

DESCRIPTION

PT6973 is a boost DC/DC converter with one channel constant current regulator, which provides 10mA to 30mA current for up to 8 LEDs in series. The power supply is from 4V to 15V and the max output voltage is 28V. PT6973 provides both PWM dimming and analog dimming functions. The minimum PWM dimming on time is 125ns, which means 0.25% dimming duty-cycle at 20KHz is available.

PT6973 also provides much protections, such as under voltage lockout, cycle by cycle input current limit, output over voltage protection, flywheel diode open protection, feedback over voltage protection, thermal shutdown protection and so on.

PT6973 default operates at 600KHz. Furthermore, it can be synchronized by external clock for different frequency operation.

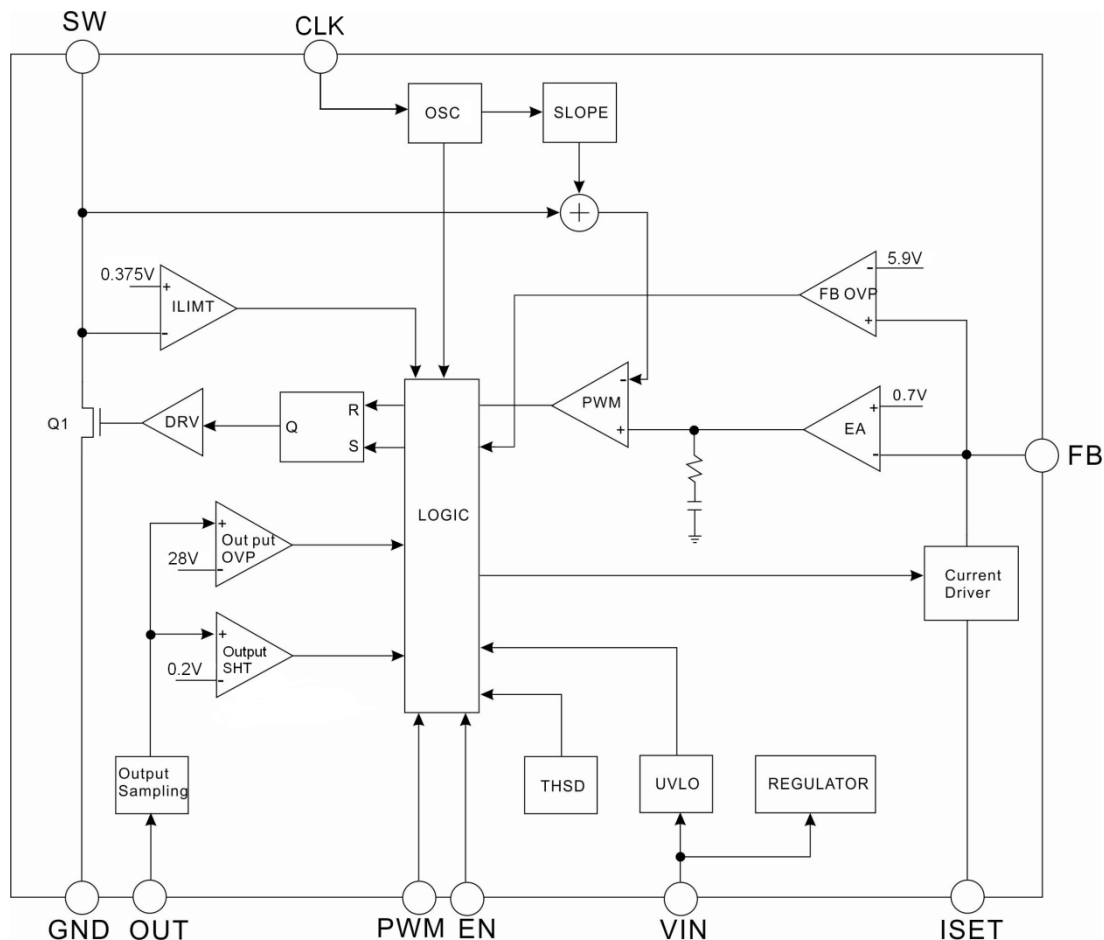
FEATURES

- 4~15V Input Voltage
- 10mA~30mA LED Current with $\pm 3\%$ matching
- Drive Up to 8 LEDs
- 600kHz Switching Frequency
- Typical less than 1uA Standby Current
- 28V Output Over Voltage Protection
- LED Open/Short Protection
- Flywheel Diode Open Protection
- Output Short to GND Protection
- 20kHz 0.25% PWM Dimming Available
- External Clock Synchronize available
- DFN8 Package

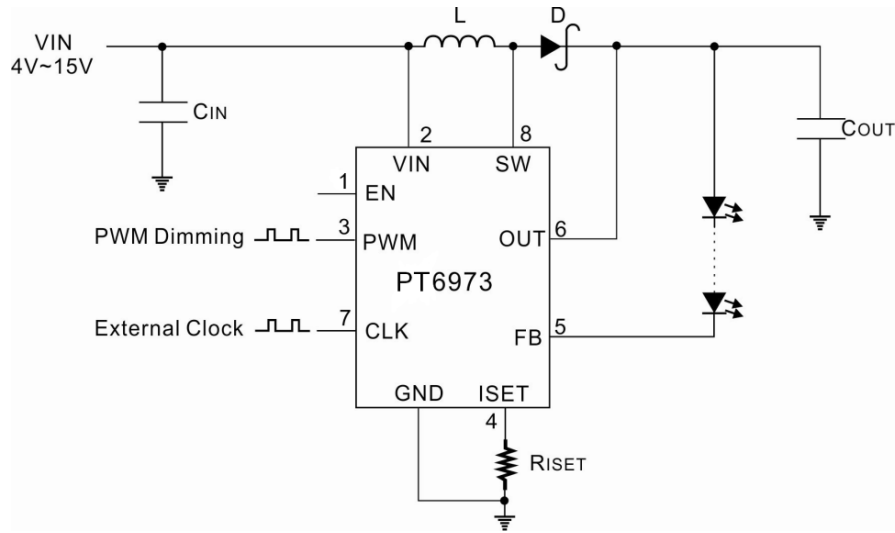
APPLICATIONS

- Digital Cameras Monitor Backlighting
- Cell Phones Monitor Backlighting
- PDAs, Handheld Computers Monitor Backlighting
- Small LCD Displays Backlighting

BLOCK DIAGRAM



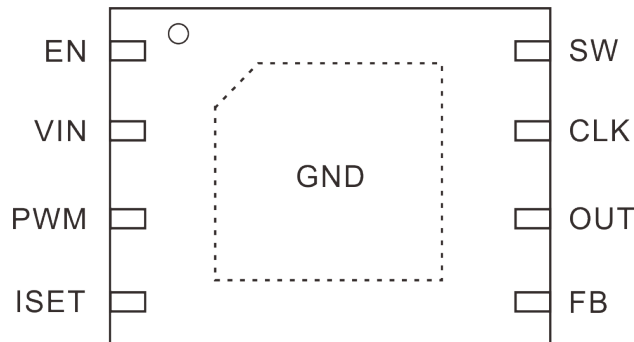
TYPICAL APPLICATIONS



ORDER INFORMATION

Valid Part Number	Package Type	Top Code
PT6973	8 Pins, DFN (2mm*3mm)	PT6973

PIN CONFIGURATION



PIN DESCRIPTION

Pin Name	Description	Pin No.
EN	Enable control.	1
VIN	Power supply pin.	2
PWM	PWM dimming signal input.	3
ISET	LED Current setting terminal, connect a resistor between ISET and GND for LED Current setting.	4
FB	Feedback Voltage input.	5
OUT	Over Voltage Protection input.	6
CLK	External Clock input.	7
SW	Switching terminal.	8
GND	Ground.	Exposed PAD

IMPORTANT NOTICE

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