

- Wide range SMPS with watchdog
- Wide range SMPS with reset
- PFM controller family
- Step down converter, fully integrated
- Step down converter, for external FET
- PWM controller for LED

► Wide range SMPS with watchdog

FEATURES

- Flyback converter with wide input range of 3V to 55V
- 5V first output voltage
- Additional output voltages possible with additional windings on transformer
- Softstart capability
- ON control-input with wide input voltage range
- Precise, programmable windowed watchdog
- Low standby current (50µA typical)
- Open load stable
- Snapback output current after short circuit on load
- K15D control-input
- Self-oscillating, multi-loop-regulation
- Non dissipating primary current simulation
- Degaussing input and variable delayed switch on
- Push/pull driver for logic level Power-MOSFET
- No current shunt needed
- -40°C to +125 °C operating temperature
- Additional system-enable output for critical modules
- SO 20w package

APPLICATION

- Automotive electronics
- Controller and sensor supply

DESCRIPTION

The IC is developed and optimized for automotive applications where it can generate different output voltages as a flyback converter. The input voltage may be higher or lower than the output voltage. The multi-loop-regulation concept ensures fast response to variation of input voltage and load. The reset circuit generates a reliable reset signal until the output is in tolerance and the integrated, programmable windowed watchdog guarantees a minimum and maximum software reset time. An additional system-enable output enables critical components after the controller has served the watchdog three times to guarantee a save controller wake up sequence. This successful wake up also enables the 'HOLD'-capability so that the controller can keep the converter running without 'ON' and 'K15D' active.

BLOCK DIAGRAM

