



Final Product/Process Change Notification  
Document #:FPCN23558Z1  
Issue Date:09 Nov 2021

| <b>Title of Change:</b>  | Update to FPCN23558Z to change Proposed First Ship Date & Current Material Last Order/Delivery Dates. Change from 6inch to 8inch wafers for HD+B technology at Roznov wafer fab.  |           |  |             |           |                        |        |        |  |        |        |  |        |        |  |        |        |
|--|---|-----------|--|-------------|-----------|------------------------|--------|--------|--|--------|--------|--|--------|--------|--|--------|--------|
| <b>Proposed Changed Material First Ship Date:</b>  | 01 Apr 2023 or earlier if approved by customer  |           |  |             |           |                        |        |        |  |        |        |  |        |        |  |        |        |
| <b>Current Material Last Order Date:</b>   | 31 Dec 2022<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>  | 31 Mar 2023<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 ON Semiconductor Sales Office or <a href="mailto:Aaron.Zierenberg@onsemi.com">Aaron.Zierenberg@onsemi.com</a>  |           |  |             |           |                        |        |        |  |        |        |  |        |        |  |        |        |
| <b>PCN Samples Contact:</b>  | Contact your local onsemi Sales Office to place sample order or < <a href="mailto:PCN.samples@onsemi.com">PCN.samples@onsemi.com</a> >. 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>   | 07 Oct 2020   |           |  |             |           |                        |        |        |  |        |        |  |        |        |  |        |        |
| <b>PPAP Availability Date:</b>   | 05 Nov 2020   |           |  |             |           |                        |        |        |  |        |        |  |        |        |  |        |        |
| <b>Additional Reliability Data:</b>  | Contact your local onsemi Sales Office or <a href="mailto:Youngchul.Lee@onsemi.com">Youngchul.Lee@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 its 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 wafer diameter  |           |  |             |           |                        |        |        |  |        |        |  |        |        |  |        |        |
| Process - Assembly   | Change of product marking   |           |  |             |           |                        |        |        |  |        |        |  |        |        |  |        |        |
| <b>Description and Purpose:</b>  |   |           |  |             |           |                        |        |        |  |        |        |  |        |        |  |        |        |
| This update notification is to change Proposed Changed Material First Ship Date, Current Material Last Order Date, and Current Material Last Delivery Date.  |   |           |  |             |           |                        |        |        |  |        |        |  |        |        |  |        |        |
| Move from 6inch to 8inch wafer size. Purpose to improve manufacturing capacity.  |   |           |  |             |           |                        |        |        |  |        |        |  |        |        |  |        |        |
| <table border="1"><thead><tr><th></th><th><b>From</b></th><th><b>To</b></th></tr></thead><tbody><tr><td>Product marking change</td><td>8405AG</td><td>8405CG</td></tr><tr><td></td><td>8405BG</td><td>8405DG</td></tr><tr><td></td><td>8406AG</td><td>8406CG</td></tr><tr><td></td><td>8406BG</td><td>8406DG</td></tr></tbody></table> |   |           |  | <b>From</b> | <b>To</b> | Product marking change | 8405AG | 8405CG |  | 8405BG | 8405DG |  | 8406AG | 8406CG |  | 8406BG | 8406DG |
|  | <b>From</b>   | <b>To</b> |  |             |           |                        |        |        |  |        |        |  |        |        |  |        |        |
| Product marking change   | 8405AG  | 8405CG    |  |             |           |                        |        |        |  |        |        |  |        |        |  |        |        |
|  | 8405BG  | 8405DG    |  |             |           |                        |        |        |  |        |        |  |        |        |  |        |        |
|  | 8406AG  | 8406CG    |  |             |           |                        |        |        |  |        |        |  |        |        |  |        |        |
|  | 8406BG  | 8406DG    |  |             |           |                        |        |        |  |        |        |  |        |        |  |        |        |
|  | <b>From</b>   | <b>To</b> |  |             |           |                        |        |        |  |        |        |  |        |        |  |        |        |
| Product marking change   | 8405AG  | 8405CG    |  |             |           |                        |        |        |  |        |        |  |        |        |  |        |        |
|  | 8405BG  | 8405DG    |  |             |           |                        |        |        |  |        |        |  |        |        |  |        |        |
|  | 8406AG  | 8406CG    |  |             |           |                        |        |        |  |        |        |  |        |        |  |        |        |
|  | 8406BG  | 8406DG    |  |             |           |                        |        |        |  |        |        |  |        |        |  |        |        |

|  |  |   |                |  |  |  |  |  |
|--|--|---|----------------|--|--|--|--|--|
| <b>Reason / Motivation for Change:</b>   | Capacity 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 Roznov, Czech Republic  |  | None  |                |  |  |  |  |  |
| onsemi Seremban, Malaysia  |  |   |                |  |  |  |  |  |
| onsemi Vietnam   |  |   |                |  |  |  |  |  |
| <b>Marking of Parts/ Traceability of Change:</b>   | New OPN's with updated marking.  |   |                |  |  |  |  |  |
| <b>Reliability Data Summary:</b>   |  |   |                |  |  |  |  |  |
| <p>QV DEVICE NAME : NCV8406BDTRKG<br/>   RMS: OSV (RRF#61238, 69600) and SBN (RRF#61239)<br/>   PACKAGE: 1186 (DPAK3)</p>  |  |   |                |  |  |  |  |  |
| <b>Test</b>  | <b>Specification</b>   | <b>Condition</b>                              | <b>Results</b> |  |  |  |  |  |
| HTRB   | MILSTD750-1, method M1038A   | Tj=150C, Bias=54V, 1008 hrs                   | 0/300          |  |  |  |  |  |
| ELFR   | JESD22-A108  | Ta=150C, Bias=10V, 24 hrs                     | 0/2400         |  |  |  |  |  |
| TC   | JESD22-A104  | Ta= -55 °C to +150 °C                         | 0/240          |  |  |  |  |  |
| HAST   | JESD22-A110  | Ta=130C, RH=85%, ~18.8 psig, Bias=54V, 96 hrs | 0/252          |  |  |  |  |  |
| uHAST  | JESD22-A118  | Ta=130C, RH=85%, ~18.8 psig, 96 hrs           | 0/240          |  |  |  |  |  |
| PC   | JEDS22-A113  | MSL 1 @ 260C °C                               |                |  |  |  |  |  |
| RSH  | JESD22- B106   | per AEC - Q101                                | 0/90           |  |  |  |  |  |
| <b>NOTE: AEC-1pager is attached.</b>   |  |   |                |  |  |  |  |  |
| To view attachments:   |  |   |                |  |  |  |  |  |
| <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>   |  |   |                |  |  |  |  |  |
| Electrical characteristics are not impacted.   |  |   |                |  |  |  |  |  |



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**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 |
|---------------------|-----------------|-----------------------|
| NCV8406BDTRKG       | NCV8406DTDRKG   | NCV8406BDTRKG         |
| NCV8406ADTRKG       | NCV8406DTCRKG   | NCV8406BDTRKG         |
| NCV8405BDTRKG       | NCV8405DTDRKG   | NCV8406BDTRKG         |
| NCV8405ADTRKG       | NCV8405DTCRKG   | NCV8406BDTRKG         |