

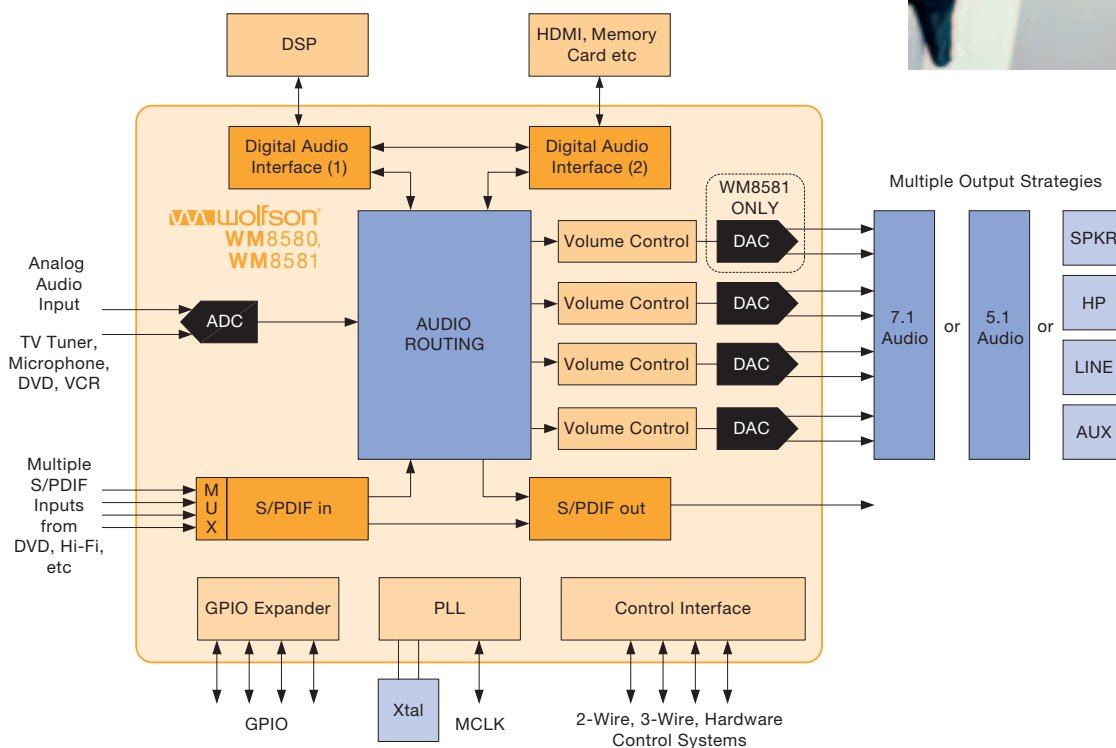
## Multi-Channel Audio CODECs with S/PDIF Transceiver

A comprehensive solution for LCD-TV and AV Receivers, the WM8580 and WM8581 Multi-Channel Audio Signal Processors radically simplify audio path design.

Combining the features of up to 6 independent devices in one package, the WM8580 and WM8581 provide a complete audio signal processing solution. The CODECs use Wolfson's renowned audio converter architecture and, along with world-class S/PDIF jitter rejection performance, are all packaged in a compact 48-lead TQFP.

# WM8580

# WM8581



### PRODUCT BENEFITS

- Complete high performance Audio Signal Processor on a single chip
- Radically simplifies LCD-TV and AV receiver audio path design
- World-class S/PDIF jitter rejection enables accurate lock onto, and recovery of, poor quality input signals
- ADC and DACs can run at independent sample rates
- Unique second audio interface allows users to input independent digital sources for features such as *Picture in Picture* and HDMI
- Capable of processing and converting a range of audio formats from a variety of sources to outputs

### APPLICATIONS

- Flat Panel TV
- AV Receivers
- Surround Sound Processors
- DVD Recorders
- Hi-Fi systems
- PC Soundcards

## Multi-Channel Audio CODECs with S/PDIF Transceiver

# WM8580

# WM8581

### PRODUCT FEATURES

- 103dB SNR ('A' weighted @ 48kHz) DAC
- 100dB SNR ('A' weighted @ 48kHz) ADC
- DAC sampling frequency: 8kHz – 192kHz
- ADC sampling frequency: 8kHz – 192kHz
- Two independent master or slave audio data interfaces
- Both interfaces support I<sup>2</sup>S, left, right justified or DSP data formats
- Independent ADC and DAC sample rates and formats
- 16/20/24/32 bit word lengths
- S/PDIF transceiver with internal clock recovery
- Two digital audio interfaces
- Digital volume controls
- 2 and 3-wire serial control interface with readback, or hardware control interface

### PRODUCT DETAILS

	WM8580	WM8581
DAC Channels	6	8
ADC Channels	2	2
S/PDIF Inputs	4	4
S/PDIF Outputs	1	1
Hardware Control	YES	YES
Software Control	YES	YES
Package	48-TQFP	48-TQFP

### AUDIO ROUTING

Powerful routing inside the WM8580 and WM8581 allows audio data in multiple formats to be seamlessly routed to multiple destinations – greatly reducing design complexity and PCB space.

### AUDIO CODEC

The core structure is a high quality multi-channel audio CODEC – perfect for 5.1 or 7.1 audio and providing solutions for line out, HP and AUX on modern DTV and PC sound cards.

### S/PDIF TRANSCEIVER

Each device integrates a 4:1 S/PDIF transceiver based on Wolfson's proprietary PLL technology ensuring industry leading S/PDIF performance.

### DUAL AUDIO INTERFACE

Wolfson's multiple audio interfaces allow seamless connection to multiple DSPs, memory cards and Nicam Decoders.

### CONTACT DETAILS

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