

## Software Release Note (SRN)

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## 1 RELEASE 1.0.2.1

### 1.1 Introduction

This release contains the ALS (Ambient Light Sensor)/IR and Proximity sensor Driver package, Software design document, Application Programmers Guide, Android test application and Driver Integration Guide, and a precompiled kernel.

### 1.2 Driver integration steps

To integrate and use this driver on panda board android kernel, please refer following document:

S.NO	Description	Version	Date
1	VVDN_ISLU_SNSR_DRIVER_INTEG_GUDE_A1_ISL29038.pdf	A1	17-10-2013

### 1.3 Features

Following are the features supported in this release:

1. The Android Test Application continuously reads Lux value from ALS sensor device and displays on screen.
2. The Test application is designed to read as well as write the configuration parameters. (Please Read the Application's Programmers Guide for Valid read write operations.)
3. 4 different ranges of ALS values can be obtained for ALS.
  - a. 125 Lux
  - b. 250 Lux
  - c. 2000 Lux
  - d. 4000 Lux
4. Configure the separate minimum and maximum interrupt thresholds for ALS sensor and PROX sensor.
5. ADC range
  - a. 12 – bit for ALS
  - b. 8 – bit for Proximity
6. Selectable Interrupt persistency (**1 / 2 / 4 / 8** cycles) for ALS/ PROX
7. Configure the Proximity sleep time. following are the sleep time values
  1. 0.0 ms
  2. 3.125 ms
  3. 6.25 ms
  4. 12.5 ms
  5. 25 ms
  6. 50 ms

7. 100 ms
  8. 400 ms
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8. Configure the Proximity IR LED current
    1. 31.25 mA
    2. 62.5 mA
    3. 125 mA
    4. 250 mA
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9. Driver supports the Proximity and ALS offset compensation set
  10. Selectable Interrupt Algorithm
    1. Windows Comparator
    2. Hysteresis Window
  11. Software reset
  12. Driver supports both polling as well as interrupt mode functionality
  13. Offline help on using the application.

## **1.4 Test report**

All features supported in this release are tested and validated.

## **1.5 Known issues**

None