

Product Overview

AR1630: CMOS Image Sensor, Digital, 16 MP, 1/3.2-Inch

For complete documentation, see the data sheet.

The ON Semiconductor AR1630 is a stacked 1/3.1-inch BSI (back side illuminated) PDAF supported CMOS active-pixel digital image sensor with a pixel array of 4632(H) × 3492 (V) (4648 (H) × 3508 (V) including border pixels). The unique feature of AR1630 is high performance SuperPD™

Phase Detect Auto Focus (PDAF) pixel technology which enables a fast auto focus camera system. It uses on-chip PDAF pixel defect correction to output a fully corrected image and on-chip calculations which provide AF correlation data (or raw PDAF data). It incorporates sophisticated on-chip camera functions such as mirroring, column and row skip modes, and snapshot mode. It is programmable through a simple two-wire serial interface and has very low power consumption.

The AR1630 digital image sensor features ON Semiconductor's breakthrough low-noise CMOS imaging technology that achieves near-CCD image quality (based on signal-to-noise ratio and low-light sensitivity) while maintaining the inherent size, cost, and integration advantages of CMOS.

The AR1630 sensor can generate full resolution image at up to 30 frames per second (fps). An on-chip analog-to-digital converter (ADC) generates a 12-bit or 10-bit value for each pixel.

Features

- 16MP Resolution
- 4K Video capture at 30fps
- Leading SuperPD™ PDAF Auto focus performance
- Advanced Stacking technology

Benefits

- High Detail capture with digital zoom capability
- Ultra high definition video recording
- Fast focus and continuous video capability
- Optimized for performance from the pixel and power from the circuitry

Applications

- High resolution recording
- 4K video recording
- Low power applications

End Products

- Smartphones
- Tablets
- Wearables
- IoT devices
- Webcams

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Type	Megapixels	Frame Rate (fps)	Optical Format	Shutter Type	Pixel Size (µm)	Output Interface	Color	Package Type
AR1630CSSC34SMD10		Pb-free Halide free non AEC-Q and PPAP	Active	CMOS	16		1/3.1 inch	Electronic Rolling	1.0 x 1.0	MIPI	RGB	

For more information please contact your local sales support at www.onsemi.com.

Created on: 1/27/2021