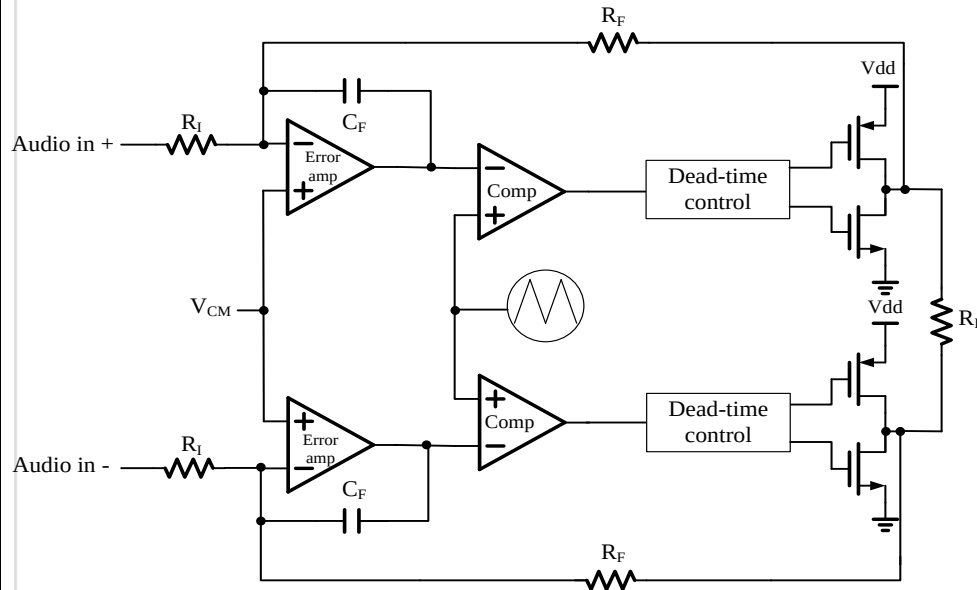




A Filterless Class D Audio Amplifier with Spread-Spectrum Modulation for EMI Reduction



Technology	TSMC 0.35 μm 2P4M CMOS
Power Supply	3.3 V
Input Voltage Range	0.02~2.8 V (p-p)
Speaker Load	8 Ω
Max. Output Power	550 mW @ THD=1%, f_{in} =1kHz
Switching Frequency	250 kHz
PSRR	76 dB
THD+N	0.09% @ P_{out} =500 mW, f_{in} =1kHz
Power Efficiency	86% @ P_{out} =200 mW, f_{in} =1kHz
Average Peak Attenuation	10 dB @ 1.5% spread amount

- ❖ EMI Reduction
- ❖ No Degradation of Specs
 - THD+N
 - Efficiency
- ❖ No Output Filters Required