

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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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:

LED Lighting Development Kit

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	7
LED lighting Development Kit with DMX and full documentation	10/22/2010 2:19:00 PM	2494 KB	Q

Quick Guide to Microchip Development Tools3/4/2011 10:09:50 AM582 KBSoftware Solutions and Tools for the 16-bit and 32-bit Designer6/6/2011 2:52:57 PM3138 KB