



Final Product/Process Change Notification

Document #:FPCN24705X

Issue Date:04 Aug 2022

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| Title of Change: | UTAC Thailand Bangsamak Assembly site expansion |
| Proposed First Ship date: | 09 Nov 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

None

External Foundry/Subcon Sites

UTAC, Thailand

Description and Purpose:

Add UTAC Thailand Bangsamak site as alternative assembly site by applying same machine model and same material for QFN package.

| | Before Change Description | After Change Description |
|---------------|----------------------------|--|
| Assembly Site | UTAC Thailand Bangkok site | UTAC Thailand Bangkok site (site1) and UTAC Thailand Bangsamak site (Site3) |

Reliability Data Summary:

QV DEVICE NAME: NCP81140MNTXG

RMS: 83848

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 1 @ 260 °C | | 0/160 |
| SD | JSTD002 | Ta = 245C, 5 sec | | 0/15 |
| PD | JESD22 B100,B108 | Critical Cpk>1.67 | | 0/30 |



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QV DEVICE NAME: NCN5120MNTWG

RMS: 83847

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 | 110°C, 85% RH, 18.8psig, unbiased | 264 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 |
|----------------|-----------------------|
| NCP81142MNTXG | NCP81140MNTXG |
| NCP81141MNTXG | NCP81140MNTXG |
| NCP81101BMNTXG | NCP81140MNTXG |
| NCP81101MNTXG | NCP81140MNTXG |
| NCP81101MNTWG | NCP81140MNTXG |
| NCP81119MNTXG | NCP81140MNTXG |
| NCP81119AMNTXG | NCP81140MNTXG |
| NCP81102MNTXG | NCP81140MNTXG |
| NCP81241MNTXG | NCP81140MNTXG |
| NCP81201MNTXG | NCP81140MNTXG |
| NCP81148MNTWG | NCP81140MNTXG |
| NCP81038MNTWG | NCP81140MNTXG |
| NCP81172MNTXG | NCP81140MNTXG |
| NCP81140MNTXG | NCP81140MNTXG |
| NCN5110MNTWG | NCN5120MNTWG |
| NCN5121MNTWG | NCN5120MNTWG |



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| NCN5130MNTWG | NCN5120MNTWG |
| NCN5120MNTWG | NCN5120MNTWG |

Appendix A: Changed Products**PCN#: FPCN24705X**
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DIKG: DIGI-KEY

| Product | Customer Part Number | Qualification Vehicle | New Part Number | Replacement Supplier |
|---------------|----------------------|-----------------------|-----------------|----------------------|
| NCP81102MNTXG | | NCP81140MNTXG | | |
| NCN5130MNTWG | | NCN5120MNTWG | | |
| NCN5120MNTWG | NCN5120MNTWGOSTR-ND | NCN5120MNTWG | | |
| NCP81172MNTXG | | NCP81140MNTXG | | |