



# BCT8933

## High Power, Low THD+N Class T Audio Amplifier

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#### GENERAL DESCRIPTION

The BCT8933 is a powerful Class-T audio amplifier. Using our unique Digital Power Modulation (DPM) audio algorithm, effectively eliminate audio noise, increase signal Dynamic range which will greatly improve sound quality and volume.

The BCT8933 includes a built-in 2X charge pump converter which generates a 6.3V supply voltage. This can provide a wider audio signal output range than a Traditional class D amplifier directly connected to the battery. The BCT8933 can provide 2W output power (10% THD+N) into 8Ω load from the 4.2V battery voltage.

The BCT8933 features the DPM function, which adjusts the system gain and output power automatically, protects the speaker from damage at high power levels and brings the most comfortable listening experience to the customers.

The BCT8933 is available in a small 3mmx3mm 20-Pin QFN Package. It is specified over the extended -40°C to +85°C temperature range.


#### FEATURES

- Digital Power Modulation audio algorithm
- 2.0W into 8Ω at 4.2V(10% THD+N)
- Ultra-Low THD+N: 0.03%
- 4 Mode selected by one-wire pulse
- 4 Selectable Gain, 12dB, 16dB, 24dB, 27.5dB
- Short-Circuit and Thermal Protection
- ±8KV HBM ESD
- Small 3mmx3mm 20-Pin TQFN Package

#### APPLICATIONS

- Smart phone
- Portable Audio Devices
- Mini Speakers

#### ORDERING INFORMATION

Order Number	Package Type	Temperature Range	Marking	QTY/Reel
BCT8933EGP-TR	QFN3X3-20L	-40°C to +85°C	 8933 XXXXX	6000

Note: "XXXXX" in Marking will be appeared as the batch code.