AR1335

CMOS Image Sensor, 13 MP, 1/3"

Product Overview

For complete documentation, see the data sheet.

The AR1335 is a 1/3.2-inch CMOS active-pixel digital image sensor with a pixel array of 4208H x 3120V. The AR1335 digital image sensor, features breakthrough 1.1µm pixel technology that delivers superior low-light image quality through leading sensitivity, quantum efficiency and linear full well. This allows image quality that rivals digital still cameras. With a sensor architecture focused on low power and a high Chief Ray Angle (CRA) for low Z-heights, the AR1335 is ideal for smartphone and other mobile device applications. It incorporates sophisticated on-chip camera functions such as windowing, mirroring, column and row skip modes, and snapshot mode. It is programmable through a simple two-wire serial interface. The AR1335 sensor can generate full resolution image at up to 30 frames per second (fps) and supports advanced video modes including 4K 30fps, 1080P 60fps and 720P 120fps.

Features

- 13MP CMOS sensor with advanced 1.1µm pixel BSI technology
- Data interfaces: 2,3 and 4 lane MIPI
- Bit-depth compression available for MIPI: 10-8 and 10-6 to lower bandwidth
- 3D synchronization controls to enable stereo video capture
- 6.8 kbits one time programmable memory (OTPM)
- Programmable controls: gain, horizontal and vertical blanking, auto black level offset correction, frame size/rate, exposure, left-right and top-bottom image reversal, window size, and panning
- Two on-die phase-locked loop (PLL) oscillators for super low noise performance
- On-chip temperature sensor
- Bayer pattern horizontal down-size scaler
- Simple two-wire fast-mode+ serial interface

  For more features, see the data sheet

Applications

- Mobile
- 4K video capture
- High resolution still capture

End Products

- Smart Phone
- Digital Still Camera
- PC Camera
- Consumer devices

Part Electrical Specifications

Product	Status	Compilance	Type	Megapixels	Frame Rate (fps)	Optical Format	Shutter Type	Pixel Size (µm)	Output Interface	Color	Family	Package Type	Case Outline	MSL Type	MSL Temp (°C)	Container Type	Container Qty.
AR1335CSSC11SMD20	Obsolete		CMOS	13	30	1/3.2 inch	Electronic Rolling	1.1 x 1.1	MIPI	RGB	-	-		NA	0	MTFRM	1
AR1335CSSC11SMKA0-CP	Active		CMOS	13	30	1/3.2 inch	Electronic Rolling	1.1 x 1.1	MIPI	RGB	-	ODCSP-63	570BU.PDF	4	245	CTRAY	3000
AR1335CSSC11SMKA0-CP1	Obsolete		CMOS	13	30	1/3.2 inch	Electronic Rolling	1.1 x 1.1	MIPI	RGB	-	ODCSP-63	570BU.PDF	4	245	CTRAY	300
AR1335CSSC11SMKA0-CP2	Active		CMOS	13	30	1/3.2 inch	Electronic Rolling	1.1 x 1.1	MIPI	RGB	-	ODCSP-63	570BU.PDF	4	245	CTRAY	50
AR1335CSSC32SMD20	Active		CMOS	13	30	1/3.2 inch	Electronic Rolling	1.1 x 1.1	MIPI	RGB	-	-		NA	0	MTFRM	1
AR1335CSSM11SMD20	Obsolete		CMOS	13	30	1/3.2 inch	Electronic Rolling	1.1 x 1.1	MIPI	Mono	-	-		NA	0	MTFRM	1
AR1335CSSM11SMKA0-CP	Active		CMOS	13	-	-	-	-	-	-	-	ODCSP-63	570BU.PDF	4	245	CTRAY	3000