



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.

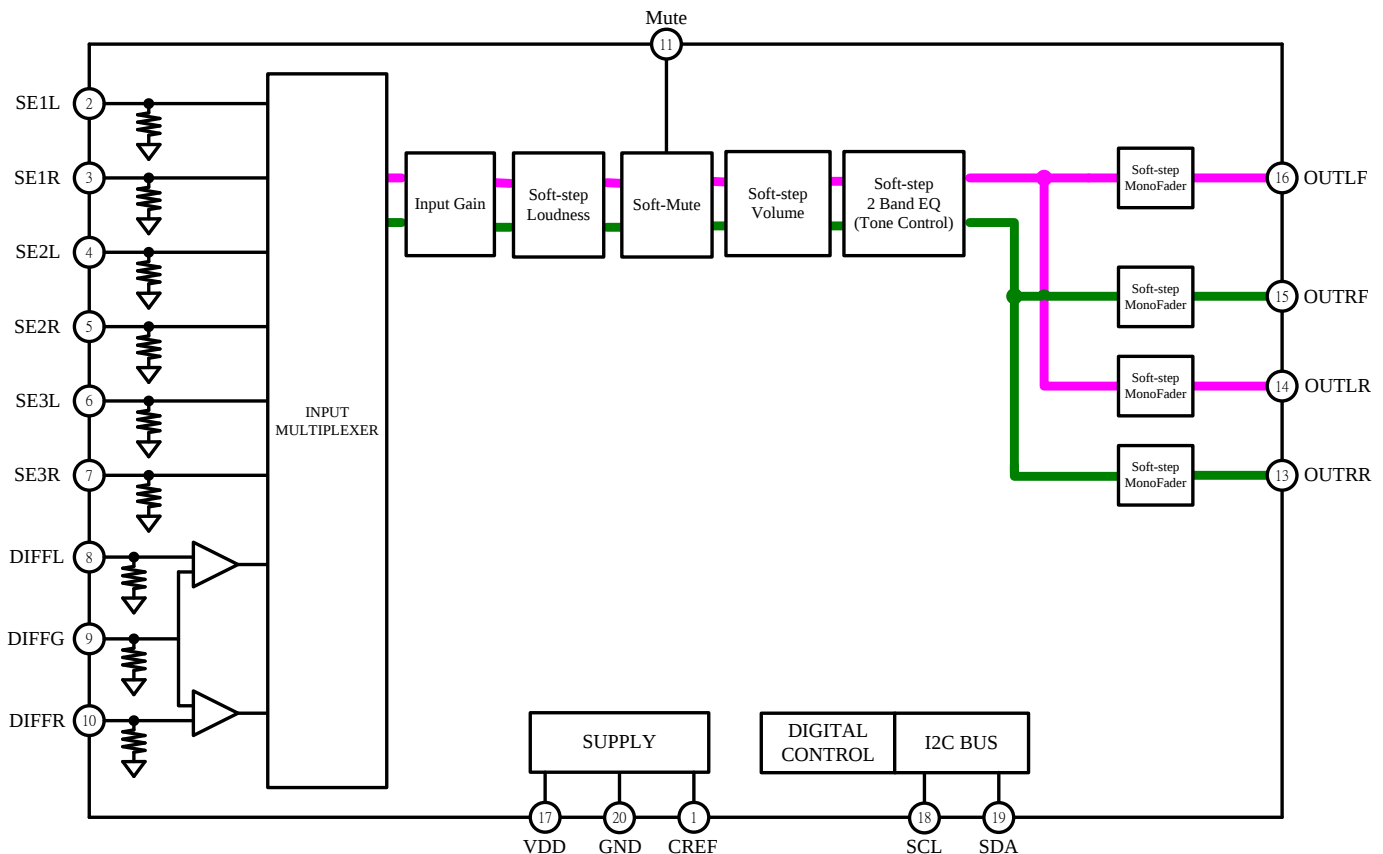
APPLICATION

- Car Audio System

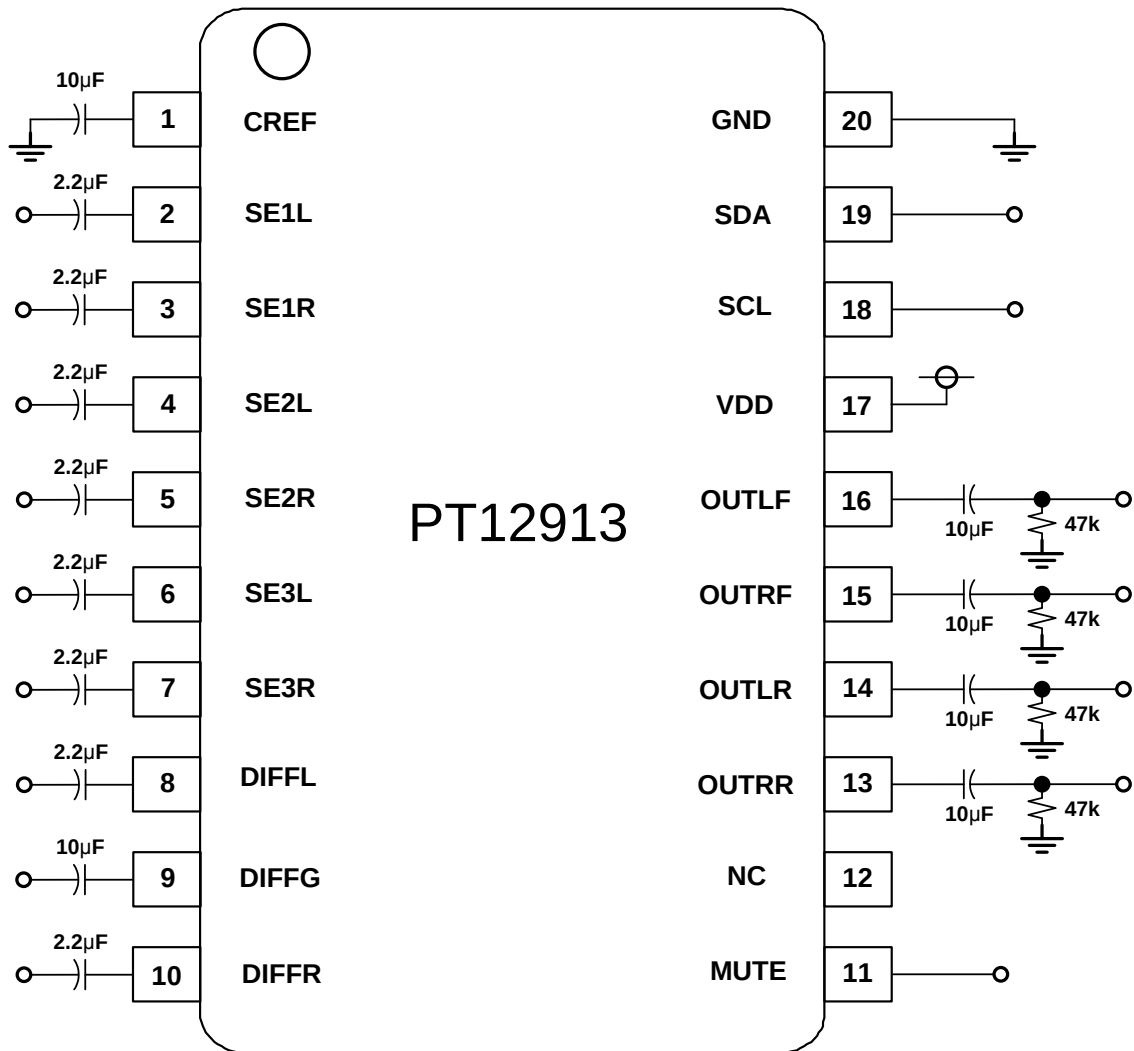
FEATURES

- 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

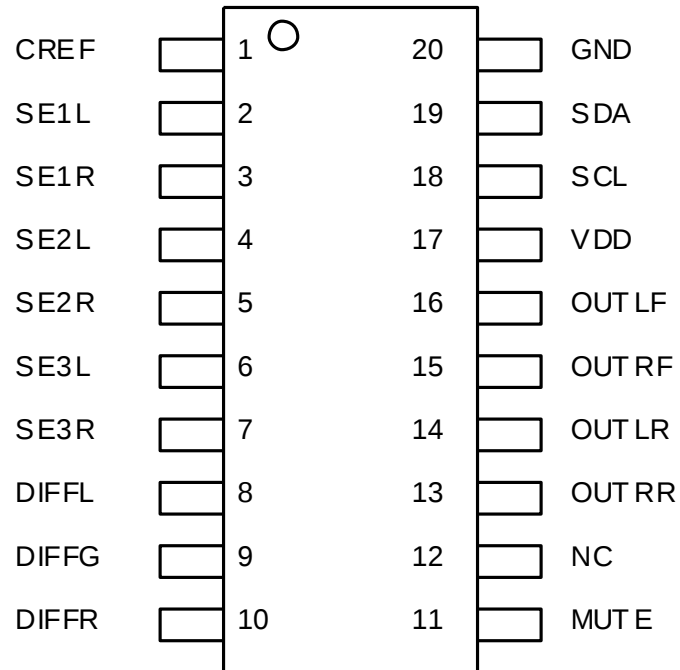


ORDER INFORMATION

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

Princeton Technology Corporation (PTC) reserves the right to make corrections, modifications, enhancements, improvements, and other changes to its products and to discontinue any product without notice at any time.

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

Princeton Technology Corp.
2F, 233-1, Baociao Road,
Sindian, Taipei 23145, Taiwan
Tel: 886-2-66296288
Fax: 886-2-29174598
<http://www.princeton.com.tw>