

Diagonal 5.71 mm (Type 1/2.8) CMOS Solid-state Image Sensor with Square Pixel for Color Cameras

INX2201-A

Brief Datasheet

V1.2

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Description

The INX2201-A is a diagonal 5.71 mm (Type 1/2.8) CMOS solid-state image sensor with a square pixel array and 2 M effective pixels. This chip operates with analog 2.8 V, digital 1.5 V, and interface 1.8 V triple power supply, and has low power consumption. High sensitivity, high signal to noise ratio and excellent high temperature performance. This chip programmable I2C port register

(Application: Security cameras/ Mobile device cameras/ Smart home cameras)

Features

- Staggered HDR
- High sensitivity
- Excellent high temperature performance
- High sensitivity
- 850nm/940nm NIR
- Low power consumption
- External control frame rate, multiple sensors synchronization
- 100 x analog gain, 15 x digital gain
- Programmable I2C port register

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Device Structure

- ◆ CMOS image sensor
- ◆ Image size
Diagonal 5.71 mm (Type 1/2.8) approx. 2 M pixels, All pixels
- ◆ Total number of pixels
1928 (H) × 1088 (V) approx. 2.1 M pixels
- ◆ Number of active pixels
1920 (H) × 1080 (V) approx. 2.07 M pixels
- ◆ Unit cell size
2.9 μm (H) × 2.9 μm (V)
- ◆ Substrate material Silicon

Absolute Maximum Ratings

Item	Symbol	Min.	Max.	Unit	Remarks
Supply voltage (analog: 2.8 V)	AV _{DD}	-0.3	3.4	V	—
Supply voltage (interface: 1.8 V)	OV _{DD}	-0.3	2.2	V	—
Supply voltage (digital: 1.5 V)	DV _{DD}	-0.3	1.8	V	—
Input voltage	VI	-0.3	OV _{DD} + 0.3	V	—
Output voltage	VO	-0.3	OV _{DD} + 0.3	V	—
Operating temperature	Topr	-30	85	°C	—
Storage temperature	Tstg	-40	85	°C	—

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