

| Title of Change: | Additional assembly site ON Semiconductor Philippines, Inc. Tarlac for QFN-16 3X3 parts. | | | |
|--|--|-------------------------------|--|--|
| Proposed First Ship date: | 14 Jul 2021 or earlier if approved by customer | | | |
| Contact Information: | Contact your local ON Semiconductor Sales Office or Peter.Vo@onsemi.com | | | |
| PCN Samples Contact: | Contact your local ON Semiconductor Sales Office or < <u>PCN.samples@onsemi.com</u> >. 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. Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements. | | | |
| Additional Reliability Data: | Contact your local ON Semiconductor Sales Office or Phine.Guevarra@onsemi.com | | | |
| Type of Notification: | This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change. ON Semiconductor will consider this change accepted, unless an inquiry is made in writing within 30 days of delivery of this notice. To do so, contact <u>PCN.Support@onsemi.com</u> | | | |
| Marking of Parts/ Traceability of Change: | Affected parts can be identified by the assembly site code in the traceability code. | | | |
| Change Category: | Assembly Change | | | |
| Change Sub-Category(s): | Shipping/Packaging/Marking, Manufacturing Site Addition | | | |
| Sites Affected: | | | | |
| ON Semiconductor Sites | | External Foundry/Subcon Sites | | |
| ON Semiconductor Tarlac, Philippines | | None | | |

Description and Purpose:

This final notification is to inform the completed qualification for assembly manufacturing including tin plating process for QFN-16 3X3 with 0.8 mil gold wire and matte tin lead finish at ON Semiconductor Philippines, Inc. Tarlac site. The new site will allow dual source manufacturing of the affected products for increased capacity and manufacturing flexibility.

There are no product material changes as a result of this change.

Product marking change will only be in the traceability code for the assembly site code.

| | From | То | |
|---------------------------|--------------------------------------|--|--|
| Assembly site | UTAC Thailand | UTAC Thailand | |
| | UTAC Indiidhu | ON Semiconductor – Tarlac | |
| Assembly tin plating site | | UTAC Thailand | |
| | UTAC Thailand | ON Semiconductor – Tarlac | |
| | | ON Semiconductor – Carmona | |
| Product marking change | Assembly site and for UTAC Theiland | Either Assembly site code for UTAC or ON | |
| | Assembly site code for UTAC Thailand | Semiconductor – Tarlac | |



Reliability Data Summary:

QV DEVICE NAME: <u>NCS37014MNTWG</u> RMS: <u>71143</u>

PACKAGE: OFN-16 3X3

| FACKAGE: Q11-10 5X5 | | | | |
|---------------------|---------------------|-----------------------------------|----------|---------|
| Test | Specification | Condition | Interval | Results |
| HTOL | JESD22-A108 | Ta=125°C, 100 % max rated Vcc | 1008 hrs | 0/239 |
| HTSL | JESD22-A103 | Ta= 150°C | 1008 hrs | 0/234 |
| TC-PC | JESD22-A104 | Ta= -65°C to +150°C | 1000 сус | 0/235 |
| HAST-PC | JESD22-A110 | 130°C, 85% RH, 18.8psig, bias | 96 hrs | 0/244 |
| UHAST-PC | JESD22-A118 | 130°C, 85% RH, 18.8psig, unbiased | 96 hrs | 0/267 |
| PC | J-STD-020 JESD-A113 | MSL 3 @ 260 °C | | Pass |
| PD | JESD-B100 | Min Cpk 1.67 | | Pass |
| SD | JESD22- B106 | Ta = 245C | | 0/45 |

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 |
|---------------|-----------------------|
| NCS37010MNTWG | NCS37014MNTWG |
| NCS37014MNTWG | NCS37014MNTWG |