



General Description

The SET8406 is a monolithic CMOS device which encodes and transmits audio data according to the AES3, IEC60958, S/PDIF, or EIAJ CP1201 standards. The SET8406 accepts audio and digital data, which is then multiplexed, encoded, and driven onto a cable.

The audio data is input through a configurable, 3-wire input port. The channel status and user bit data are input through an SPI™ or I²CTM microcontroller port, and may be assembled in block-sized buffers. For systems with no microcontroller, a Stand-Alone Mode allows direct access to channel status and user bit data pins.

The SET8406 is available in 28-pin TSSOP, SOIC, and QFN packages in both Commercial (-10° to +70°C) and Automotive grades (-40° to +85°C). The SET8406 Demonstration board is also available for device evaluation and implementation suggestions. Please refer to “Ordering Information” on page 37 for complete details.

Target applications include A/V Receivers, CD-R, DVD receivers, digital mixing consoles, effects processors, set-top boxes, and computer and automotive audio systems.

Features

- Complete EIAJ CP1201, IEC-60958, AES3, S/PDIF-compatible Transmitter
- +3.3 V or 5.0 V Digital Supply (VD)
- +3.3 V or 5.0 V Digital Interface (VL)
- On-Chip Channel Status and User Bit Buffer Memories Allow Block-Sized Updates
- Flexible 3-Wire Serial Digital Audio Input Port
- Up to 192-kHz Frame Rate
- Microcontroller Write Access to Channel Status and User Bit Data
- On-Chip Differential Line Driver
- Generates CRC Codes and Parity Bits
- Stand-Alone Mode Allows Use Without a Microcontroller

Device Information

Ordering Number	Package	Packing
SET8406-RS	SOP-28	Tape Reel
SET8406-RT	TSSOP-28	Tape Reel