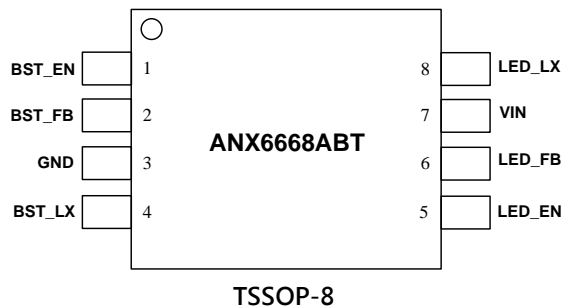


## TFT LCD Power Supply with 1 Channel LED Driver

### FEATURES

- 2.5V to 5.5V Input Voltage Range
- Boost Regulator
  - 1MHz Fixed Frequency
  - Current Mode Control
  - High Accuracy Output Voltage
  - Built-In 40V 1.4A, 0.5Ω NFET
  - Over-Current Protection
- Single Channel White LED Driver
  - Drive up to 39 LEDs at 5V Input (3S13P)
  - Current Mode Boost Controller with Fixed 1MHz Switching Frequency
  - Built-In 40V 1.4A, 0.5Ω NFET
  - Over-Current Protection
  - LED Open Detection
  - Adjustable PWM Dimming Frequency from 100Hz to 200kHz
- RoHS Compliant
- Low Profile TSSOP-8 Packages

### PIN CONFIGURATION (Top View)



### APPLICATIONS

- Tablet PCs
- Digital Cameras
- GPS Receivers
- PDAs, Handheld Computers

### DESCRIPTION

The ANX6668 integrates a high-performance step-up regulator to generate voltage for the LCD bias power and a high power LED driver to drive the WLEDs for LCD backlight.

The high performance step-up regulator operates at a fixed switching frequency of 1MHz. This high switching frequency allows the use of small inductors and fast transient response. The integrated N-channel FET has a typical current limit of 1.4A and can support output voltages up to 22V. To minimize the inrush current a built-in soft start circuit sets the soft start period at 8ms.

The ANX6668 also includes a high power single channel white LED driver. The LED driver is specially designed for driving WLEDs with a constant current. It contains a current mode step-up DC/DC converter with fixed 1 MHz switching frequency, which can drive up to 10 white LEDs in series from a lithium-ion battery. Series connection of LEDs provides identical LED current for uniform brightness and minimizes the number of traces to the LEDs. The device provides a low feedback voltage of 0.3V which can minimize power dissipation, and the internal soft start function can reduce the inrush current. The LED current is set with the external sense resistor.

The ANX6668 includes current limit protection, thermal shutdown protection, input under-voltage lockout (UVLO), and output over-voltage function, which can protect the circuit from LED open.

The ANX6668 is available in a space-saving TSSOP-8 package or MSOP-10 package.

### ORDERING INFORMATION

Part Number	Package
ANX6668ABT	TSSOP-8L