waveforms and displays their amplitude values.