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NCP3065SOBCKGEVB:NCP3065 BUCK DEMO BD

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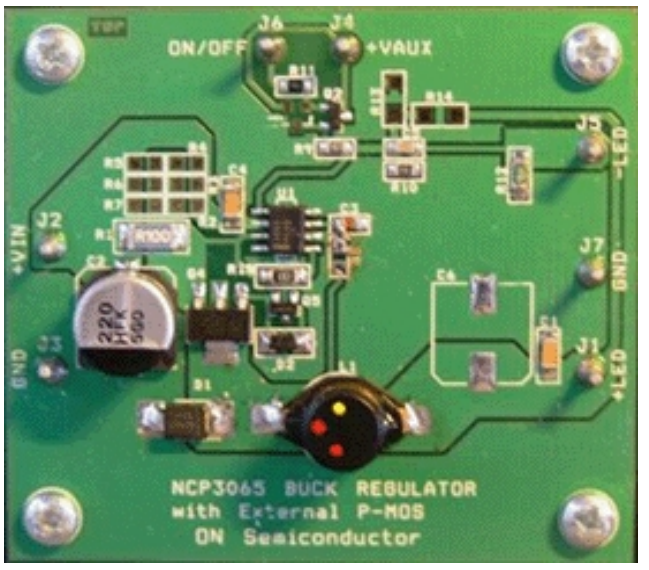
Evaluation Board Description



The NCP3065 is a monolithic switching regulator designed to deliver constant current for powering high brightness LEDs (HBLED). The device has a very low feedback voltage of 235 mV (nominal) which is used to regulate the average current of the LED string. In addition, the NCP3065 has a wide input voltage up to 40 V to allow it to operate from 12 Vac or 12 Vdc supplies commonly used for lighting applications as well as unregulated supplies such as Lead Acid batteries.
The device can be configured in a controller topology with the addition of an external transistor to support higher LED currents beyond the 1.5 A rated switch current of the internal transistor. The NCP3065 switching regulator can be configured in Step - Down (Buck) and Step - Up (boost) topologies with a minimum number of external components.

Features and Applications

Features

- Integrated 1.5 A Switch
- Input Voltage Range from 3 V to 40 V
- Low Feedback Voltage of 235 mV
- Cycle - by - Cycle Current Limit
- No Control Loop Compensation Required
- Frequency of Operation Adjustable up to 250 kHz
- Operation With All Ceramic Output Capacitors or No Output Capacitance
- Analog and Digital PWM Dimming Capability
- Internal Thermal Shutdown with Hysteresis

Evaluation Board Information

Evaluation Board	Short Description	Status	Parts Used	Action
NCP3065SOBCKGEVB	NCP3065 BUCK DEMO BD	Active	NCP3065DR2G	Buy Contact Local Sales Office

Technical Documents

Type	Document Title	Document ID/Size	Rev
Eval Board: BOM	NCP3065SOBCKGEVB Bill of Materials ROHS Compliant	NCP3065SOBCKGEVB_BOM_ROHS.PDF - 188.0 KB	0
Eval Board: Gerber	NCP3065SOBCKGEVB Gerber Layout Files (Zip Format)	NCP3065SOBCKGEVB_GERBER.ZIP - 32.0 KB	0
Eval Board: Schematic	NCP3065SOBCKGEVB Schematic	NCP3065SOBCKGEVB_SCHEMATIC.PDF - 121.0 KB	0
Eval Board: Test Procedure	NCP3065SOBCKGEVB Test Procedure	NCP3065SOBCKGEVB_TEST_PROCEDURE.PDF - 182.0 KB	0

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