

## Final Product/Process Change Notification Document #:FPCN24739Z Issue Date:13 Jun 2022

| Title of Change:                              | Addition of onsemi, Seremban, Malaysia (onsemi, SBN) for assembly and test of NCV8177AMTW family for capacity flexibility.  |  |  |
|---|---|--|--|
| Proposed Changed Material First Ship<br>Date: | 20 Dec 2022 or earlier if approved by customer  |  |  |
| Current Material Last Order Date:             | N/A<br>Orders received after the Current Material Last Order Date expiration are to be considered<br>orders for new changed material as described in this PCN. Orders for current (unchanged) mate<br>after this date will be per mutual agreement and current material inventory availability.   |  |  |
| Current Material Last Delivery Date:          | N/A<br>The Current Material Last Delivery Date may be subject to change based on build and depletion<br>of the current (unchanged) material inventory   |  |  |
| Product Category:                             | Active components – Integrated circuits   |  |  |
| Contact information:                          | Contact your local onsemi Sales Office or Milos.Dvorak@onsemi.com   |  |  |
| PCN Samples Contact:                          | 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<br>notification.<br>Samples delivery timing will be subject to request date, sample quantity and special custom<br>packing/label requirements.  |  |  |
| Sample Availability Date:                     | 20 Jun 2022   |  |  |
| PPAP Availability Date:                       | 30 Jun 2022   |  |  |
| Additional Reliability Data:                  | Contact your local onsemi Sales Office or Vladislav.Hrachovec@onsemi.com  |  |  |
| Type of Notification:                         | This is a Final Product/Process Change Notification (FPCN) sent to customers. The change will<br>be implemented at 'Proposed Change Material First Ship Date' in compliance to J-STD-46 or<br>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<br>made in writing within 45 days of delivery of this notice. To do so, contact<br>PCN.Support@onsemi.com. |  |  |
| Change Category                               |   |  |  |
| Category                                      | Type of Change  |  |  |
| Process - Assembly                            | Move of all or part of assembly to a different location/site/subcontractor.   |  |  |

#### **Description and Purpose:**

onsemi would like to inform our customers of the addition of onsemi, Seremban, Malaysia (onsemi, SBN) for assembly and test of NCV8177AMTW family to enable capacity flexibility. Product bill of material changes are shown in the table below, and all products continue to meet electrical specification requirements listed in the product datasheet. This change is for capacity flexibility, so future deliveries will be sourced from onsemi, SBN, or any of the previously qualified assembly & test locations at the discretion of our supply chain.

|               | From               | То                 |                           |
|---------------|--------------------|--------------------|---------------------------|
| Assembly Site | UTL (Thailand)     | UTL (Thailand)     | onsemi Seremban, Malaysia |
| Die Attach    | AB 8600 CONDUCTIVE | AB 8600 CONDUCTIVE | AB 8008HT                 |
| Mold Compound | G700LTD            | G700LTD            | G770HMD                   |

There are no changes of form, fit, or device function as a result of this change.

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



| Reason / Motivation for Change:  | Source/Supply/Capacity Changes Process/Materials Change  |                               |  |  |
|--|--|-------------------------------|--|--|
| Anticipated impact on fit, form,<br>function, reliability, product<br>safety or manufacturability: | 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. No anticipated impacts. |                               |  |  |
| Sites Affected:  |  |                               |  |  |
| onsemi Sites   |  | External Foundry/Subcon Sites |  |  |
| onsemi Seremban, Malaysia  |  | None                          |  |  |
| Marking of Parts/ Traceability of Change:  | The affected products will be identified with date code.   |                               |  |  |
| Reliability Data Summary:  |  |                               |  |  |

QV DEVICE NAME: NCV8177AMTW330TCG RMS: S78250, S78251, S78252 PACKAGE: WDFN8

| Test  | Specification       | Condition   | Interval | Results |
|-------|---------------------|---|----------|---------|
| HTOL  | JESD22-A108         | Ta=125°C, 100 % max rated Vcc                                 | 1008 hrs | 0/240   |
| HTSL  | JESD22-A103         | Ta= 150°C   | 1008 hrs | 0/240   |
| TC    | JESD22-A104         | Ta= -65°C to +150°C   | 500 сус  | 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   |
| РС    | J-STD-020 JESD-A113 | MSL1 @ 260°C, Pre TC, uHAST, HAST for surface mount pkgs only |          | 0/all   |

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

To view attachments:

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

#### **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 |
|------------------------|-----------------|-----------------------|
| NCV8177AMTW120TCG-A642 | NA              | NCV8177AMTW330TCG     |
| NCV8177AMTW110TCG-A642 | NA              | NCV8177AMTW330TCG     |
| NCV8177AMTW090TCG-A642 | NA              | NCV8177AMTW330TCG     |
| NCV8177AMTW330TCG      | NA              | NCV8177AMTW330TCG     |
| NCV8177AMTW280TCG      | NA              | NCV8177AMTW330TCG     |
| NCV8177AMTW180TCG      | NA              | NCV8177AMTW330TCG     |
| NCV8177AMTW120TCG      | NA              | NCV8177AMTW330TCG     |
| NCV8177AMTW110TCG      | NA              | NCV8177AMTW330TCG     |
| NCV8177AMTW090TCG      | NA              | NCV8177AMTW330TCG     |
| NCV8177AMTW085TCG      | NA              | NCV8177AMTW330TCG     |

# Appendix A: Changed Products

| Product                | Customer Part Number | Qualification Vehicle | New Part Number | Replacement Supplier |
|------------------------|----------------------|-----------------------|-----------------|----------------------|
| NCV8177AMTW120TCG-A642 |                      | NCV8177AMTW330TCG     | NA              |                      |
| NCV8177AMTW330TCG      |                      | NCV8177AMTW330TCG     | NA              |                      |
| NCV8177AMTW180TCG      |                      | NCV8177AMTW330TCG     | NA              |                      |
| NCV8177AMTW085TCG      |                      | NCV8177AMTW330TCG     | NA              |                      |
| NCV8177AMTW110TCG-A642 |                      | NCV8177AMTW330TCG     | NA              |                      |
| NCV8177AMTW090TCG-A642 |                      | NCV8177AMTW330TCG     | NA              |                      |