

Initial Product/Process Change Notification

Document #:IPCN23978X Issue Date:19 May 2021

| Title of Change: | Change Emboss Clip to Flat Clip on SO8 FL package in ATM | | | |
|---|---|-------------------------------|--|--|
| Proposed First Ship date: | 26 Sep 2021 or earlier if approved by customer | | | |
| Contact Information: | Contact your local ON Semiconductor Sales Office or guokun.yeng@onsemi.com | | | |
| PCN Samples Contact: | Contact your local ON Semiconductor Sales Office or < PCN.samples@onsemi.com >. 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. | | | |
| Type of Notification: | 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 < PCN.Support@onsemi.com> | | | |
| Marking of Parts/ Traceability of Change: | No change on marking. Effective date code will provided in FPCN. | | | |
| Change Category: | Assembly Change | | | |
| Change Sub-Category(s): | Material Change | | | |
| Sites Affected: | | | | |
| ON Semiconductor Sites | | External Foundry/Subcon Sites | | |
| None | | AMKOR, Malaysia | | |

Description and Purpose:

This Product Change Notification, which is intended to change SO8FL clip from emboss design to flat clip design in Amkor Malaysia assembly site. The purpose of this change is for continuous quality and reliability improvement in the listed part number below.

| Before Change Description | | After Change Description | |
|---------------------------|---------------|--------------------------|--|
| Clip | Emboss Design | Flat Clip Design | |

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

Qualification Plan:

QV DEVICE NAME: NTMFS4C020NT1G

 $\mathsf{RMS}:\underline{\mathsf{TBD}}$

PACKAGE: SO8FL CLIP DFN6

| Test | Specification | Condition | Interval |
|-------|------------------------------------|--|-----------|
| IOL | MIL-STD-750 (M1037) AEC-Q101 | Ta=+25°C, delta Tj=100°C On/off = 2 min | 15000 cyc |
| TC | JESD22-A104 | Ta= -55°C to +150°C, mount on board | 1000 cyc |
| HAST | JESD22-A110 | 130°C, 85% RH, 18.8psig, bias | 192 hrs |
| uHAST | JESD22-A118 | 130°C, 85% RH, 18.8psig, unbiased | 96 hrs |
| PC | J-STD-020 JESD-A113 | MSL 1 @ 260 °C | |
| RSH | JESD22- B106 | Ta = 265C, 10 sec | |

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Estimated date for qualification completion: 12 July 2021

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 | |
|-------------------|-----------------------|--|
| NTMFS4C020NT1G-01 | NTMFS4CS20NT1G | |
| NTMFS0D9N03CGT1G | NTMFS4CS20NT1G | |
| NTMFS0D8N03CT1G | NTMFS4CS20NT1G | |
| NTMFS4C020NT1G | NTMFS4CS20NT1G | |

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Appendix A: Changed Products

PCN#: IPCN23978X

Issue Date: May 18, 2021

| Product | Customer Part Number | Qualification Vehicle | New Part Number | Replacement Supplier |
|-----------------|----------------------|-----------------------|-----------------|----------------------|
| NTMFS0D8N03CT1G | | NTMFS4CS20NT1G | | |