



# Final Product/Process Change Notification

Document #: FPCN24601Z

Issue Date: 30 Sep 2022

|  |  |                |
|--|--|----------------|
| <b>Title of Change:</b>  | Output current limit improvement - NCV8187 family.   |                |
| <b>Proposed Changed Material First Ship Date:</b>  | 03 Apr 2023 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:Jan.Gryzbon@onsemi.com">Jan.Gryzbon@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>Sample Availability Date:</b>   | 31 Oct 2022  |                |
| <b>PPAP Availability Date:</b>   | 31 Oct 2022  |                |
| <b>Additional Reliability Data:</b>  | Contact your local onsemi Sales Office or <a href="mailto:Vladislav.Hrachovec@onsemi.com">Vladislav.Hrachovec@onsemi.com</a>   |                |
| <b>Type of Notification:</b>   | 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.<br>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 <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   | New / change of metallization (specifically chip frontside)  |                |
| <b>Description and Purpose:</b>  |  |                |
| <p>A process improvement adjustment will be made with a metal 2 layer change on the NCV8187 family in DFNW8 and DPAK5 packages.</p> <p>This metal adjustment resulted in a change to the typical value for output current when Tj = 25C.</p> <p>There are no changes to datasheet specifications, and lout minimum and maximum limits are not affected.</p> <p>This is a minor change to typical performance value only.</p> |  |                |
|  | <b>From</b>  | <b>To</b>      |
| <b>Typical Output Current, Tj=25</b>   | <b>1650 mA</b>   | <b>1450 mA</b> |

| <b>Reason / Motivation for Change:</b>  |                 | Quality improvement  |          |          |
|---|-----------------|--|----------|----------|
| <b>Anticipated impact on fit, form, function, reliability, product safety or manufacturability:</b>   |                 | <p>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.</p> <p>No anticipated impacts.</p> |          |          |
| <b>Sites Affected:</b>  |                 |  |          |          |
| <b>onsemi Sites</b>   |                 | <b>External Foundry/Subcon Sites</b>   |          |          |
| onsemi Aizu, Japan  |                 | None   |          |          |
| <b>Marking of Parts/ Traceability of Change:</b>  |                 | The affected products will be identified with date code  |          |          |
| <b>Reliability Data Summary:</b>  |                 |  |          |          |
| QV device name : NCV8187ADT330RKG   |                 |  |          |          |
| Package : DPAK-5  |                 |  |          |          |
| Test  | Specification   | Condition  | Interval | Results  |
| ED  | ON DataSheet    | Cpk > 1.67<br>Test @ R, H, C   |          | Cpk>1.67 |
| <b>NOTE: AEC-1pager is attached.</b>  |                 |  |          |          |
| <p>To view attachments:</p> <ol style="list-style-type: none"> <li>1. Download pdf copy of the PCN to your computer</li> <li>2. Open the downloaded pdf copy of the PCN</li> <li>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</li> <li>4. Then click on the attached file.</li> </ol> |                 |  |          |          |
| <b>Electrical Characteristics Summary:</b>  |                 |  |          |          |
| Typical value of Output current changes from 1650mA to 1450mA; no other electrical characteristics are impacted.  |                 |  |          |          |
| <b>List of Affected Parts:</b>  |                 |  |          |          |
| <b>Note:</b> 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 <b><u>PCN Customized Portal</u></b> .  |                 |  |          |          |
| Current Part Number   | New Part Number | Qualification Vehicle  |          |          |
| NCV8187AMLEADJTCG   | NA              | NCV8187ADT330RKG   |          |          |
| NCV8187AMLE330TCG   | NA              | NCV8187ADT330RKG   |          |          |
| NCV8187AMLE280TCG   | NA              | NCV8187ADT330RKG   |          |          |
| NCV8187AMLE180TCG   | NA              | NCV8187ADT330RKG   |          |          |
| NCV8187AMLE120TCG   | NA              | NCV8187ADT330RKG   |          |          |
| NCV8187ADT180RKG  | NA              | NCV8187ADT330RKG   |          |          |
| NCV8187ADTADJRKG  | NA              | NCV8187ADT330RKG   |          |          |
| NCV8187ADT330RKG  | NA              | NCV8187ADT330RKG   |          |          |

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**Appendix A: Changed Products**

**PCN#: FPCN24601Z**  
**Issue Date: Sep 30, 2022**

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DIKG: DIGI-KEY

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| Product           | Customer Part Number | Qualification Vehicle | New Part Number | Replacement Supplier |
|-------------------|----------------------|-----------------------|-----------------|----------------------|
| NCV8187AMLEADJTCG |                      | NCV8187ADT330RKG      | NA              |                      |
| NCV8187AMLE280TCG |                      | NCV8187ADT330RKG      | NA              |                      |
| NCV8187AMLE180TCG |                      | NCV8187ADT330RKG      | NA              |                      |
| NCV8187AMLE330TCG |                      | NCV8187ADT330RKG      | NA              |                      |