

DESCRIPTION

The PT2314E is an audio processor designed for versatile application, includes 4 stereo input selector with adjustable gain, master volume control with low frequency loudness compensation, speaker output attenuator and tone control. It is a good solution for the home audio signal processing.

Due to the high reliability requirement from the audio business, the PT2314E improves both audio performances and input surge current capability, these causes the PT2314E is the best solution for the cost-effective audio systems.

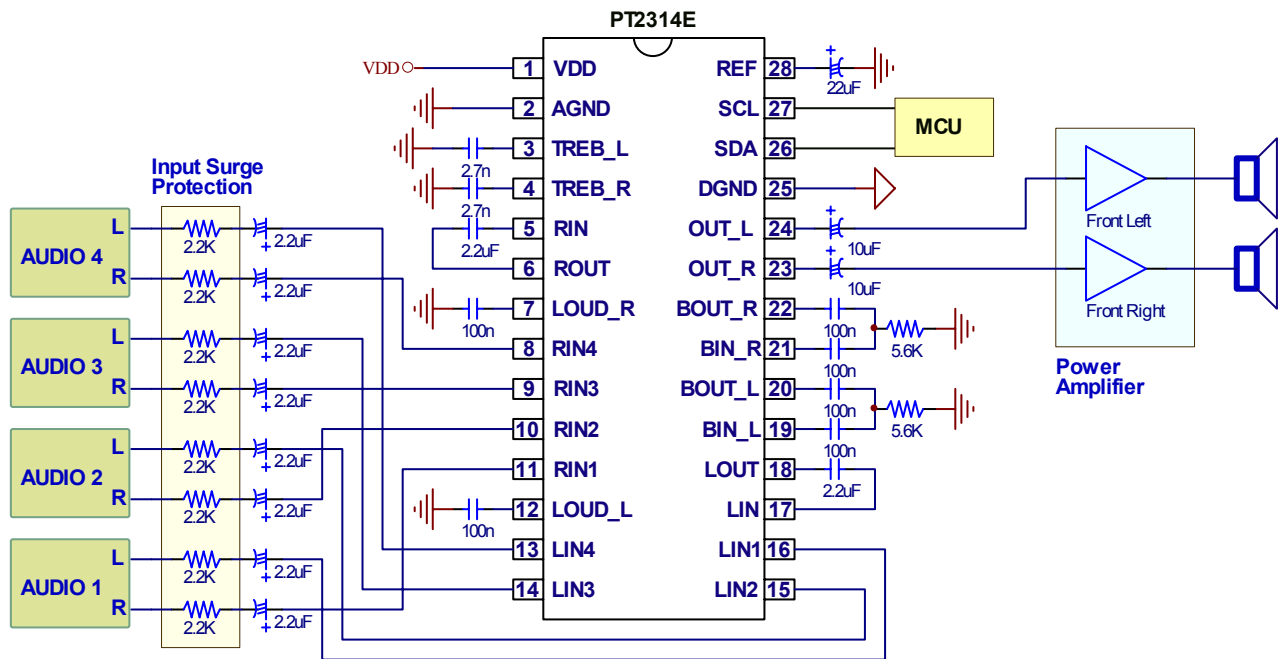
APPLICATIONS

- Flat Panel TV
- Home Audio System
- Powered Speaker System

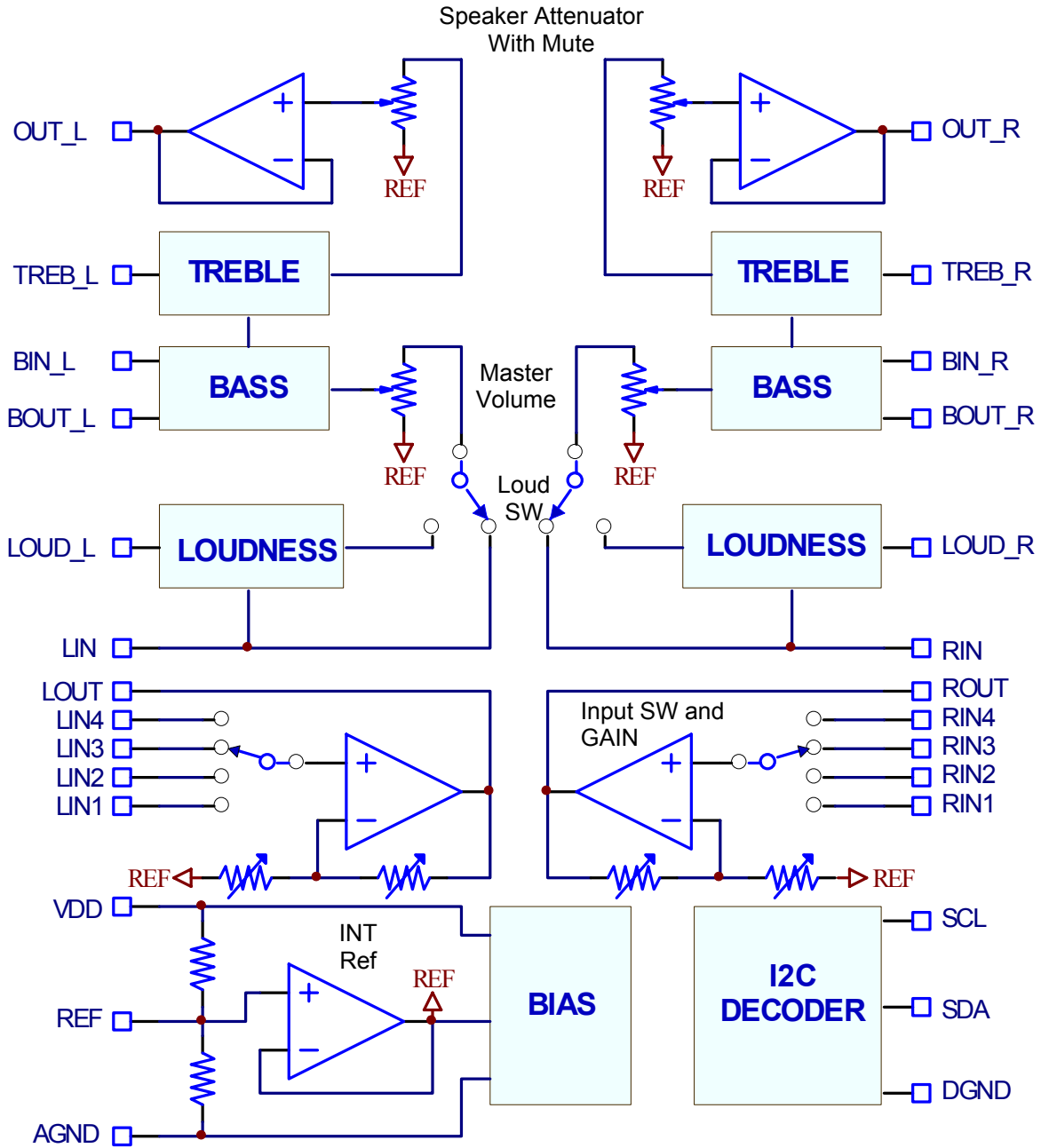
FEATURES

- 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, 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)
- Low harmonic distortion, low noise
- Improved and replace PT2314 and PT2314A

APPLICATION CIRCUIT



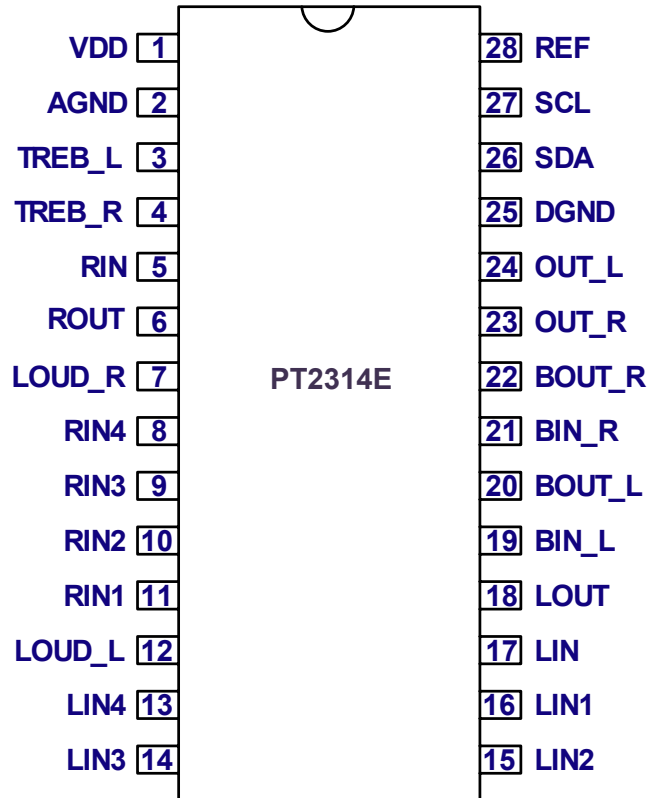
BLOCK DIAGRAM



ORDER INFORMATION

| Valid Part Number | Package Type | Top Code |
|-------------------|----------------------|----------|
| PT2314E-S | 28 Pins, SOP, 300mil | PT2314E |

PIN CONFIGURATION



PIN DESCRIPTION

| Pin Name | I/O | Description | Pin No. |
|----------|-----|---|---------|
| VDD | - | Supply input voltage | 1 |
| AGND | - | Analog ground | 2 |
| TREB_L | I | Left channel input for treble controller | 3 |
| TREB_R | I | Right channel input for treble controller | 4 |
| RIN | I | Right channel volume controller input | 5 |
| ROUT | O | Right channel Input selector output | 6 |
| LOUD_R | I | Right channel loudness input | 7 |
| RIN4 | I | Right channel input 4 | 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 |
| LIN4 | I | Left channel input 4 | 13 |
| LIN3 | I | Left channel input 3 | 14 |
| LIN2 | I | Left channel input 2 | 15 |
| LIN1 | I | Left channel input 1 | 16 |
| LIN | I | Left channel volume controller input | 17 |
| LOUT | O | Left channel Input selector output | 18 |
| BIN_L | I | Left channel input for bass controller | 19 |
| BOUT_L | O | Left channel output for bass controller | 20 |
| BIN_R | I | Right channel input for bass controller | 21 |
| BOUT_R | O | Right channel output for bass controller | 22 |
| OUT_R | O | Right channel output | 23 |
| OUT_L | O | Left channel output | 24 |
| DGND | - | Digital ground | 25 |
| SDA | I | I ² C data input | 26 |
| SCL | I | I ² C clock input | 27 |
| REF | - | Analog reference voltage (1/2VDD) | 28 |

IMPORTANT NOTICE

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