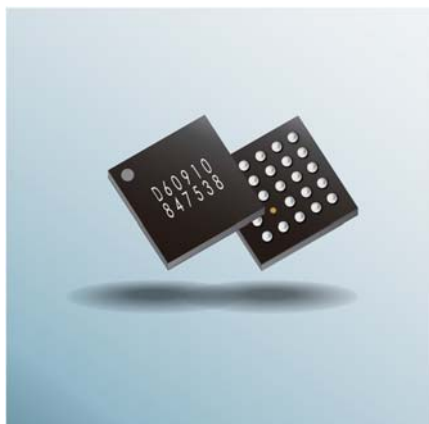


# 8-lamp Backlight LED Driver with Dimming Function for Mobile Phones

## BD60910GU



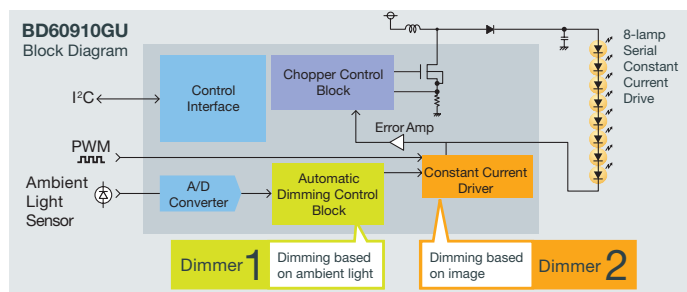
Double-dimming functionality and the industry's first 8-lamp LED drive capability ensure lower power consumption

### Product Outline

ROHM's new BD60910GU LED driver was designed to drive up to 8 LEDs in series - the most in the industry - with dual dimming functionality. Automatic dimming is performed in real time based on image brightness and ambient conditions, preventing eye strain while conserving energy. In addition, 256-level current adjustment capability results in both lower power consumption and flicker-free operation.

## 8-lamp serial drive

The industry's first 8-lamp serial drive design and automatic dimming functionality simplifies application while contributing to lower power consumption.



## Compatible with log / linear ambient light sensor output

Supports both log / linear output from an ambient light sensor, facilitating design.

### Capacitor reduces noise

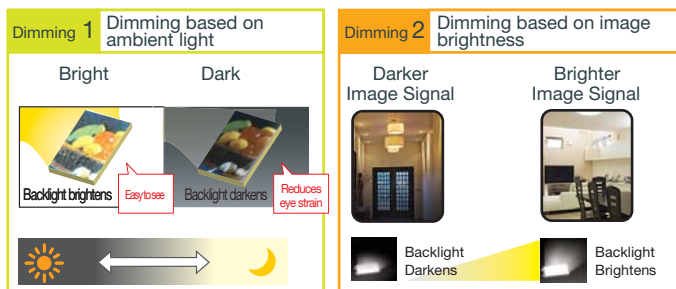
During PWM drive step-up voltage fluctuations are minimized by the external capacitor, preventing ringing noise.

### Automatic 8bit LED current adjustment

Automatic 8bit (256 steps, 0.1mA increments) LED current adjustment minimizes flickering and prevents eye strain.

## Double dimming function

Dimming is performed based on image brightness and ambient conditions, reducing power consumption - particularly in portable equipment.



## Supports ambient sensor gain switching (Linear input)

Automatic ambient sensor gain control switching simplifies design considerably. Ideal for use with ROHM's BH1621FVC ambient sensor IC.



### Applications

Smart phones, PDAs, MIDs (Mobile Internet Devices), and other compact and medium-sized LCD-equipped portable devices.



### Specifications

Part No.	Supply Voltage (V)	LED Connection	Boost Circuit	No. of LEDs	Dimming	Control Interface	Package (mm)
BD60910GU	2.7 to 5.5	Serial	Chopper	8	PWM signal / Max. 25.6mA 128-Step Current DAC	I <sup>2</sup> C Bus	VCSP85H3 (3.0x3.0mm, t=1.0 Max.)

The content specified herein is for the purpose of introducing ROHM's products (hereinafter "Products"). If you wish to use any such Product, please be sure to refer to the specifications, which can be obtained from ROHM upon request. Great care was taken in ensuring the accuracy of the information specified in this document. However, should you incur any damage arising from any inaccuracy or misprint of such information, ROHM shall bear no responsibility for such damage. The technical information specified herein is intended only to show the typical functions of and examples of application circuits for the Products. ROHM does not grant you, explicitly or implicitly, any license to use or exercise intellectual property or other rights held by ROHM and other parties. ROHM shall bear no responsibility whatsoever for any dispute arising from the use of such technical information. If you intend to export or ship overseas any Product or technology specified herein that may be controlled under the Foreign Exchange and the Foreign Trade Law, you will be required to obtain a license or permit under the Law.

The content specified in this document is correct as of 10th February, 2009.