ON Semiconductor®

# Final Product/Process Change Notification

Document #:FPCN23759X
Issue Date:05 Jan 2021

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|---|---|
| **Title of Change:** | Qualify ASE Kunshan as alternative assembly site for SOIC7 |
| **Proposed First Ship date:** | 12 Apr 2021 or earlier if approved by customer |
| **Contact Information:** | Contact your local ON Semiconductor Sales Office or Lubomir.Adamek@onsemi.com |
| **PCN Samples Contact:** | Contact your local ON Semiconductor Sales Office or <PCN.samples@onsemi.com>.<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. |
| **Additional Reliability Data:** | Contact your local ON Semiconductor 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.<br>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 PCN.Support@onsemi.com |
| **Marking of Parts/ Traceability of Change:** | Product marked with date code PN or later may be built from current factory or from OSPI Factory. The trace code marking on Line 2 is of the form ALYW where A = Assembly Location, L = Wafer Lot ID and YW is a 2-digit date code. Product marked with "AK" as the assembly location will be from ASEKS. For example, the first wafer lot released from ASEKS in WW14 will be marked "AKAPN". Additionally on the label of the box and reel, the ASSY LOC: CV will also indicate product assembled in ASEKS. Please see sample label on Page 2 at the following URL http://www.onsemi.com/pub/Collateral/LABELRM-D.PDF to see the location of the ASSY LOC. |
| **Change Category:** | Assembly Change |
| **Change Sub-Category(s):** | Shipping/Packaging/Marking, Material Change, Manufacturing Site Addition |

**Sites Affected:**

| **ON Semiconductor Sites** | **External Foundry/Subcon Sites** |
|---|---|
| None | ASEKS, China |

**Description and Purpose:**

This FPCN is to notify customers that ON Semiconductor has completed qualification of ASE Kunshan (ASEKS) for the assembly of SOIC-7 products listed in this FPCN. This is a capacity expansion, and at the end of the FPCN approval cycle, these products may be dual sourced from either ASEKS or from the previously approved site, OSPI.

All package dimensions will still be within the existing ON Semiconductor published package case outlines.

BOM changes associated with this FPCN are shown here:

| Assembly Site | ON Semiconductor | ASEKS |
|---|---|---|
| **Lead Frame** | SOIC 7L lead frame, PIN7 removed,<br>AG Spot Plated Copper Strip,<br>Flag size 90x90mils | SOIC 7L lead frame, PIN7 removed,<br>AG Spot Plated Copper Strip,<br>Flag size 102x102mils |
| **Die Attach** | CRM-1076WB | EN-4900GC |
| **Mold Compound** | G600 | CEL9240 |

| | ON Semiconductor | ASEKS |
|---|---|---|
| **Product marking change** | Assembly Location: P | Assembly Location: AK |

## Reliability Data Summary:

**QV DEVICE NAME : NCL30388A1DR2G**
**RMS : O58893, P58222**
**PACKAGE : SOIC 8-P7**

| Test | Specification | Condition | Interval | Results |
|---|---|---|---|---|
| HTOL | JESD22-A108 | Ta= 110°C, 100 % max rated Vcc | 1008 hrs | 0/231 |
| HTSL | JESD22-A103 | Ta= 150°C | 1008 hrs | 0/231 |
| TC | JESD22-A104 | Ta= -65°C to +150°C | 500 cyc | 0/231 |
| HAST | JESD22-A110 | 130°C, 85% RH, 18.8psig, bias | 96 hrs | 0/231 |
| uHAST | JESD22-A118 | 130°C, 85% RH, 18.8psig, unbiased | 96 hrs | 0/231 |
| PC | J-STD-020 JESD-A113 | MSL 1 @ 260 °C |  | 0/693 |
| RSH | JESD22-B106 | Ta= 265C, 10 sec |  | 0/30 |
| SD | JSTD002 | Ta= 245C, 5 sec |  | 0/45 |
| PD | JESD22-B100, B108 |  |  | 0/30 |

## Electrical Characteristics Summary:

Electrical characteristics are not impacted by this change. Electrical Comparison reports are available upon request.

## 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 |
|---|---|
| NCL30488A2DR2G | NCL30388A1DR2G |
| NCL30488A3DR2G | NCL30388A1DR2G |