

ULVR-3325A-250

0.25 μ m 3.3V to 2.5V 100mA Linear Voltage Regulator

Features

- ◆ 0.25 μ m 2.5V/3.3V logic salicide CMOS process with 1P3M layout
- ◆ 3.3V to 2.5V
- ◆ Maximum output load current: 100mA
- ◆ Operation temperature range: 0 $^{\circ}$ C~100 $^{\circ}$ C
- ◆ Build-in voltage reference
- ◆ Power down mode available
- ◆ Stable with 1 μ F ceramic capacitor
- ◆ Test chip available in SOP-16 package
- ◆ Customized I/O pads available

Applications

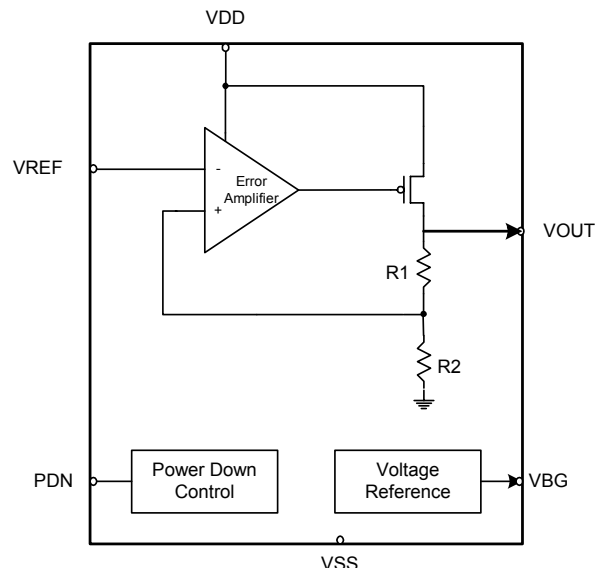
- PCMCIA Card
- Camera
- Battery Powered Application

Overview

ULVR-3325A-250 is a linear voltage regulator IP (LVR) for powering the 2.5V digital core circuit from single 3.3V supply voltage. The regulator incorporates a bandgap circuit for fixing reference voltage generation. The feedback loop sets the output voltage to 2.5V with small voltage coefficient regardless whether the output load current changes from 0mA up to 100mA or supply voltage varies.

A bypass capacitor is required for proper frequency compensation. A power down mode is available for the regulator.

Block Diagram



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Description

The output voltage of the regulator (VOUT) is set by the VREF. The relationship between the regulator output VOUT and input reference voltage VREF is defined as :

$$V_{out} = V_{ref} \times 2 \quad (1.180V \leq V_{ref} \leq 1.350V)$$

Deliverables

- Comprehensive document set
- Hard macro
- Synopsys™ synthesis model
- Verilog model
- TLF model
- LEF model
- Testchip and evaluation board

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