Product Overview

FAN5701: 6-LED Driver with PWM Dimming Interface

For complete documentation, see the data sheet.

The FAN5701 is a highly integrated and efficient chargepump-based multi-LED driver. The device can drive up to six LEDs in parallel with a total output current of 180 mA. The FAN5701 is capable of driving a primary display backlight requiring four to six LEDs. When more than four LEDs are needed for backlighting, the FAN5701’s two PWM dimming inputs can be connected together to provide the proper dimming control for all six LEDs. When a primary and sub-display is needed, the FAN5701 can be controlled such that each group can be dimmed independently. For candybar phones requiring a primary display and simple keypad lighting, the FAN5701 offers a simple and compact lighting solution. Regulated internal current sinks deliver excellent current and brightness matching to all six LEDs. The device provides excellent efficiency without an inductor by operating the charge pump in 1.5x or pass-through modes. The FAN5701 can be ordered with default ISET values of 30 mA, 20 mA, 15 mA, or 8 mA. The default ISET is always determined by the part number purchased.

Features

• Six (6) Parallel LEDs (up to 30 mA each)
• Total Package Load Current Capability: 180 mA
• Two Default Groups of Four (4) and Two (2) LEDs for Main and Sub-Display Lighting with Individual PWM Dimming Controls that Operate up to 20 kHz
• >600:1 Dimming Ratio for 100 Hz PWM Frequency
• Up to 92% Efficiency
• Built-in 1.5x Charge Pump with Low-Dropout Bypass Switch
• Wide Input Range: 2.7 V to 5.5 V
• VOUT Over-Voltage and Short-Circuit Protection
• Over-Temperature Protection
• 1.2 MHz Switching Frequency for Small-Sized Capacitors

For more features, see the data sheet

Applications

• TBA

For more information please contact your local sales support at www.onsemi.com.

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