

## عنوان مقاله:

thd analysis in closed-loop analog PWM class-D amplifiers

## محل انتشار:

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## خلاصه مقاله:

in this paper we investigate the parameters affecting total harmonic distortion and power supply rejection ratio in PWM class D amplifiers on the basis of linear models with feedback. from our mathematical analysis we show that the THD of a PWM class D amplifier with feedback can be improved by increasing the gain of the integrator through adding another amplifier at the output of integrator. we also show that the THD can be further improved by means of two cascaded amplifiers. simulation results show that the THD of the gain boosting and the two cascaded amplifiers with a .single pole CDAs can be improved by as much as 1.4 times and 2 times respectively

## کلمات کلیدی:

class-D amplifiers-audio amplifiers switching amplifiers THD distortion pulse width modulation

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/369447>

