



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



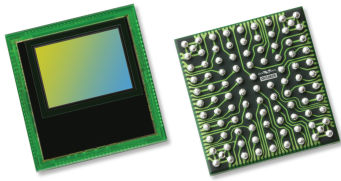
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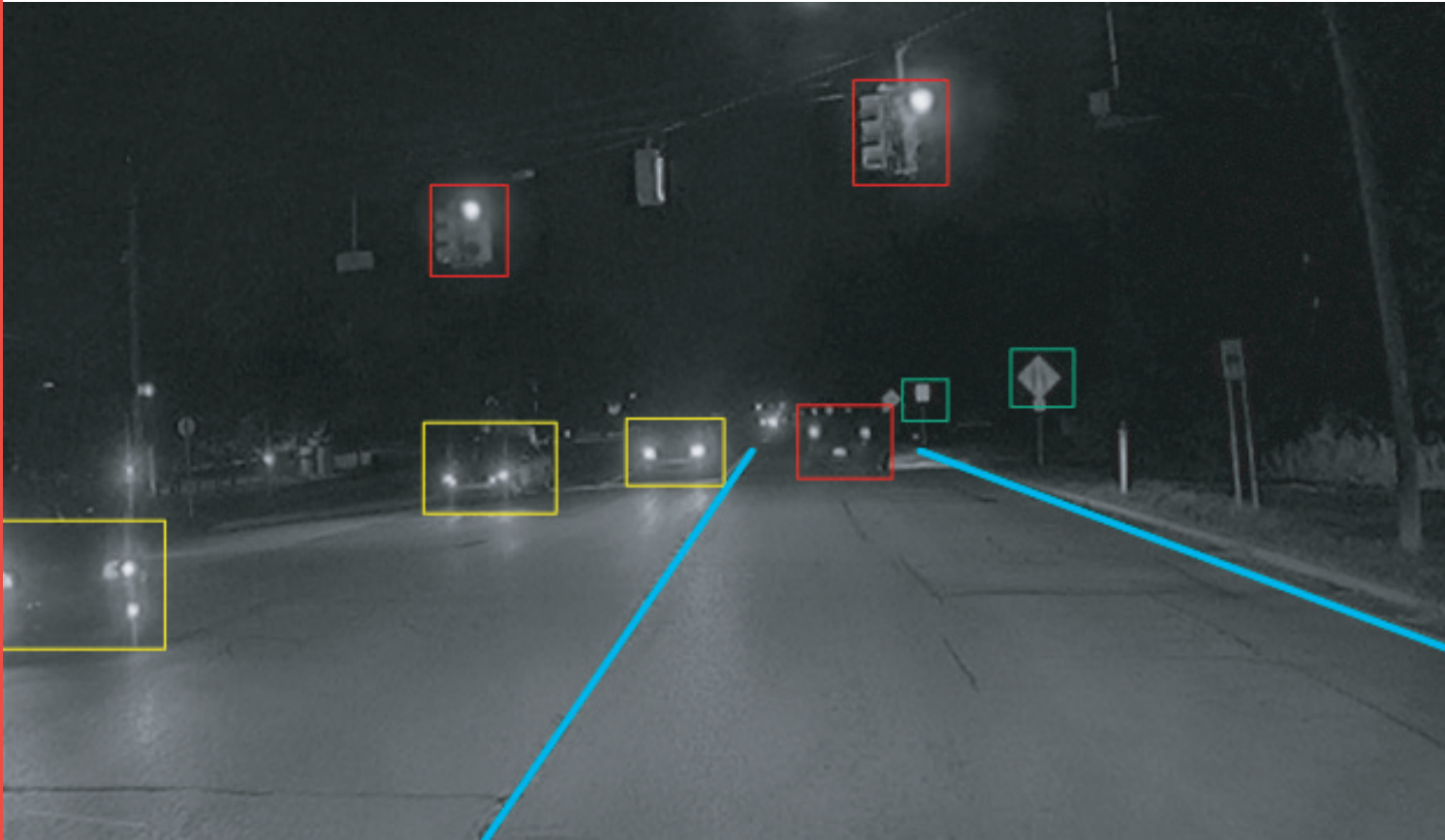
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# OV10625 HD HDR product brief



## Industry-Leading Sensitivity and High Dynamic Range for Next-Generation Automotive Applications



available in  
a lead-free  
package

OmniVision's new OV10625 image sensor is a high performance OmniHDR imaging solution that brings industry-leading sensitivity and best-in-class high dynamic range (HDR) to advanced driver assistance systems (ADAS).

The sensor's benefits enable a host of ADAS features, including: pedestrian detection, lane-departure warning, lane keeping assist, blind spot detection, and traffic signal recognition, among others.

The 1/3.2-inch OV10625 delivers HDR performance of up to 120 dB combined with best-in-class low-light sensitivity of 15 V/Lux-sec ensures accurate scene reproduction in a wide range of driving conditions.

The OV10625 supports digital RAW data output and fits into one of the industry's most compact and efficient 7.3 x 7.8 mm package.

Find out more at [www.ovt.com](http://www.ovt.com).





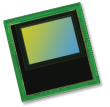
## Applications

- Automotive
  - pedestrian detection
  - lane-departure warning
  - lane keeping assist
- blind spot detection
- traffic signal recognition

## Product Features

- support for image size: WVGA, VGA, QVGA and any cropped size
- high dynamic range
- high sensitivity
- safety features
- low power consumption
- image sensor processor functions:
  - automatic exposure/gain control
  - lens correction
  - defective pixel cancelation
  - HDR combination and tone mapping
  - automatic black level correction
- supported output formats: RAW
- horizontal and vertical sub-sampling
- serial camera control bus (SCCB) for register programming
- external frame synchronization capability
- 50/60 Hz flicker cancellation
- parallel 16-bit DVP output
- embedded temperature sensor
- one time programmable (OTP) memory

# OV10625



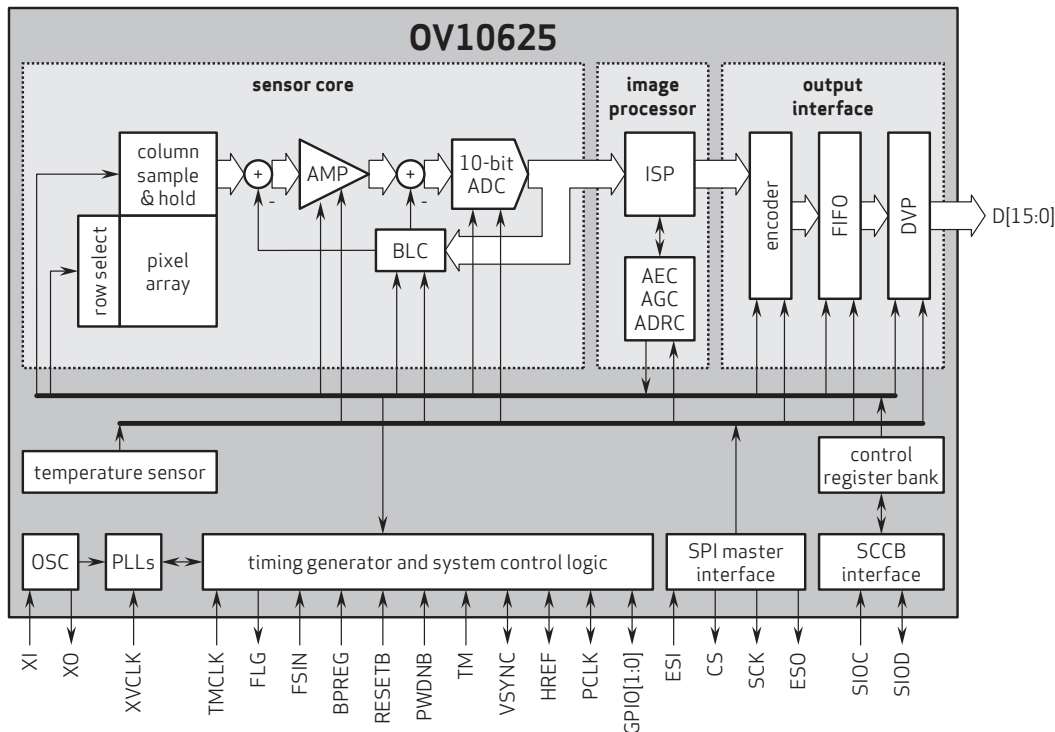
## Ordering Information

- OV10625-N02V-1A-Z (RCCC, lead-free, 102-pin aCSP™, rev 1A, in tray)

## Product Specifications

- active array size: 752 x 548
- power supply:
  - core: 1.425 - 1.575V
  - analog: 3.14 - 3.47V
  - I/O: 1.7 - 3.47V
- temperature range:
  - operating: -40°C to +105°C
  - sensor ambient temperature and -40°C to +125°C junction temperature (operating sensor junction temperatures above +60°C may result in degraded image quality)
- output interfaces:
  - 16-bit parallel DVP
- output formats: up to 20-bit combined RAW, separated 8-/10-bit RAW
- lens size:
  - VGA: 1/3.7"
  - WVGA: 1/3.2"
- lens chief ray angle: 9°
- input clock frequency: 6 - 27 MHz
- maximum image transfer rate: 60 fps full resolution
- dynamic range: -120 dB
- sensitivity: 15 V/lux-sec
- scan mode: progressive
- shutter: rolling shutter
- maximum exposure interval: TBD
- pixel size: 6 μm x 6 μm
- image area: 4608 μm x 3384 μm
- package dimensions:
  - aCSP: 7310 μm x 7810 μm

## Functional Block Diagram



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