

DESCRIPTION

The PT12913 is a 2 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.

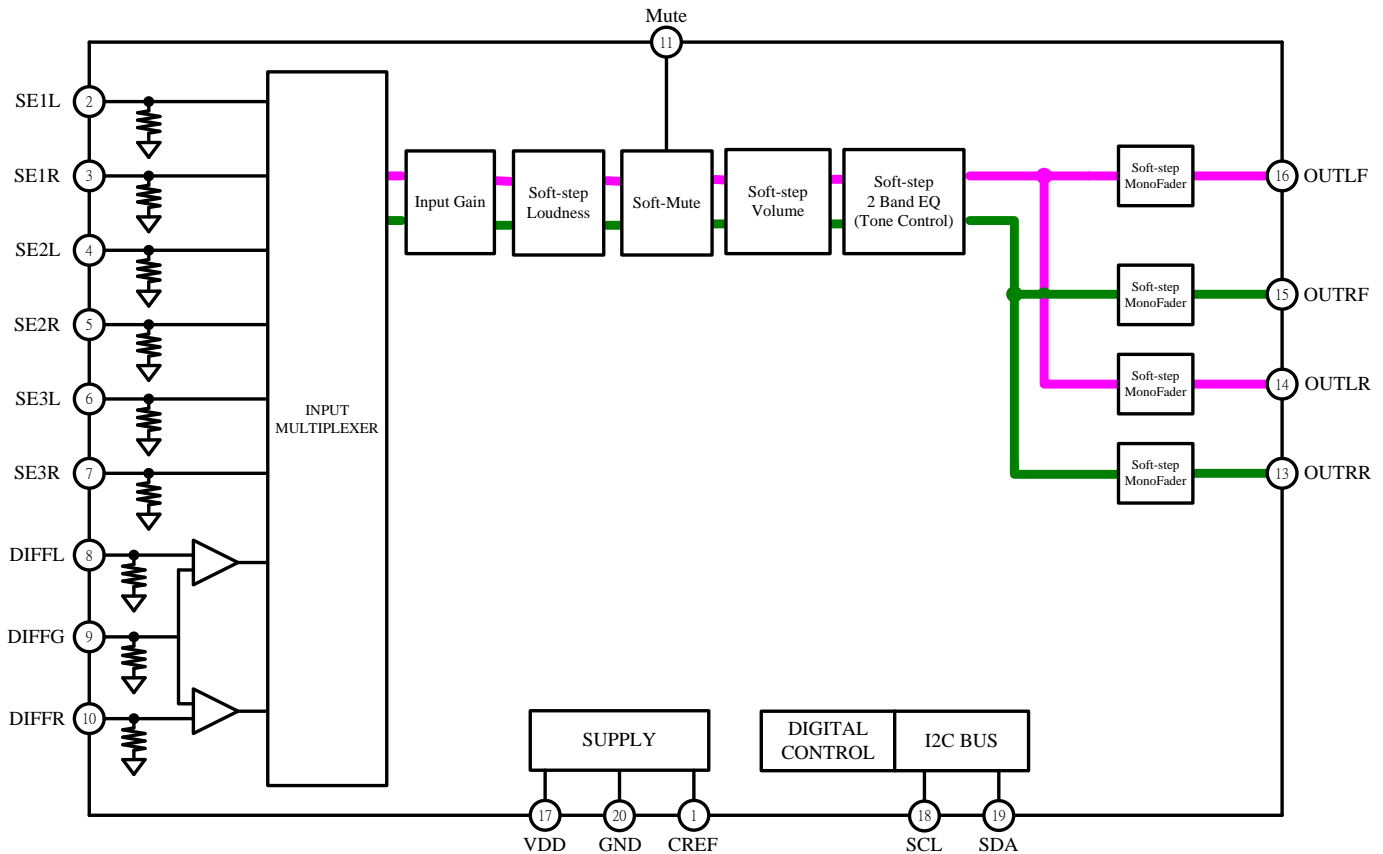
APPLICATION

- Car Audio System

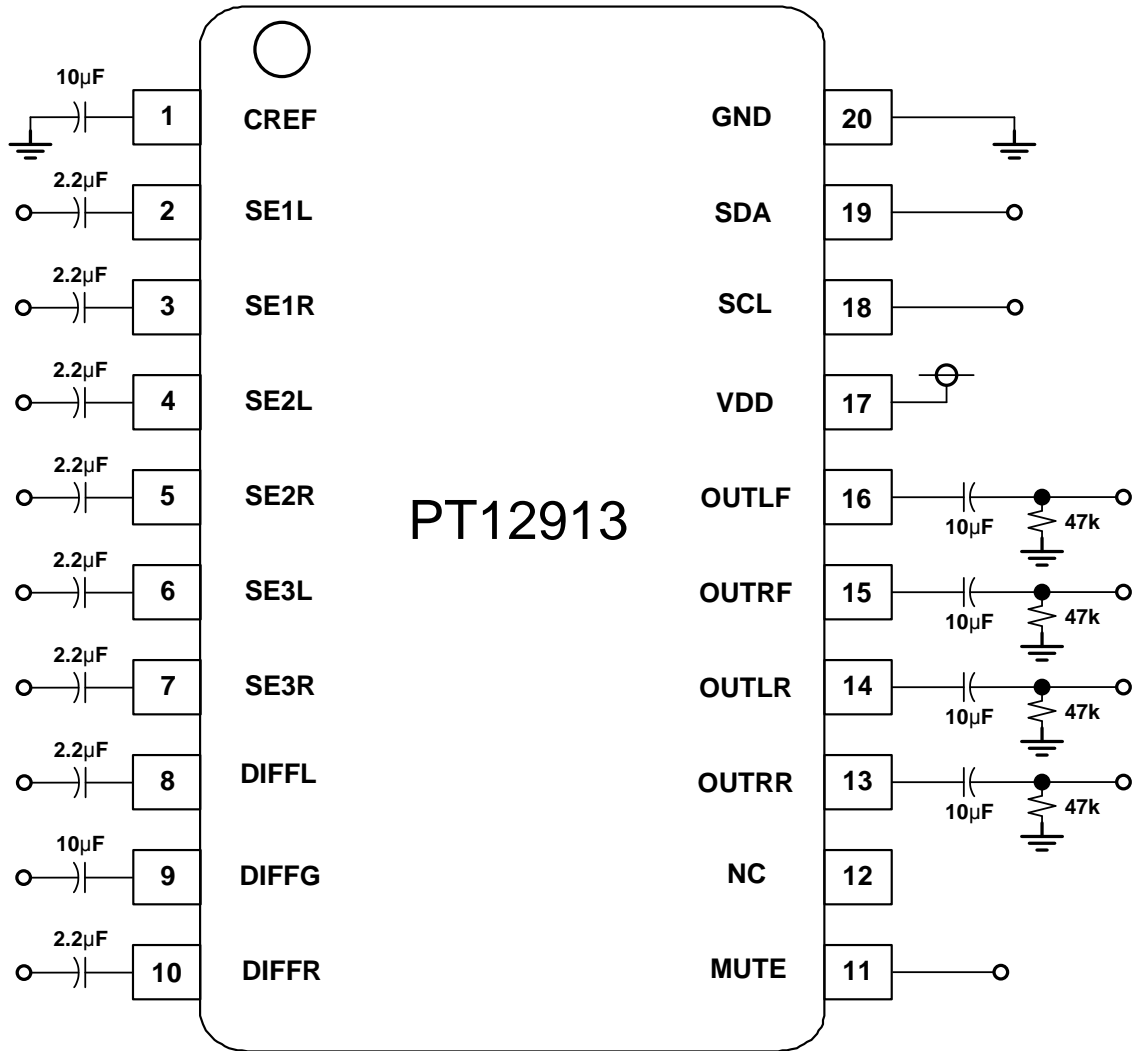
FEATURES

- 3 SE stereo inputs and 1 Quasi-Differential input with selectable input gain
- Input gain control: 0 to +20dB, 1dB/step
- 2 channels electronic volume with soft step function: +15 to -79dB with 1dB/step
- Soft mute
- Tone control (Bass and Treble): -20 to +20dB, 1dB/step with softstep
 - . Bass: $f_0=100\text{Hz}$, $Q=1.0$
 - . Treble: $f_0=10\text{KHz}$, $Q=1.25$
- Loudness: 0 to 20dB, 1dB/step with softstep function.
- 4 independent speaker outputs with softstep volume: +15 to -79dB with 1dB/step
- Controlled by I²C BUS interface
- Low distortion and low noise
- 20-pin SSOP package

BLOCK DIAGRAM



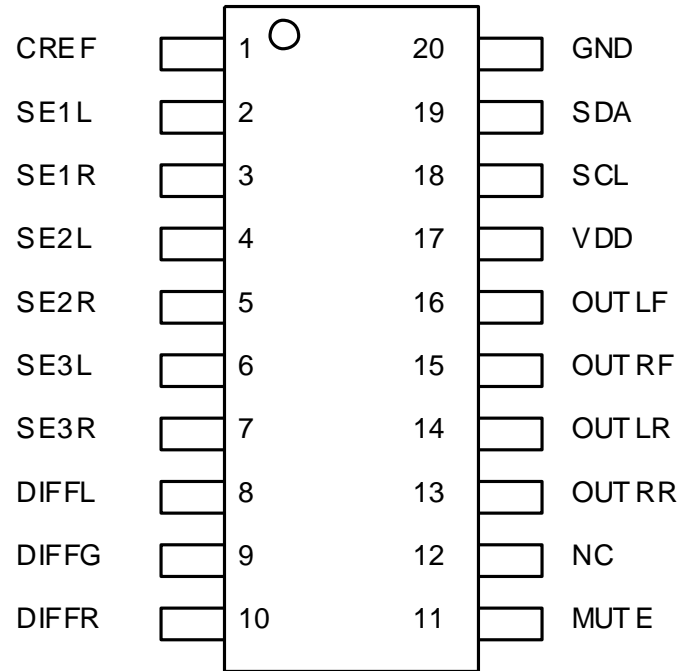
APPLICATION CIRCUIT



ORDER INFORMATION

Part Number	Package Type	Top Code
PT12913-X	20 Pins, SSOP, 150mil	PT12913-X

PIN CONFIGURATION



PT12913

PIN DESCRIPTION

Pin Name	I/O	Description	Pin No.
CREF	O	Reference capacitor	1
SE1L	I	Single-ended input 1 left channel	2
SE1R	I	Single-ended input 1 right channel	3
SE2L	I	Single-ended input 2 left channel	4
SE2R	I	Single-ended input 2 right channel	5
SE3L	I	Single-ended input 3 left channel	6
SE3R	I	Single-ended input 3 right channel	7
DIFFL	I	Quasi-differential input left channel	8
DIFFG	I	Quasi-differential input ground	9
DIFFR	I	Quasi-differential input right channel	10
Mute	I	Hardware/external Mute control pin	11
N.C	-	No connection	12
OUTRR	O	Rear right output	13
OUTLR	O	Rear left output	14
OUTRF	O	Front right output	15
OUTLF	O	Front left output	16
VCC	-	Power supply	17
SCL	I	I ² C bus clock	18
SDA	I/O	I ² C bus data	19
GND	-	Ground	20

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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