

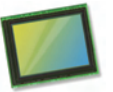
Applications

- Security and Surveillance Cameras
- Wearables
- PC Multimedia
- 960H for Analog CCTV Applications

Product Features

- 3.75 μm x 3.75 μm pixel
- 1280 x 960 at 60 fps @ 10-bit, 45 fps @ 12-bit
- programmable controls for:
 - frame rate
 - mirror and flip
 - cropping
 - windowing
- supports images sizes:
 - SXGA (1280x960)
 - 720p (1280x720)
 - VGA (640x480), and more
- 58 bytes of embedded one-time programmable (OTP) memory for customer use
- ultra low power mode (ULPM)
- support for output formats:
 - 10/12-bit RGB RAW
- two-wire serial bus control (SCCB)
- MIPI/LVDS serial output interface (1- or 2-lane)/DVP interface
- 2x binning support
- image quality control:
 - defect pixel correction
 - automatic black level calibration

OV9750



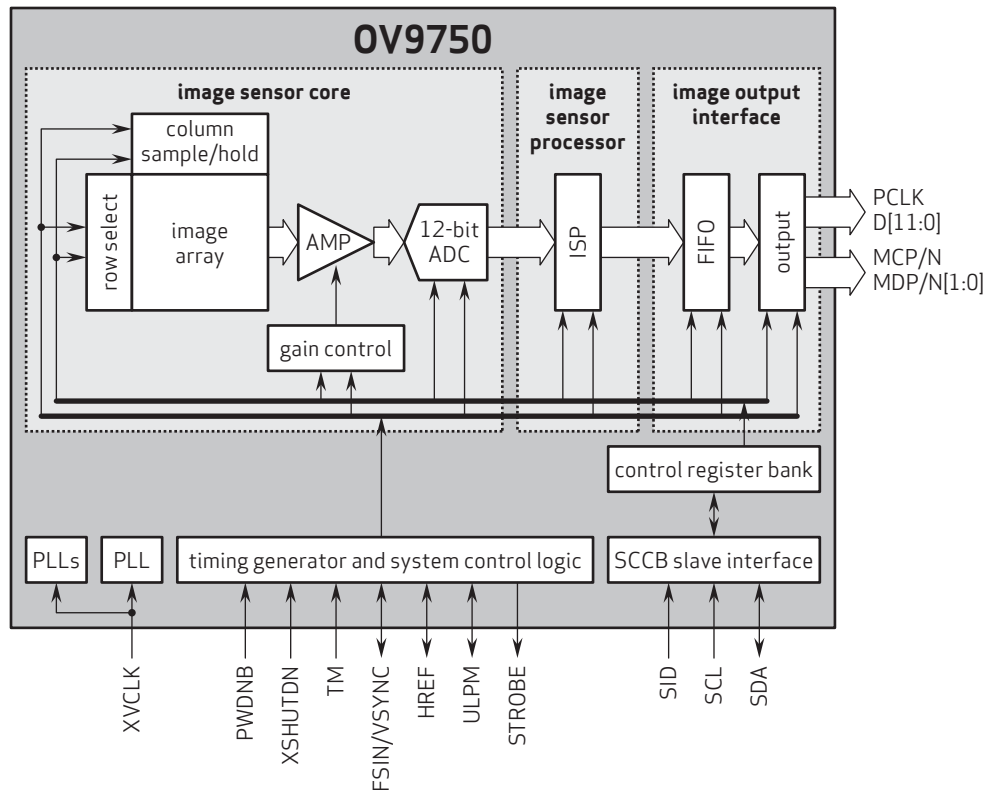
Ordering Information

- OV09750-H55A
(color, lead-free, 55-pin CSP)

Product Specifications

- active array size: 1280 x 960
- power supply:
 - core: 1.7 to 1.9V (1.8V nominal)
 - analog: 3.15 to 3.45V (3.3V nominal)
 - I/O: 1.7 to 1.9V (1.8V nominal)
- power requirements:
 - active: 166 mW
 - standby: 51 μW
 - XSHUTDN: 13 μW
- temperature range:
 - operating: -30°C to +85°C junction temperature
 - stable image: 0°C to +60°C junction temperature
- output interface: 2-lane MIPI/LVDS serial output/DVP parallel output
- output formats: 10/12-bit RGB RAW
- lens size: 1/3"
- input clock frequency: 6 - 74.5 MHz
- lens chief ray angle: 9° linear
- maximum image transfer rate:
 - SXGA (1280x960): 60 fps
 - 720p (1280x720): 60 fps
 - VGA (640x480): 120 fps
- sensitivity: 39.6 Ke-/Lux-sec
- max S/N ratio: 43.1 dB
- dynamic range: 73.4 dB @ 8x gain
- pixel size: 3.75 μm x 3.75 μm
- image area: 4860 μm x 3660 μm
- die dimensions: 6254 μm x 5194 μm

Functional Block Diagram



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