MBI6671

Multi-topology Constant Current Controller

MBI6671 is a Buck, Boost, Buck-Boost and SEPIC topology with constant-current high-brightness LED controller to provide a reliable design solution for high power automotive illumination applications.

The output current of MBI6671 can be programmed by an external resistor and dimmed via pulse width modulation (PWM) to achieve higher efficiency linear current modulation.

MBI6671 features completed protection design to handle faulty situations. The cycle-by-cycle current limitation function limits the inrush current while the power is switched on. Thermal shutdown guards the system to be robust and keep the driver away from being damaged which results from LED open-circuited, and other abnormal events. With an error flag pin, short circuit condition can be reported to a possible external mechanism for further control decision making. MBI6671 is packaged in the thermal-enhanced TSSOP14 for efficient power dissipation.

MBI6671 Product Specifications Items Spec. Content 01 **Topology** Multi-topology / PFM 02 Max. Output Current per Channel By External MOSFET 03 Supply Voltage 4.5~65V 04 **Dimming Method** Digital Analog 05 **Protection - LED Open** 06

Protection - LED Short

	•	07
Protection - Thermal Shutdown		
	•	08
Protection - OVP		
	•	09
Protection - UVLO		
	•	10
Protection - OCP		
	•	11
RoHS Compliant Package TSSOP14		
	•	12
Major Applications High Power LED lighting, automotive	lie	hting