

## DESCRIPTION

The PT2348 is a 4.1CH audio processor designed for Car Audio purpose. Using I<sup>2</sup>C interface controls all of the functions. Like most of audio processors, it equips up to 4 stereo sources input with adjustable gain, master volume with adaptive loudness, treble and bass tone control.

In a car entertainment system where needs front and rear seat individual control, the PT2348 provides separate input source selection and output volume adjustment; a special design, mixing amp, is very easy to combine the navigation system or cellular phone's voice with the car audio system.

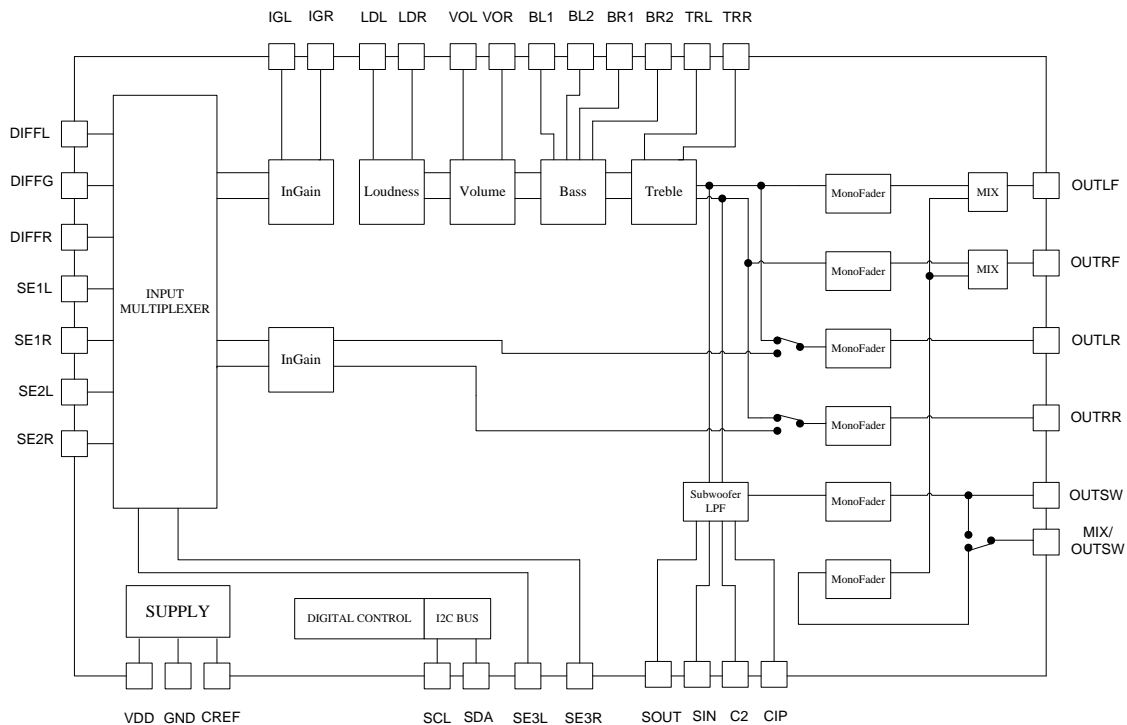
## APPLICATION

- Car Audio

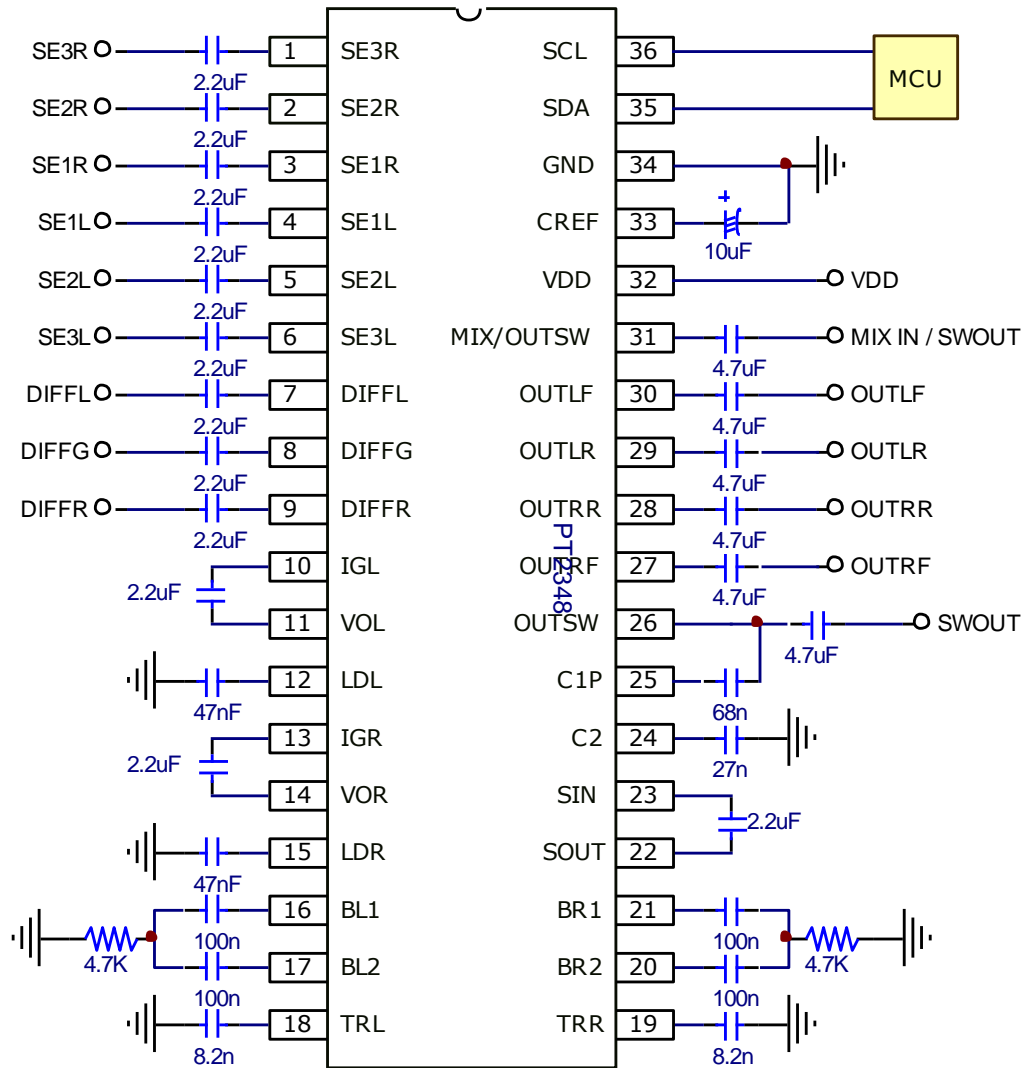
## FEATURES

- Controlled by I<sup>2</sup>C Interface
- 4 Stereo Inputs (including 1 quasi-differential input) with selectable input gain
- 2 Channels Electronic Volume : +15 to -79dB with 1dB/step
- 1 Subwoofer Output: +15 to -79dB with 1dB/step
- Adjustable crossover frequency for Subwoofer
- Tone Control (Bass and Treble): -15 to +15dB, 1dB/step
- Input Gain Control: 0 to +15dB, 1dB/step
- Loudness: 0 to -15dB, 1dB/step
- 4 independent speaker outputs: +15 to -79dB with 1dB/step & independent programmable mix input with 50% mixing ratio for front speakers
- Low Distortion and Low Noise
- 36-pin SSOP package

## BLOCK DIAGRAM



# APPLICATION CIRCUIT



## ORDER INFORMATION

Valid Part Number	Package Type	Top Code
PT2348-X	36 Pins, SSOP, 300mil	PT2348-X

## PIN CONFIGURATION



## PIN DESCRIPTION

Pin Name	I/O	Description	Pin No.
SE3R	I	Single-ended Right Channel Input 3	1
SE2R	I	Single-ended Right Channel Input 2	2
SE1R	I	Single-ended Right Channel Input 1	3
SE1L	I	Single-ended Left Channel Input 1	4
SE2L	I	Single-ended Left Channel Input 2	5
SE3L	I	Single-ended Left Channel Input 3	6
DIFFL	I	Pseudo Differential Stereo Input Left	7
DIFFG	I	Pseudo Differential Stereo Input Common	8
DIFFR	I	Pseudo Differential Stereo Input Right	9
IGL	O	Left Channel Input Selector Output	10
VOL	I	Left Channel Volume Input	11
LDL	I	Left Channel Loudness Input	12
IGR	O	Right Channel Input Selector Output	13
VOR	I	Right Channel Volume Input	14
LDR	I	Right Channel Loudness Input	15
BL1	I	Left Channel Bass Cap 1	16
BL2	O	Left Channel Bass Cap 2	17
TRL	I	Left Channel Treble Cap	18
TRR	I	Right Channel Treble Cap	19
BR2	O	Right Channel Bass Cap 2	20
BR1	I	Right Channel Bass Cap 1	21
SOUT	O	R + L Output (-6db Gain)	22
SIN	I	Subwoofer Filter Input	23
C2	I	Subwoofer Filter Cap 2	24
C1P	I	Subwoofer Filter Cap 1	25
OUTSW	O	Subwoofer Output	26
OUTRF	O	Right Front Output	27
OUTRR	O	Right Rear Output	28
OUTLR	O	Left Rear Output	29
OUTLF	O	Left Front Output	30
MIX/OUTSW	I/O	Mix input / Subwoofer output	31
VDD	-	Supply Voltage	32
CREF	I	Analog Reference Voltage (1/2 VDD)	33
GND	-	Ground	34
SDA	I	SDA INPUT	35
SCL	I	SCL INPUT	36

## 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 Dist., New Taipei City 23145, Taiwan  
Tel: 886-2-66296288  
Fax: 886-2-29174598  
<http://www.princeton.com.tw>