



## DESCRIPTION

The PT12916 is a car audio processor with 10 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

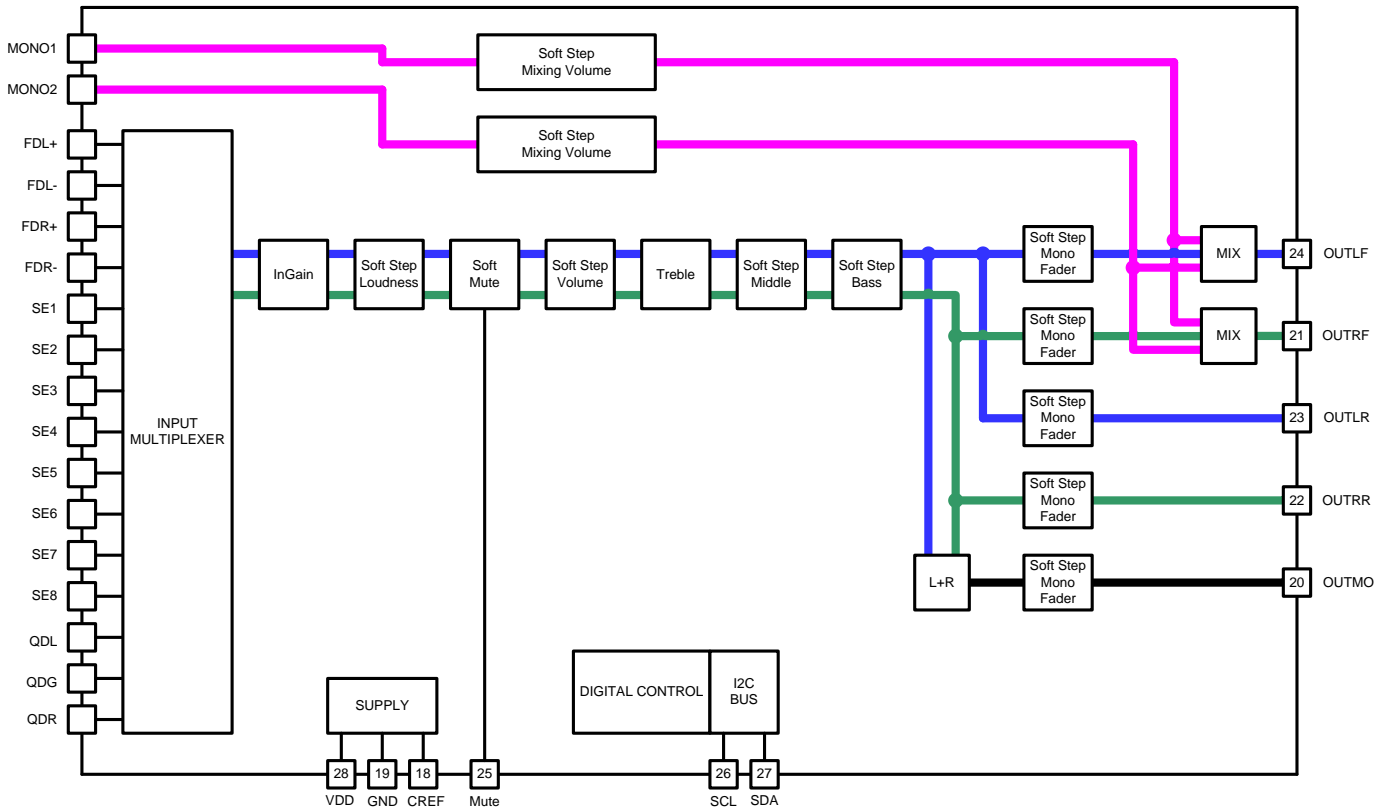
- Car Audio System

## FEATURES

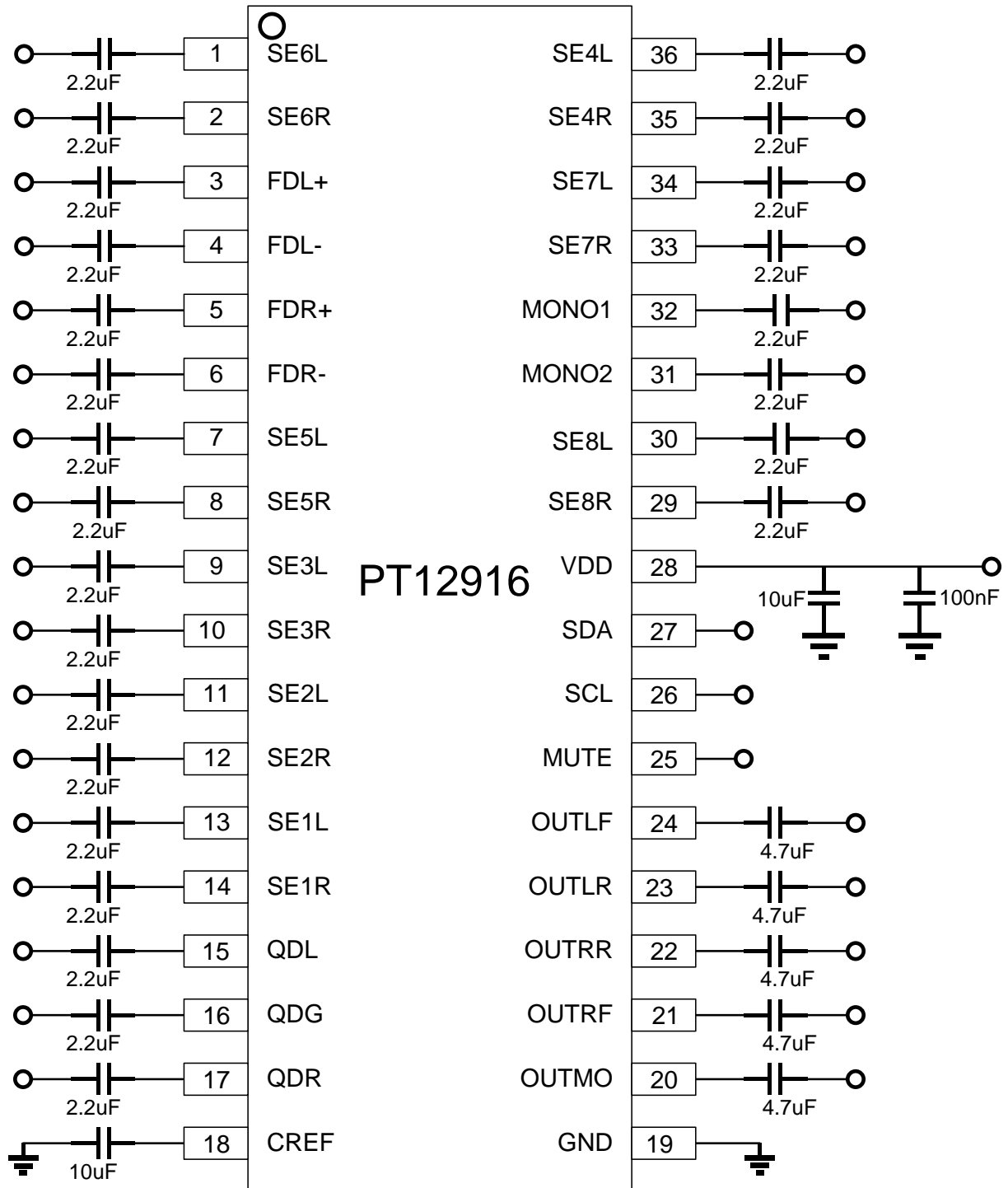
- Controlled by I<sup>2</sup>C Bus Micro-Processor Interface
- Input Gain from 0 to +15dB with 1dB/step

- 8 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
- 36-pin SSOP package

## BLOCK DIAGRAM



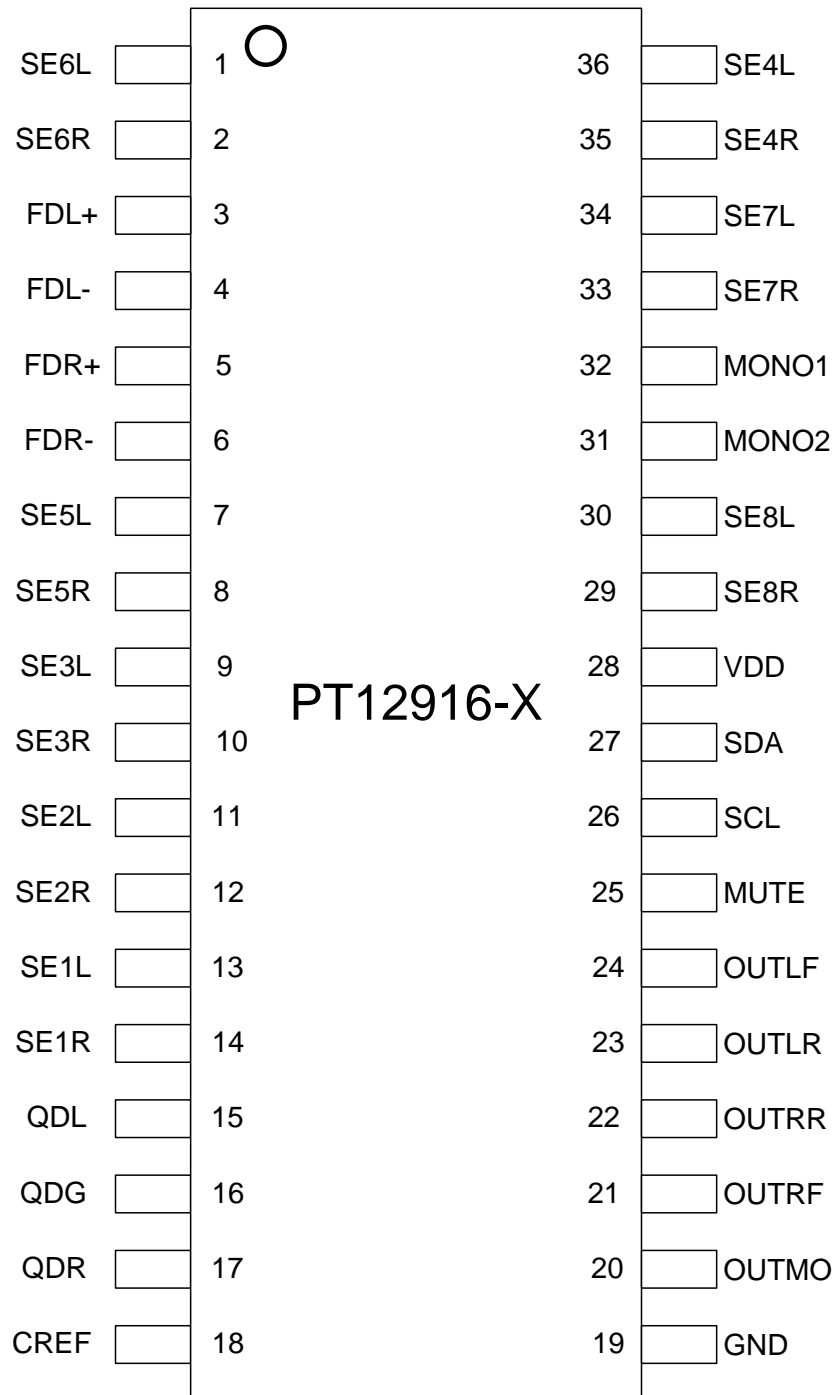
# APPLICATION CIRCUIT



## ORDER INFORMATION

Part Number	Package Type	Top Code
PT12916	36 Pins, SSOP, 300mil	PT12916-X

## PIN CONFIGURATION



## PIN DESCRIPTION

Pin Name	I/O	Description	Pin No.
SE6L	I	Single-ended input 6 left channel	1
SE6R	I	Single-ended input 6 right channel	2
FDL+	I	Fully-Differential Input left channel +	3
FDL-	I	Fully-Differential Input left channel -	4
FDR+	I	Fully-Differential Input right channel +	5
FDR-	I	Fully-Differential Input right channel -	6
SE5L	I	Single-ended input 5 left channel	7
SE5R	I	Single-ended input 5 right channel	8
SE3L	I	Single-ended input 3 left channel	9
SE3R	I	Single-ended input 3 right channel	10
SE2L	I	Single-ended input 2 left channel	11
SE2R	I	Single-ended input 2 right channel	12
SE1L	I	Single-ended input 1 left channel	13
SE1R	I	Single-ended input 1 right channel	14
QDL	I	Quasi-Differential input left channel	15
QDG	I	Quasi-Differential input common	16
QDR	I	Quasi-Differential input right channel	17
CREF	O	For Internal reference bypass capacitor	18
GND	-	Ground	19
OUTMO	O	Mono output for subwoofer	20
OUTRF	O	Front right output	21
OUTRR	O	Rear right output	22
OUTLR	O	Rear left output	23
OUTLF	O	Front left output	24
MUTE	I	Soft mute input	25
SCL	I	I2C bus clock	26
SDA	I/O	I2C bus data	27
VDD	-	Supply voltage	28
SE8R	I	Single-ended input 8 right channel	29
SE8L	I	Single-ended input 8 left channel	30
MONO2	I	Mono Mixing Input 2	31
MONO1	I	Mono Mixing Input 1	32
SE7R	I	Single-ended input 7 right channel	33
SE7L	I	Single-ended input 7 left channel	34
SE4R	I	Single-ended input 4 right channel	35
SE4L	I	Single-ended input 4 left channel	36

## **IMPORTANT NOTICE**

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