

## Product Overview

### NOA1212: Ambient Light Sensor with Dark Current Compensation

For complete documentation, see the data sheet.

The NOA1212 is a very low power ambient light sensor (ALS) with an analog current output and a power down mode to conserve power. Designed primarily for handheld device applications, the active power dissipation of this chip is less than 8  $\mu\text{A}$  at dark and its quiescent current consumption is less than 200  $\text{pA}$  in power down mode. The device can operate over a very wide range of voltages from 2V to 5.5V. The NOA1212 employs proprietary CMOS image sensing technology from ON Semiconductor, including built-in dynamic dark current compensation to provide large signal to noise ratio (SNR) and wide dynamic range (DR) over the entire operating temperature range. The photopic optical filter provides a light response similar to that of the human eye. Together the photopic light response and dark current compensation insures accurate light level detection

#### Features

- Photopic light response
- Dark current compensation
- ~0 lux to over 100K lux range
- Power down mode
- Selectable gain ranges
- Less than 8 $\mu\text{A}$  power at 0 lux
- Linear response over full range

#### Benefits

- Display power savings
- Excellent SNR and DR
- Operation from dark to full sun
- Extends battery life
- High small step accuracy

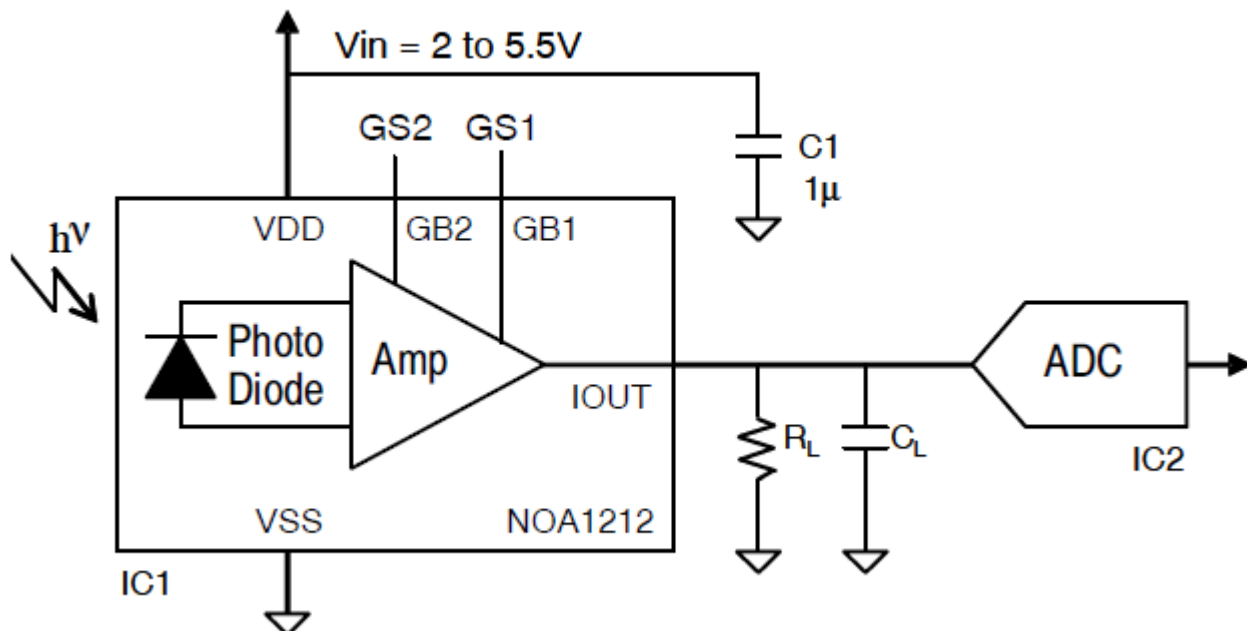
#### Applications

- Display power management

#### End Products

- Cell phones, PDAs, MP3 players, GPS
- Internet Mobile Devices (IMD)
- Cameras, video recorders
- Mobile devices with displays or backlit keypads

#### Application Diagram



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