



## Final Product/Process Change Notification

Document #:FPCN25070XE

Issue Date:07 Feb 2024

|                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                  |            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| <b>Title of Change:</b>                                                                                                                                                                                                                                                                                                                                                                                                   | Qualification of new lead frame with A194ESH base material for specific QFN Devices in onsemi Seremban, Malaysia.                                                                                                                                                                                                                                                |            |
| <b>Proposed First Ship date:</b>                                                                                                                                                                                                                                                                                                                                                                                          | 25 Jul 2024 or earlier if approved by customer                                                                                                                                                                                                                                                                                                                   |            |
| <b>Contact Information:</b>                                                                                                                                                                                                                                                                                                                                                                                               | Contact your local onsemi Sales Office or <a href="mailto:YongChin.Wong@onsemi.com">YongChin.Wong@onsemi.com</a>                                                                                                                                                                                                                                                 |            |
| <b>PCN Samples Contact:</b>                                                                                                                                                                                                                                                                                                                                                                                               | Contact your local onsemi Sales Office.<br>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.<br>Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.                                                |            |
| <b>Additional Reliability Data:</b>                                                                                                                                                                                                                                                                                                                                                                                       | Contact your local onsemi Sales Office or <a href="mailto:MohdAzizi.Azman@onsemi.com">MohdAzizi.Azman@onsemi.com</a>                                                                                                                                                                                                                                             |            |
| <b>Type of Notification:</b>                                                                                                                                                                                                                                                                                                                                                                                              | This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change.<br>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 <a href="mailto:PCN.Support@onsemi.com">PCN.Support@onsemi.com</a> |            |
| <b>Marking of Parts/ Traceability of Change:</b>                                                                                                                                                                                                                                                                                                                                                                          | Product traceability will be maintained by date code.                                                                                                                                                                                                                                                                                                            |            |
| <b>Change Category:</b>                                                                                                                                                                                                                                                                                                                                                                                                   | Assembly Change                                                                                                                                                                                                                                                                                                                                                  |            |
| <b>Change Sub-Category(s):</b>                                                                                                                                                                                                                                                                                                                                                                                            | Material Change                                                                                                                                                                                                                                                                                                                                                  |            |
| <b>Sites Affected:</b>                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                  |            |
| <b>onsemi Sites</b>                                                                                                                                                                                                                                                                                                                                                                                                       | <b>External Foundry/Subcon Sites</b>                                                                                                                                                                                                                                                                                                                             |            |
| onsemi Seremban, Malaysia                                                                                                                                                                                                                                                                                                                                                                                                 | None                                                                                                                                                                                                                                                                                                                                                             |            |
| <b>Description and Purpose:</b>                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                  |            |
| onsemi is announcing the qualification of new lead frame with A194ESH base material for QFN devices in onsemi Seremban, Malaysia. This change is implemented to mitigate potential supply disruption. Customers are encouraged to urgently review this change in order to minimize any potential impact to their supply chain. Upon implementation of this change, the qualified supplier will be used to support demand. |                                                                                                                                                                                                                                                                                                                                                                  |            |
|                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>From</b>                                                                                                                                                                                                                                                                                                                                                      | <b>To</b>  |
| <b>LeadFrame Supplier</b>                                                                                                                                                                                                                                                                                                                                                                                                 | DCI                                                                                                                                                                                                                                                                                                                                                              | AAMI       |
| <b>Base Material</b>                                                                                                                                                                                                                                                                                                                                                                                                      | C194 FH                                                                                                                                                                                                                                                                                                                                                          | A194 ESH   |
| <b>Plating Type</b>                                                                                                                                                                                                                                                                                                                                                                                                       | Ni, Pd, Au                                                                                                                                                                                                                                                                                                                                                       | Ni, Pd, Au |
| <b>Roughed</b>                                                                                                                                                                                                                                                                                                                                                                                                            | Non-Roughed                                                                                                                                                                                                                                                                                                                                                      | Roughed    |
| There is no product marking change as a result of this change.                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                  |            |



## Final Product/Process Change Notification

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### Reliability Data Summary:

QV DEVICE NAME: NVT211DMTR2G (Supplier: AAMI)

PACKAGE: WDFN2020-8L

RRF: 91877

| Test  | Specification       | Condition                                                    | Interval | Result |
|-------|---------------------|--------------------------------------------------------------|----------|--------|
| HTSL  | JESD22-A103         | Ta= 150°C                                                    | 1008 hrs | 0/84   |
| PC    | J-STD-020 JESD-A113 | MSL 1 @ 260 °C                                               |          | 0/22   |
| TC    | JESD22-A104         | Ta= - 65°C to +150°C                                         | 500 cyc  | 0/84   |
| uHAST | JESD22-A118         | 130°C, 85% RH, 18.8psig, unbiased                            | 96 hrs   | 0/84   |
| RSH   | JESD22- B106        | Ta = 268°C, 10 sec<br>Required for through hole devices only |          | 0/10   |
| SD    | JSTD002             | Ta = 245°C, 5 sec                                            |          | 0/15   |

### 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](#).

| Part Number | Qualification Vehicle |
|-------------|-----------------------|
| NCT72CMTR2G | NVT211DMTR2G          |
| NCT218MTR2G | NVT211DMTR2G          |



Appendix A: Changed Products

PCN#: FPCN25070XE  
Issue Date: Feb 06, 2024

DIKG: DIGI-KEY

| Product     | Customer Part Number | Qualification Vehicle | New Part Number | Replacement Supplier |
|-------------|----------------------|-----------------------|-----------------|----------------------|
| NCT72CMTR2G |                      | NVT211DMTR2G          | NCT72CMTR2G     |                      |
| NCT218MTR2G |                      | NVT211DMTR2G          | NCT218MTR2G     |                      |