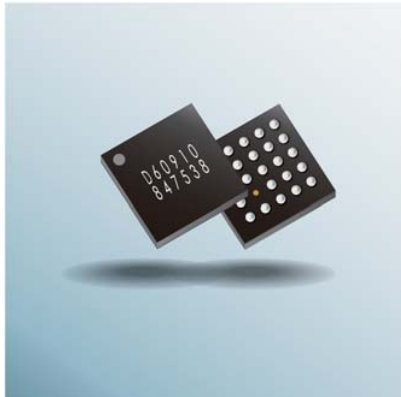


8-lamp Backlight LED Driver with Dimming Function for Mobile Phones

BD60910GU



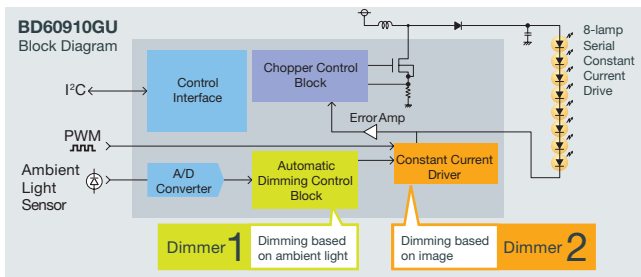
Double-dimming functionality and the industry's first 8-lamp LED drive capability ensure lower power consumption

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.

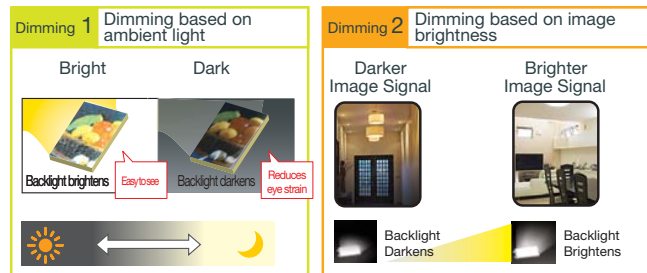
8-lamp serial drive

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



Double dimming function

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



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.

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 ² C Bus	VCSP85H3 (3.0x3.0mm, t=1.0 Max.)

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