

Product Overview

NOA3302: Ambient Light Sensor + Proximity Sensor

For complete documentation, see the data sheet.

The NOA3302 combines an advanced digital proximity sensor and LED driver with an ambient light sensor (ALS) and tri-mode I2C interface with interrupt capability in an integrated monolithic device. Multiple power management features and very low active sensing power consumption directly address the power requirements of battery operated mobile phones and mobile internet devices. The proximity sensor measures reflected light intensity with a high degree of precision and excellent ambient light rejection. The NOA3302 enables a proximity sensor system with a 32:1 programmable LED drive current range and a 30 dB overall proximity detection threshold range. The photopic light response, dark current compensation and high sensitivity of the ambient light sensor eliminates inaccurate light level detection, insuring proper backlight control even in the presence of dark cover glass. The NOA3302 is ideal for improving the user experience by enhancing the screen interface with the ability to measure distance for near/far detection in real time and the ability to respond to ambient lighting conditions to control display backlight intensity.

Features

- 30dB proximity threshold range
- 32:1 LED driver range
- IR and ambient light rejection
- Dark current compensation
- Photopic light response
- Output counts proportional to ambient light intensity

Benefits

- Up to 100mm and beyond range
- Minimize IR LED power
- Operates in sunlight and CFL
- High dynamic range
- Display power savings
- Simplifies application algorithms

Applications

- Measure human presense in terms of distance
- Control backlight intensity

End Products

- Smart phones, mobile internet devices, MP3 players, GPS
- Mobile device displays and backlit keypads

For more information please contact your local sales support at www.onsemi.com.

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