

Final Product/Process Change Notification Document #:FPCN25729ZA Issue Date:18 Nov 2024

| Title of Change: | Wafer Fab Site Addition of onsemi, Bucheon Korea as Alternate Fab Site for ESD and Surge Protection Products | | | |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| Proposed Changed Material First Ship Date: | 25 May 2025 or earlier if approved by customer | | | |
| Current Material Last Order Date: | N/A Orders received after the Current Material Last Order Date expiration are to be considered as orders for new changed material as described in this PCN. Orders for current (unchanged) material after this date will be per mutual agreement and current material inventory availability. | | | |
| Current Material Last Delivery Date: | N/A The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory | | | |
| Product Category: | Active components – Discrete components | | | |
| Contact information: | Contact your local onsemi Sales Office or NoorArdila.Shaharuddin@onsemi.com | | | |
| PCN Samples Contact: | Contact your local onsemi Sales Office to place sample order. Sample requests are to be submitted no later than 45 days after publication of this change notification. Samples delivery timing will be subject to request date, sample quantity and special custome packing/label requirements. | | | |
| Sample Availability Date: | 13 Sep 2024 | | | |
| PPAP Availability Date: | 04 Oct 2024 | | | |
| Additional Reliability Data: | Contact your local onsemi Sales Office or Nicky.Siu@onsemi.com | | | |
| Type of Notification: | This is a Final Product/Process Change Notification (FPCN) sent to customers. The change will be implemented at 'Proposed Change Material First Ship Date' in compliance to J-STD-46 or ZVEI, or earlier upon customer approval, or per our signed agreements. onsemi will consider this proposed change and it's conditions acceptable, unless an inquiry is made in writing within 45 days of delivery of this notice. To do so, contact PCN.Support@onsemi.com. | | | |
| Change Category | | | | |
| Category | Type of Change | | | |
| Process - Wafer Production | Move of all or part of wafer fab to a different location/site/subcontractor | | | |
| Equipment | Production from a new equipment/tool which uses the same basic technology (replacement equipment or extension of existing equipment pool) without change of process. | | | |
| Data Sheet | Change of datasheet parameters/electrical specification (min./max./typ. values) and/or AC/DC specification | | | |

Description and Purpose:

This Final Product Change Notification (FPCN) is to notify customers that onsemi has qualified onsemi Bucheon, Korea as an additional fab site for the affected parts listed below

There are no product marking changes as a result of this change.

| | From | То |
|--------------------------------------|----------------------------------------|-----------------------------------------------------------------|
| Manufacturing location for Wafer Fab | LA Semiconductor, Idaho, United States | LA Semiconductor, Idaho, United States onsemi Bucheon, Korea |



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| | | Vbr min | | | | |
|------------------------------------------------------------------------------------|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|--------------------------------------|----------|---------|
| OF | PN | Before | After | | | |
| SZESD9M5.0ST5G | | 5.8 | 5.4 | | | |
| eason / Motivation for | Change: Sou | Source/Supply/Capacity Changes | | | | |
| nticipated impact on fi inction, reliability, proo ifety or manufacturabi | t, form, _{succ} duct perf lity: | The device has been qualified and validated based on the same Product Specification. The device has successfully passed the qualification tests. Potential impacts can be identified, but due to testing performed by onsemi in relation to the PCN, associated risks are verified and excluded. No anticipated impacts. | | | | |
| ites Affected: | | | | | | |
| onsemi Sites | | | External Foundry/Subcon Sites | | | |
| nsemi Bucheon, Korea | isemi Bucheon, Korea | | | None | | |
| Marking of Parts/ Tracea Change: | ability of Cha | Changed material can be identified by lot code | | | | |
| Reliability Data Summar RV DEVICE NAME: ESD9M5 RMS: 97093 PACKAGE: SOD923 | - | | | | | |
| Test | | Specificat | ion | Condition | Interval | Results |
| High Temperature Re | verse Bias | JESD22-A | 108 | Ta=150°C, 100% max rated V | 1008 hrs | 0/231 |
| High Temperature Storage Life | | JESD22-A | 103 | Ta=150°C | 1008 hrs | 0/231 |
| Preconditioning | | J-STD-020 JES | -STD-020 JESD-A113 MSL 1 @260°C | | | |
| Temperature Cy | cling | JESD22-A | 104 | Ta= -55°C to +150°C | 1000 cyc | 0/231 |
| Highly Accelerated Stress Test | | JESD22-A | 110 | 130°C, 85% RH, 18.8psig, bias | 96 hrs | 0/231 |
| | Unbiased Highly Accelerated Stress Test | | | 130°C, 85% RH, 18.8psig, unbiased 96 | | |

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:

Limits have been changed per described in the details section for standardization purposes.

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**.

| Current Part Number | New Part Number | Qualification Vehicle |
|---------------------|-----------------|-----------------------|
| SZESD9R3.3ST5G | #NONE | ESD9M5.0ST5G |
| SZESD9M5.0ST5G | #NONE | ESD9M5.0ST5G |
| SESD9L5.0ST5G | #NONE | ESD9M5.0ST5G |