



Initial Product/Process Change Notification

Document #: IPCN25729XC

Issue Date: 17 Apr 2024

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|---|--|--|
| 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: | 28 Mar 2025 or earlier if approved by customer | |
| Contact Information: | Contact your local onsemi Sales Office or norhayati.othman@onsemi.com | |
| 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. | |
| Type of Notification: | This is an Initial Product/Process Change Notification (IPCN) sent to customers. An IPCN is an advance notification about an upcoming change and contains general information regarding the change details and devices affected. It also contains the preliminary reliability qualification plan. The completed qualification and characterization data will be included in the Final Product/Process Change Notification (FPCN). This IPCN notification will be followed by a Final Product/Process Change Notification (FPCN) at least 90 days prior to implementation of the change. In case of questions, 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): | Manufacturing Site Addition | |
| Sites Affected: | | |
| onsemi Sites | External Foundry/Subcon Sites | |
| onsemi Bucheon, Korea | None | |
| Description and Purpose: | | |
| This IPCN announces the qualification of onsemi, Bucheon Korea as additional wafer fab for ESD and Surge Protection products. | | |
| There are no product marking changes as a result of this change. | | |
| | Before Change Description | After Change Description |
| Manufacturing locations for Wafer Fab | LA Semiconductor, Idaho, United States | onsemi Bucheon, Korea, LA Semiconductor, Idaho, United States |



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Qualification Plan:

Qualification tests are designed to show that the reliability of the transferred devices will continue to meet or exceed onsemi standard.

QV DEVICE NAME: ESD9M5.0ST5G

RMS: 97093

PACKAGE: SOD923

| Test | Specification | Condition | Interval |
|---|---------------------|-----------------------------------|----------|
| High Temperature Reverse Bias | JESD22-A108 | Ta=150°C, 100% max rated V | 1008 hrs |
| High Temperature Storage Life | JESD22-A103 | Ta=150°C | 1008 hrs |
| Preconditioning | J-STD-020 JESD-A113 | MSL 1 @260°C | |
| Temperature Cycling | JESD22-A104 | Ta= -55°C to +150°C | 1000 cyc |
| Highly Accelerated Stress Test | JESD22-A110 | 130°C, 85% RH, 18.8psig, bias | 96 hrs |
| Unbiased Highly Accelerated Stress Test | JESD22-A118 | 130°C, 85% RH, 18.8psig, unbiased | 96 hrs |

QV DEVICE NAME: ESD8011MUT5G

RMS: 97108

PACKAGE: X3DFN

| Test | Specification | Condition | Interval |
|--------------------------------|---------------------|-------------------------------|----------|
| High Temperature Reverse Bias | JESD22-A108 | Ta=150°C, 100% max rated V | 1008 hrs |
| Preconditioning | J-STD-020 JESD-A113 | MSL 1 @260°C | |
| Highly Accelerated Stress Test | JESD22-A110 | 130°C, 85% RH, 18.8psig, bias | 96 hrs |

QV DEVICE NAME: ESD7321MUT5G

RMS: S94408

PACKAGE: X3DFN

| Test | Specification | Condition | Interval |
|---|---------------------|-----------------------------------|----------|
| High Temperature Reverse Bias | JESD22-A108 | Ta=150°C, 100% max rated V | 1008 hrs |
| High Temperature Storage Life | JESD22-A103 | Ta=150°C | 1008 hrs |
| Preconditioning | J-STD-020 JESD-A113 | MSL 1@260°C | |
| Temperature Cycling | JESD22-A104 | Ta= -55°C to +150°C | 1000 cyc |
| Highly Accelerated Stress Test | JESD22-A110 | 130°C, 85% RH, 18.8psig, bias | 96 hrs |
| Unbiased Highly Accelerated Stress Test | JESD22-A118 | 130°C, 85% RH, 18.8psig, unbiased | 96 hrs |



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QV DEVICE NAME: SESDL2031MX4T5G

RMS: 97012

PACKAGE: X4DFN

| Test | Specification | Condition | Interval |
|---|---------------------|-----------------------------------|----------|
| High Temperature Reverse Bias | JESD22-A108 | Ta=150°C, 100% max rated V | 1008 hrs |
| High Temperature Storage Life | JESD22-A103 | Ta=150°C | 1008 hrs |
| Preconditioning | J-STD-020 JESD-A113 | MSL 1 @260°C | |
| Temperature Cycling | JESD22-A104 | Ta= -40°C to +125°C | 1550 cyc |
| Highly Accelerated Stress Test | JESD22-A110 | 130°C, 85% RH, 18.8psig, bias | 96 hrs |
| Unbiased Highly Accelerated Stress Test | JESD22-A118 | 130°C, 85% RH, 18.8psig, unbiased | 96 hrs |

QV DEVICE NAME: SZTVS4201MR6T1G

RMS: 97122

PACKAGE: TSOP6

| Test | Specification | Condition | Interval |
|---|---------------------|-----------------------------------|----------|
| High Temperature Reverse Bias | JESD22-A108 | Ta=150°C, 100% max rated V | 1008 hrs |
| High Temperature Storage Life | JESD22-A103 | Ta=150°C | 1008 hrs |
| Preconditioning | J-STD-020 JESD-A113 | MSL 1 @260°C | |
| Temperature Cycling | JESD22-A104 | Ta= -55°C to +150°C | 1000 cyc |
| Highly Accelerated Stress Test | JESD22-A110 | 130°C, 85% RH, 18.8psig, bias | 96 hrs |
| Unbiased Highly Accelerated Stress Test | JESD22-A118 | 130°C, 85% RH, 18.8psig, unbiased | 96 hrs |

QV DEVICE NAME: SESD5111PFCT5G

RMS: 97040

PACKAGE: X4DFN

| Test | Specification | Condition | Interval |
|---|---------------------|-----------------------------------|----------|
| High Temperature Reverse Bias | JESD22-A108 | Ta=150°C, 100% max rated V | 1008 hrs |
| High Temperature Storage Life | JESD22-A103 | Ta=150°C | 1008 hrs |
| Preconditioning | J-STD-020 JESD-A113 | MSL 1 @260°C | |
| Temperature Cycling | JESD22-A104 | Ta= -40°C to +125°C | 1550 cyc |
| Highly Accelerated Stress Test | JESD22-A110 | 130°C, 85% RH, 18.8psig, bias | 96 hrs |
| Unbiased Highly Accelerated Stress Test | JESD22-A118 | 130°C, 85% RH, 18.8psig, unbiased | 96 hrs |



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QV DEVICE NAME: ESD10201MUT5G

RMS: 97034

PACKAGE: X3DFN

| Test | Specification | Condition | Interval |
|--------------------------------|---------------------|-------------------------------|----------|
| High Temperature Reverse Bias | JESD22-A108 | Ta=150°C, 100% max rated V | 1008 hrs |
| Preconditioning | J-STD-020 JESD-A113 | MSL 1 @260°C | |
| Highly Accelerated Stress Test | JESD22-A110 | 130°C, 85% RH, 18.8psig, bias | 96 hrs |

QV DEVICE NAME: ESDL2012MX4T5G

RMS: 93678

PACKAGE: X4DFN

| Test | Specification | Condition | Interval |
|---|---------------------|-----------------------------------|----------|
| High Temperature Reverse Bias | JESD22-A108 | Ta=150°C, 100% max rated V | 1008 hrs |
| High Temperature Storage Life | JESD22-A103 | Ta=150°C | 1008 hrs |
| Preconditioning | J-STD-020 JESD-A113 | MSL 1 @260°C | |
| Temperature Cycling | JESD22-A104 | Ta= -40°C to +125°C | 1550 cyc |
| Highly Accelerated Stress Test | JESD22-A110 | 130°C, 85% RH, 18.8psig, bias | 96 hrs |
| Unbiased Highly Accelerated Stress Test | JESD22-A118 | 130°C, 85% RH, 18.8psig, unbiased | 96 hrs |
| Physical Dimension | JESD22-B120 | | |

QV DEVICE NAME: ESD8111FCT5G

RMS: 97110

PACKAGE: DSN2

| Test | Specification | Condition | Interval |
|---|---------------------|-----------------------------------|----------|
| High Temperature Reverse Bias | JESD22-A108 | Ta=150°C, 100% max rated V | 1008 hrs |
| High Temperature Storage Life | JESD22-A103 | Ta=150°C | 1008 hrs |
| Preconditioning | J-STD-020 JESD-A113 | MSL 1 @260°C | |
| Temperature Cycling | JESD22-A104 | Ta= -40°C to +125°C | 1550 cyc |
| Highly Accelerated Stress Test | JESD22-A110 | 130°C, 85% RH, 18.8psig, bias | 96 hrs |
| Unbiased Highly Accelerated Stress Test | JESD22-A118 | 130°C, 85% RH, 18.8psig, unbiased | 96 hrs |



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QV DEVICE NAME: SZESD7205DT5G

RMS: 97194

PACKAGE: SOT-723

| Test | Specification | Condition | Interval |
|---|---------------------|-----------------------------------|----------|
| High Temperature Reverse Bias | JESD22-A108 | Ta=150°C, 100% max rated V | 1008 hrs |
| High Temperature Storage Life | JESD22-A103 | Ta=150°C | 1008 hrs |
| Preconditioning | J-STD-020 JESD-A113 | MSL 1 @260°C | |
| Temperature Cycling | JESD22-A104 | Ta= -55°C to +150°C | 1000 cyc |
| Highly Accelerated Stress Test | JESD22-A110 | 130°C, 85% RH, 18.8psig, bias | 96 hrs |
| Unbiased Highly Accelerated Stress Test | JESD22-A118 | 130°C, 85% RH, 18.8psig, unbiased | 96 hrs |

QV DEVICE NAME: SESDU1052FCT5G

RMS: TBD

PACKAGE: DSN2

| Test | Specification | Condition | Interval |
|--------------------------------|---------------------|-------------------------------|----------|
| High Temperature Reverse Bias | JESD22-A108 | Ta=150°C, 100% max rated V | 1008 hrs |
| Preconditioning | J-STD-020 JESD-A113 | MSL 1 @260°C | |
| Temperature Cycling | JESD22-A104 | Ta= -40°C to +125°C | 1550 cyc |
| Highly Accelerated Stress Test | JESD22-A110 | 130°C, 85% RH, 18.8psig, bias | 96 hrs |

Estimated date for qualification completion: **28 December 2024**

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 |
|----------------|----------------------------|
| ESD9L3.3ST5G | ESD9M5.0ST5G |
| ESD9L5.0ST5G | ESD9M5.0ST5G |
| ESD9M5.0ST5G | ESD9M5.0ST5G |
| ESD9P5.0ST5G | ESD9M5.0ST5G |
| ESD9R3.3ST5G | ESD9M5.0ST5G |
| ESD8011MUT5G | ESD8011MUT5G, ESD7321MUT5G |
| ESD8351MUT5G | ESD8011MUT5G |
| ESD8451MUT5G | ESD8011MUT5G |
| ESDL2031MX4T5G | SESDL2031MX4T5G |



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|------------------|---|
| SESDL2031MX4T5G | SESDL2031MX4T5G |
| NSP4201MR6T1G | SZTVS4201MR6T1G |
| NSP2201MR6T1G | SZTVS4201MR6T1G |
| TVS4201MR6T1G | SZTVS4201MR6T1G |
| ESD5111PFCT5G | SESD5111PFCT5G |
| ESDM2033MX4T5G | SESD5111PFCT5G |
| ESDU1052FCT5G | SESDU1052FCT5G, ESD8111FCT5G |
| SESDU1052FCT5G | SESDU1052FCT5G, ESD8111FCT5G |
| ESD5101FCT5G | SESD5111PFCT5G, ESD8111FCT5G |
| ESD5101AFCT5G | SESD5111PFCT5G, ESD8111FCT5G |
| SESD5101AFCT5G | SESD5111PFCT5G, ESD8111FCT5G |
| ESD8111PFCT5G | ESD8011MUT5G, SESD5111PFCT5G |
| ESD8111FCT5G | ESD8111FCT5G |
| ESDL1012MX4T5G | ESDL2012MX4T5G |
| SESDL1012MX4T5G | ESDL2012MX4T5G |
| ESD7481MUT5G | ESD7321MUT5G |
| ESD7382MUT5G | ESD7321MUT5G |
| ESD7381MUT5G | ESD7321MUT5G |
| ESD7205DT5G | SZESD7205DT5G |
| ESD10201MUT5G | ESD10201MUT5G, ESD7321MUT5G |
| ESD7181MUT5G | ESD10201MUT5G |
| ESDM2032MX4T5G | SESD5111PFCT5G, ESDL2012MX4T5G, SESDL2031MX4T5G |
| SESDM2033AMX4T5G | SESD5111PFCT5G, ESDL2012MX4T5G, SESDL2031MX4T5G |