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1/2.8-inch 2 MP CMOS Digital Image Sensor with Global Shutter AR0235CS

Description

The AR0235CS is a 1/2.8-inch CMOS digital image sensor with an active-pixel array of 1920 (H) x 1200 (V). It incorporates a new innovative global shutter pixel design optimized for accurate and fast capture of moving scenes. It features a 2.8-μm pixel size, 37 dB SNR_{MAX}, and a dynamic range of 65.3 dB. The sensor supports 120 FPS at full resolution and is capable of capturing both continuous video and single frames, making it the perfect choice for a wide range of applications, including scanning and industrial inspection.

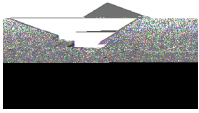
Table 1. KEY PERFORMANCE PARAMETERS

Parameter	Typical Value
Optical Format	1/2.8-inch (6.34 mm)
Active Pixels	1920 (H) x 1200 (V) not including 8 border pixels on each side
Pixel Size	2.8 μm
Color Filter Array	Monochrome
Chief Ray Angle	0 or 28
Shutter Type	Global Shutter
Input Clock Range	10–48 MHz
Output Interface	8-bit/10-bit MIPI 1, 2, or 4-lane
Output Data Rate	Maximum Serial Output Data Rate 850 Mbps/lane
Frame Rate Full Resolution	120 fps (10-bit)
Responsivity Monochrome	41.9 ke-/lux*s
SNR _{MAX}	37 dB
Dynamic Range	65.3 dB
Supply Voltage	
I/O	1.8 V
Digital	1.25 V
Analog	2.8 V
Power Consumption	252 mW, at 120 FPS, Full Resolution
Operating Temperature	(-30 C < T _J < 85 C)

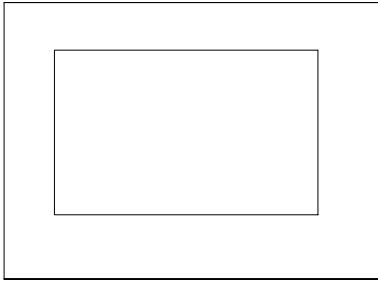
AR0235CS

AR0235CS

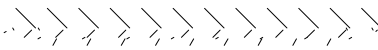
PACKAGE DIMENSIONS



ODCSP62 7.659x5.643
CASE 570CY
ISSUE 0



TOP VIEW



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