

## ***PWM Controller for High Switching Frequency Dual Boost Converter with LDO***

### ***Features***

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

### ***Applications***

- LCD TV LED Backlighting

### ***Description***

The SM1203 consists of two step-up switching regulator controllers and a low-dropout voltage regulator (LDO). The step-up switching regulator controllers drive external MOSFETs to provide the regulated supply voltages 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
SM1203	24 QFN	5 mm x 5 mm

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