

## Product Overview

### FAN25800: LDO Regulator, 500 mA, Low Iq, High PSRR, Low Noise

For complete documentation, see the data sheet.

The FAN25800 is a linear low-dropout regulator with a high PSRR (85 dB at 100 Hz) and low output noise (typically 8  $\mu$ V<sub>RMS</sub> over a 10 Hz to 100 kHz bandwidth). The LDO can provide up to 250 mA of output current for 2.8 V output and up to 500 mA of output current for 3.3 V output. The enable control pin can be used to shut down the device and disconnect the output load from the input. During shutdown, the supply current drops below 1  $\mu$ A. The FAN25800 is designed to be stable with space-saving ceramic capacitors as small as 0201 case size. The FAN25800 is available in a 4-bump, 0.35 mm pitch, WLCSP package.

### Features

- VIN: 2.3 V to 5.5 V
- VOUT = 3.3 V (IOUT Max. = 500 mA)
- VOUT = 2.8 V (IOUT Max. = 250 mA)
- Output Noise Density at 250 mA and 10 kHz = 19 nV/ $\sqrt$ Hz (Integrated 8  $\mu$ V<sub>rms</sub>)
- Low IQ of 17  $\mu$ A in Regulation and Low-IQ Dropout Mode with Optimized Dropout Transitions
- <70 mV Dropout Voltage at 250 mA Load
- Controlled Soft-Start to Reduce Inrush Current
- Thermal Shutdown Protection (TSD)
- Input Under-Voltage Lockout (UVLO)
- Short-Circuit Protection (SCP)

For more features, see the data sheet

For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com).

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