

Contactless Force Sensing – Enhanced Touch Experience



The DNA of tech.®

- ✓ 4 x Slave Addresses – With One I²C Signal
- ✓ Automotive-Grade Optical Force Sensing
- ✓ Sensor Algorithm Support

VCNL4030X01



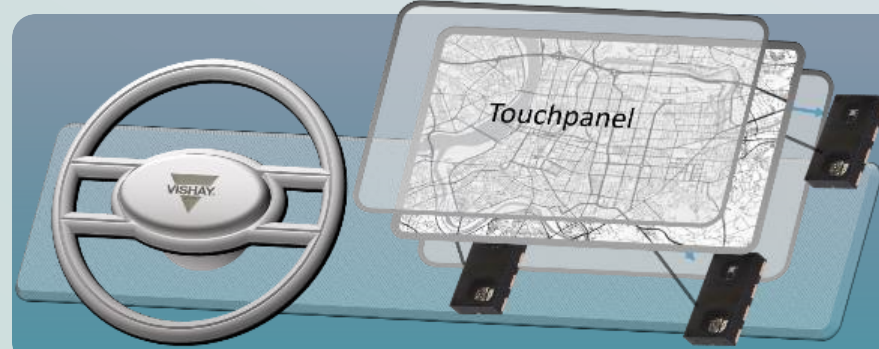
Infrared Emitter



ASIC



Photodiode



[White Paper](#)



[Infographic](#)



[Did You Know?](#)

Principle

Uses an emitter and a photodetector to measure force by detecting how mechanical displacement changes the intensity of the light reflection

Advantages

Contactless design offers high precision, no wear and tear, immunity to EMI, and ultrathin integration ideal for compact applications

Applications

Ideal for automotive hidden buttons, medical wearables, and premium consumer devices where sleek design and reliability are critical

