



Final Product/Process Change Notification

Document #:FPCN25729XO

Issue Date:17 Mar 2025

Title of Change:	Wafer Fab Site Addition of onsemi, Bucheon Korea as alternate fab site for ESD and Surge Protection products.																																												
Proposed First Ship date:	24 Jun 2025 or earlier if approved by customer																																												
Contact Information:	Contact your local onsemi Sales Office.																																												
PCN Samples Contact:	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.																																												
Additional Reliability Data:	Contact your local onsemi Sales Office.																																												
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. 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 PCN.Support@onsemi.com																																												
Marking of Parts/ Traceability of Change:	Changed material can be identified by lot code																																												
Change Category:	Wafer Fab Change																																												
Change Sub-Category(s):	Datasheet/Product Doc change, Manufacturing Site Addition																																												
Sites Affected:																																													
onsemi Sites					External Foundry/Subcon Sites																																								
onsemi Bucheon, Korea					None																																								
Description and Purpose:																																													
This Final Product Change Notification (FPCN) is to notify customers of the qualification of onsemi Bucheon, Korea Wafer Fab as an additional wafer fab site for ESD and Surge Protection products.																																													
Upon expiration of this FPCN, affected parts can be sourced from either onsemi Bucheon, Korea or LA Semiconductor wafer fab.																																													
There are no product marking changes as a result of this change.																																													
<table border="1"><thead><tr><th></th><th colspan="3">Before Change Description</th><th colspan="3">After Change Description</th></tr></thead><tbody><tr><td>Manufacturing location for Wafer Fab</td><td colspan="3">LA Semiconductor, Idaho, United States</td><td colspan="3">onsemi Bucheon, Korea, LA Semiconductor, Idaho, United States</td></tr></tbody></table>											Before Change Description			After Change Description			Manufacturing location for Wafer Fab	LA Semiconductor, Idaho, United States			onsemi Bucheon, Korea, LA Semiconductor, Idaho, United States																								
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The Reverse Peak Pulse Current (Ipp) and Clamping Voltage 8/20 μ s (Vc) for ESDM2032MX4T5G datasheet will be revised as below.																																													
<table border="1"><thead><tr><th rowspan="2">Parameter</th><th rowspan="2">Symbol</th><th rowspan="2">Conditions</th><th colspan="3">Before</th><th colspan="3">After</th><th rowspan="2">Unit</th></tr><tr><th>Min</th><th>Typ</th><th>Max</th><th>Min</th><th>Typ</th><th>Max</th></tr></thead><tbody><tr><td>Reverse Peak Pulse Current</td><td>Ipp</td><td>IEC61000-4-5 (8/20 μs)</td><td>15.5</td><td>16.5</td><td></td><td>14</td><td></td><td></td><td>A</td></tr><tr><td>Clamping Voltage 8/20 μs</td><td>Vc</td><td>Ipp = 14A</td><td></td><td>5.8</td><td>8.2</td><td></td><td>6.3</td><td>8.2</td><td>V</td></tr></tbody></table>										Parameter	Symbol	Conditions	Before			After			Unit	Min	Typ	Max	Min	Typ	Max	Reverse Peak Pulse Current	Ipp	IEC61000-4-5 (8/20 μ s)	15.5	16.5		14			A	Clamping Voltage 8/20 μ s	Vc	Ipp = 14A		5.8	8.2		6.3	8.2	V
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Reliability Data Summary:

QV DEVICE NAME: ESDL2031MX4T5G

RMS: 97012

PACKAGE: X4DFN

Test	Specification	Condition	Interval	Results
High Temperature Reverse Bias	JESD22-A108	Ta=150°C, 100% max rated V	1008 hrs	0/231
High Temperature Storage Life	JESD22-A103	Ta=150°C	1008 hrs	0/231
Preconditioning	J-STD-020 JESD-A113	MSL 1 @260°C, Pre TC, uHAST, HAST for surface mount pkgs only	-	0/693
Temperature Cycling	JESD22-A104	Ta= -40°C to +125°C	1550 cyc	0/231
Highly Accelerated Stress Test	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/231
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231

QV DEVICE NAME: ESD5111PFCT5G

RMS: 97040

PACKAGE: X4DFN

Test	Specification	Condition	Interval	Results
High Temperature Reverse Bias	JESD22-A108	Ta=150°C, 100% max rated V	1008 hrs	0/231
High Temperature Storage Life	JESD22-A103	Ta=150°C	1008 hrs	0/231
Preconditioning	J-STD-020 JESD-A113	MSL 1 @260°C, Pre TC, uHAST, HAST for surface mount pkgs only		0/693
Temperature Cycling	JESD22-A104	Ta= -40°C to +125°C	1550 cyc	0/231
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Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231

Electrical Characteristics Summary:

Limits have been changed in datasheet as described in "**Description and Purpose**" section of FPCN document.

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
ESDM2032MX4T5G	ESDL2031MX4T5G, ESD5111PFCT5G