

## DC/DC Converter – Power Supply 28 V

### Description

The U6229B is a multifunctional power supply IC which provides four different voltages dedicated to supply components of complex microcontroller systems. Supplied by a battery voltage in the wide range from 6 V to 26 V, the U6229B generates typically 28.4 V with a step-up converter, PWM, external power MOSFET and 150 nH inductivity. This voltage is fed to a step-down

converter with external 150 nH inductivity to generate a 7-V auxiliary voltage with a small ripple. By means of this voltage, two linear regulators with only a small power dissipation provide a constant 5-V ( $\pm 3\%$ ) supply for microcontrollers and an even more accurate 5-V ( $\pm 2\%$ ) supply as a reference for sensors and a/d converters.

### Features

#### D Voltage outputs

- 28.4-V step-up converter with  $I_v$  1.2 A
- 7-V step-down converter with  $I_v$  400 mA
- 5-V logic supply with  $I_v$  14 mA
- 5-V reference voltage with  $I_v$  14 mA

#### D Logic input ENABLE

- Enables the step-up converter

#### D Analog input VKL15

- Energy-reserve mode switches off the step-up converter at  $V_{Batt} < 5.25$  V
- Controls start-up behavior

#### D Logic output NRES

- N-reset output with over/ under voltage monitoring of both 5-V supplies

### Ordering Information

Extended Type Number	Package	Remarks
U6229B	SO20	

### Block Diagram

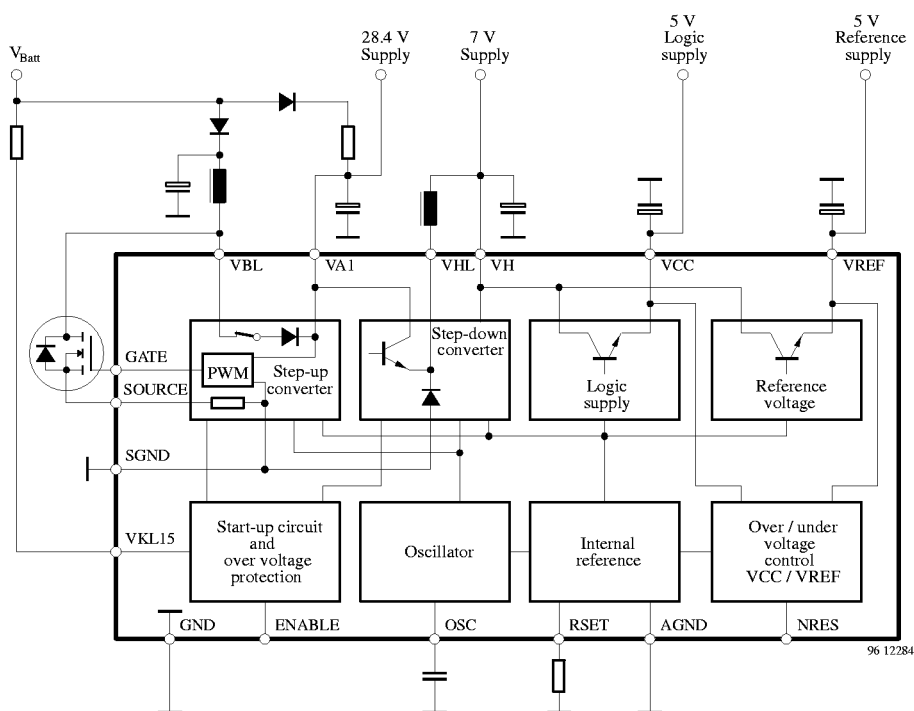


Figure 1. Block diagram with external circuit