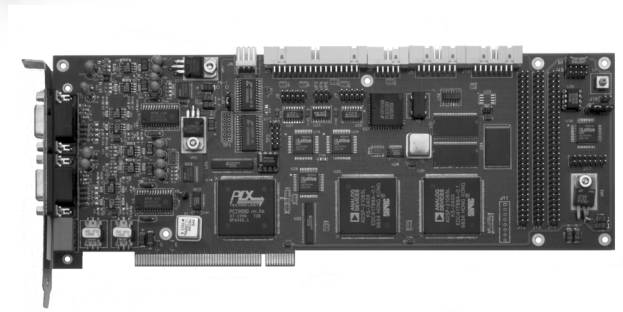


# Spinner

## ADSP-21065L Audio OEM Board



### SHARC® Power, 96 kHz Audio

The Spinner is an audio OEM board based on Analog Devices' low-cost ADSP-21065L SHARC DSP. Combining 180 MFLOPS of processing power with analog and digital 24-bit 96 kHz audio interfaces, the PCI format Spinner is ideal for professional audio applications that require a high-quality audio interface and a high-performance 32-bit processor.

### Audio Interfaces

The Spinner's digital audio interface consists of a single differential AES/EBU input and output channel. A digital audio transmitter and receiver transport AES/EBU signals to and from the ADSP-21065L processors via I<sup>2</sup>S format serial ports.

Using the latest high-quality audio converters from AKM Semiconductor, the Spinner's analog audio interface consists of two or four differential channels of A/D and two or four single-ended channels of D/A. An A/D and a D/A converter transmit the analog audio signals to and from the ADSP-21065L processors via I<sup>2</sup>S format serial ports.

### ADSP-21065L Processors

The Spinner is configured with one or two 60 MIPS ADSP-21065L processors, each with two bi-directional timers. Each processor also has twelve flags, eight of which are available for digital I/O via a digital I/O connector. The ADSP-21065L processors share a common 32-bit processor bus, which gives them access to the Spinner's 4M (16MB) bank of SDRAM, 1MB bank of FLASH memory, dual UART, and PCI bus interface.

### Host or Standalone Operation

The ADSP-21065L processors can boot from the host computer via the PCI interface or operate standalone with the Spinner's on-board boot FLASH. The Spinner's bus-mastering-capable PCI bus interface gives the host computer direct access to the ADSP-21065L processors' IOP registers, allowing the host to reset and boot the processors.

### Dual UART Access

The Spinner's dual UART allows the ADSP-21065L processors to communicate with external serial devices via RS-232 ports.

### Available Development Tools

BittWare offers a complete software development kit that allows you to easily integrate the Spinner into your system. The software tools include a comprehensive host interface library, a standard I/O library, and diagnostic utilities. The Spinner audio board is also fully compatible with Analog Devices' VisualDSP® software development tools and supports in-circuit emulation.

## Features

- Single or dual 180 MFLOPS ADSP-21065L SHARC DSPs
- 2 or 4 channels of 24-bit, 96 kHz A/D and D/A
- 96 kHz AES/EBU digital audio interface
- 16 MB SDRAM
- 1 MB FLASH memory with optional boot loading
- Dual 16550-type UART
- PCI interface or standalone operation
- Digital I/O port

