

# Final Product/Process Change Notification Document #:FPCN24325X

Issue Date:12 Oct 2021

| Title of Change:                          | Add Plasma Clean prior to Mold process (Industrial)  |  |
|---|--|--|
| Proposed First Ship date:                 | 19 Jan 2022 or earlier if approved by customer   |  |
| Contact Information:                      | Contact your local onsemi Sales Office or David.Craig@onsemi.com   |  |
| PCN Samples Contact:                      | Contact your local onsemi Sales Office or <pcn.samples@onsemi.com>.  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.</pcn.samples@onsemi.com> |  |
| 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. 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: | Same   |  |
| Change Category:                          | Assembly Change  |  |
| Change Sub-Category(s):                   | Manufacturing Process Change   |  |
| Sites Affected:                           |  |  |

| onsemi Sites                | External Foundry/Subcon Sites |
|-----------------------------|-------------------------------|
| onsemi Carmona, Philippines | None                          |

### **Description and Purpose:**

Pre-mold plasma clean operation is being added to the assembly process to improve adhesion.

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

There is no product marking change as a result of this change.

### **Reliability Data Summary:**

**QV DEVICE NAME: NCV57255DR2G** 

RMS: 068223

**PACKAGE: SOIC-16W** 

| Test  | Specification       | Condition                        | Interval | Results |
|-------|---------------------|----------------------------------|----------|---------|
| HAST  | JESD22-A110         | 130°C, 85% RH, 18.8psig, bias    | 192 hrs  | 0/231   |
| HTBB  |                     | Ta= 125 °C                       | 2016 hrs | 0/231   |
| HTOL  | JESD22-A108         | Ta = 125 °C, 100 % max rated Vcc | 2016 hrs | 0/231   |
| HTSL  | JESD22-A103         | Ta= 150 °C                       | 2016 hrs | 0/231   |
| HVTHB |                     | 85 °C, 60% RH                    | 336 hrs  | 0/231   |
| PC    | J-STD-020 JESD-A113 | MSL 1 @ 260 °C                   |          | 0/231   |
| RSH   | JESD22- B106        | Ta = 265C, 10 sec                |          | 0/30    |
| SAT   |                     | Precon Level = MSL 1 @ 260 °C    |          | 0/75    |
| SD    | JSTD002             | Ta = 245C, 5 sec                 |          | 0/45    |

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| TC    | JESD22-A104 | Ta= -65 °C to +150 °C             | 1000 cyc | 0/231 |
|-------|-------------|-----------------------------------|----------|-------|
| uHAST | JESD22-A118 | 130°C, 85% RH, 18.8psig, unbiased | 192 hrs  | 0/231 |

### **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  $specific \ PCN \ addendum \ in \ the \ PCN \ email \ notification, \ or \ on \ the \ \underline{PCN \ Customized \ Portal}.$ 

| Part Number   | Qualification Vehicle |
|---------------|-----------------------|
| NCD57080CDR2G | NCV57255DR2G          |
| NCD57080BDR2G | NCV57255DR2G          |
| NCD57080ADR2G | NCV57255DR2G          |
| NCD57201DR2G  | NCV57255DR2G          |
| NCD57200DR2G  | NCV57255DR2G          |

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### **Appendix A: Changed Products**

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| Product       | Customer Part Number | Qualification Vehicle | New Part Number | Replacement Supplier |
|---------------|----------------------|-----------------------|-----------------|----------------------|
| NCD57080CDR2G |                      | NCV57255DR2G          | N/A             |                      |
| NCD57080BDR2G |                      | NCV57255DR2G          | N/A             |                      |
| NCD57080ADR2G |                      | NCV57255DR2G          | N/A             |                      |
| NCD57201DR2G  |                      | NCV57255DR2G          | N/A             |                      |
| NCD57200DR2G  |                      | NCV57255DR2G          | N/A             |                      |