

## DESCRIPTION

The PT12311 is an audio processor designed for versatile application, includes 3 stereo input selector with adjustable gain, master volume control with low frequency loudness compensation, individual output attenuator and tone control. It is a good solution for the car audio signal processing.

Due to the high reliability requirement from the car audio business, the PT12311 improves both audio performances and input surge current capability, these causes the PT12311 is the best solution for the cost-effective car audio systems.

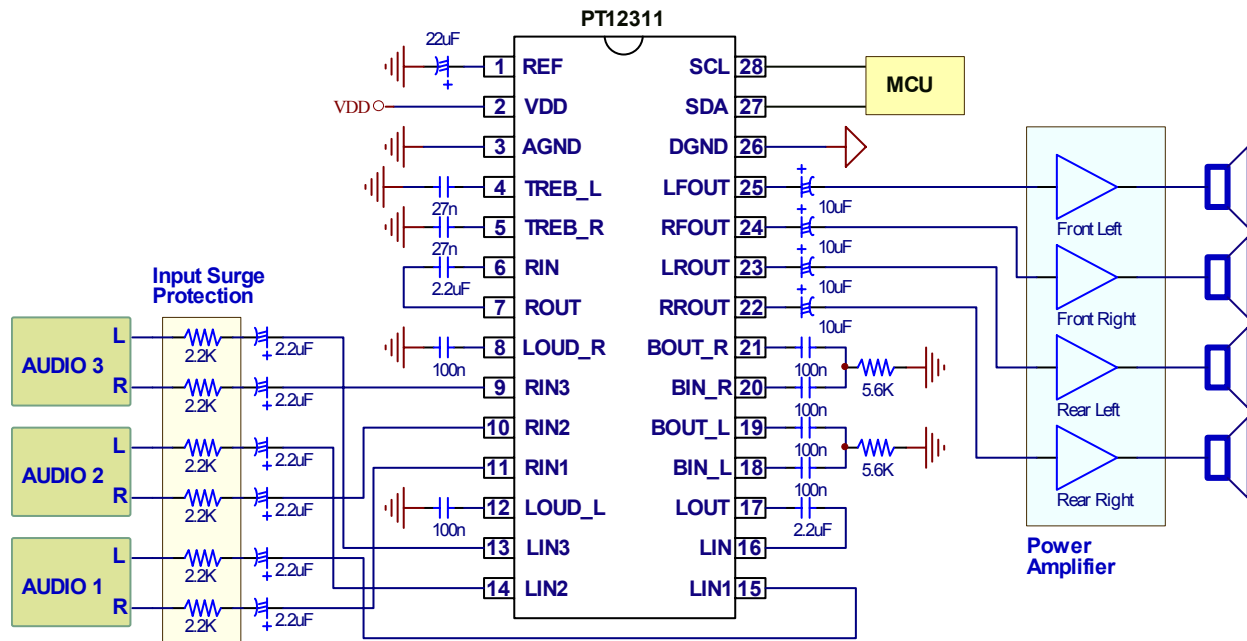
## FEATURES

- 3 stereo inputs with gain selection, range from 0dB to +11.25dB in 3.75dB/step
- Master volume from 0 dB to -78.75dB in 1.25dB/step
- Speaker attenuator for balance and fader, range from 0dB to -38.75dB in 1.25dB/step
- Each channel output can be muted individually.
- Low frequency loudness compensation
- Bass and Treble control, range from -14dB to +14dB in 2dB/step
- Wide operation range (VDD = 5V to 10V)
- Low harmonic distortion, low noise

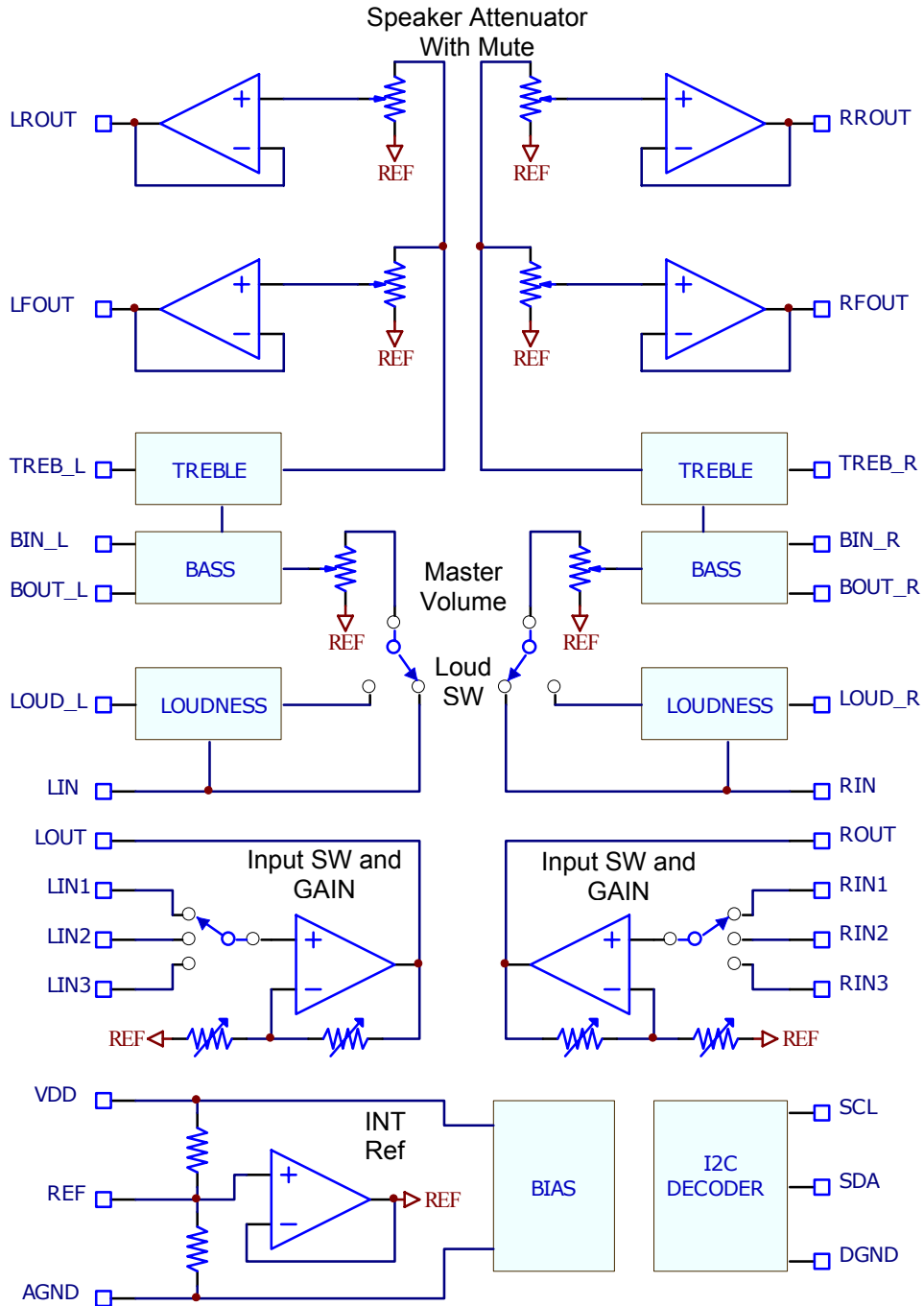
## APPLICATIONS

- Car Audio
- Home Audio System
- Powered Speaker System

## APPLICATION CIRCUIT



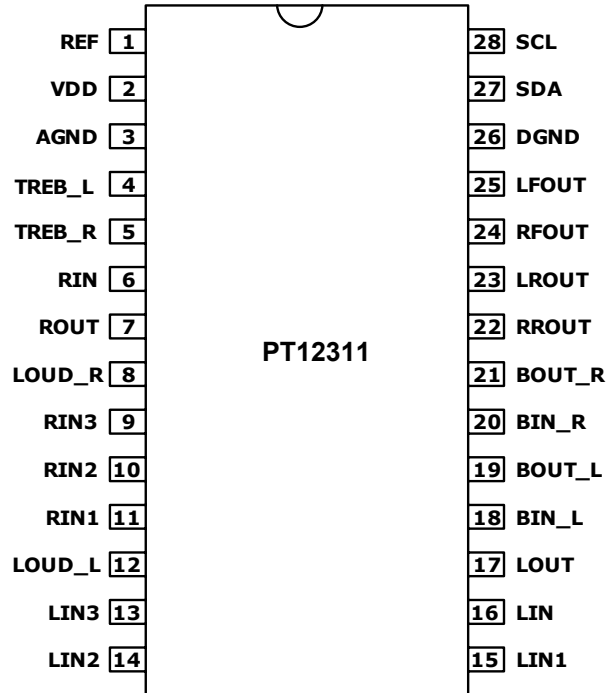
# BLOCK DIAGRAM



## ORDER INFORMATION

Valid Part Number	Package Type	Top Code
PT12311-S	28 Pins, SOP, 300mil	PT12311

## PIN CONFIGURATION





## **PIN DESCRIPTION**

<b>Pin Name</b>	<b>I/O</b>	<b>Description</b>	<b>Pin No.</b>
REF	-	Analog reference voltage (1/2VDD)	1
VDD	-	Supply input voltage	2
AGND	-	Analog ground	3
TREB_L	I	Left channel input for treble controller	4
TREB_R	I	Right channel input for treble controller	5
RIN	I	Right channel volume controller input	6
ROUT	O	Right channel Input selector output	7
LOUD_R	I	Right channel loudness input	8
RIN3	I	Right channel input 3	9
RIN2	I	Right channel input 2	10
RIN1	I	Right channel input 1	11
LOUD_L	I	Left channel loudness input	12
LIN3	I	Left channel input 3	13
LIN2	I	Left channel input 2	14
LIN1	I	Left channel input 1	15
LIN	I	Left channel volume controller input	16
LOUT	O	Left channel Input selector output	17
BIN_L	I	Left channel input for bass controller	18
BOUT_L	O	Left channel output for bass controller	19
BIN_R	I	Right channel input for bass controller	20
BOUT_R	O	Right channel output for bass controller	21
RROUT	O	Right rear speaker output	22
LROUT	O	Left rear speaker output	23
RFOUT	O	Right front speaker output	24
LFOUT	O	Left front speaker output	25
DGND	-	Digital ground	26
SDA	I	I <sup>2</sup> C data input	27
SCL	I	I <sup>2</sup> C clock input	28

## **IMPORTANT NOTICE**

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