

MC44C401

MTS STEREO ENCODER

## Freescale Semiconductor, Inc.



digital dna

## OVERVIEW

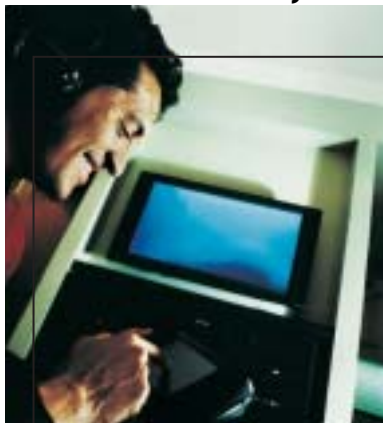
The MC44C401 Multi-Channel Television Sound (MTS) Stereo Encoder is the industry's first single-chip, CMOS implementation of a Broadcast Television Systems Committee (BTSC)-compatible stereo encoder.

The MC44C401 MTS Stereo Encoder is designed for use in audio/video redistribution systems, set-top boxes, VCRs, DVD players/recorders, game stations and other applications that are required to output high-quality stereo sound through a single RF coaxial cable.

The digital audio processing used in the MC44C401 is engineered to preserve the full fidelity of surround sound and other audio coding schemes. The MC44C401 is designed to process right and left analog audio signals and baseband composite video to generate a stereophonic composite signal in accordance with BTSC system standards. It is designed to output this signal to a Motorola RF modulator that in turn will produce a stereo-encoded RF channel for use with any BTSC stereo television receiver.



For More Information On This Product,  
Go to: [www.freescale.com](http://www.freescale.com)



## FEATURES

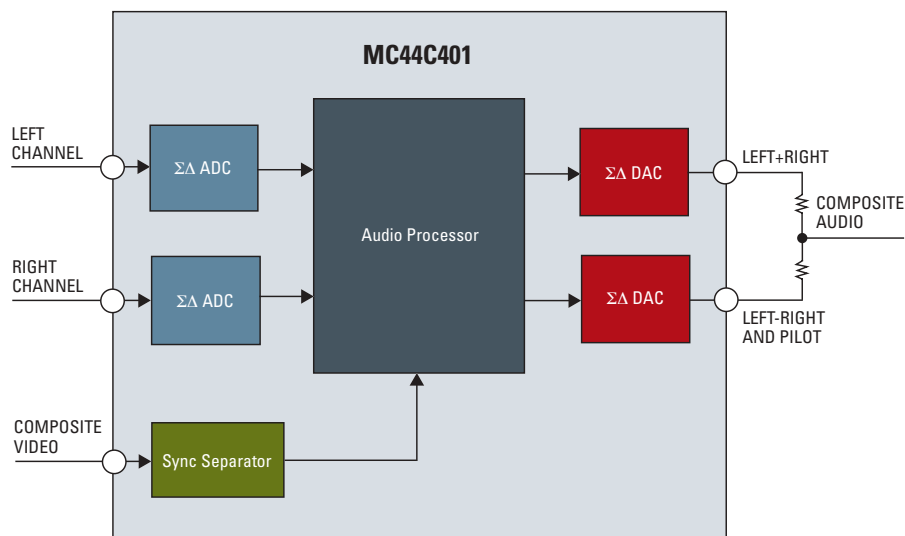
- Integrated A/D input and D/A output circuitry
- CEX™ digital audio processing encodes and transports stereo signals
- Surround sound and Macrovision™ compatible
- Extended low-frequency response  
(The MC44C401 frequency response extends below 25 Hz)
- Simple passive interface to Motorola's MC44BC374 (UHF/VHF) and MC44BC375 (VHF) modulators

## BENEFITS

- Preservation of original surround sound fidelity
- System performance not impacted by copy protection technologies
- Enables lower system component count, smaller board size and significantly lowers overall system cost
- Eliminates manual alignment of filters, phase controls and composite signal amplitude

## APPLICATIONS

- Audio/video redistribution systems
- Set-top boxes
- VCRs
- DVD players/recorders
- Game stations



## LEARN MORE

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For all other inquiries, please contact the Motorola Customer Response Center at (800) 521-6274, or click on Contact Us at [www.motorola.com/semiconductors](http://www.motorola.com/semiconductors).



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