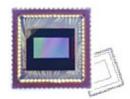
CP8210



CP8210 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. CP8210 is set up with a 1280x720 image array, outputs up to 60 frames (1280x720) per second, and supports various forms of digital output format and SMPTE296M format to support HD—SDI. CP8210 has various camera control functions, and can be programmed through a two—wire serial interface.

Features

- · ClairPixel's Wideye™, Wide Dynamic Range technology
- · System-on-a-chip(SOC)-completely integrated camera system
- · Integrated microcontroller for flexibility
- · 8-,10-bit parallel digital output
- · Bayer Noise Reduction, Lens Shading Compen-sation, 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
- · 2 channel(Master, Slave) Two-wire serial interface

Application

- · Automotive
- · Machine Visions
- · Security surveillance cameras

WDR, Digital Output, 1/3", 1Mp

PARAMETER		TYPICAL VALUE
Optical Dimension	Optical Format	1/3 inch
	Pixel Size	4.0 um X 4.0 um
	Effective Resolution	1288(H) X 728(V)
	Effective Pixel Area	5.152 mm(H) X 2.912 mm(V)
Digital Output		10bit, 8bit RGB Bayer, YCbCr422, RGB565/555 SMPTE296M
Input Clock Frequency		27MHz
Maximum Frame Rate		1280x720, 60fps(Bayer)@74.25MHz 1280x720, 30fps(YCbCr)@74.25MHz
Shutter Type		Electronic Rolling Shutter
Sensitivity		3.2V / lux-sec
Dynamic Range		120 dB
SNR		39 dB
Max. Programmable Gain		analog (x400), digital (x32)
Supply Voltage	Pixel	3.3V ± 10%
	Analog	3.3V ± 10%
	Digital	1.5V ± 10%
	I/O	3.3V ± 10%
Power Consumption	Active	420mW
	Standby	[T.B.D]
Operating Temperature		-40°C ~ 85°C
Package Type		CLCC or Wafer Die