



# Initial Product/Process Change Notification

Document #: IPCN25374ZA

Issue Date: 10 Oct 2023

| <b>Title of Change:</b>  | Galvanic Isolation Process 2nd source from "Gresham" to "Gresham or Aizu"  |  |  |      |    |                 |                    |  |
|--|--|--|--|------|----|-----------------|--------------------|--|
| <b>Proposed Changed Material First Ship Date:</b>  | 04 Nov 2024 or earlier if approved by customer   |  |  |      |    |                 |                    |  |
| <b>Current Material Last Order Date:</b>   | N/A<br><i>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.</i>  |  |  |      |    |                 |                    |  |
| <b>Current Material Last Delivery Date:</b>  | N/A<br><i>The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory</i>  |  |  |      |    |                 |                    |  |
| <b>Product Category:</b>   | Active components – Integrated circuits  |  |  |      |    |                 |                    |  |
| <b>Contact information:</b>  | Contact your local onsemi Sales Office or <a href="mailto:Joswald.Macabale@onsemi.com">Joswald.Macabale@onsemi.com</a>   |  |  |      |    |                 |                    |  |
| <b>PCN Samples Contact:</b>  | Contact your local onsemi Sales Office to place sample order.<br>Sample requests are to be submitted no later than 45 days after publication of this change notification.<br>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:Dongsun.Park@onsemi.com">Dongsun.Park@onsemi.com</a>   |  |  |      |    |                 |                    |  |
| <b>Type of Notification:</b>   | 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 6 months prior to implementation of the change. In case of questions, contact < <a href="mailto:PCN.Support@onsemi.com">PCN.Support@onsemi.com</a> >. |  |  |      |    |                 |                    |  |
| <b>Change Category</b>   |  |  |  |      |    |                 |                    |  |
| <b>Category</b>  | <b>Type of Change</b>  |  |  |      |    |                 |                    |  |
| Process - Wafer Production   | Move of all or part of wafer fab to a different location/site/subcontractor  |  |  |      |    |                 |                    |  |
| <b>Description and Purpose:</b>  |  |  |  |      |    |                 |                    |  |
| <p>onsemi would like to notify its customers of its intent to qualify our Isolated Gate Driver technology at our onsemi Aizu, Japan wafer FAB. The qualification enables expanded capacity for this technology. All products listed in this IPCN, upon completion of qualification and the FPCN, may be dual sourced from either the current onsemi wafer FAB at onsemi Gresham, US or onsemi Aizu, Japan.</p> <table border="1" data-bbox="110 1539 1533 1619"> <thead> <tr> <th></th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td><b>Fab Site</b></td> <td>onsemi, Gresham US</td> <td>onsemi, Aizu Japan or onsemi, Gresham US</td> </tr> </tbody> </table> |  |  |  | From | To | <b>Fab Site</b> | onsemi, Gresham US | onsemi, Aizu Japan or onsemi, Gresham US |
|  | From   | To                                       |  |      |    |                 |                    |  |
| <b>Fab Site</b>  | onsemi, Gresham US   | onsemi, Aizu Japan or onsemi, Gresham US |  |      |    |                 |                    |  |
| There are no product marking changes as a result of this change  |  |  |  |      |    |                 |                    |  |



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|   |   |
|---|---|
| <b>Reason / Motivation for Change:</b>  | Capacity improvement  |
| <b>Anticipated impact on fit, form, function, reliability, product safety or manufacturability:</b> | The device will be qualified and validated based on the same Product Specification. No anticipated impacts. |

**Sites Affected:**

|                     |                                      |
|---------------------|--------------------------------------|
| <b>onsemi Sites</b> | <b>External Foundry/Subcon Sites</b> |
| onsemi Aizu, Japan  | None                                 |

|  |  |
|--|--|
| <b>Marking of Parts/ Traceability of Change:</b> | Product that is produced out of onsemi Aizu, Japan can be identified on the label by referring to the "Diffused In" location. If produced out of onsemi Aizu, Japan, it will show JP. If it is produced out of onsemi Gresham, US, it will show US |
|--|--|

**Qualification Plan:**

QV DEVICE NAME : NCV51561  
 RMS : 90767  
 PACKAGE : SOIC16 WB

| Test                                    | Specification       | Condition                         | Interval |
|---|---------------------|-----------------------------------|----------|
| High Temperature Operating Life         | JESD22-A108         | Ta=125°C, Vcc = 1.2 x nominal     | 1008 hrs |
| Early Life Failure Rate                 | AECQ100-008         | Ta=125°C, Vcc = 1.2 x nominal     | 48 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 +125°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   |
| Power Temperature Cycling               | JESD22-A105         | Ta= -40°C to +125°C               | 1000 cyc |

**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](#).

| Current Part Number | New Part Number | Qualification Vehicle |
|---------------------|-----------------|-----------------------|
| NCV51563CADWR2G     | NA              | NCV51561BBDWR2G       |
| NCV51561BBDWR2G     | NA              | NCV51561BBDWR2G       |
| NCV51561DADWR2G     | NA              | NCV51561BBDWR2G       |
| NCV51563BBDWR2G     | NA              | NCV51561BBDWR2G       |