



OS05L10

5-megapixel product brief



New 5MP FSI Image Sensor for Industrial and Consumer Security Surveillance Cameras

The new OS05L10 is a 5-megapixel (MP) image sensor featuring a small, 2.0-micron (μm) frontside-illuminated (FSI) pixel with OmniPixel®3-HS technology for high sensitivity and performance. Two-exposure staggered high dynamic range (HDR) extends dynamic range for the highest quality images possible. The OS05L10 sensor has a frame rate of 30 fps.

The OS05L10 has a 1/2.7-inch OF as is pin-to-pin compatible with previous-generation sensors, for a cost-effective and seamless upgrade. It features CSP package technology for the smallest possible solution. It supports MIPI: 1/2-lane.

Find out more at www.ovt.com.



- OS05L10-A44A-001A-Z (color, lead-free)
44-pin CSP

Applications

- security surveillance systems
- IP cameras
- HD analog cameras

Technical Specifications

- active array size:** 2880 x 1620
- maximum image transfer rate:**
 - 2880 x 1620 @ 30 fps
 - 2880 x 1620 @ 15 fps (HDR)
- power supply:**
 - analog: 2.8V
 - I/O: 1.8V
 - core: 1.2V
- output formats:** 10-bit RGB RAW / 8-bit RGB RAW
- temperature range:**
 - operating: -30°C to +85°C junction temperature
 - stable: 0°C to +60°C junction temperature
- lens size:** 1/2.7"
- lens chief ray angle:** 12° linear
- pixel size:** 2 μm x 2 μm
- image area:** 5776 μm x 3256 μm

Product Features

- support image sizes: full size (2880 x 1620)
- supports 2x2 color binning function
- supports mirror and flip, cropping, and windowing
- supports output formats: 10-bit RAW RGB
- two on-chip phase lock loops (PLLs)
- 256 bits of embedded one-time programmable (OTP) memory
- two-wire serial bus control (SCCB)
- supports automatic black level calibration
- supports multi-camera synchronous function
- supports dynamic defective pixel correction
- slave SCCB interface for sensor setting with max 400 kHz (supports 1 MHz when ECLK ≥ 12 MHz) speed

Functional Block Diagram

