



## Initial Product/Process Change Notification

Document #: IPCN24698X

Issue Date: 13 May 2022

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|--|--|
| <b>Title of Change:</b>                          | Lead Frame Vendor and Design change for QFN15 Products Assembled in UTAC (UTL) , Bangkok, Thailand.  |
| <b>Proposed First Ship date:</b>                 | 19 Nov 2022 or earlier if approved by customer   |
| <b>Contact Information:</b>                      | Contact your local onsemi Sales Office or <a href="mailto:Marty.Paul@onsemi.com">Marty.Paul@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>Type of Notification:</b>                     | This is an Initial Product/Process Change Notification (IPCN) sent to customers. An IPCN is an advance notification about an upcoming change and contains general information regarding the change details and devices affected. It also contains the preliminary reliability qualification plan. The completed qualification and characterization data will be included in the Final Product/Process Change Notification (FPCN). This IPCN notification will be followed by a Final Product/Process Change Notification (FPCN) at least 90 days prior to implementation of the change. In case of questions, contact < <a href="mailto:PCN.Support@onsemi.com">PCN.Support@onsemi.com</a> > |
| <b>Marking of Parts/ Traceability of Change:</b> | Affected products will be identified with date code 2247 or newer. After DC 2247, customers will receive products assembled with Rokko lead frame vendor.  |
| <b>Change Category:</b>                          | Assembly Change  |
| <b>Change Sub-Category(s):</b>                   | Material Change  |

### Sites Affected:

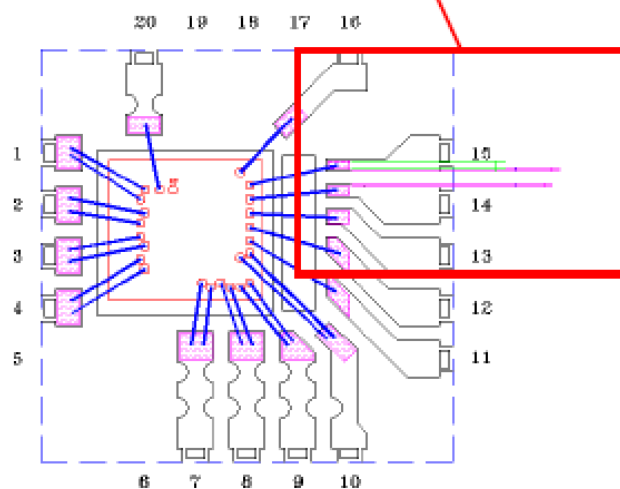
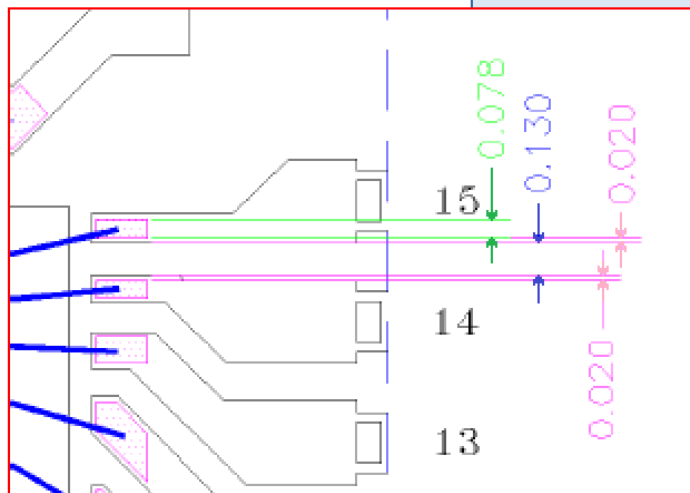
| onsemi Sites | External Foundry/Subcon Sites |
|--------------|-------------------------------|
| None         | UTAC, Thailand                |

### Description and Purpose:

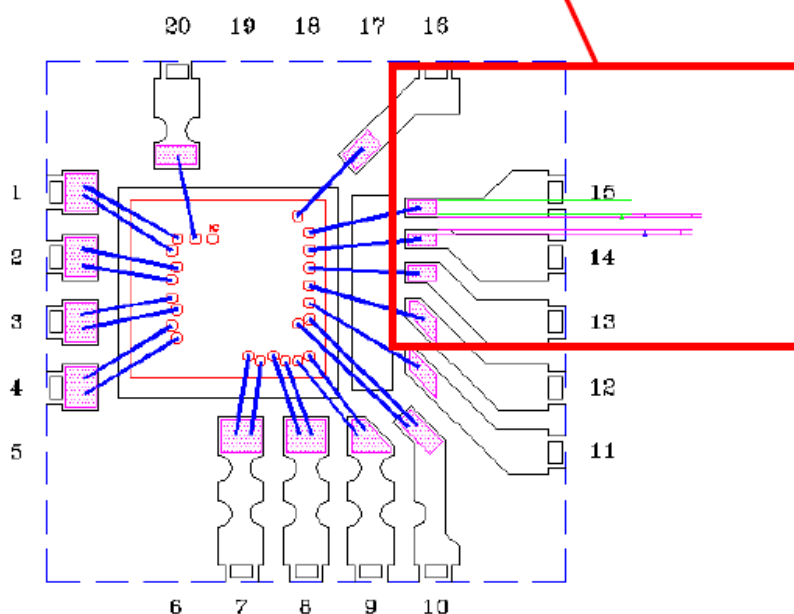
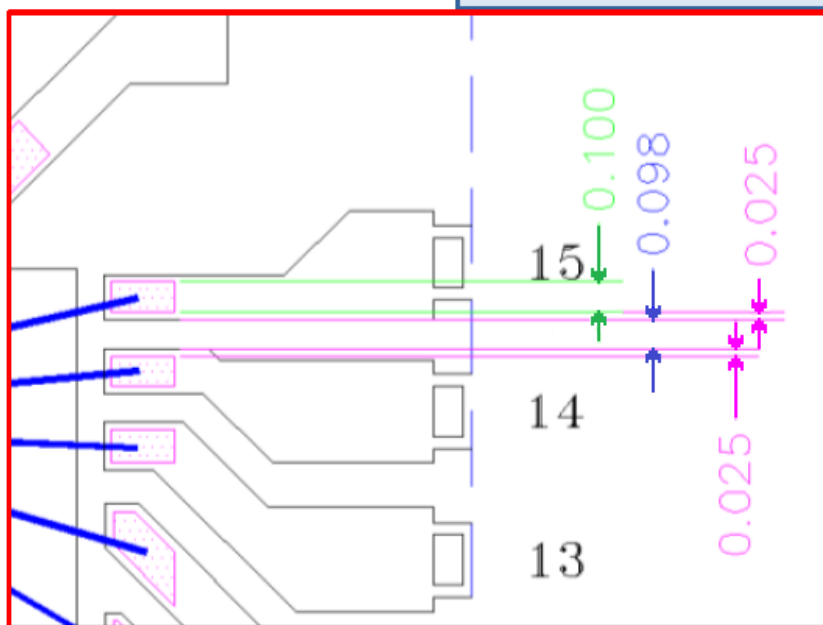
This is an IPCN to notify customers that onsemi has begun qualification of a new vendor for the leadframe in the QFN-15 package assembled at the UTAC, Bangsamak Thailand location for the products listed in this announcement. The previous vendor has discontinued their leadframe product. As a result, the following changes will occur:

|           | Before Change Description                                     | After Change Description  |
|-----------|---|---|
| LeadFrame | Lead frame vendor CWTC with 0.30-1.2 microinch bottom plating | Lead frame vendor Rokko with 1.38 microinch bottom plating and below dimension changes. |

## Current design CWTC supplier



## Rokko supplier



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



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### Qualification Plan:

QV DEVICE NAME NCP51820AMNTWG

RMS 84002

PACKAGE QFN-15

| Test  | Specification       | Condition                         | Interval |
|-------|---------------------|-----------------------------------|----------|
| HTSL  | JESD22-A103         | Ta = 150°C                        | 1008 hrs |
| TC    | JESD22-A104         | Ta = -65°C to +150°C              | 500 cyc  |
| HAST  | JESD22-A110         | 130°C, 85% RH, 18.8psig, bias     | 96 hrs   |
| uHAST | JESD22-A118         | 130°C, 85% RH, 18.8psig, unbiased | 96 hrs   |
| PC    | J-STD-020 JESD-A113 | MSL 1 @ 260 °C                    |          |
| SD    | JSTD002             | Ta = 245C, 5 sec                  |          |
| PD    | JESD22 B100, B108   |                                   |          |

Estimated date for qualification completion: 10 August 2022

### 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 |
|----------------|-----------------------|
| NCP51810AMNTWG | NCP51820AMNTWG        |
| NCP51820AMNTWG | NCP51820AMNTWG        |