

UDCDC-3312-130

0.13 μ m 3.3V to 1.2V 300mA Step-down DC-DC Converter

Features

- ◆ Up to 93% efficiency
- ◆ Up to 300mA output current
- ◆ 1.8V to 3.63V Input Supply Voltage
- ◆ 1 MHz fixed frequency PWM operation
- ◆ PFM operation for power save
- ◆ 38- μ A typical quiescent current
- ◆ Over-current protection
- ◆ Soft-start inrush current limiting
- ◆ Power down mode
- ◆ <1 μ A typical shutdown supply current
- ◆ Test chip available in a 64-lead LQFP package

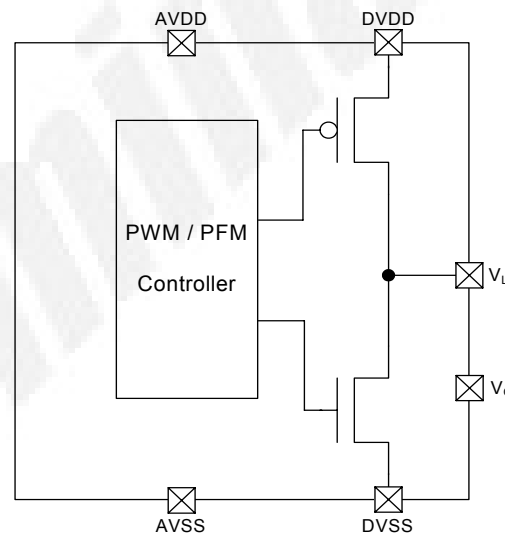
Applications

- Portable equipments
- Cellular phones, smart phones
- PDAs and pocket PC
- Notebook computers

Overview

UDCDC-3312-130 is a high-efficiency switching-mode DC-DC converter. It receives a 3.3-V supply voltage and provides a regulated 1.2-V voltage with maximum output current of 300mA suited for portable systems and digital circuits.

Block Diagram



Description

UDCDC-3312-130 is a high efficiency synchronous step-down DC-DC converter utilizing a 1-MHz constant frequency and voltage mode architecture. It operates from an input voltage range of 1.8V to 3.63V and supports up to 300-mA load current. The UDCDC-3312-130 allows the use of tiny, low cost inductors and capacitors. The UDCDC-3312-130 is fabricated in tsmc 0.13 μ m 1P6M 1.2V/3.3V logic process. The test chip of UDCDC-3312-130 is available in a 64-lead LQFP package. Also an evaluation board is available with the test chip.

Global Unichip Corp.

TEL: +886-3-5646600 <http://www.globalunichip.com>
 FAX: +886-3-5646000 e-mail: info@globalunichip.com
 No. 10, Li-Hsin 6th Rd., Hsinchu Science Park, Hsinchu City 300, Taiwan

Deliverables

- Comprehensive document set
- Hard macro
- Synopsys™ synthesis model
- Verilog model
- TLF model
- LEF model
- Test chip
- Evaluation board

Global Unichip Corp.

TEL: +886-3-5646600

<http://www.globalunichip.com>

FAX: +886-3-5646000

e-mail: info@globalunichip.com

No. 10, Li-Hsin 6th Rd., Hsinchu Science Park, Hsinchu City 300, Taiwan