MBI6671Q

Multi-topology Constant Current Controller

MBI6671Q 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 MBI6671Q can be programmed by an external resistor and dimmed via pulse width modulation (PWM) to achieve higher efficiency linear current modulation.

MBI6671Q 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. MBI6671Q is packaged in the thermal-enhanced TSSOP14 for efficient power dissipation.

Product Specifica **MBI6671Q Product Specifications Items** Spec. Content 01 **Topology** Multi-topology 02 Max. Output Current per Channel By External MOSFET 03 Max. Sustaining Voltage 71V 04 **Supply Voltage** 5.4~65V 05 Switch on Resistance 06

AEC-Q100

	•	07
Dimming Method Digital/Analog		
	•	08
Protection-LED Open/Short		
	•	09
Protection-TFB		
	•	10
Protection-OTP		
	•	11
Protection - UVLO		
	•	12
Protection - OCP		
	•	13
Soft Start-up		
	•	14
RoHS Compliant Package TSSOP14		
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Major Applications Head Lamp / DRL / Fog Lamp		