

## Product Overview

### NOA1305: Ambient Light Sensor

For complete documentation, see the data sheet.

The NOA1305 ambient light sensor (ALS) is designed for handheld applications and integrates a 16-bit ADC, a 2-wire I2C digital interface, internal clock oscillator and a power down mode. The built in dynamic dark current compensation and precision calibration capability coupled with excellent IR and 50-60 Hz flicker rejection enables highly accurate measurements from very low light levels to full sunlight. The device can support simple count equals lux readings in interrupt-driven or polling modes. The NOA1305 employs proprietary CMOS image sensing technology from ON Semiconductor to provide large signal to noise ratio (SNR) and wide dynamic range (DR) over the entire operating temperature range. The optical filter used with this chip provides a light response similar to that of the human eye.

#### Features

- Photopic light response
- Dark current compensation
- 0.165 lux to over 100,000 lux range
- Less than 2 $\mu$ A in power down mode
- Less than 120 $\mu$ s in normal operation
- Linear response over full range

#### Applications

- Display power management

#### Benefits

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

#### End Products

- Cell phones, PDAs, MP3 players, GPS
- Cameras, Video Recorders
- Mobile devices with displays or backlit keypads

For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com).

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