OV5116N B&W CMOS CAMERACHIP™ with NTSC Analog Output

General Description

The OV5116N is a complete black and white CMOS Video Camera chip. The OV5116N conforms to EIA/NTSC (60 Hz) standards and outputs composite video capable of directly driving a 75Ω display device.

The on-chip auto exposure allows for a wide range of lighting conditions, eliminating the need for external mechanical shutter components. This along with its single supply, low power consumption make the OV5116N an incredibly versatile and cost-effective video camera.

Note: The OV5116N is available in a lead-free package.

Features

- Single chip 1/4" format video image sensor
- EIA/NTSC output
- Selectable mirror image
- Auto gain control (maximum +18 dB)
- High I.R. sensitivity for nighttime applications
- Auto and manual backlight compensation mode
- Gamma correction - ON/OFF
- External frame sync capability
- 40 mW on-chip power consumption
- External data acquisition support
- Smear free
- Auto level expanding
- Optional edge enhancement

Ordering Information

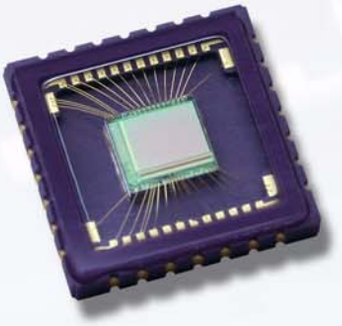
Product	Packages
OV05116-C11A (B&W, NTSC)	CLCC-28

Applications

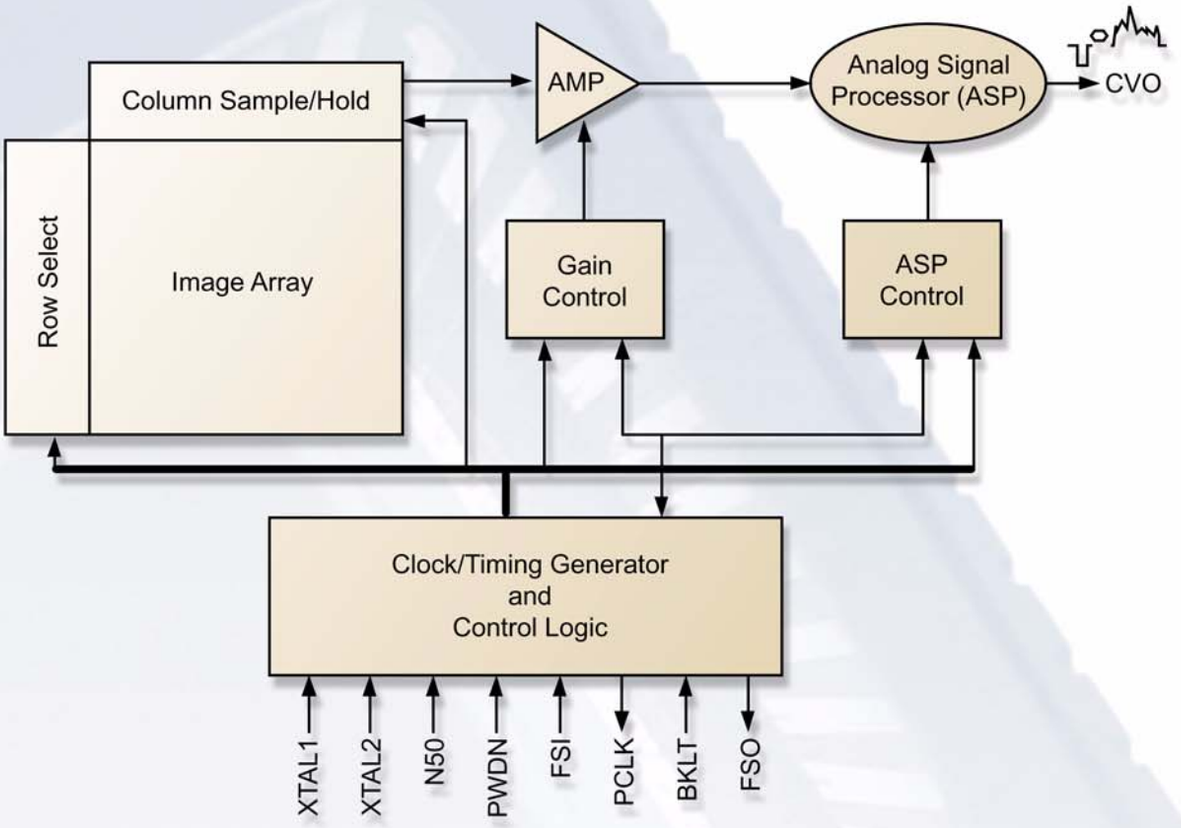
- Security
- Surveillance
- Machine Vision
- Process Control
- CCTV
- Infant Monitoring
- Toys

Key Specifications

Array Size		320 x 240
Power Supply		5 VDC ± 5%
Power Requirements	**Without Loading**	40 mW
	With 75 ohm Loading	70 mW
Image Area		3.3mm x 2.5mm
Auto Electronic Exposure Time		1/60s - 1/6000s
Minimum Illumination (3000K)		0.5 lux @ f 1.4
S/N Ratio		46 dB (AGC=1x)
Pixel Size		9.1 µm x 8.7 µm
Package Dimensions		0.45 in. x 0.45 in.



Functional Block Diagram



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