

Product Bulletin

Document #:PB23215X Issue Date:08 Mar 2020

Title of Change:	AR0237SR Datasheet Update
Effective date:	08 Mar 2020
Contact information:	Contact your local ON Semiconductor Sales Office or < <u>Sonya.Yip@onsemi.com</u> >
Type of notification:	This Product Bulletin is for notification purposes only. ON Semiconductor will proceed with implementation of this change upon publication of this Product Bulletin.
Change Category:	Documentation Change
Change Sub-Category(s):	Datasheet/Product Doc change
Sites Affected:	

ON Semiconductor Sites	External Foundry/Subcon Sites
None	None

Description and Purpose:

The AR0237SR Datasheet has been updated with new information. These changes do not affect form, fit, or function of the product.

AR0237SR Datasheet Changes

1. Updated Table 1, "Key Performance Parameters"

Table 1. KEY PERFORMANCE PARAMETERS

Old Table 1:

Parameter	Value
Optical Format	1/2.7-inch (6.6 mm)
Active Pixels	1928 (H) x 1088 (V) (16:9 Mode)
Pixel Size	3.0 μm x 3.0 μm
Color Filter Array	RGB Bayer
Shutter Type	Electronic Rolling Shutter and GRR
Input Clock Range	6–48 MHz
Output Clock Maximum	148.5 Mp/s (4-lane HiSPi)
Output	HiSPi 10- or 12-bit
Frame Rate 1080p	60 fps Linear 30 fps Line Interleaved
Responsivity	24.6 Ke-/lux-s
SNR _{MAX}	40.3 dB
Max Dynamic Range	78.5 dB (Linear Mode)
Supply Voltage	
I/O Digital Analog HiSPi	1.8 or 2.8 V 1.8 V 2.8 V 0.3–0.6 V (SLVS), 1.7–1.9 V (HiV _{CM})
I/O Digital Analog	1.8 V 2.8 V
i/O Digital Analog HiSPi	1.8 V 2.8 V 0.3–0.6 V (SLVS), 1.7–1.9 V (HiV _{CM}) 182 mW 1080p30 Linear Mode

New Table 1:

Table 1. KEY PERFORMANCE PARAMETERS

Parameter	Value	
Optical Format	1/2.7-inch (6.6 mm)	
Active Pixels	1928 (H) x 1088 (V) (16:9 Mode)	
Pixel Size	3.0 μm x 3.0 μm	
Color Filter Array	RGB Bayer	
Shutter Type	Electronic Rolling Shutter and GRR	
Input Clock Range	6–48 MHz	
Output Clock Maximum	148.5 Mp/s (4-lane HiSPi)	
Output	HiSPi 10- or 12-bit	
Frame Rate 1080p	60 fps (Linear Mode) 30 fps (Line Interleaved Mode)	
Responsivity	4.0 V/lux-s	
SNR _{MAX}	41 dB	
Max Dynamic Range	78 dB (Linear Mode) 96 dB (Line Interleaved Mode)	
Max Dynamic Range Supply Voltage I/O Digital Analog HiSPi	96 dB (Line Interleaved Mode) 1.8 or 2.8 V 1.8 V 2.8 V	
Supply Voltage I/O Digital Analog HiSPi	96 dB (Line Interleaved Mode) 1.8 or 2.8 V 1.8 V 2.8 V	
Supply Voltage I/O Digital Analog	96 dB (Line Interleaved Mode) 1.8 or 2.8 V 1.8 V 2.8 V 0.3-0.6 V (SLVS), 1.7-1.9 V (HIV _{CM}) 182 mW 1080p30 (Linear Mode) 291 mW 1080p30 (Line Interleaved	

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2. Replaced Figure 7, "Quantum Efficiency- RGB Package Part" with new figure

Old Figure 7:

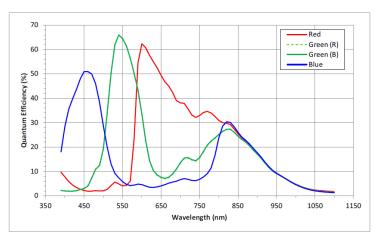


Figure 7. Quantum Efficiency – RGB Packaged Part

New Figure 7:

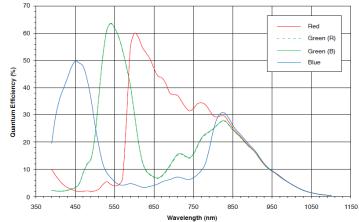


Figure 7. Quantum Efficiency – RGB Packaged Part

List of Affected Standard Parts:

Note: Only the standard (off the shelf) part numbers are listed in the parts list. Any custom parts affected by this PCN are shown in the customer specific PCN addendum in the PCN email notification, or on the **PCN Customized Portal**.

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