

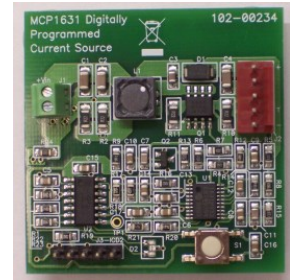
# MCP1631HV Digitally Controlled Programmable Current Source Reference Design

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Part Number: MCP1631RD-DCPC1

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The MCP1631HV Digitally Controlled Programmable Current Source Reference Design is used to drive and dim one or more power LEDs in a series or parallel topology (depending on the LED's capability). The reference design may also be used to charge one to four cell NiMH/NiCd or one to two cell Li-Ion battery packs. The board uses the MCP1631HV high-speed analog PWM controller and PIC16F616 microcontroller to generate the proper dimming ratio for LEDs or charge algorithm for NiMH, NiCd and Li-Ion batteries. The boards is used to evaluate Microchip's MCP1631HV in a SEPIC power converter application.



Features

Package Contents

- Input Operating Voltage Range: +3.5V to +16V
- Firmware default output current of 700 mA with dimming ratio 10:1 (70 mA/step)
- Maximum output current of 1000 mA
- Maximum output power of 8.5W
- Drive one or more LEDs
- Firmware for charging Li-Ion, NiMH, and NiCd batteries
- Single ON/OFF/Dimming switch
- Status and fault indication
- Hardware and software overvoltage protection (OVP) set to 9.0V. The software value can be modified in the source code to be less than 9.0V

## Documentation & Software

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Documents	Last Updated	Size	
<a href="#">PIC16F610/16HV610/PIC16F616/16HV616 14-Pin Flash-Based, 8-Bit CMOS MCU</a>	11/11/2009 8:23:21 AM	3MB	
<a href="#">MCP1631RD-DCPC1 Firmware</a>	7/22/2009 8:48:04 AM	70KB	
<a href="#">MCP1631HV Digitally Controlled Programmable Current Source Reference Design</a>	7/21/2009 1:55:09 PM	367KB	
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