

# MCP1633 SEPIC LED DRIVER DEMO

# Part Number: ADM01002

## **Summary**

The MCP1633 SEPIC LED Driver Demo Board is a step-up/step-down, switch-mode, DC/DC converter used for LED driver applications. The demo



board provides a 200mA constant current source. Other output currents can be obtained with minor modifications to the board's Bill of Materials (BOM). MCP1633 LED Driver Demo Board utilizes Microchip's MCP1633 high-speed Pulse-Width Modulator (PWM). The small 16-pin QFN MCP1633 device contains all the analog components necessary for a peak current mode control loop including specialized LED driver blocks. An 8-pin PIC12F1822 microcontroller is used to implement the dimming and protection functions.

#### **Package Contents**

1 x ADM01002 (MCP1633 SEPIC LED DRIVER DEMO BOARD)

### **Product Features**

The MCP1633 SEPIC LED Driver Demo Board has the following features:

- \* Compact size with high output power
- \* Can operate in buck (step down) or boost (step up) mode
- \* Sustain voltage stresses typically found in automotive products: 42V in for 180ms
- \* High efficiency over entire operating input and output voltage ranges: typ 85%
- \* Typical output current 200mA; can be adjusted via hardware
- \* Factory-programmed source code provider.
- \* Additional application functions can be implemented in the firmware.