



DESCRIPTION

The PT12917 is a car audio processor with 6 input sources selector and 3-band equalizer, which includes a fully integrated high performance audio filters that are built into a single chip to provide audio system having the highest audio performance and reliability. Digital control allows programming in a wide range of filter characteristics.

APPLICATION

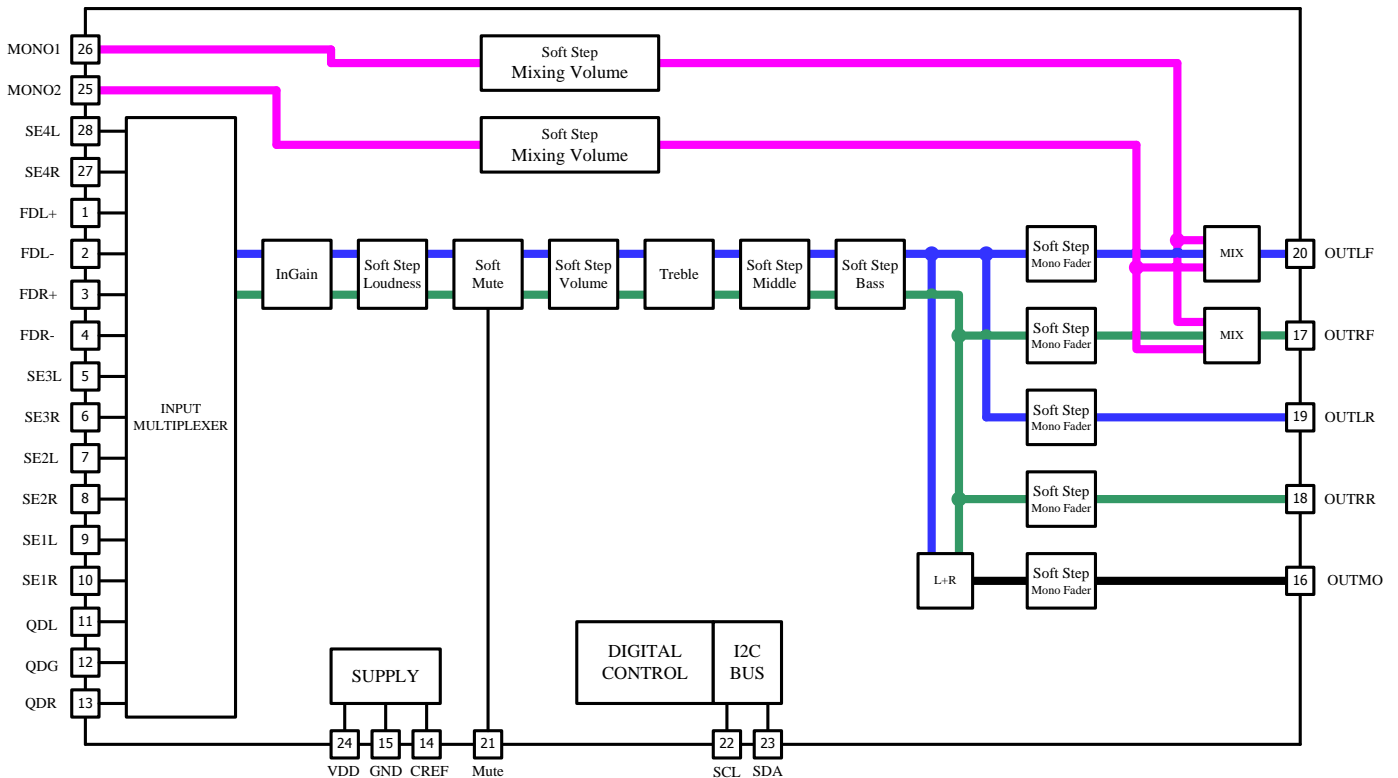
- Car audio system

FEATURES

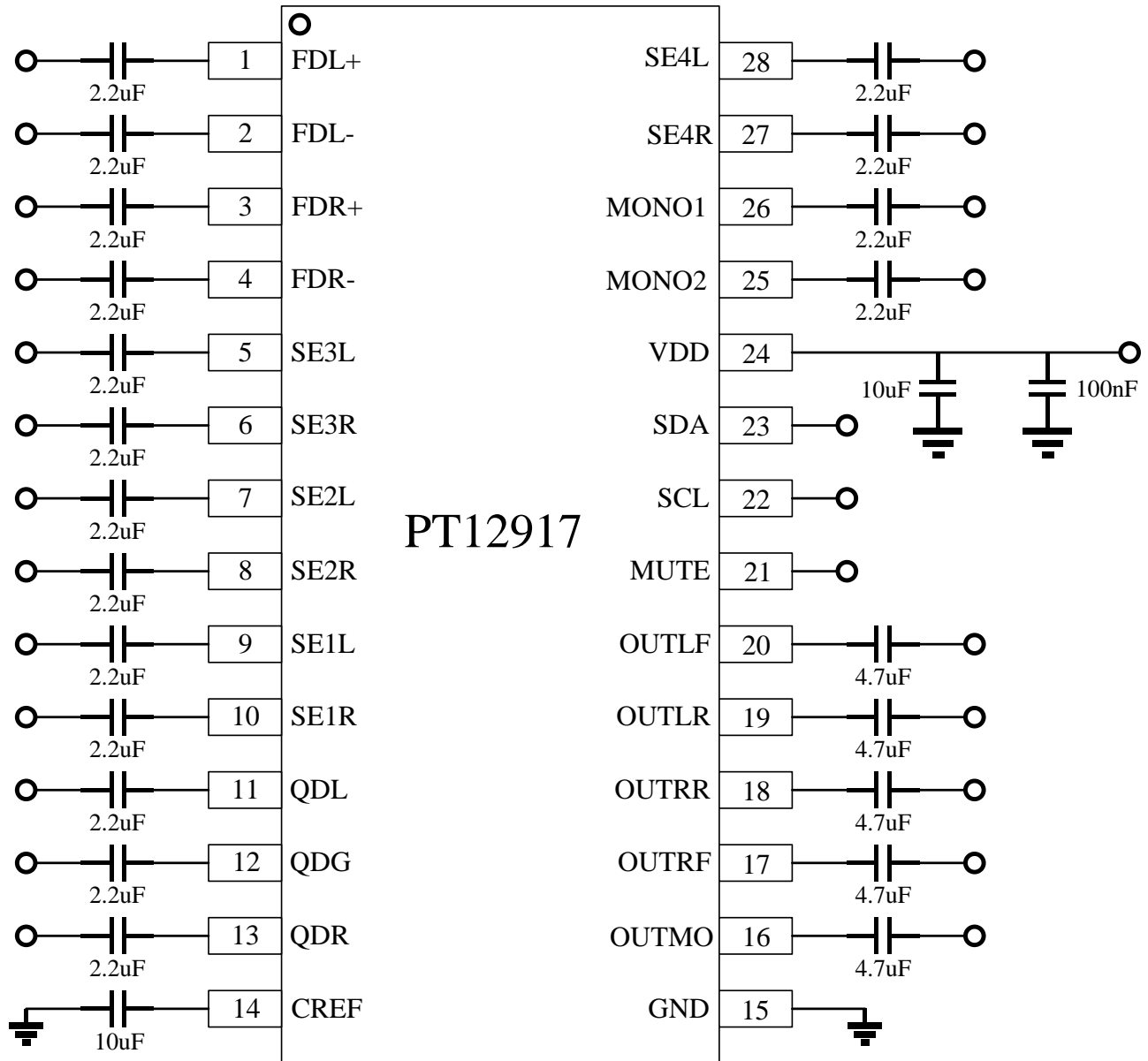
- Controlled by I²C Bus Micro-processor interface
- Input gain from 0 to +15dB with 1dB/step

- 4 stereo inputs for audio sources
- 1 Quasi-Differential input for external auxiliary input.
- 1 Fully-Differential input for auxiliary input or disc changer.
- 2 mono mixing inputs for GPS navigation system and mobilephone.
- 2 channels electronic volume with soft step, from +15 to -79dB with 1dB/step
- Soft mute
- 1 mono output with soft step volume for subwoofer, from +15 to -79dB with 1dB/step
- 3 band equalizer with gain, Q-factor and center frequency programmable, bass and middle band with soft step gain.
- Frequency and gain programmable loudness : 0 to -15dB with 1dB/step and soft step
- 4 independent speaker outputs volume with soft step: from +15 to -79dB with 1dB/step
- 28-pin SOP package

BLOCK DIAGRAM



APPLICATION CIRCUIT



ORDER INFORMATION

Part Number	Package Type	Top Code
PT12917-S	28 Pins, SOP, 300mil	PT12917-S

PIN CONFIGURATION





PIN DESCRIPTION

Pin Name	I/O	Description	Pin No.
FDL+	I	Fully-Differential Input left channel +	1
FDL-	I	Fully-Differential Input left channel -	2
FDR+	I	Fully-Differential Input right channel +	3
FDR-	I	Fully-Differential Input right channel -	4
SE3L	I	Single-ended input 3 left channel	5
SE3R	I	Single-ended input 3 right channel	6
SE2L	I	Single-ended input 2 left channel	7
SE2R	I	Single-ended input 2 right channel	8
SE1L	I	Single-ended input 1 left channel	9
SE1R	I	Single-ended input 1 right channel	10
QDL	I	Quasi-Differential input left channel	11
QDG	I	Quasi-Differential input common	12
QDR	I	Quasi-Differential input right channel	13
CREF	O	For internal reference bypass capacitor	14
GND	-	Ground	15
OUTMO	O	Mono output for subwoofer	16
OUTRF	O	Front right output	17
OUTRR	O	Rear right output	18
OUTLR	O	Rear left output	19
OUTLF	O	Front left output	20
MUTE	I	Soft mute input	21
SCL	I	I ² C bus clock	22
SDA	I/O	I ² C bus data	23
VDD	-	Supply voltage	24
MONO2	I	Mono mixing input 2	25
MONO1	I	Mono mixing input 1	26
SE4R	I	Single-ended input 4 right channel	27
SE4L	I	Single-ended input 4 left channel	28

IMPORTANT NOTICE

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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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