

DESCRIPTION

The PT12919 is a 3 band audio signal processor specially designed for car radio applications. The device includes a high performance audio processor with fully integrated audio filters. The digital control allows programming in a wide range of filter characteristics.

APPLICATION

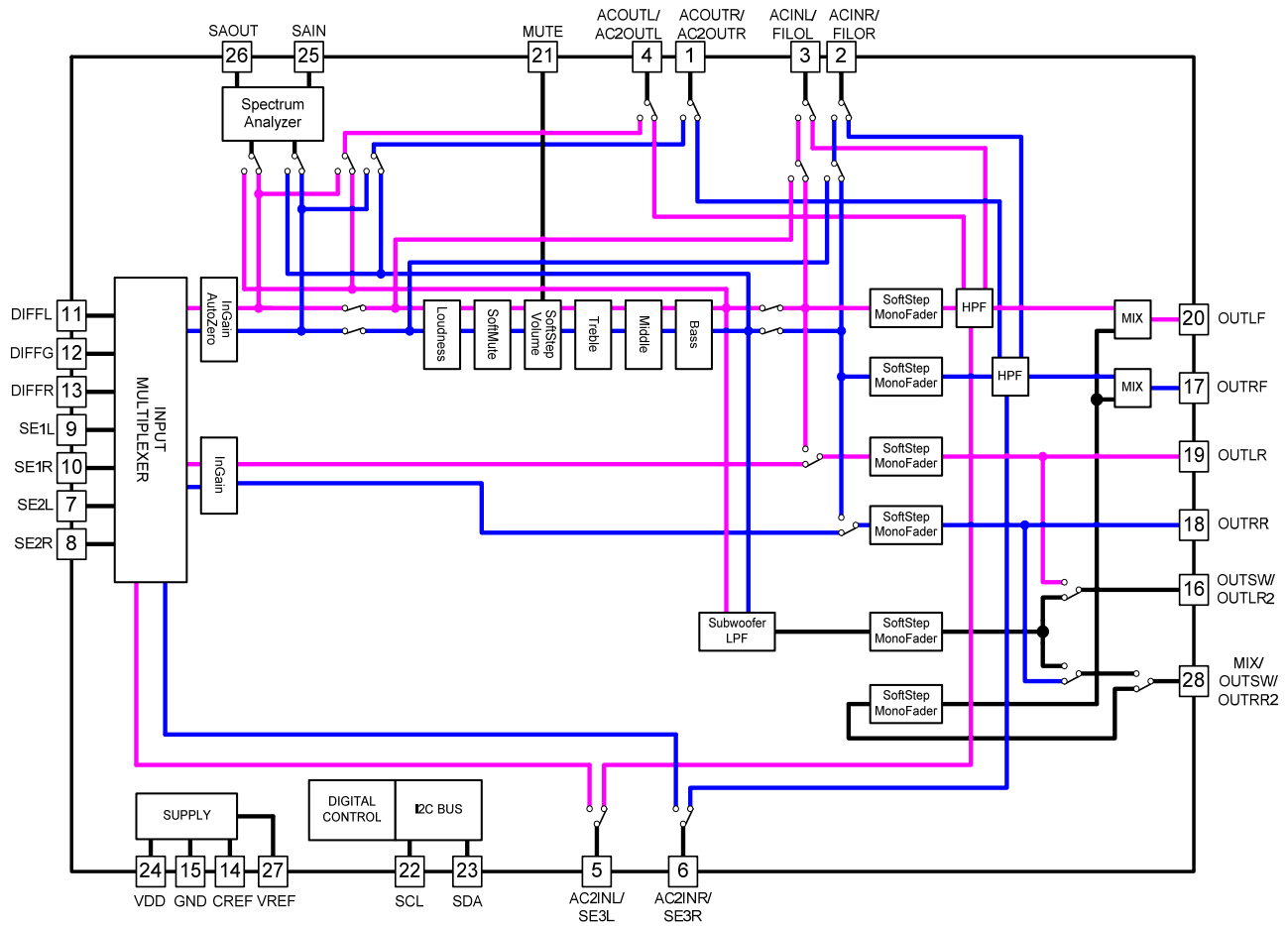
- Car Audio System

FEATURES

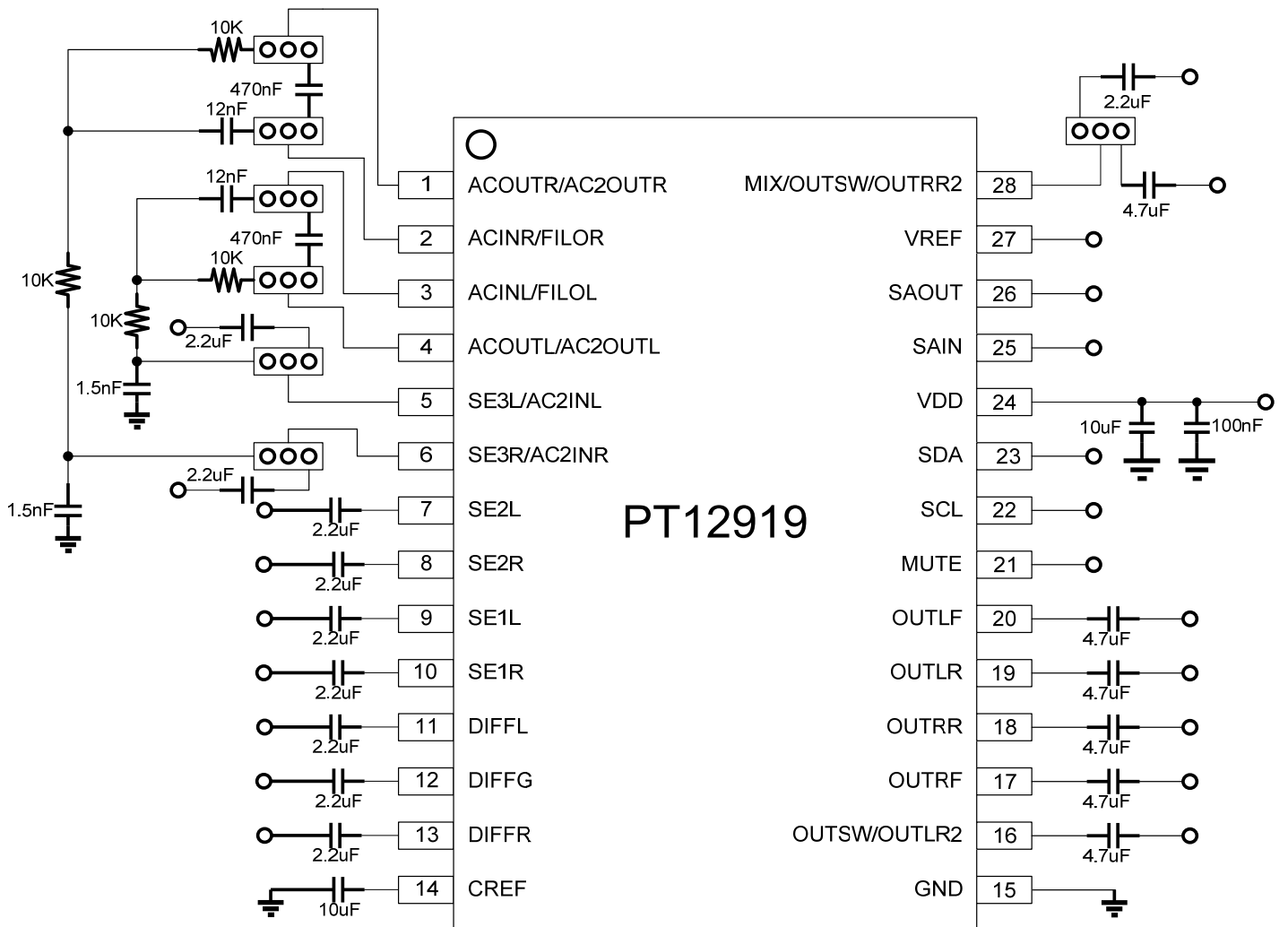
- 4 stereo inputs (including 1 quasi-differential input) with selectable input gain
- Input Gain Control: 0 to +15dB, 1dB/step

- Car Audio System
- 2 channels electronic volume with soft step function: +15 to -79dB with 1dB/step
- Direct mute and soft mute
- 1 subwoofer output with soft step: +15 to -79dB with 1dB/step
- Adjustable crossover frequency for subwoofer
- Tone control (Bass \ Middle and Treble): -15 to +15dB, 1dB/step
- Loudness: 0 to -15dB, 1dB/step
- 4 independent speaker outputs with soft step volume: +15 to -79dB with 1dB/step & independent programmable mix input with 50% mixing ratio for front speakers
- 7 band spectrum analyzer
- Controlled by I²C BUS Interface
- Low distortion and low noise
- 28-pin SOP package

BLOCK DIAGRAM



APPLICATION CIRCUIT

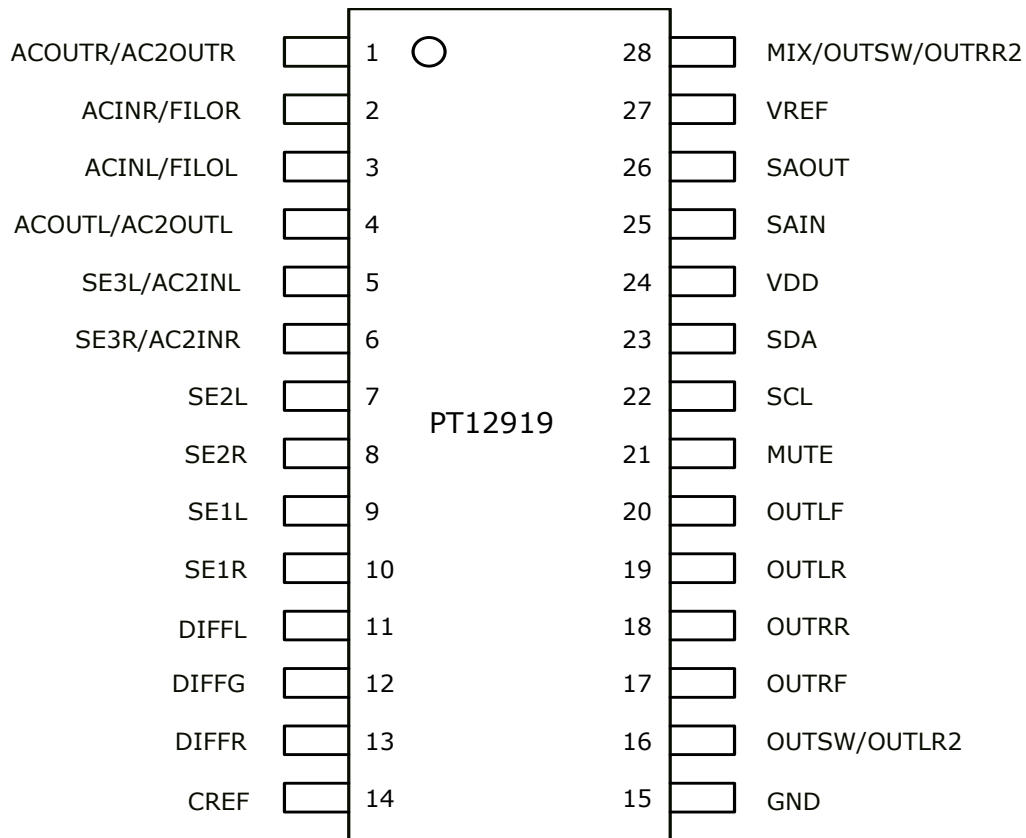




ORDER INFORMATION

Part Number	Package Type	Top Code
PT12919-S	28 Pins, SOP, 300mil	PT12919-S

PIN CONFIGURATION





PIN DESCRIPTION

Pin Name	I/O	Description	Pin No.
ACOUTR/AC2OUTR	O	AC coupling right output/HPF filter AC2OUT right channel	1
ACINR/FILOR	I/O	AC coupling right input/HPF filter FILO right channel	2
ACINL/FIOL	I/O	AC coupling left input/HPF filter FILO left channel	3
ACOUTL/AC2OUTL	O	AC coupling left output/HPF filter AC2OUT left channel	4
SE3L/ACINL	I	Single-ended input 3 left channel/AC coupling left input	5
SE3R/ACINR	I	Single-ended input 3 right channel/AC coupling right input	6
SE2L	I	Single-ended input 2 left channel	7
SE2R	I	Single-ended input 2 right channel	8
SE1L	I	Single-ended input 1 left channel	9
SE1R	I	Single-ended input 1 right channel	10
DIFFL	I	Quasi-Differential stereo input left	11
DIFFG	I	Quasi-Differential stereo input common	12
DIFFR	I	Quasi-Differential stereo input right	13
CREF	O	Reference capacitor	14
GND	S	Ground	15
OUTSW/OUTLR2	O	Subwoofer output/2 nd rear left output	16
OUTRF	O	Front right output	17
OUTRR	O	Rear right output	18
OUTLR	O	Rear left output	19
OUTLF	O	Front left output	20
MUTE	I	External mute pin	21
SCL	I	I ² C bus clock	22
SDA	I/O	I ² C bus data	23
VDD	S	Supply	24
SAIN	I	Spectrum Analyzer clock input	25
SAOUT	O	Spectrum Analyzer output	26
VREF	O	Vref output	27
MIX/OUTSW/OUTRR2	I/O	Mix input/Additional subwoofer output/2 nd rear right output	28

IMPORTANT NOTICE

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PTC cannot assume responsibility for use of any circuitry other than circuitry entirely embodied in a PTC product. No circuit patent licenses are implied.

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