



# OX08D20

## 8-Megapixel Product Brief



## 8MP Automotive Image Sensor with TheiaCel™ for Exterior Automotive Cameras

The OX08D20 8-megapixel (MP) CMOS image sensor with TheiaCel™ technology is for automotive OEMs seeking a single device that integrates all of the most important image sensor features, including best-in-class low-light performance, LED flicker mitigation, compact size, superior image quality at high temperatures, and low power. It is an upgrade to the popular OX08D10 sensor for exterior cameras used in advanced driver assistance systems (ADAS) and autonomous driving (AD).

The OX08D20 features all of the benefits of the OX08D10, as well as:

- An innovative capture scheme developed in collaboration with Mobileye that significantly reduces the motion blur of nearby objects (while driving) and improves low-light performance
- An upgrade to 60 frames per second (fps) to enable dual-use cameras
- Updated cybersecurity to match the latest industry standard, MIPI CSE 2.0

### Applications

- High resolution front viewing
- Machine vision
- Autonomous driving
- Digital video recording

### Features

- **Active array size:** 3840 x 2160
- **Maximum image transfer rate:**
  - HDR6: 30 fps @ 3840 x 2160
  - HDR4: 55 fps @ 3840 x 2160
  - 60 fps @ 3840 x 1972
  - HDR3: 60 fps @ 3840 x 2160
- **Power supply:**
  - Analog: 3.3V
  - Digital: 0.94V
  - I/O pads: 1.8/3.3V
- **Output interfaces:** Up to 4-lane MIPI CSI-2
- **Output formats:** Uncompressed 24-bit (HDR4) / 20-bit (HDR3) and 20/16/14/12-bit (PWL) combined HDR
- **Lens size:** 1/1.729"
- **Pixel size:** 2.1 µm x 2.1 µm

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