

STMicroelectronics Introduces High-quality Audio Amplifier for Mobile Equipment

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STMicroelectronics has introduced a 1.2W audio amplifier with one differential mono input, for use in mobile phones, laptops, PDAs and portable audio devices.

The TS4994 is a fully differential audio power amplifier capable of delivering 1.2W of continuous RMS power into an 8 ohm load at 5V, with a total harmonic distortion of 1%, measured at 1KHz. The differential design means the part has good noise immunity with an 85dB common mode rejection ratio and 100dB power supply rejection ratio, both at 217Hz with grounded inputs. The part has also been designed to avoid pops and clicks.

The amplifier runs off a supply of 2.5V to 5.5V. It has a standby mode, which can be set by a signal that can be programmed to be active high or low. Standby mode cuts power consumption to 10nA. This is complemented by an ultra-fast start-up time of 15ms.

Other features include thermal shutdown protection, to protect against short circuits. Common-mode feedback circuitry enables the outputs to be biased to half the supply voltage, regardless of the input common-mode voltage.

The TS4994 is available in a nine-bump, 0.5mm-pitch flip-chip package; as a DFN10 or as a MiniSO-8 part. Pricing is US\$0.60 in quantities of 5K pieces.

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