



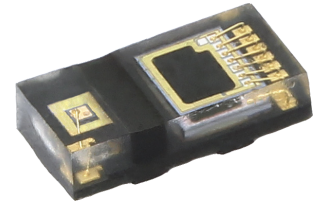
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DID YOU KNOW?

VCNL36828P

KEY BENEFITS AND APPLICATIONS

VCNL36828P - Small Package, VCSEL-Based Proximity Sensor



[VCNL36828P](#)

Key Benefits

- **Low Power Consumption**
Low power mode reduces current to a minimum (5 μ A idle current) between measurements
- **Narrow Emission Profile**
Narrow angle VCSEL ($\pm 4.5^\circ$) allows for a small window design
- **Multiple I²C Addresses**
Smart dual slave address accessible simply by swapping the pins
- **Small Package Size**
2.0 x 1.0 x 0.5 (L x W x H in mm) package allows for use even in tight spaces
- **Superior Proximity Detection**
Presence detection up to 200 mm
- **Design Flexibility**
Integration time and gain are programmable to meet specific application needs
- **Sunlight Cancellation**
Proximity detection supports cancellation of up to 140 klux



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KEY BENEFITS AND APPLICATIONS

Multibutton Display

Touchless Buttons

Narrow VCSEL emission and package size allow the placement of multiple sensors in a confined housing.



TWS

In-Ear Detection

Multiple slave addresses allow two sensors to be placed in the same I²C bus in each earphone to differentiate if the sensor is placed in-ear or on a table. Low power mode optimizes the sensor for battery-driven applications.



IoT - Smart Home

Wake-Up Detection and Activation

The sensor, which has a lower power mode to extend battery life, can be used in IoT devices for wake-up detection. Superior sunlight cancellation enables the IoT devices to also be placed close to a window.



Touchless Dispenser

Adjustable Distance Hand Detection

Adjustable distance settings according to the application requirements to avoid false detection.

