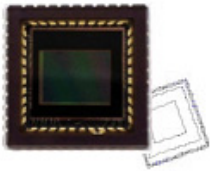


CP8208



CP8208 is a single-chip video/image camera sensor that uses a unique WiDy™ technology developed by Clairepixel to allow video capture in extremely diverse lighting conditions, hence making it suitable for auto vehicle cameras and security systems. CP8208 is set up with a 720x480 image array, outputs up to 60 frames (720x480) per second, and supports various forms of digital output format and NTSC/PAL composite output. CP8104 has various camera control functions, and can be programmed through a 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,
- Automatic features : 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

- Automotive
- Machine Visions
- Security surveillance cameras

WDR, Analog / Digital, 1/3" , D1

PARAMETER	TYPICAL VALUE	
Optical Dimension	Optical Format	1/3 inch
	Pixel Size	6.5 um X 7.4 um
	Effective Resolution	728(H) X 488(V)
	Effective 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 @ 27MHz (YCbCr) 720x480, 60fps @ 54MHz (YCbCr) 720x480, 30fps @ 27MHz (Bayer) 720x480, 60fps @ 54MHz (Bayer)	
Shutter Type	Electronic Rolling Shutter	
Sensitivity	[T.B.D]	
Dynamic Range	120 dB	
SNR	[T.B.D]	
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	Active	267 mW
	Standby	0 mW
Operating Temperature	-40°C ~ 105°C	
Package Type	CLCC, Wafer or Die	