



# Final Product/Process Change Notification

Document #:FPCN23868XA1

Issue Date:17 Mar 2022

<b>Title of Change:</b>	Update to FPCN23868XA - Addition of carrier tape change for tape supplier consolidation. (Original PCN contents: WLCSP Manufacturing Site Change and Product Consolidation.) (Original PCN contents: WLCSP Manufacturing Site Change and Product Consolidation.)
<b>Proposed First Ship date:</b>	22 Jun 2022 or earlier if approved by customer
<b>Contact Information:</b>	Contact your local onsemi Sales Office or <a href="mailto:Yujiro.Yoshida@onsemi.com">Yujiro.Yoshida@onsemi.com</a>
<b>PCN Samples Contact:</b>	Contact your local onsemi Sales Office. 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.
<b>Additional Reliability Data:</b>	Contact your local onsemi Sales Office or <a href="mailto:Takashi.Naruse@onsemi.com">Takashi.Naruse@onsemi.com</a>
<b>Type of Notification:</b>	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change. onsemi will consider this change accepted, unless an inquiry is made in writing within 30 days of delivery of this notice. To do so, contact <a href="mailto:PCN.Support@onsemi.com">PCN.Support@onsemi.com</a>
<b>Marking of Parts/ Traceability of Change:</b>	Date Code
<b>Change Category:</b>	Assembly Change
<b>Change Sub-Category(s):</b>	Manufacturing Site Transfer

**Sites Affected:**

**onsemi Sites**

onsemi Tarlac, Philippines

**External Foundry/Subcon Sites**

ASECL, Taiwan (ChungLi)

**Description and Purpose:**

Due to sale of Niigata factory announcement on Aug 8, 2020, onsemi issue this FPCN of WLCSP Site Change on the affected parts.

Regarding carrier tape, it is changed because of carrier tape supplier consolidation.

The new tape satisfies onsemi evaluation contents.

Tape pocket pitch is changed. About the details, please refer to the attached document.

	Before Change Description	After Change Description
<b>WLCSP Assembly Site</b>	onsemi Niigata	Advanced Semiconductor Engineering Inc., ChungLi
<b>Passivation Material</b>	Phenolic resin	Polyimide resin
<b>Solder Ball type</b>	SAC305	SAC405
<b>Carrier Tape (Only ASECL WLCSP Product: LE2416RDXATDG, LE2464DXATBG)</b>	Parts Name: CARR(WLP0.9X1.3X400) CARRIETAPE-037	Parts Name: CARR(WLCSP6,0.80X1.20) N40549H001



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WLCSP Manufacturing Site Change and Product Consolidation.

Current OPN	Product Description	OPN after Change	Change Contents	Change Impact	
				Case Outline	Electrical Spec.
LE2416RDXATDG	16Kbit EEPROM	LE2416RDXATDG (No Change)	Site Change	Package Total Thickness Change only (Refer to the below)	Same
LE2464DXATBG	64Kbit EEPROM	LE2464DXATBG (No Change)	Site Change		Same
LE2464CXATBG	64Kbit EEPROM	LE2464DXATBG (Consolidation to LE2464DXATBG)	NA (Consolidation to LE2464DXATBG)	NA (Consolidation to LE2464DXATBG)	clock frequency change (Refer to the below)

Package Total Thickness is only changed. Because back side coating addition and increase of silicon thickness are applied for the further prevention of package chipping. (Refer to the below table.)

Regarding 64KEEPROM, two products are consolidated to one part, LE2464DXATBG.

Electrical specification of LE2464DXA is superior to LE2464CXA. (Refer to the below table.)

There is no impact except the above.

### Package Dimension Change

Dimension		Min	Nom	Max
Package Total Thickness (mm)	Before	-	-	0.33
	After	0.31	0.34	0.37

### Electrical parameter Change (Upgraded change)

Parameter	OPN	Min	Nom	Max
Slave mode SCL clock frequency	LE2464CXATBG	-	-	400KHz
	LE2464DXATBG	-	-	1000KHz

### Reliability Data Summary:

QV DEVICE NAME: LE25S161XB

RMS: O75242

PACKAGE: WLCSP8 2.92x1.53x0.525

Test	Specification	Condition	Interval	Results
HTSL	JESD22-A103	Ta= 150°C	1008hrs	0/231
TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/231
HAST	JESD22-A110	110°C, 85% RH, 17.7psig, bias	264 hrs	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231



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QV DEVICE NAME: LC898249AXH  
RMS: O76970  
PACKAGE: WLCSP6 0.86x1.75x0.265

Test	Specification	Condition	Interval	Results
uHAST	JESD22-A118	110°C, 85% RH, 17.7psig, unbiased	264 hrs	0/75

**NOTE: Carrier Tape Information is attached.**

To view attachments:

1. Download pdf copy of the PCN to your computer
2. Open the downloaded pdf copy of the PCN
3. Click on the paper clip icon available on the menu provided in the left/bottom portion of the screen to reveal the Attachment field
4. Then click on the attached file

### Electrical Characteristics Summary:

Electrical characteristics are not impacted.

### 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
LE2416RDXATDG	LE25S161XB, LC898249AXH
LE2464DXATBG	LE25S161XB, LC898249AXH
LE2464CXATBG	LE25S161XB, LC898249AXH