



Final Product/Process Change Notification

Document #:FPCN24563XC

Issue Date: 29 Jun 2022

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| Title of Change: | UTAC Thai Limited Assembly site expansion for non-automotive. | |
| Proposed First Ship date: | 06 Oct 2022 or earlier if approved by customer | |
| Contact Information: | Contact your local onsemi Sales Office or Naruedol.Srisamran@onsemi.com | |
| PCN Samples Contact: | Contact your local onsemi Sales Office. 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 onsemi Sales Office or Shiela.Crosby@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. 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 PCN.Support@onsemi.com | |
| Marking of Parts/ Traceability of Change: | No change on marking. Traceability will be maintained by manufacturing lot number | |
| Change Category: | Assembly Change | |
| Change Sub-Category(s): | Manufacturing Site Addition | |
| Sites Affected: | | |
| onsemi Sites | External Foundry/Subcon Sites | |
| None | UTAC, Thailand | |

Description and Purpose:

Add UTAC Thailand Bangsamak site as alternative assembly site by apply same machine model and same material. Including update in case outline dimensions D2 and E2 tolerances for the exposed pad have increased by 0.10 mm. This does not affect the Recommended Mounting Footprint shown on the case outline drawing

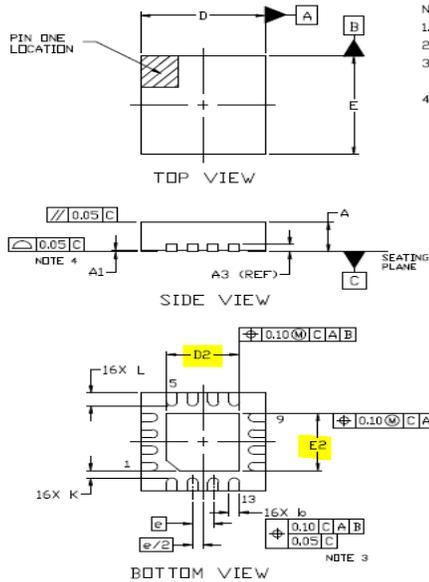
| | Before Change Description | | After Change Description | |
|--|--|---------------------------|---|--------------------------|
| Assembly Site | UTAC Thailand Bangkok site | | UTAC Thailand Bangkok site (site1) and UTAC Thailand Bangsamak site (Site3) | |
| Case Outline Dimensions D2 & E2 | See illustration below for D2 and E2 dimensions. | | See illustration below for D2 and E2 dimensions. | |
| | Dimension | Before (MIN, NOM, MAX) mm | Dimension | After (MIN, NOM, MAX) mm |
| | D2 | 1.70, 1.75, 1.80 | D2 | 1.65, 1.75, 1.85 |
| | E2 | 1.70, 1.75, 1.80 | E2 | 1.65, 1.75, 1.85 |

Materials shipped after PCN effectivity may be sourced from either qualified locations and will be identified by product date code and package labelling. Traceability will be maintained by manufacturing lot number

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

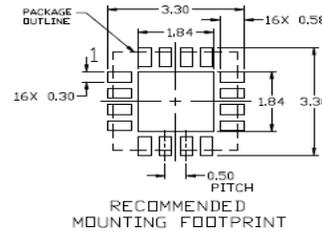
There is no product marking change as a result of this change

Illustration of case outline showing the exposed pad dimensions D2 and E2



- NOTES:
1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 1994.
 2. CONTROLLING DIMENSION: MILLIMETERS
 3. DIMENSION b APPLIES TO PLATED TERMINAL AND IS MEASURED BETWEEN 0.25 AND 0.30 MM FROM THE TERMINAL TIP.
 4. COPLANARITY APPLIES TO THE EXPOSED PAD AS WELL AS THE TERMINALS.

| MILLIMETERS | | | |
|-------------|----------|------|------|
| DIM | MIN. | NDM. | MAX. |
| A | 0.80 | 0.90 | 1.00 |
| A1 | --- | --- | 0.05 |
| A3 | 0.20 REF | | |
| b | 0.18 | 0.24 | 0.30 |
| D | 2.95 | 3.00 | 3.05 |
| D2 | 1.70 | 1.75 | 1.80 |
| E | 2.95 | 3.00 | 3.05 |
| E2 | 1.70 | 1.75 | 1.80 |
| e | 0.50 BSC | | |
| K | 0.18 TYP | | |
| L | 0.30 | 0.40 | 0.50 |



Reliability Data Summary:

QV DEVICE NAME: NCS37010MNTWG
 RMS: O82486
 PACKAGE: QFN

| Test | Specification | Condition | Interval | Result |
|-------|----------------------|-----------------------------------|----------|--------|
| HTSL | JESD22-A103 | Ta= 150°C | 1008 hrs | 0/80 |
| TC | JESD22-A104 | Ta= -65°C to +150°C | 500 cyc | 0/80 |
| uHAST | JESD22-A118 | 130°C, 85% RH, 18.8psig, unbiased | 96 hrs | 0/80 |
| PC | J-STD-020, JESD-A113 | MSL 3 @ 260 °C | | 0/160 |
| SD | JSTD002 | Ta = 245C, 5 sec | | 0/15 |
| PD | JESD22 B100,B108 | Critical Cpk>1.67 | | 0/30 |

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 | NCS37010MNTWG |