



# MIC3202 HB LED Driver Evaluation Board **Part Number: ADM00962**

## Summary

The MIC3202 is a hysteretic, step-down, constant-current, LED driver for high brightness LED. It can be used for interior/exterior lighting, architectural and ambient lighting, LED bulbs, and other general illumination applications. The MIC3202 is well suited for lighting applications requiring a wide-input voltage range. The hysteretic control gives good supply rejection and fast response during load transients and PWM dimming. The high-side current sensing and on-chip current-sense amplifier delivers LED current with  $\pm 5\%$  accuracy. An external high-side current-sense resistor is used to set the output current. The MIC3202 offers a dedicated PWM input (DIM pin) which enables a wide range of pulsed dimming. High-frequency switching operation of up to 1MHz allows the use of smaller external components, minimizing space and cost. The MIC3202 offers a frequency dither feature for low-EMI applications. The MIC3202 operates over a junction temperature from  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$  and is available in an 8-pin SOIC package with exposed pad.

# Product Features

- 6V to 37V input voltage range
- High efficiency (>90%)
- $\pm 5\%$  LED current accuracy
- MIC3202: Dither enabled for low EMI
- High-side current sense (up to 1A)
- Dedicated dimming control input
- Hysteretic control (no compensation required)
- Up to 1MHz switching frequency
- Adjustable constant LED current with external current-sense resistor
- Over-temperature protection
- $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$  junction temperature range