

Crystal Image through
Imaging Innovation

PIXELPLUS



*Preliminary
Brief Spec*

***1/2.9 inch FHD Bayer Chip
CMOS Image Sensor with 1928x1088 Pixel Array***

PS6210K

Rev 0.1

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1/2.9 inch FHD Bayer Chip
CMOS Image Sensor with 1928x1088 Pixel Array

Features

- 1928x1088 effective pixel array with RGB bayer color filters and micro-lens
- Output Format
 - RGB bayer
- Output Interface
 - DVP(Digital Video Parallel) 10-bit
 - 1/2-lane MIPI
- Auto black level compensation
- Programmable frame size, frame rate, window size, exposure and white balance gain
- Horizontal/Vertical mirroring
- Image processing : ADG(Adaptive Digital Gain)
- External synchronization support (Genlock)
- Chip address selection PAD
- Software reset
- On-chip phase locked loop (PLL)
- I2C Interface support

1/2.9 inch FHD Bayer Chip
CMOS Image Sensor with 1928x1088 Pixel Array

General Description

The PS6210K is a 1/2.9-inch CMOS image sensor. It is a Bayer sensor with an effective pixel array of 1928 (width) x 1088 (height). The PS6210K can generate a 10-bit RGB raw Bayer data at maximum frame rate of 30 FPS through MIPI serial interface or DVP(Digital Video Parallel) 10-bit interface. On-chip sensor functions can be controlled through I2C interface.

Table 1 Key Performance Parameter

Parameter	Typical value
Pixel size	2.8 [um] x 2.8 [um]
Effective pixel array	1928(H) x 1088(V)
Effective image area	5.3984 [mm] x 3.0464 [mm]
Optical format	1/2.9 [inch]
Input clock frequency	27 [MHz]
Output interface	DVP(Digital Video Parallel) 10-bit
	MIPI serial interface with 1/2 lane
Max. frame rate	30 [FPS]
Dark signal	TBD
Sensitivity	TBD
Power supply	HVDD : 1.8 ~ 3.3 [V]
	AVDD : 3.3 [V]
	DVDD : 1.2 [V]
Power consumption	TBD
Operating Temp. (fully functional Temp.)	TBD
Dynamic range	80 [dB]
SNR	TBD
Package Type	CSP (6120 [um] x 4146 [um])