



Sample Rate Converter 216ksps 24bit 48-Pin TQFP Tray

Manufacturer: <u>Texas Instruments, Inc</u>

Package/Case: TQFP-48

Product Type: Discrete Semiconductor Modules

RoHS: RoHS Compliant/Lead free

Lifecycle: Active



Images are for reference only

Inquiry

General Description

Key Features

Two-Channel Asynchronous Sample Rate Converter (SRC) Dynamic Range with -60dB Input (A-Weighted): 128dB typical

Total Harmonic Distortion and Noise (THD+N) with Full-Scale Input: -125dB typical

Supports Audio Input and Output Data Word Lengths Up to 24 Bits

Supports Input and Output Sampling Frequencies Up to 216kHz

Automatic Detection of the Input-to-Output Sampling Ratio

Wide Input-to-Output Conversion Range: 16:1 to 1:16 Continuous

Excellent Jitter Attenuation Characteristics

Digital De-Emphasis Filtering for 32kHz, 44.1kHz, and 48kHz Input Sampling Rates

Digital Output Attenuation and Mute Functions

Output Word Length Reduction

Status Registers and Interrupt Generation for Sampling Ratio and Ready Flags

Digital Audio Interface Transmitter (DIT) Supports Sampling Rates Up to 216kHz

Includes Differential Line Driver and CMOS Buffered Outputs

Block-Sized Data Buffers for Both Channel Status and User Data

Status Registers and Interrupt Generation for Flag and Error Conditions

User-Selectable Serial Host Interface: SPI or Philips I2C? Provides Access to On-Chip Registers and Data Buffers

Digital Audio Interface Receiver (DIR)

PLL Lock Range Includes Sampling Rates from 20kHz to 216kHz

Includes Four Differential Input Line Receivers and an Input Multiplexer

Bypass Multiplexer Routes Line Receiver Outputs to Line Driver and Buffer Outputs

Block-Sized Data Buffers for Both Channel Status and User Data

Automatic Detection of Non-PCM Audio Streams (DTS CD/LD and IEC 61937 formats)

Audio CD Q-Channel Sub-Code Decoding and Data Buffer

Status Registers and Interrupt Generation for Flag and Error Conditions

Low Jitter Recovered Clock Output

Two Audio Serial Ports (Ports A and B)

Synchronous Serial Interface to External Signal Processors, Data Converters, and Logic

Slave or Master Mode Operation with Sampling Rates up to 216kHz

Supports Left-Justified, Right-Justified, and Philips I2S? Data Formats

Supports Audio Data Word Lengths Up to 24 Bits

Four General-Purpose Digital Outputs

Multifunction Programmable Via Control Registers

Extensive Power-Down Support

Functional Blocks May Be Disabled Individually When Not In Use

Operates From +1.8V Core and +3.3VI/O Power Supplies

Small TQFP-48 Package, Compatible with the SRC4392 and DIX4192

APPLICATIONS

DIGITAL AUDIO RECORDERS AND MIXING DESKS

DIGITAL AUDIO INTERFACES FOR COMPUTERS

DIGITAL AUDIO ROUTERS AND DISTRIBUTION SYSTEMS

BROADCAST STUDIO EQUIPMENT

DVD/CD RECORDERS

SURROUND SOUND DECODERS AND A/V RECEIVERS

CAR AUDIO SYSTEMS

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Recommended For You

SRC4382IPFBR SRC4194IPAG SRC4192IDB

Texas Instruments, Inc Texas Instruments, Inc Texas Instruments, Inc

QFP TQFP-64 SSOP28

AVAQ SEMICONDUCTOR CO., LIMITED

SRC4190IDBR

Texas Instruments, Inc

SSOP28

SRC4190IDBRQ1

Texas Instruments, Inc

SSOP28

SRC4192IDBR

Texas Instruments, Inc

SSOP28

SRC4184IPAG

Texas Instruments, Inc

QFP

SRC4392IPFB

Texas Instruments, Inc

48-TQFP

SRC4184IPAGT

Texas Instruments, Inc

64-TQFP

SRC4184IPAGR

Texas Instruments, Inc

TQFP-64

SRC4194IPAGT

Texas Instruments, Inc

64-TQFP

SRC4392IPFBR

Texas Instruments, Inc

TQFP-48

SRC4392IPFBRG4

Texas Instruments, Inc

TQFP48

SRC4194IPAGR

Texas Instruments, Inc

TQFP-64

SRC4192IDBG4

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