



|                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| <b>Title of Change:</b>                                                                                                                                                                                                                                                  | Transfer of Assembly and Test operations for DPAK to ON Semiconductor Bien Hoa, Dong Nai Province, Vietnam.                                                                                                                                                                                                                                                                                                                                           |                                 |
| <b>Proposed First Ship Date:</b>                                                                                                                                                                                                                                         | 15 June 2018 <i>or earlier upon customer approval.</i>                                                                                                                                                                                                                                                                                                                                                                                                |                                 |
| <b>Product Category:</b>                                                                                                                                                                                                                                                 | Active components – Integrated circuits                                                                                                                                                                                                                                                                                                                                                                                                               |                                 |
| <b>Contact information</b>                                                                                                                                                                                                                                               | Contact your local ON Semiconductor Sales Office or < <a href="mailto:Richard.White@onsemi.com">Richard.White@onsemi.com</a> >                                                                                                                                                                                                                                                                                                                        |                                 |
| <b>Samples</b>                                                                                                                                                                                                                                                           | Contact your local ON Semiconductor Sales Office to place sample order.<br>Sample requests are to be submitted no later than 45 days after publication of this change notification.                                                                                                                                                                                                                                                                   |                                 |
| <b>Sample Availability Date:</b>                                                                                                                                                                                                                                         | May 30, 2017                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                 |
| <b>PPAP Availability Date:</b>                                                                                                                                                                                                                                           | May 30, 2017                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                 |
| <b>Additional Reliability Data</b>                                                                                                                                                                                                                                       | Contact your local ON Semiconductor Sales Office or < <a href="mailto:Peter.Turlo@onsemi.com">Peter.Turlo@onsemi.com</a> >.                                                                                                                                                                                                                                                                                                                           |                                 |
| <b>Type of Notification</b>                                                                                                                                                                                                                                              | This is a Final Product/Process Change Notification (FPCN) sent to customers.<br>FPCNs are issued 12 months prior to implementation of the change or earlier upon customer approval.<br>ON Semiconductor 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 < <a href="mailto:PCN.Support@onsemi.com">PCN.Support@onsemi.com</a> >. |                                 |
| <b>Change Category:</b>                                                                                                                                                                                                                                                  | <b>Type of Change</b>                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                 |
| Test Flow                                                                                                                                                                                                                                                                | Move of all or part of electrical wafer test and/or final test to a different location/site/subcontractor                                                                                                                                                                                                                                                                                                                                             |                                 |
| Process – Assembly                                                                                                                                                                                                                                                       | Change of mold compound<br>Change of product marking<br>Move of all or part of assembly to a different location/site/subcontractor.                                                                                                                                                                                                                                                                                                                   |                                 |
| Equipment - Assembly                                                                                                                                                                                                                                                     | Production from a new equipment/tool which uses the same basic technology (replacement equipment or extension of existing equipment pool) without change of process.                                                                                                                                                                                                                                                                                  |                                 |
| <b>Description and Purpose:</b>                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                 |
| This Final Notification announces the transfer of ON Semiconductor's assembly and test operations for the below listed DPAK package products, currently built at ON Semiconductor Seremban (TB), Malaysia to ON Semiconductor Bien Hoa, Dong Nai Province, Vietnam (VF). |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                 |
| The changes to the assembly are:                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                 |
| <ol style="list-style-type: none"> <li>The Mold Compound has been improved in the OSV bill of material. Changing from G700HC to G700HF. The G700HF has lower stress index than G700HC which helps lower package stress and lower tendency for delamination.</li> </ol>   |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                 |
|                                                                                                                                                                                                                                                                          | <b>Before Change Description</b>                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>After Change Description</b> |
| Mold Compound                                                                                                                                                                                                                                                            | MC EME-G700HC                                                                                                                                                                                                                                                                                                                                                                                                                                         | G700HF                          |
| No Changes to the Final Test process or equipment.                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                 |
| <b>Reason / Motivation for Change:</b>                                                                                                                                                                                                                                   | <b>Change Benefit:</b> Rapid utilization of available capacity.<br><b>Risk for late release:</b> Limited Capacity                                                                                                                                                                                                                                                                                                                                     |                                 |
| <b>Anticipated impact on fit, form, function, reliability, product safety or manufacturability</b>                                                                                                                                                                       | No anticipated impacts.                                                                                                                                                                                                                                                                                                                                                                                                                               |                                 |



## Final Product/Process Change Notification

Document # : FPCN21659Z

Issue Date: 15 June 2017

**Sites Affected:**

☐ All site(s)      ☐ not applicable      ☒ ON Semiconductor site(s) :  
ON Binh Duong Province, Vietnam  
ON Seremban, Malaysia      ☐ External Foundry/Subcon site(s)

**Marking of Parts/ Traceability of Change:**

New Orderable Part Numbers are created.

### Reliability Data Summary:

**QV DEVICE NAME: NCV8401BDTRKG**

PACKAGE        DPAK

| Test  | Specification       | Condition                         | Interval | Results |
|-------|---------------------|-----------------------------------|----------|---------|
| HTOL  | JESD22-A108         | Ta=150°C, 100 % max rated Vcc     | 1000 hrs | 0/240   |
| TC    | JESD22-A104         | Ta= -50°C to +150°C               | 1000 cyc | 0/240   |
| HAST  | JESD22-A110         | 130°C, 85% RH, 18.8psig, bias     | 96 hrs   | 0/240   |
| uHAST | JESD22-A118         | 130°C, 85% RH, 18.8psig, unbiased | 96 hrs   | 0/240   |
| PC    | J-STD-020 JESD-A113 | MSL 1 @ 260 °C                    |          | 0/all   |
| RSH   | JESD22- B106        | Ta = 265C, 10 sec                 |          | 0/30    |
| SD    | JSTD002             | Ta = 245C, 10 sec                 |          | 0/ 10   |

**NOTE: AEC-1pager is attached.**

*To access file attachments on pdf copy of PCN, please be guided by the steps below:*

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/s

### Electrical Characteristic Summary:

Electrical characteristics are not impacted.

**List of Affected Standard Parts:**

| Current Part Number | New Part Number | Qualification Vehicle |
|---------------------|-----------------|-----------------------|
| NCV8401ADTRKG       | NCV8401BDTRKG   | NCV8401BDTRKG         |
| NCV8403ADTRKG       | NCV8403BDTRKG   |                       |
| NCV8408DTRKG        | NCV8408BDTRKG   |                       |
| NCV8406ADTRKG       | NCV8406BDTRKG   |                       |