

PWM Controller for Boost Converter with LDO

Features

- 8 V to 15 V Input Supply Voltage Range
- Step-up Regulator Controller
 - . Peak-Current Mode Control – Fast Transient
 - . 100 kHz to 1 MHz Adjustable Switching Frequency
 - . VIN Gate Drive Output (12 V Clamped)
- 5 V, 80 mA LDO
- Programmable UVLO and Hysteresis
- Programmable Soft Start
- Boost Switching Enable Function
- Protections
 - . Step-up Regulator Controller Overvoltage Protection
 - . Step-up Regulator Controller Overcurrent Protection
 - . Thermal Shut Down Protection

Applications

- LCD TV LED Backlighting

Description

The SM1201 consists of a step-up switching regulator controller and a low-dropout voltage regulator (LDO). The step-up switching regulator controller drives external MOSFET to provide the regulated supply voltage for LED strings of the LCD TV backlight unit. The switching frequency is programmable using an external resistor, and the LDO provides the logic voltage for the system. The device is optimized for thin-film transistor (TFT) liquid-crystal display (LCD) applications.

Device Information

Part	Package	Size
SM1201	20 QFN	4 mm x 4 mm

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