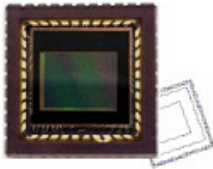


CP8108



CP8108 is a single-chip video/image camera sensor designed for car or security system using WIDy™ technology of ClairPixel that make screen capture in various light conditions. CP8108 configures as a 720x480 image array can output up to 30 frames per second, and various digital output formats and PAL composite output are supported. CP8108 features various camera control functions and can be programmable through two-wire serial interface.

Features

- ClairPixel's WIDy™ , Wide Dynamic Range technology
- System-on-a-chip(SOC)-completely integrated camera system
- Integrated microcontroller for flexibility
- CVBS, 8-,10-bit parallel digital output
- Bayer Noise Reduction, Lens Shading Compensation, Defective Pixel Compensation
- Color Correction, Gamma Correction,
- Hue/Saturation, Contrast/Brightness Control
- Edge Enhancement
- Parking Guide, OSD, Privacy Zone Mask,
- Auto Exposure, Auto White Balance,
- Anti-Flicker, Black Level Calibration
- NTSC/PAL encoder with 10bit DAC
- 2 channel(Master, Slave) Two-wire serial interface
- Embedded 2 channel 8-bit General ADC for OSD & CdS

Application

- Surveillance / IP camera
- USB camera
- Automotive blackbox camera

WDR, 1/3", D1, Analog(NTSC/PAL) / Digital output

PARAMETER	TYPICAL VALUE	
Optical Dimension	Optical Format	1/3 inch
	Pixel Size	6.5 um X 7.4 um
	Effective Resolution	720(H) X 480(V)
	Active Pixel Area	4.732 mm(H) X 3.611 mm(V)
Digital Output	10bit, 8bit RGB Bayer, YCbCr422, RGB565/555, CCIR656	
Analog Output	CVBS(NTSC/PAL) @ 54MHz	
Maximum Clock Frequency	54MHz	
Maximum Frame Rate	720x480, 30fps @ 54MHz (YCbCr) 720x480, 60fps @ 54MHz (Bayer) 720x480, 30fps @ 27MHz (Bayer)	
Shutter Type	Electronic Rolling Shutter	
Sensitivity	[T.B.D] V / lux-sec	
Dynamic Range	120 dB	
SNR	[T.B.D] dB	
Max. Programmable Gain	analog (x72), digital (x31.5)	
GADC input voltage range	0V~3V	
Supply Voltage	Pixel	3.3V ± 10%
	Analog	3.3V ± 10%
	Digital	1.5V ± 10%
	I/O	3.3V ± 10%
Power Consumption	Analog	311 mW
	Digital	136 mW
Operating Temperature	-40°C ~ 105°C	
Package Type	CLCC, Wafer or Die	