

EPP9723 is a high efficiency driver for white LEDs mainly for notebook application. It is suitable for battery or adapter to drive LED light bars which contains six strings in parallel and up to 12 WLEDs (40V OVP) per string. The internal current sinks support a maximum of 2% current mismatching for excellent brightness uniformity in each string of LEDs.

EPP9723 contains I<sup>2</sup>C interface for controlling the dimming mode, operate frequency and the LED current. The device has a build-in high-efficiency boost regulator with integrated 250mΩ, 2A, 40V power MOSFET. EPP9723 is available in the WQFN-20L 3.5 x 3.5 packaging.

## Features

- Wide Operating Input Voltage: 2.7V to 24V
- High Output Voltage: Up to 40V
- Channel Current Programmable: 6mA to 25mA
- Channel Current Regulation with Accuracy 3% and Matching 2%
- Dimming Controls
  - Direct PWM Mode up to 25kHz with Minimum 1% Duty
  - Analog Mode, Mix Mode and Mixed-26kHz Mode up to 2kHz with 12-bit Resolution, up to 4kHz with 11-bit Resolution
- I<sup>2</sup>C Programs LED Current, Switching Frequency and Dimming Mode
- Switching Frequency: 0.27MHz to 1.45MHz
- Embedded Memory by MTP
- Protection
  - LED Strings Open and Short Detection
  - Current Limit Protection
  - Programmable Over-Voltage Protection
  - Over Temperature Protection (OTP)

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