Challenge Electronics
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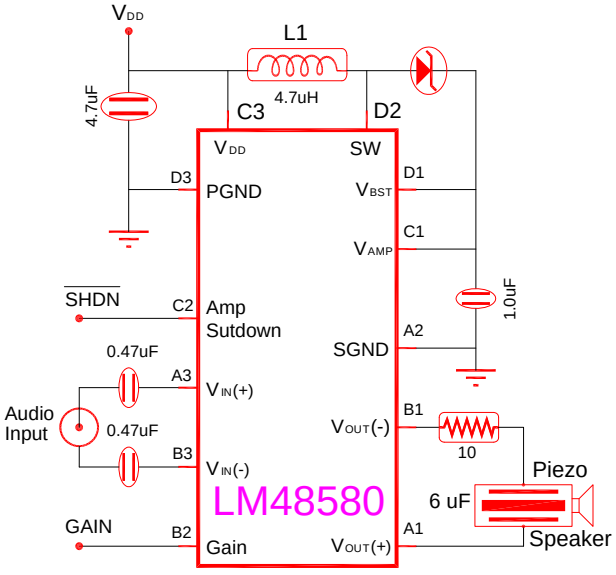
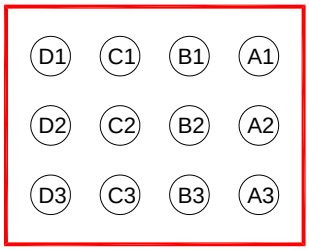
AN-PSA-12-112

Typical Circuit Drive for Piezoelectric Speakers

National Semiconductor LM48580 Typical Application



Package (Bump-Up) Connection



	VALUE	UNIT
Vout @ Vdd = 3.6 V R_L = 6 uF+10 Ohms; THD+N ≤1%	30	Vp-p (Typ.)
Power Supply Range	2.5 to 5.5	Vdc
Switching Frequency	2.1	M Hz. (typ.)
Power Dissipation at 25 Vp-p Output	800	mW (typ.)

Package Pin Description

BUMP	NAME	DESCRIPTION
A1	OUT (+)	Amplifier Non-Inverting Output
A2	SGND	Amplifier Ground
A3	IN (+)	Amplifier Non-Inverting Input
B1	OUT (-)	Amplifier Inverting Output
B2	GAIN	Gain Select: GAIN = float: Av = 18 dB GAIN = GND: Av = 24 dB GAIN = Vdd: Av = 30 dB
B3	IN (-)	Amplifier Inverting Input
C1	Vamp	Amplifier Supply Voltage, Connect to Vbst
C2	$\overline{\text{SHDN}}$	Active Low Shutdown. Drive $\overline{\text{SHDN}}$ low to disable device. Connect $\overline{\text{SHDN}}$ to Vdd for normal operation
C3	Vdd	Power Supply
D1	Vbst	Boost Converter Output, Connect to Vamp
D2	SW	Boost Converter Switching Node
D3	PGND	Boost Converter Switching Ground

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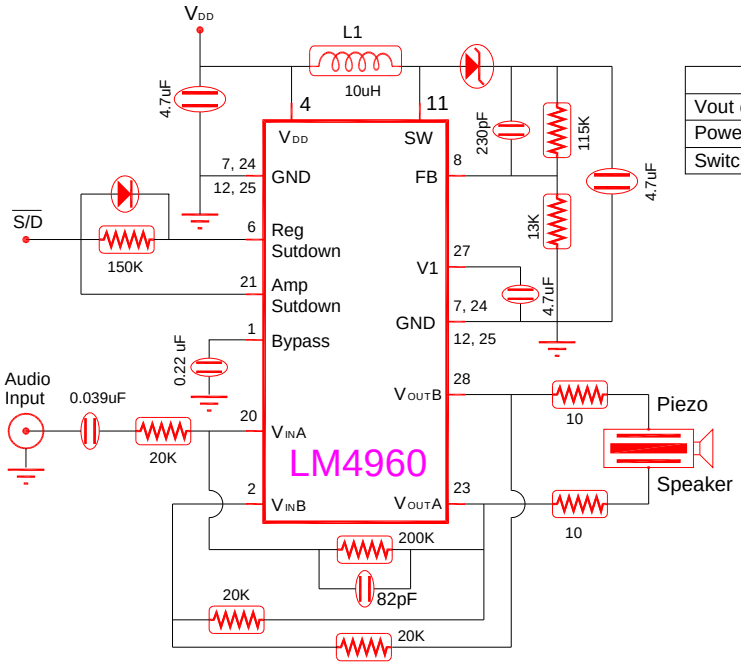
Texas Instruments LM4960 Typical Application



	VALUE	UNIT
Vout @ Vdd = 3.0; THD+N≤1%	24	Vp-p (Typ.)
Power Supply Range	3.0 to 7.0	Vdc
Switching Frequency	1.5	M Hz. (typ.)

Refer to manufacturer catalog for complete information.