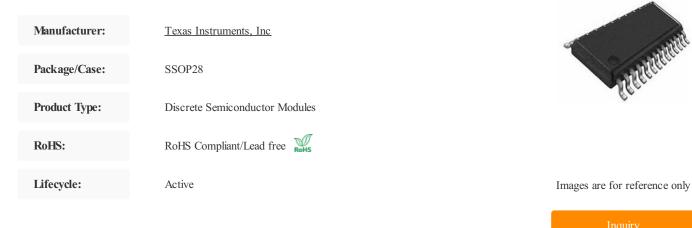


Sample Rate Converter 28-Pin SSOP Tube



General Description

The SRC4192 and SRC4193 devices are asynchronous, sample-rate converters designed for professional and broadcast audio applications. The SRC4192 and SRC4193 devices combine a wide input-to-output sampling ratio with outstanding dynamic range and ultra-low distortion. Input and output serial ports support standard audio formats, as well as a Time Division Multiplexed (TDM) mode. Flexible audio interfaces allow the SRC4192 and SRC4193 devices to connect to a wide range of audio data converters, digital audio receivers and transmitters, and digital signal processors.

The SRC4192 device is a standalone, pin-programmed device, with control pins for mode, data format, mute, bypass, and low group-delay functions. The SRC4193 device is a software-controlled device featuring a serial peripheral interface (SPI) port, which is utilized to program all functions through the internal control registers.

The SRC4192 and SRC4193 devices can operate from a single 3.3-V power supply. A separate digital I/O supply (VIO) operates over the 1.65-V to 3.6-V supply range, allowing greater flexibility when interfacing to current and future generation signal processors and logic devices. Both devices are available in a 28-pin SSOP package.

Key Features

Automatic Sensing of the Input-to-Output Sampling Ratio
Wide Input-to-Output Sampling Range: 16:1 to 1:16
Supports Input and Output Sampling Rates Up to 212 kHz
Dynamic Range: 144 dB (-60-dbFS Input, BW = 20 Hz to fS/2, A-Weighted)
THD+N: $-140 \text{ dB} (0 \text{-dbFS Input, BW} = 20 \text{ Hz to fS/2})$
Attenuates Sampling and Reference Clock Jitter
High-Performance, Linear-Phase Digital Filtering with Stop Band Attenuation Greater than 140 dB
Flexible Audio Serial Ports: Master or Slave-Mode Operation
Supports I2S, Left-Justified, Right-Justified, and TDM Data Formats
Supports 16, 18, 20, or 24-Bit Audio Data
TDM Mode Allows Daisy-Chaining of up to Eight Devices
Supports 24-, 20-, 18-, or 16-Bit Input and Output Data: All Output Data is Dithered from the Internal 28-Bit Data Path
Low Group Delay Option for Interpolation Filter
Direct Downsampling Option for Decimation Filter (SRC4193 Only)
SPI Port Provides Access to Internal Control Registers (SRC4193 Only)
Soft Mute Function
Bypass Mode
Programmable Digital Output Attenuation (SRC4193 Only); 256 Steps: 0 dB to -127.5 dB, 0.5-dB/step
Power Down Mode
Operates From a Single 3.3-V Power Supply
Small 28-Pin SSOP Package
Pin Compatible with the AD1896 (SRC4192 Only)

Recommended For You

SRC4382IPFBR	SRC4194IPAG	SRC4382IPFB
Texas Instruments, Inc	Texas Instruments, Inc	Texas Instruments, Inc
QFP	TQFP-64	TQFP-48
SRC4190IDBR	SRC4392IPFB	SRC4392IPFBR
Texas Instruments, Inc	Texas Instruments, Inc	Texas Instruments, Inc
SSOP28	48-TQFP	TQFP-48

SRC4190IDBRQ1

Texas Instruments, Inc

SSOP28

SRC4192IDBR

Texas Instruments, Inc

SSOP28

SRC4184IPAG

Texas Instruments, Inc

QFP

SRC4184IPAGT

Texas Instruments, Inc

64-TQFP

SRC4184IPAGR

Texas Instruments, Inc TQFP-64

SRC4194IPAGT

Texas Instruments, Inc 64-TQFP

SRC4392IPFBRG4

Texas Instruments, Inc TQFP48

SRC4194IPAGR

Texas Instruments, Inc TQFP-64

SRC4192IDBG4

Texas Instruments, Inc 28-SSOP