

MAX98360A/B/C/D

Tiny, Cost-Effective, Plug-and-Play
Digital Class-D Amplifier

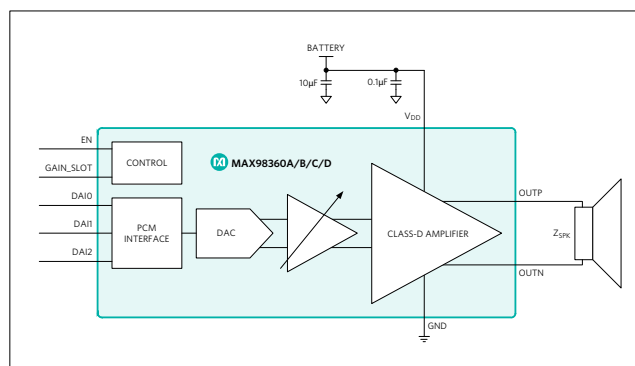
DESCRIPTION

The MAX98360A/B/C/D is an easy-to-use, low-cost, digital pulse-code modulation (PCM) input Class-D amplifier that provides industry-leading, Class-AB audio performance with Class-D efficiency.

Key Features

- Simple Plug-and-Play Design
- Single-Supply Operation (2.5V to 5.5V)
- 1.2V - 5.5V I/O tolerance without level shifters
- Ultra-Low Power
 - 15nA shutdown current
 - 1.5uA standby current when DAI pins are low
 - 2.2mA Quiescent Current
 - 92% Efficiency ($R_L = 8\Omega$, THD+N = 10%)
- Enables Tiny, Low Cost Design using 9 pin WLP without vias or expensive HDI manufacturing
- 3.2W Output Power into 4 Ω at 5V

FUNCTIONAL DIAGRAM



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Order

- 1ms Turn-On Time (for MAX98360A and MAX98360B)
- 10 μ V_{RMS} Output Noise
- No MCLK Required
- Sample Rates of 8kHz to 96kHz
- Supports Left, Right, or (Left/2 + Right/2) Output in I²S and Left-Justified Modes

Part Number	Spkr. Amp. V_{CC} (V)s	Spkr. Amp. V_{CC} (V)s	Spkr. Amp. I_{CC} (V)s	P_{OUT} into 4 Ω @ 1% THD+N (W)	P_{OUT} into 4 Ω @ 10% THD+N (W)	P_{OUT} into 8 Ω @ 1% THD+N (W)	P_{OUT} into 8 Ω @ 10% THD+N (W)	Spkr. Amp. Half Pwr. THD+N (%)	SNR (dB)	PSRR (dB)s
	min	max	typ	min	min	min	min		A-Weighted	min
MAX98360A/B/C/D	2.5	5.5	2	2.5	3.2	1.4	1.8	0.006	110	80

[See parametric specs for Speaker Amplifiers \(37\)](#)

RELATED RESOURCES

