DESCRIPTION

The PT2312E is an audio processor designed for versatile application, includes 4 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 audio business, the PT2312E improves both audio performances and input surge current capability, these causes the PT2312E is the best solution for the cost-effective audio systems.

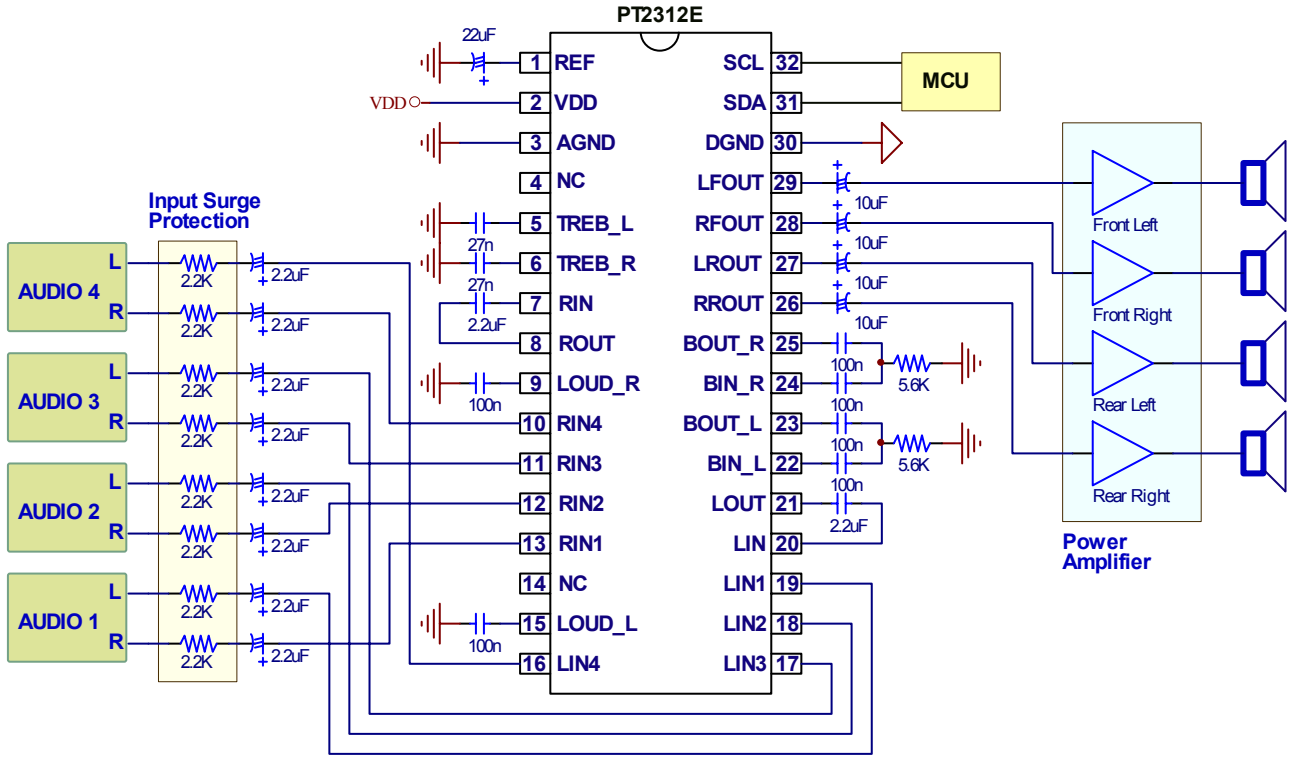
FEATURES

- 4 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 = 4V to 10V)
- Improved and replace PT2312 and PT2312A

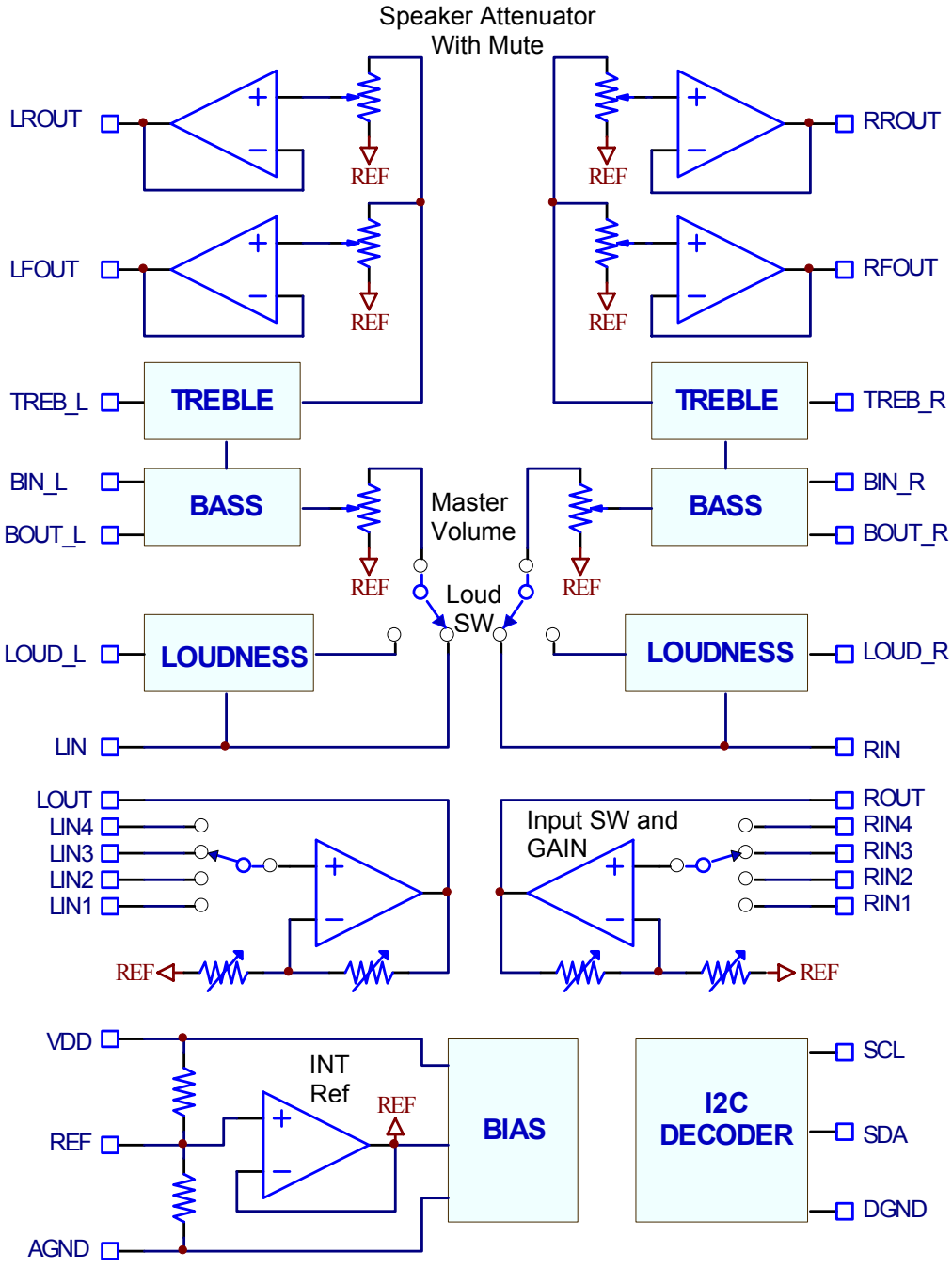
APPLICATIONS

- Car Audio
- Home Audio System
- Powered Speaker System

APPLICATION CIRCUIT



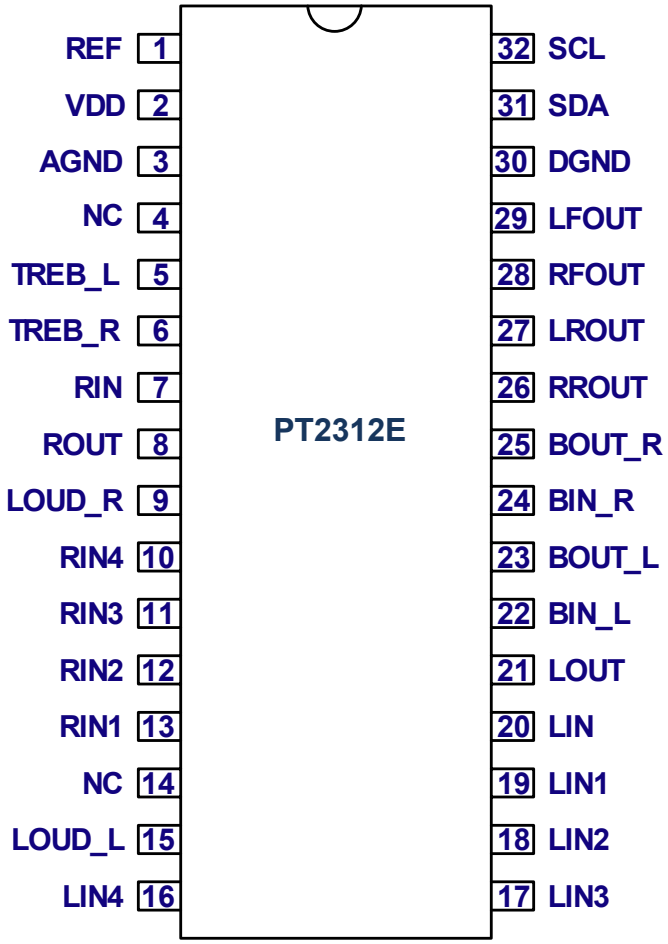
BLOCK DIAGRAM



ORDER INFORMATION

Valid Part Number	Package Type	Top Code
PT2312E-S	32 Pins, SOP, 300mil	PT2312E

PIN CONFIGURATION



PIN DESCRIPTION

Pin Name	I/O	Description	Pin No.
REF	-	Reference voltage	1
VDD	-	Supply input	2
AGND	-	Analog ground	3
NC	-	No Connect	4
TREB_L	I	L-CH treble input	5
TREB_R	I	R-CH treble input	6
RIN	I	R-CH volume input	7
ROUT	O	R-CH mux output	8
LOUD_R	I	R-CH loudness input	9
RIN4	I	R-CH input 4	10
RIN3	I	R-CH input 3	11
RIN2	I	R-CH input 2	12
RIN1	I	R-CH input 1	13
NC	-	No Connect	14
LOUD_L	I	L-CH loudness input	15
LIN4	I	L-CH input 4	16
LIN3	I	L-CH input 3	17
LIN2	I	L-CH input 2	18
LIN1	I	L-CH input 1	19
LIN	I	L-CH volume input	20
LOUT	O	L-CH mux output	21
BIN_L	I	L-CH bass input	22
BOUT_L	O	L-CH bass output	23
BIN_R	I	R-CH bass input	24
BOUT_R	O	R-CH bass output	25
RROUT	O	Right rear output	26
LROUT	O	Left rear output	27
RFOUT	O	Right front output	28
LFOUT	O	Left front output	29
DGND	-	Digital ground	30
SDA	I	I^2C data input	31
SCL	I	I^2C clock input	32

* Pin 4 in the PT2312 and PT2312A is for “CODE” function and always pull-high by external connection, the PT2312E modified to internally pull-high so pin 4 becomes to NC status.

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.

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