



Newsletter 04/2009

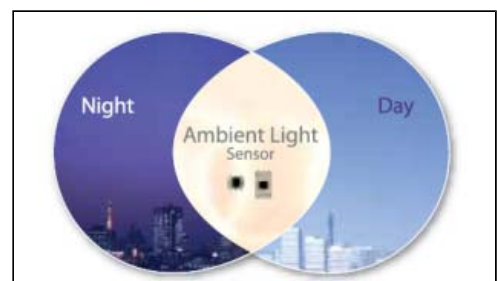
Dear Customer,

welcome to the April 2009 issue of Rohm's Email Newsletter. If you want to change your contact details or if you do not want to receive the Newsletter anymore please use the link at the end of this page.

Ambient Light Sensor IC Series

ROHM ambient light sensor (ALS) ICs are designed to control the brightness of LED-backlighted LCD displays based on ambient light availability and brightness for optimum display visibility and energy efficiency. The compact ROHM ALS ICs are the ideal choice for LCD-equipped portable devices as well as LCD monitors and high-definition (HDTV) backlighting control.

- * Mobile Phones
- * Digital Cameras
- * Video Players
- * PDAs
- * Notebook PCs
- * Car Navigation systems
- * LCD TVs
- * LCD Monitors/Displays



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ROHM provides a complete line-up of products designed specifically for the needs of current and next-generation automotive systems, including the body, interface, security, AV and sensor blocks.



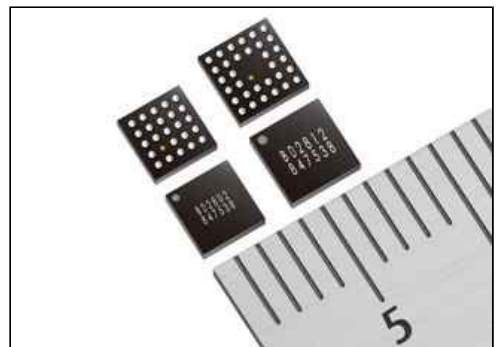
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LED Driver ICs with Built-in Display Pattern Data Optimized for Illumination Control in Portables

ROHM Semiconductor GmbH has announced the development of an LED driver IC series optimized for portable devices of all types, including mobile phones and car audio equipment. Features include built-in display pattern data and automatic illumination control that lightens CPU load. Two models are offered: the BD2802GU (2.8×2.8×1.0mm) designed to drive 6 LEDs, and the BD2812GU (3.1×3.1×1.0mm) which integrates a boost circuit.

The continuing trend towards greater sophistication in electronic devices has been accompanied by an equally large need for high performance LED illumination. Conventional LED driver ICs normally do not include an illumination control function, making fine current control difficult. Additional problems that often arise are flickering and/or inflexible design. And while LED driver ICs equipped with an illumination function do exist, the variety is often insufficient and the degree of sophistication severely limited. Problems such as the necessity of noise countermeasures when performing highly expressive and complicated LED illumination and the increased load on the CPU required when performing illumination control occur.

In order to meet these demands, ROHM has developed the BD2802GU and BD2812GU driver ICs for driving 6 LED lamps (two RGB LEDs). The units are offered in an ultra-compact WL-CSP (Wafer Level Chip Scale Package) featuring a pitch of 0.5mm for easy mounting in mobile devices. Both types feature 7-bit gradation (128 steps) and integrate a constant current DAC for lower EMI noise and reduced flickering. Integrated display pattern data enables automatic illumination control, eliminating CPU load. The display patterns of each of the 6 LEDs can be set individually, and 7-bit (128-step) resolution results in up to 2,097,000 colors (R:128 steps × G:128 steps × B:128 steps) for smooth, highly expressive LED illumination. By changing the device control address both the BD2802GU and BD2812GU can be configured to drive greater number of lamps for larger scale applications.



Availability:


Now (BD2802GU - OEM Quantities)

(BD2812GU - Samples), July 2009 (BD2812GU - OEM Quantities)

Main features of the BD2802GU and BD2812GU

- * Drives up to 6 lamps (30.48mA max.)
- * Constant current circuit with dimming function
plus 7-bit gradation (128 steps) for all 6 lamps
- * I2C address change and reference clock input/output
functions enable simultaneous operation of multiple units
- * Built-in charge pump circuit (BD2812GU only)
- * Control interface: Supports fast mode (400kHz max.)
I2C-bus format
- * Compact WL-CSP (Wafer Level Chip Scale Package)
ideal for portable devices
Constant current type (BD2802GU):
VCSP85H2 package (2.8×2.8×1.0mm, 0.5mm pitch)
Built-in boost circuit type (BD2812GU):

VCSP85H3 package (3.1×3.1×1.0mm, 0.5mm pitch)

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