

R2A15220FP

7.1ch Electronic Volume with 16 Input Selector

Creat by Efim
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Description

R2A15220FP is an audio signal processor for home audio. This IC contains 8 channels electronic volume, input selector and 2 band tone control.

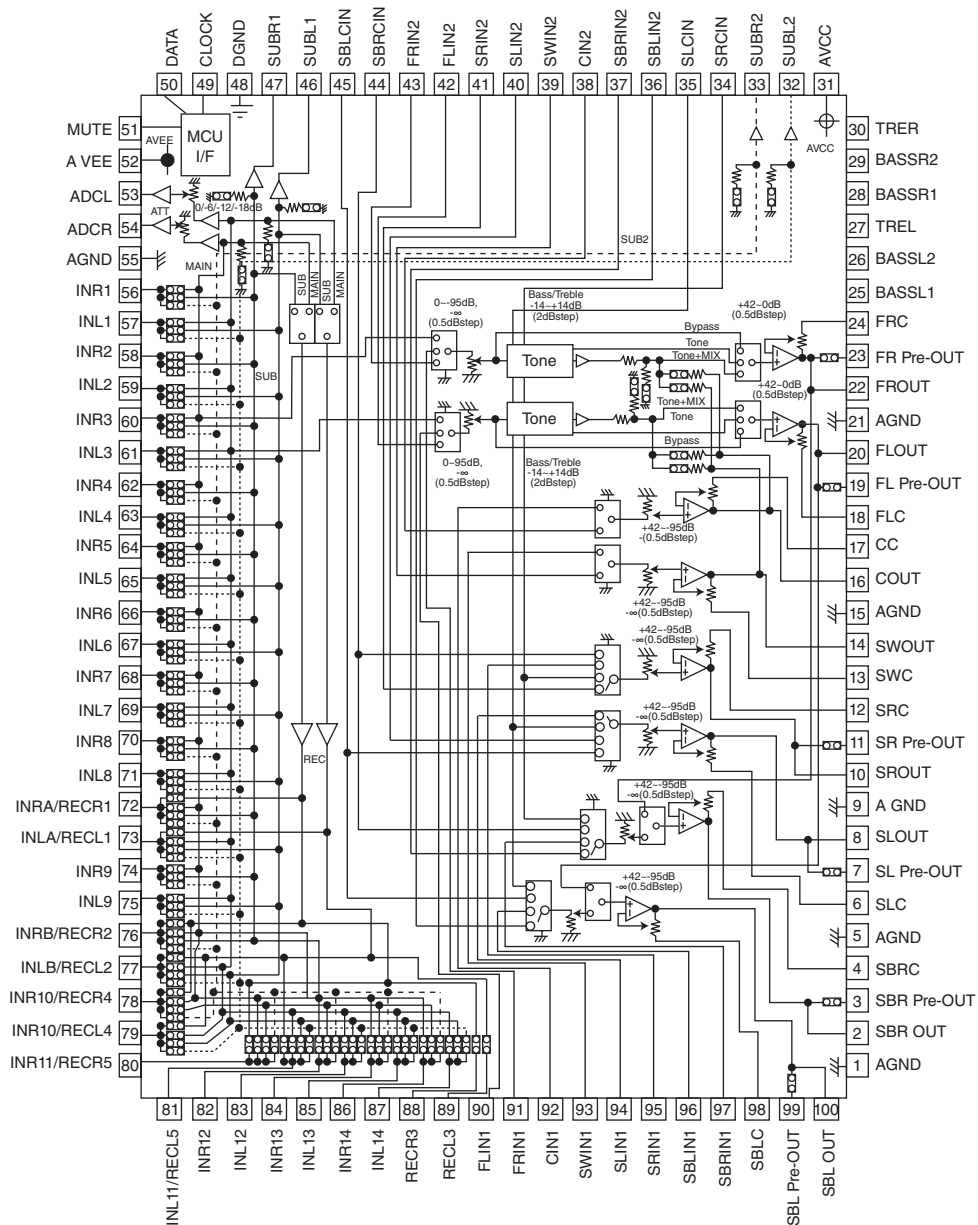
Features

- 8 channels independent electronic volume (+42 to -95dB/0.5dB step, $-\infty$ dB)
- L/R channel 16 input selector
- Multi channel input: 7.1 channels input
- Tone control Bass: -14 to + 14dB(2dB step), Treble: -14 to + 14dB(2dB step)
- Can use 5 input for REC output
- Built-in ADC output (Input Att: 0/ -6/ -12/ -18dB)

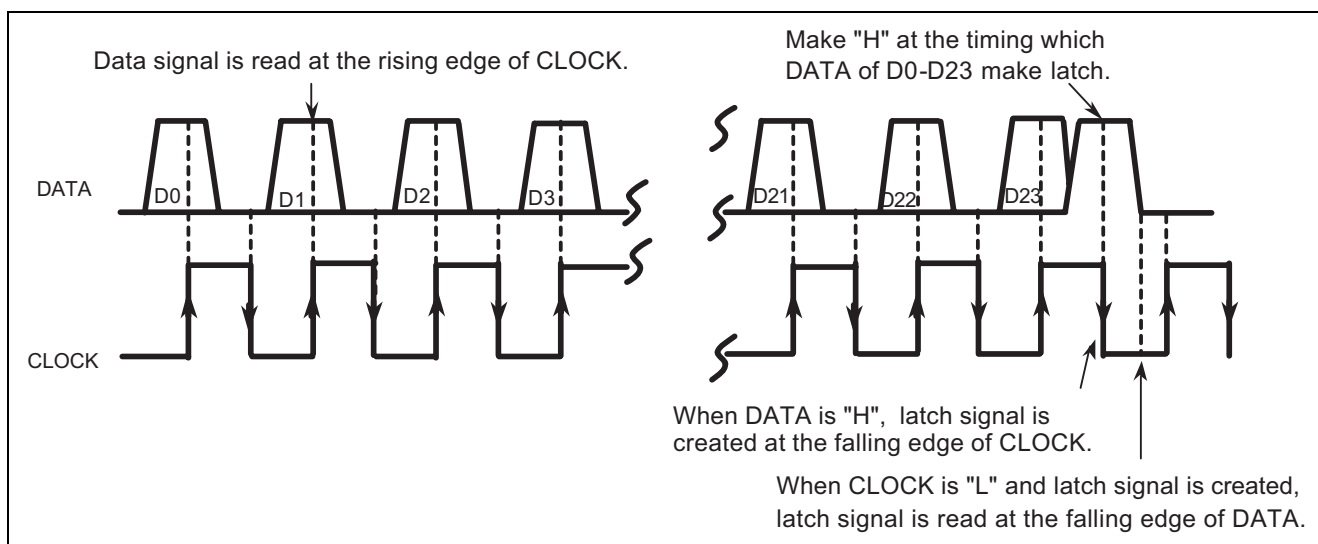
Application

Receiver, AV amp, Home theater, Mini stereo etc.

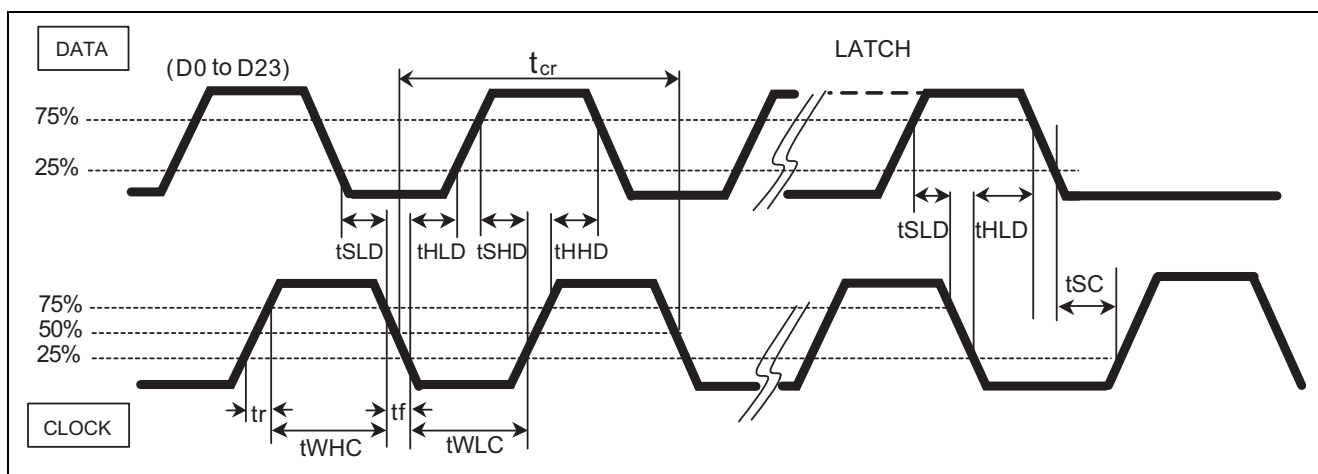
Block Diagram and Pin Configuration



Relationship Between Data and Clock



Clock and Data Timings



Timing Definition of Digital Block

Parameter	Symbol	Limits			Unit
		Min	Typ	Max	
CLOCK cycle time	t_{cr}	8	—	—	μs
CLOCK pulse width ("H" level)	t_{WHC}	3.2	—	—	
CLOCK pulse width ("L" level)	t_{WLC}	3.2	—	—	
Rising time of clock and data	t_r	—	—	0.8	
Falling time of clock and data	t_f	—	—	0.8	
DATA setup time (Rising time of clock)	t_{SHD}	1.6	—	—	
DATA setup time (Falling time of clock)	t_{SLD}	1.6	—	—	
DATA hold time ("H" level)	t_{HHD}	1.6	—	—	
DATA hold time ("L" level)	t_{HLD}	1.6	—	—	
CLOCK setup time	t_{SC}	1.6	—	—	

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