

Product Overview

AR1820HS: CMOS Image Sensor, 18 MP, 1/2.3"

For complete documentation, see the data sheet.

The AR1820HS is an 18 megapixel, 1/2.3-inch format, 1.25 μm pixel sensor using ON Semiconductor's A-PixHS[™]; BSI technology. With a variety of operating modes, the AR1820HS can dynamically optimize resolution, low-light and frame rate for environmental conditions. For example, the camera could run in full 18 megapixel resolution at 24 fps under high-light conditions, and switch to a 2:1 summing and 2:1 binning at 1080p 60 frames-per-second mode for superb low-light performance under darker conditions. With high resolution and frame rates, and a variety of flexible modes, the AR1820HS sensor is excellent for many applications such as surveillance, sports cameras and mobile handsets.

Applications

- Camera
- Security

Part Electrical Specifications

| Product | Compliance | Status | Type | Megapixels | Frame Rate (fps) | Optical Format | Shutter Type | Pixel Size (μm) | Output Interface | Color | Package Type |
|-----------------------|------------------------|--------|------|------------|------------------|----------------|--------------------|------------------------------|----------------------------|-------|--------------|
| AR1820HSSC00SHEA0-DP1 | Pb-free Halide free | Active | CMOS | 18.1 | 24 | 1/2.3 inch | Electronic Rolling | 1.25 x 1.25 | MIPI HiSPi [™] | RGB | IBGA-60 |
| AR1820HSSC00SHEA0-DR | Pb-free Halide free | Active | CMOS | 18.1 | 24 | 1/2.3 inch | Electronic Rolling | 1.25 x 1.25 | MIPI HiSPi [™] | RGB | IBGA-60 |
| AR1820HSSC12SHEA0-DP | Pb-free Halide free | Active | CMOS | 18.1 | 24 | 1/2.3 inch | Electronic Rolling | 1.25 x 1.25 | MIPI HiSPi [™] | RGB | IBGA-60 |
| AR1820HSSC12SHEA0-DP1 | Pb-free Halide free | Active | CMOS | 18.1 | 24 | 1/2.3 inch | Electronic Rolling | 1.25 x 1.25 | MIPI HiSPi [™] | RGB | IBGA-60 |
| AR1820HSSC12SHEA0-DR | Pb-free Halide free | Active | CMOS | 18.1 | 24 | 1/2.3 inch | Electronic Rolling | 1.25 x 1.25 | MIPI HiSPi [™] | RGB | IBGA-60 |
| AR1820HSSC12SHEA0-DR1 | Pb-free Halide free | Active | CMOS | 18.1 | 24 | 1/2.3 inch | Electronic Rolling | 1.25 x 1.25 | MIPI HiSPi [™] | RGB | IBGA-60 |

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

Created on: 6/18/2019