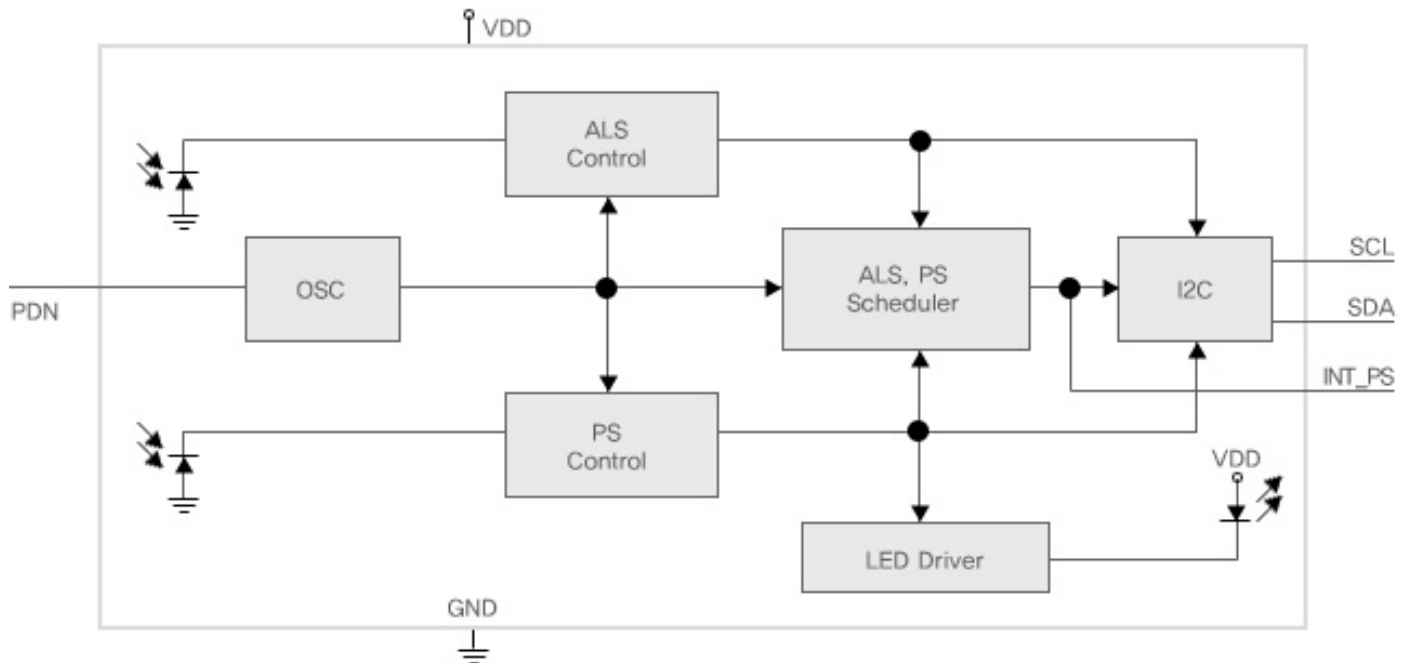


CP5301

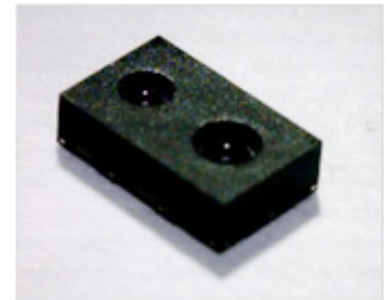
CP5301 is designed for mobile phone, notebook etc, and all-in-one sensor with ALS, PS and LED driver. CP5301 is operated by internal Scheduler and I2C, This Scheduler and I2C control LED driver and ALS/PS analog, digital sleep, wake up, interrupt mode, etc. Operating voltage range is 2.4V~3.6V and it enables low power consumption by LED driver current control.

BLOCK DIAGRAM



APPLICATIONS

- Industrial automation,
- Home electronics
- PDA, GPS and mobile phones,
- Portable and Handheld devices,
- Personal Computer/Notebooks,
- robot cleaners
- door lock



FEATURES

Proximity sensor, ambient light sensor, and LED Driver are integrated into one package

ALS

- 20-bit ADC resolution
- Detecting Ambient light from 0,1 to 237,500 Lux
- Ambient temperature dependency cancel out circuit

PS

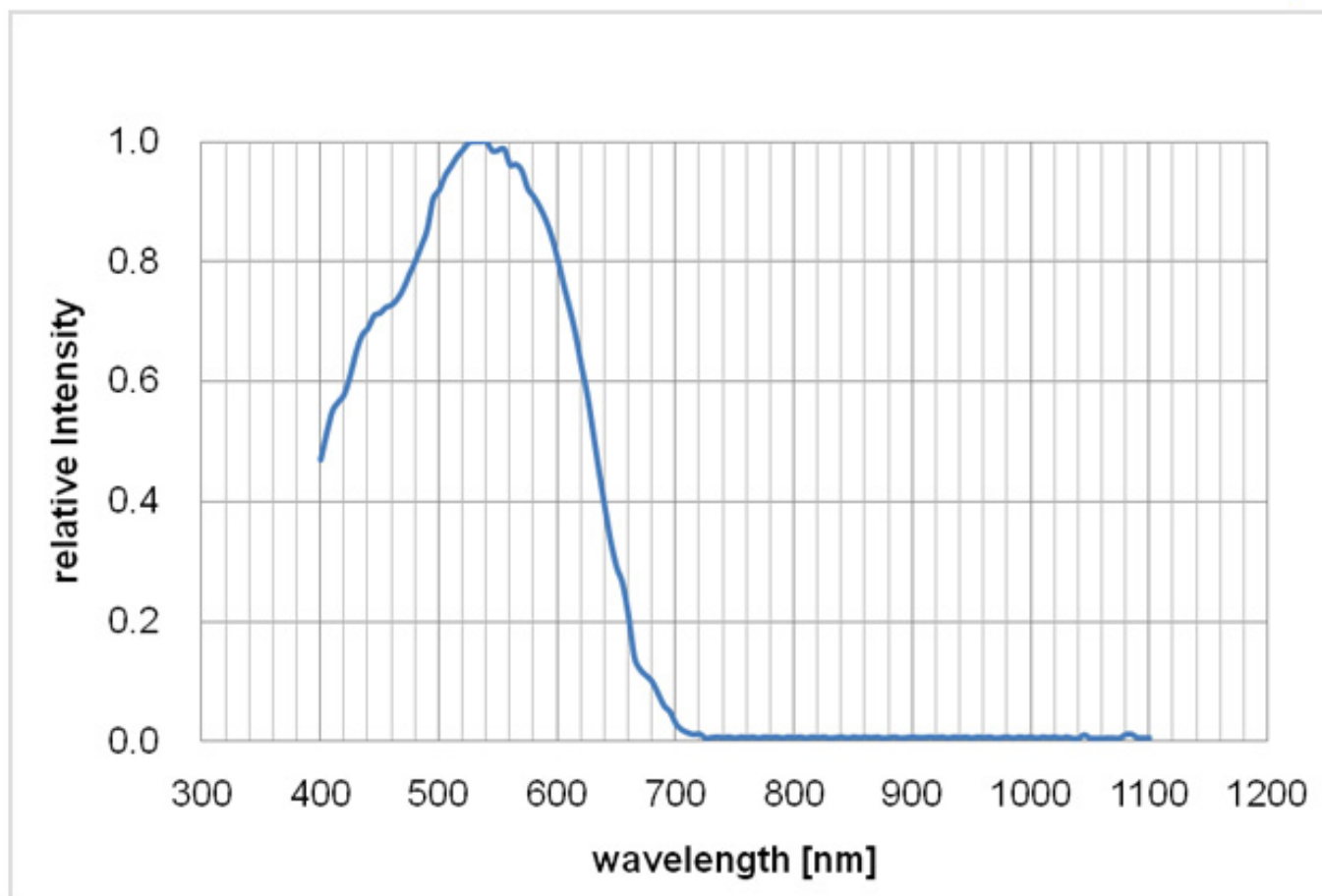
- Embedded IR LED
- Ambient Light Cancellation circuit
- Over 10cm detection distance using Kodak's Gray Card

System Interface

- Open Drain Digital Interface (I2C & Interrupt)
- VDD: 2.6V ~ 3.6V, I/O: 1.8V ~ 3.6V

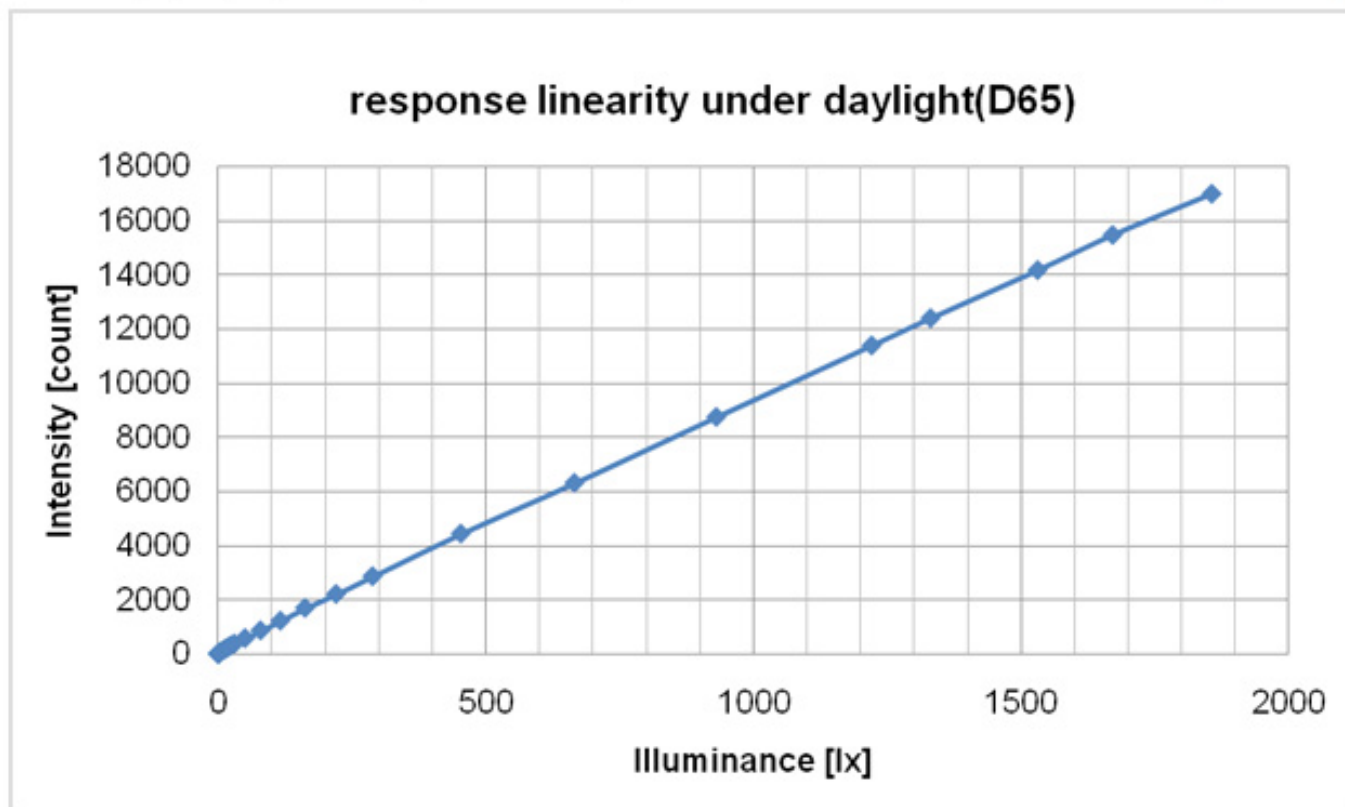
Int. time 100ms, Peak wave length is 540nm

ALS: Close to human eyes

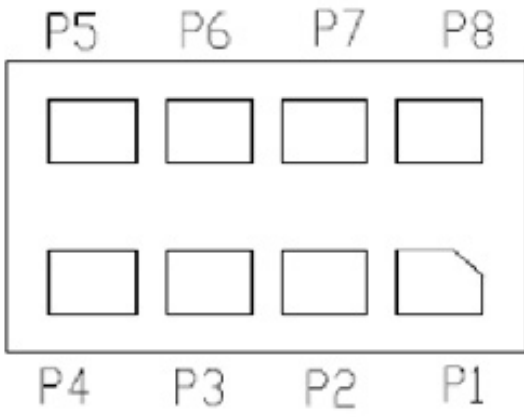


Under Daylight (D65, color temperature 6500K) illumination

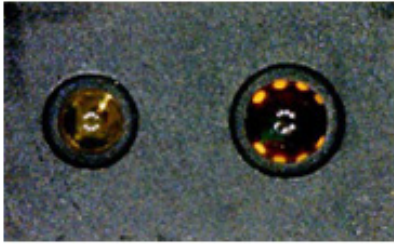
ALS: Linearity



Package Outline



Pin	Pin Name
P1	SDA
P2	INT
P3	LDR
P4	LED K
P5	LED A
P6	GND
P7	SCL
P8	VDD



- 1) 근접 및 조도센서 : 4.35×2.7×1.2mm
- 3) 근접센서 : 4.00×2.4×1.4mm
- 5) 근접 및 조도센서 : 4.00×2.4×1.4mm
- 6) 조도센서 : 1.43×1.5×0.6mm