KLT-H3MF-OS08A20 V2.0 NIR

OmniVision OS08A20 MIPI Interfaz Foco fijo 8MP M12 Módulo de cámara No IR Filter Lens

Módulo de cámara No.	KLT-H3MF-OS08A20 V2.0 NIR
Sensor de imagen	OS08A20
EFL	5 mm
F.NO	2.0
Pixel	3840 x 2160
Ángulo de visión	105°(D) 84°(H) 52°(V)
Tipo de lente	1/1.8 pulgada, No IR Filter
Dimensiones de la lente	16.40 x 16.40 x 33.67 mm
Tamaño del módulo	40.00 x 22.00 mm
Tipo de módulo	Foco fijo
Interfaz	MIPI

N. ° de pieza del conector de acoplamiento. AXE540124

Conector de acoplamiento en la placa principal. Se vende por separado.

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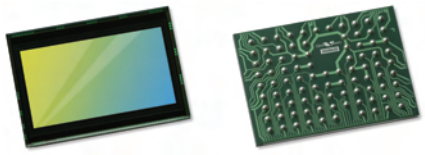


OS08A20 8-megapixel product brief

High Resolution 8-Megapixel PureCel® Sensor Brings Superior Near-Infrared Imaging to Surveillance Applications

lead free

available in a lead-free package

OmniVision's OS08A20 is the first 8-megapixel image sensor to combine Nyxel™ technology with OmniVision's PureCel® pixel architecture, which allows the OS08A20 to capture ultra-high definition (UHD) 4K2K video and images that are bright and crisp in all lighting conditions. This makes it an ideal imaging solution for professional surveillance systems, as well as other nascent security applications such as body-worn cameras.

OmniVision's breakthrough Nyxel™ technology delivers significant quantum efficiency (QE) improvements at 850 nm and 940 nm while maintaining high-modulation transfer function, allowing the OS08A20 to monitor a larger area. Additionally, by reducing the need for external lighting sources, Nyxel™ technology enables lower power consumption.

The OS08A20 supports a wide range of resolution formats and frame rates, including 4K2K (3840x2160) in a 16:9 aspect ratio at 60 frames per second (fps), quad HD (2560x1440) at 60 fps, or full 1080p HD at 120 fps. It comes in a 2x2-micron pixel size and 1/1.8-inch optical format for improved sensitivity.

Find out more at www.ovt.com.

OmniVision

OS08A20

Applications

- Security Cameras
- Action Cameras
- High Resolution Consumer Cameras
- Digital Still Cameras (DSC)
- Digital Video Camcorders (DVC)

Ordering Information

- **OS08A20-H92A-1B**
  (color, lead-free) 92-pin CSP

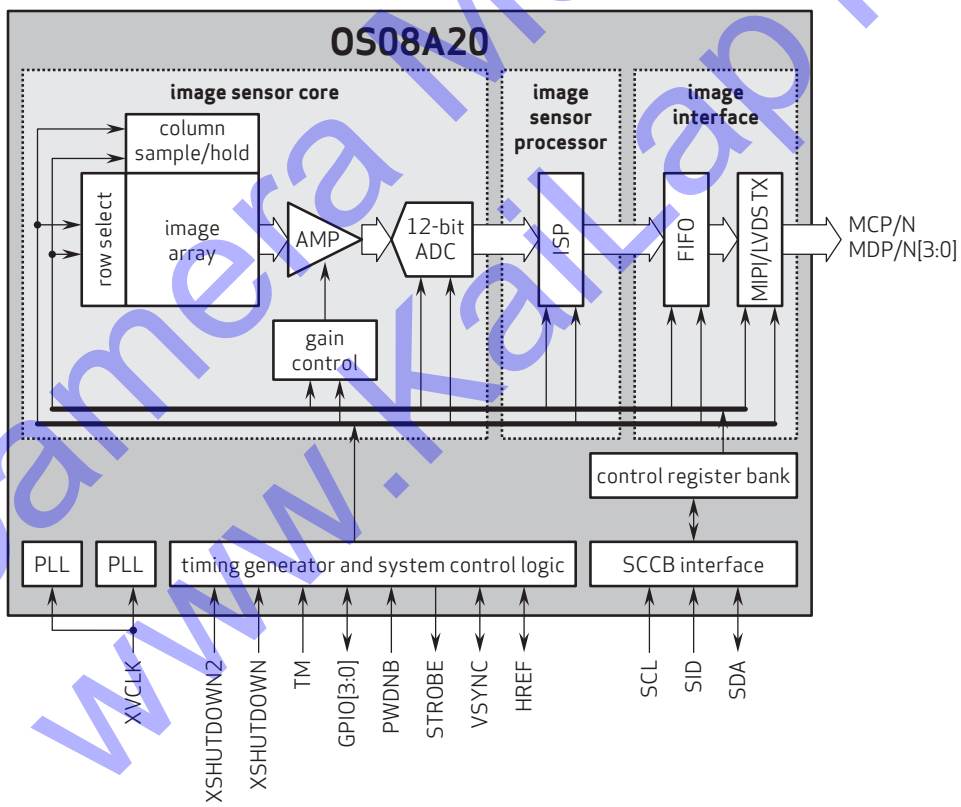
Product Features

- 2 µm x 2 µm pixel
- optical size of 1/1.8"
- QE enhancement in 850 nm and 940 nm
- programmable controls for:
  - frame rate
  - mirror and flip
  - cropping
  - windowing
- supports output formats:
  - 12-/10-bit RAW RGB
- supports image sizes:
  - 4K2K (3840x2160)
  - 2560 x 1440
  - 1080p (1920x1080)
  - 720p (1280x720)
- supports 2x2 binning
- standard serial SCCB interface
- 12-bit ADC
- up to 4-lane MIPI/LVDS serial output interface (supports maximum speed up to 1500 Mbps/lane)
- 2-exposure staggered HDR support
- programmable I/O drive capability
- light sensing mode (LSM)
- PLL with SCC support
- support for FSIN

Product Specifications

- **active array size:** 3840 x 2160
- **power supply:**
  - **core:** 1.2V
  - **analog:** 2.8V
  - **I/O:** 1.8V
- **power requirements:**
  - **active:** 240 mA
  - **XSHUTDOWN:** <10 µA
- **temperature range:**
  - **operating:** -30°C to +85°C junction temperature
  - **stable image:** 0°C to +60°C junction temperature
- **output formats:** 10/12-bit RGB RAW
- **lens size:** 1/1.8"
- **input clock frequency:** 6 - 27 MHz
- **lens chief ray angle:** 11° linear
- **max S/N ratio:** 39 dB
- **dynamic range:** 74 dB @ 16x gain
- **maximum image transfer rate:**
  - **4K2K:** 60 fps
  - **2560 x 1440:** 60 fps
  - **1080p:** 120 fps
- **sensitivity:** 13,000 e⁻/Lux-sec
- **scan mode:** progressive
- **maximum exposure interval:** VTS-8
- **pixel size:** 2.0 µm x 2.0 µm
- **image area:** 7736.256 µm x 4379.616 µm
- **package dimensions:**
  - **CSP:** 8929.2 µm x 6330 µm

Functional Block Diagram



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