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Title of Change:	Image Sensor Wafer Reconstruct (Die) shipping tape change		
Proposed First Ship date:	18 Feb 2021 or earlier if approved by customer		
Contact Information:	Contact your local ON Semiconductor Sales Office or Geethakrishnan.Narasimhan@onsemi.com		
PCN Samples Contact:	Contact your local ON Semiconductor Sales Office or < <u>PCN.samples@onsemi.com</u> >. Sample requests are to be submitted no later than 30 days from the date of first notification, Initial PCN or Final PCN, for this change. Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.		
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or <u>Amy.Wu@onsemi.com</u>		
Type of Notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change. ON Semiconductor will consider this change accepted, unless an inquiry is made in writing within 30 days of delivery of this notice. To do so, contact <u>PCN.Support@onsemi.com</u>		
Marking of Parts/ Traceability of Change:	Date Code of Part Feb 2021 (0521)		
Change Category:	Assembly Change		
Change Sub-Category(s):	Shipping/Packaging/Marking		
Sites Affected:			
ON Semiconductor Sites	External Foundry/Subcon Sites		
None	Kingpak, Taiwan	Kingpak, Taiwan	
Description and Dumpson			

Description and Purpose:

The shipping tape for reconstruct die is being changed from Lintec D-175 to Sumitomo FSL N6801. The change improves product quality by preventing burr formation on dies with copper interconnects kept in storage for more than three months. The burr formation is due to the migration of carbon present in the current shipping tape. The proposed shipping tape does not have any carbon but still meets all other specifications including anti-ESD. Comparison of key specifications of the two tapes are shown in the table below. Safety datasheet sheets are provided in the table below.

	Before Change Description	After Change Description
Shipping Tape (Reconstruct Die)	Lintec D-175	Sumitomo FSL N6801
Part Number	IUT-P2700-04	IUT-N6801-09
Material Type	UV	UV
Adhesive	10 um, Acrylic	10 um, Acrylic
Base Film	80 um, PVC	100 um, Anti-ESD PO
Total Thickness	90 um	110 um
Adhesion (Si) before UV	2.8 (N/25mm)	4.0 (N/25mm)
Adhesion (Si) after UV	0.29 (N/25mm)	0.06 (N/25mm)
UV irradiation quantity	190 (mJ/cm2)	200 (mJ/cm2)
Surface Resistance	Insulation Material	1.0x10^9 (Ω/sq.)
Color	Blue	Milky While



Appearance						
	Datasheet	D-175 MSDS.pdf	N6801 MSDS.pdf			
There are no product material changes as a result of this change. There is no product marking change as a result of this change. The difference in the appearance of the shipping tapes is shown in the table above. Reliability Data Summary: QV DEVICE NAME: AR0521CS (300mm Cu Interconnect CMOS Image Sensor) PACKAGE: mPLCC						
ACKAGE: mP	LCC					
ACKAGE: mP Test	LCC Specification	Condition	Interval	Results		
ACKAGE: mP Test HTSL	Specification JESD22-A103	Condition Ta= 150°C	1008 hrs	0/80		
ACKAGE: mP Test HTSL TC	Specification JESD22-A103 JESD22-A104	Condition Ta= 150°C Ta= -55°C to +125°C	1008 hrs 1000 cyc	0/80 0/240		
ACKAGE: mP Test HTSL	Specification JESD22-A103	Condition Ta= 150°C Ta= -55°C to +125°C 110°C/ 85% RH	1008 hrs	0/80		
ACKAGE: mP Test HTSL TC	Specification JESD22-A103 JESD22-A104	Condition Ta= 150°C Ta= -55°C to +125°C	1008 hrs 1000 cyc	0/80 0/240 0/240 0/480		
ACKAGE: mP Test HTSL TC uHAST	Specification JESD22-A103 JESD22-A104 JESD22-A101D	Condition Ta= 150°C Ta= -55°C to +125°C 110°C/ 85% RH	1008 hrs 1000 cyc	0/80 0/240 0/240 0/480 0/30		
ACKAGE: mP Test HTSL TC UHAST PC	Specification JESD22-A103 JESD22-A104 JESD22-A101D J-STD-020 JESD-A113	Condition Ta= 150°C Ta= -55°C to +125°C 110°C/ 85% RH MSL 4 @ 260 °C	1008 hrs 1000 cyc	0/80 0/240 0/240 0/480		
ACKAGE: mP Test HTSL TC uHAST PC WBS	Specification JESD22-A103 JESD22-A104 JESD22-A104 JESD22-A101D J-STD-020 JESD-A113 AEC Q100-001	Condition Ta= 150°C Ta= -55°C to +125°C 110°C/ 85% RH MSL 4 @ 260 °C Wire Bond Shear: Cpk > 1.67	1008 hrs 1000 cyc	0/80 0/240 0/240 0/480 0/30		

Electrical Characteristics Summary:

Electrical characteristics are not impacted by this change.

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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**.

Part Number	Qualification Vehicle
AR1335CSSC11SMD20	AR0521SR2C09SURA0-DR
AR1335CSSC32SMD20	AR0521SR2C09SURA0-DR
AR1335CSSM11SMD20	AR0521SR2C09SURA0-DR
AR0261CSSC30SMD20	AR0521SR2C09SURA0-DR
AR0261CSSM00SMD20	AR0521SR2C09SURA0-DR
AR0430CSSC34SMD10	AR0521SR2C09SURA0-DR
AR1335CSSM32SMD20	AR0521SR2C09SURA0-DR
AR1335PDSC32SMD20	AR0521SR2C09SURA0-DR
AR1337CSSC32SMD10	AR0521SR2C09SURA0-DR
AR1337CSSC32SMD20	AR0521SR2C09SURA0-DR



Appendix A: Changed Products

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
AR1335CSSM11SMD20		AR0521SR2C09SURA0-DR	NA	