



Title of Change:	AR01444 Die Datasheet Update.	
Effective date:	21 March 2019	
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:	<input type="checkbox"/> Wafer Fab <input type="checkbox"/> Assembly Change <input type="checkbox"/> Test Change <input checked="" type="checkbox"/> Other <u>Documentation</u>	
Change Sub-Category(s):	<input type="checkbox"/> Manufacturing Site Addition <input type="checkbox"/> Material Change <input checked="" type="checkbox"/> Datasheet/Product Doc change <input type="checkbox"/> Manufacturing Site Transfer <input type="checkbox"/> Product specific change <input type="checkbox"/> Shipping/Packaging/Marking <input type="checkbox"/> Manufacturing Process Change <input type="checkbox"/> Other: _____	
Sites Affected:	ON Semiconductor Sites: None	External Foundry/Subcon Sites: None
Description and Purpose:		
The AR0144 Die Datasheet updated to match current datasheet. These changes do not affect form, fit, or function of the product.		
AR0144 Die Datasheet Change		
1. Updated Key Performance Parameters		
Old Key Performance Parameters:		
Key Performance Parameters <ul style="list-style-type: none"> • Optical Format: 1/4-inch (4.5 mm) • Active Pixels: 1280 (H) × 800 (V) • Pixel Size: 3.0 μm • Color Filter Array: RGB Bayer or Monochrome • Chief Ray Angle (CRA): 0° or 20° or 28° • Input Clock Range: 6–48 MHz • Output Clock Maximum: 74.25 MHz • Frame Rate: <ul style="list-style-type: none"> • Full Resolution: <ul style="list-style-type: none"> 60 fps (Parallel, MIPI 2–lane, 12–bit) 44 fps (MIPI 1–lane, 12–bit) 52 fps (MIPI 1–lane, 10–bit) • 720p Resolution: <ul style="list-style-type: none"> 66 fps (Parallel, MIPI 2–lane, 12–bit) • Responsivity: <ul style="list-style-type: none"> • 56 ke-/lux*s (Mono) • 22.3 ke-/lux*s (Color) • Dynamic Range: 71.4 dB • SNR_{MAX}: 38 dB • Supply Voltage <ul style="list-style-type: none"> • Digital: 1.2 V • I/O: 1.8 or 2.8 V • Analog: 2.8 V • Operating Temperature: –40°C to +105°C (Junction) 		

**New Key Performance Parameters:****Key Performance Parameters**

- Optical Format: 1/4-inch (4.5 mm)
- Active Pixels: 1280 (H) × 800 (V)
- Pixel Size: 3.0 μm
- Color Filter Array: RGB Bayer or Monochrome
- Chief Ray Angle (CRA): 0° or 20° or 28°
- Input Clock Range: 6–48 MHz
- Output Clock Maximum: 74.25 MHz
- Frame Rate:
 - ◆ Full Resolution: 60 fps
 - ◆ 720p Resolution: 66 fps
- Responsivity:
 - ◆ 3.6 V/lux-sec (Mono)
 - ◆ 3.1 V/lux-sec (Color)
- Dynamic Range: 63.9 dB
- SNR_{MAX}: 38 dB
- Supply Voltage
 - ◆ Digital: 1.2 V
 - ◆ I/O: 1.8 or 2.8 V
 - ◆ Analog: 2.8 V
- Operating Temperature: -40°C to +105°C (Junction)

List of Affected 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](#).

AR0144CSSC00SUKA0-CPBR
AR0144CSSC00SUKA0-CRBR
AR0144CSSM00SUKA0-CPBR
AR0144CSSM00SUKA0-CRBR
AR0144CSSC20SUKA0-CPBR
AR0144CSSC20SUKA0-CRBR
AR0144CSSM20SUKA0-CPBR
AR0144CSSM20SUKA0-CRBR
AR0144CSSC00SUD20
AR0144CSSC20SUD20
AR0144CSSM00SUD20
AR0144CSSM20SUD20
AR0144CSSM28SUD20