



Final Product/Process Change Notification

Document #:FPCN23609X

Issue Date:14 Jan 2021

Title of Change:	Second source site addition for final test and shipping tray change for AR0330 CSP products.
Proposed First Ship date:	23 Apr 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 <PCN.samples@onsemi.com> . 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 Amy.Wu@onsemi.com
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 PCN.Support@onsemi.com
Marking of Parts/ Traceability of Change:	Date Code Apr 2021
Change Category:	Assembly Change, Test Change
Change Sub-Category(s):	Manufacturing Site Addition

Sites Affected:

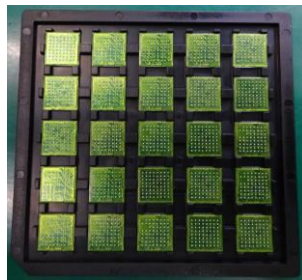
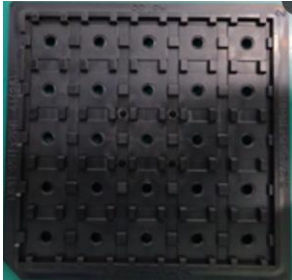
ON Semiconductor Sites	External Foundry/Subcon Sites
None	Huatian Technology, China
	KYEC, Taiwan
	Xintec (ISBU)

Description and Purpose:

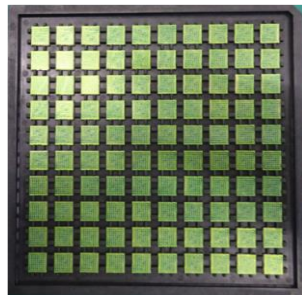
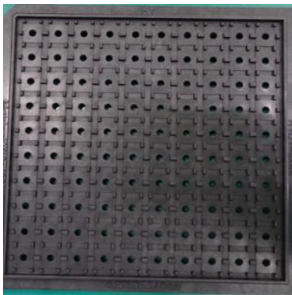
This final product change notification (FPCN23609X) communicates the addition of KYEC as a final test site and the conversion of the tray used for shipping from a 2inch tray to a 4inch tray. The table below summarizes the changes. The addition of test site at KYEC (Taiwan) is being done to add capacity to our current test site at Huatian (HTKS). There is no change in test program, test limits or control plan. The proposed tester platform in KYEC is already in production for other image sensor products for more than 7 years.

Backend Manufacturing	Before Change Description	After Change Description
Final Test Site (FT)	-Huatian (HTKS)	-Huatian (HTKS) -KYEC
Shipping Tray Manufacturer and Size	Yangin Tray, 2inch	Hung Yang, 4inch
Tester Platform	DoThinKey at HTKS	-DoThinKey at HTKS -IP750EX at KYEC
Tester Handler	Homegrown at HTKS	-Homegrown at HTKS -HT9045 at KYEC

There is no product marking change as a result of this change. The difference in appearance of the tray is shown below.

*Original Case Outline Drawing (2inch Tray)*

2inch : 5*5=25ea

Proposed Case Outline Drawing (4inch Tray):

4inch : 10*10=100ea

Reliability Data Summary:

The proposed tray has passed the required qualification for the following tests.

NO.	Item	Result
1	Dimension Measure	OK
2	Resistance Measure	OK
3	ESD Test	OK
4	Particle Test	OK
5	Warpage Test	OK
6	Clean Test	OK
7	Drop Test	OK

**Electrical Characteristics Summary:**

Electrical data shows a one to one matching between current and proposed sites for final test for passing (973units) units and between wafer probe and proposed site for failing bins (158 units) from three different lots.

Test	HBin	SBin	Parts	Pass Yield
PASS	1	1	973	100%

FAIL UNITS**158**

Test	HBin	SBin	Parts	Fail Yield
Shorts_Test	8	49**	25	100%
Leakage	8	45**	5	
Continuity	8	48**	7	
ADC	5	51**	65	
MidL	5	57**	20	
Dark	5	56**	36	

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
AR0330CM1C00SHKA0-CP	AR0330CM1C21SHKA0-CP
AR0330CM1C12SHKA0-CP	AR0330CM1C21SHKA0-CP
AR0330CM1C12SHKA0-CR	AR0330CM1C21SHKA0-CP
AR0330CM1C21SHKA0-CP	AR0330CM1C21SHKA0-CP
AR0330CM1C21SHKA0-CR	AR0330CM1C21SHKA0-CP
AR0330CS1C12SPKA0-CP	AR0330CM1C21SHKA0-CP
AR0330CS1C12SPKA0-CP2	AR0330CM1C21SHKA0-CP
AR0330CS1C12SPKA0-CR	AR0330CM1C21SHKA0-CP
AR0330SR1C00SUKA0-CP	AR0330CM1C21SHKA0-CP
AR0330SR1C00SUKA0-CR	AR0330CM1C21SHKA0-CP