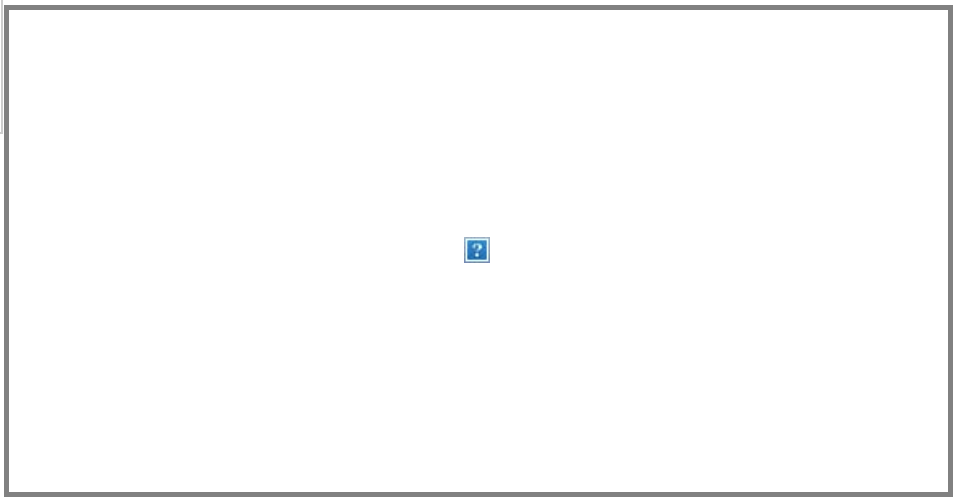
Other Links

- Buy/Sample Options DM330014
- Contact Microchip
- Development Tool Selector
- Microchip Advanced Parts Selector (MAPS)

Digital LED Lighting Development Kit

Buy it Now

Part Number: DM330014



LED lighting designers are being challenged to meet the rapidly expanding demand for green, smart energy technologies while differentiating their products. Microchip's Digital LED Lighting Development Kit (DM330014) enables designers to quickly leverage the capabilities and performance of the dsPIC33 'GS' series of Digital Signal Controllers (DSCs), to develop LED lighting products. The dsPIC33 'GS' DSC and this reference design allow developers to create a 100% digitally controlled ballast function, while including advanced features such as dimming and color hue control. The dsPIC33 'GS' DSCs can support an entire system implementation for LED lighting products, including power-conversion circuits, such as AC-to-DC and DC-to-DC conversion, along with functions such as Power Factor Correction (PFC), which are necessary for a complete product and lower the overall system cost.

Benefits offered by the digital-power techniques in this reference design and the dsPIC33 'GS' series of DSCs include:

Reduced System Cost via higher integration
Higher Efficiency using digital-control techniques
Flexible and reusable designs
Advanced features implemented in software

Example Applications:

LED lighting applications supported by Microchip's LED Lighting development Kit include dimmable LCD backlighting, signage, LED replacement of fluorescent tubes and incandescent bulbs, architectural lighting, and automotive lighting applications. Automotive lighting products include exterior applications, such as headlights, daytime running lights and signal lights.

Key features of Microchip's Digital LED Lighting Development Kit include:

Color control for RGB LEDs
Supports DMX512 Standard for brightness control
Flexible input voltage support, including both Buck and Boost topologies
Fully dimmable
Full digital control
Fault protection
Fully controlled with a single dsPIC33FJ16GS504 DSC.

Web seminars:

Click here to view the web seminar on Controlling High Brightness LEDs using the dsPIC GS series of SMPS controllers.

Do you want a demonstration?

Please contact local sales office in your geography and request for a demonstration.

Click here to find worldwide network of Sales & Support.

To get started today see the downloads link below and get full documentation including Users Guide, Hardware Design Package, and software source code.

Downloads

Title	Date Published	Size	D/L
Controlling High Brightness LEDs using the dsPIC GS series of SMPS controllers	1/24/2011 8:46:08 AM	19998 KB	
LED lighting Development Kit with DMX and full documentation	10/22/2010 2:19:00 PM	2494 KB	

Quick Guide to Microchip Development Tools	3/4/2011 10:09:50 AM	582 KB	
Software Solutions and Tools for the 16-bit and 32-bit Designer	6/6/2011 2:52:57 PM	3138 KB	