

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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# OV6922 NTSC product brief





#### available in a lead-free package

## Ultra Small 1/18-inch CMOS Camera-on-a-Chip

The OV6922 is a 1/18-inch optical format CMOS image sensor incorporating a high level of functionality and very low power consumption in an ultra-small footprint package. This makes it ideal for use in small disposable cameras for medical imaging applications such as diagnostic and intubation systems.

The  $2.1~\text{mm} \times 2.3~\text{mm}$  CSP packaged sensor enables a microscopic camera module with a 4.0~mm diameter, to make medical procedures even less invasive for the patient.

Having been designed for very low power operation, the OV6922 only requires a clock and a single 3.3-volt DC power supply to get the NTSC composite signal out to a direct interface with a VCR and TV monitor.

The OV6922 is built on OmniVision's proprietary OmniPixel® architecture providing the highest image quality, performance and clarity. It is an ideal solution for medical applications that require both color video and a very small footprint package.

Find out more at www.ovt.com.





### **Applications**

- Medical Devices
- Security and Surveillance
- Entertainment Multimedia, Games and Toys

# OV6922



### **Product Features**

- single chip 1/18" NTSC lens video camera
- composite video output
- automatic exposure/gain/white balance
- aperture correction
- gamma correction
- low power consumption

- +3.3V only power supply
- wide dynamic range, anti-blooming, zero smearing
- SCCB programmable controls:
- color saturation
- exposure
- gain
- gamma curve

### Ordering Information

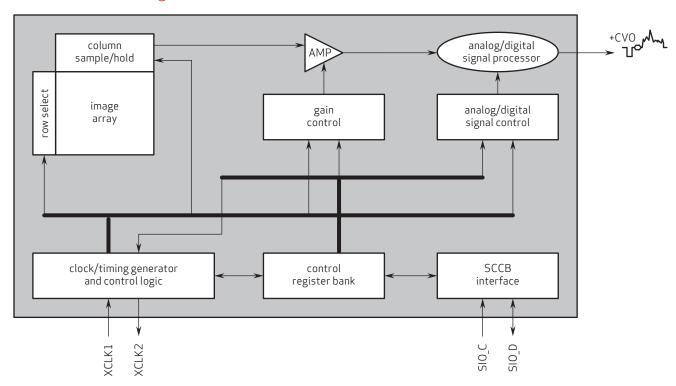
■ OV06922-V09N (color, NTSC, lead-free, 9-pin CSP2)

### **Product Specifications**

- active array size: 328 x 250
- power supply: 3.3 VDC ±5%
- power requirements (active):
  without loading: 20 mA
  with 75 ohm loading: 30 mA
- temperature range:operating: -20°C to +70°Cstable image: 0°C to +50°C
- lens size: 1/18"
- electronic exposure: 1/60 s to 5.7 µs
- output formats: composite video

- color mosaic: RGB Bayer pattern
- sensitivity: 1000 mV/lux-sec
- max S/N ratio: 42 dB
- dynamic range: 66 dB @ 8x gain
- dark current: 3 mV/sec@ 60°C junction temperature
- $\blacksquare$  pixel size: 2.5  $\mu$ m x 2.5  $\mu$ m
- image area: 820 µm x 625 µm
- package dimensions: 2135 µm x 2265 µm

### Functional Block Diagram





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