



Title of Change:	AR0261 Mono Datasheet
Effective date:	18 May 2020
Contact information:	Contact your local ON Semiconductor Sales Office or Sonya.Yip@onsemi.com
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**

None

External Foundry/Subcon Sites

None

Description and Purpose:

The AR0261 Mono datasheet has been updated. These changes do not affect form, fit, or function of the product.

AR0261 Mono Datasheet Changes:**1. Updated responsivity in "Table 1, Key Performance Parameters"****Old Table 1:****Table 1. KEY PERFORMANCE PARAMETERS**

Parameter	Value
Optical Format	1/6-inch (16:9)
Active Pixels	1936 (H) x 1096 (V)
Pixel Size	1.4 μm Back Side Illuminated (BSI)
Die Size	4.09 mm x 3.89 mm (15.91 mm ²)
Input Clock Frequency	10–48 MHz
Interface	Maximum PHY MIPI Data Output Rate per Lane: • 1 Gbps for MIPI 1st data lane (lane 0) when operating on one MIPI lane • 758 Mbps for both MIPI 1st data lane (lane 0) and 2nd data lane (lane 1) when operating on two MIPI lanes
ADC Resolution	10 bits, on-die
Analog Gain	1x, 2x, 4x, 8x
Compression	DPCM: 10–8–10, 10–6–10
3D Support	Frame rate and exposure synchronization; color stats and color gains
Supply Voltage	VAA, VAA_PIX 2.6–2.9 V (2.8 V Nominal)
	VDD_IO 1.7–1.9 V (1.8 V Nominal)
	VDD 1.14–1.3 V (1.2 V Nominal)
	VDD_PHY 1.14–1.3 V (1.2 V Nominal)
Power Consumption	175 mW at 2 Mp 60 fps (+70°C) Typical
Responsivity	0.75 V/lux-sec
SNRMAX	37.5 dB (Estimated)
Dynamic Range	66.5 dB (Estimated)
Operating Temperature	–30°C to +70°C

New Table 1:**Table 1. KEY PERFORMANCE PARAMETERS**

Parameter	Value
Optical Format	1/6-inch (16:9)
Active Pixels	1936 (H) x 1096 (V)
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	VDD_IO 1.7–1.9 V (1.8 V Nominal)
	VDD 1.14–1.3 V (1.2 V Nominal)
	VDD_PHY 1.14–1.3 V (1.2 V Nominal)
Power Consumption	175 mW at 2 Mp 60 fps (+70°C) Typical
Responsivity	14.2 ke-/lux*s (6,500K, 670 nm IR-cut filter)
SNRMAX	37.5 dB (Estimated)
Dynamic Range	66.5 dB (Estimated)
Operating Temperature	–30°C to +70°C



2. Updated "Table 3, Available Part Numbers"

Old Table 3:

ORDERING INFORMATION

Table 3. AVAILABLE PART NUMBERS

Part Number	Description
AR0261CSSM00SMD20	Bare Die, Monochrome
AR0261CSSM00SMKA0-CR-E	Chip Scale Package (CSP), Monochrome Engineering Sample
AR0261CSSM00SMKAH3-GEVB	Chip Scale Package (CSP), Monochrome Evaluation Headboard

See the ON Semiconductor Device Nomenclature document ([TND310/D](#)) for a full description of the naming convention used for image sensors. For reference documentation, including information on evaluation kits, please visit our web site at www.onsemi.com.

New Table 3:

ORDERING INFORMATION

Table 3. AVAILABLE PART NUMBERS

Part Number	Description
AR0261CSSM00SMD20	Bare Die, Monochrome
AR0261CSSM00SMKA0-CP-E	Chip Scale Package (CSP) with Protective Film, Monochrome Engineering Sample
AR0261CSSM00SMKAH3-GEVB	Chip Scale Package (CSP with Protective Film), Monochrome Evaluation Headboard
AR0261CSSM00SMKA0-CR-E	Chip Scale Package (CSP) without Protective Film, Monochrome Engineering Sample

See the ON Semiconductor Device Nomenclature document ([TND310/D](#)) for a full description of the naming convention used for image sensors. For reference documentation, including information on evaluation kits, please visit our web site at www.onsemi.com.

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](#).

AR0261CSSM00SMD20

AR0261CSSM00SMKA0-CP-E