



Description

The SET8422 is a 24-bit, high-performance, monolithic CMOS stereo asynchronous sample rate converter with an integrated digital audio interface receiver that decodes audio data according to the EIAJ CP1201, IEC-60958, AES3, and S/PDIF interface standards.

Audio data is input through the digital interface receiver or a 3-wire serial audio input port. Audio is output through one of two 3-wire serial audio output ports. Serial audio data outputs can be set to 24, 20, 18, or 16-bit word-lengths. Data into the digital interface receiver and serial audio input port can be up to 24-bits long. Input and output data can be completely asynchronous, synchronous to an external clock through XTI, or synchronous to the recovered master clock.

The SET8422 can be controlled through the control port in Software Mode or in a Stand-Alone Hardware Mode. In Software Mode, the user can control the device through an SPI or I²C control port. Target applications include digital recording systems (DVD-R/RW, CD-R/RW, PVR, DAT, MD, and VTR), digital mixing consoles, high-quality D/A, effects processors, and computer audio systems. The SET8422 is available in a space-saving QFN package in Commercial (-40° C to +85° C) grade. The CDB4822 is also available for device evaluation and implementation suggestions. Please refer to "Ordering Information" on page 80 for complete details.

Feature

- SPI™ or I²C™ Software Mode and Stand-Alone Hardware Mode
- Flexible 3-wire Digital Serial Audio Input Port
- Dual Serial Audio Output Ports with Independently Selectable Data Paths
- Master or Slave Mode Operation for all Serial Audio Ports
- Time Division Multiplexing (TDM) Mode
- Integrated Oscillator for use with External Crystal
- Four General-purpose Output Pins (GPO)
- +3.3 V Analog Supply (VA)
- +1.8 V to 5.0 V Digital Interface (VL)
- Space-saving 32-pin QFN Package