



# Initial Product/Process Change Notification

Document #:IPC23735XA

Issue Date:29 Nov 2021

|   |   |  |
|---|---|--|
| <b>Title of Change:</b>   | Qualification of ASE foundry for WLCSP and onsemi Cebu site for probe and assembly. Carrier tape dimensions are changed and include corner relief.  |  |
| <b>Proposed First Ship date:</b>  | 05 Apr 2022 or earlier if approved by customer  |  |
| <b>Contact Information:</b>   | Contact your local onsemi Sales Office or <a href="mailto:Jeremy.Ferris@onsemi.com">Jeremy.Ferris@onsemi.com</a>  |  |
| <b>PCN Samples Contact:</b>   | Contact your local onsemi Sales Office or < <a href="mailto:PCN.samples@onsemi.com">PCN.samples@onsemi.com</a> >. 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.   |  |
| <b>Type of Notification:</b>  | This is an Initial Product/Process Change Notification (IPCEN) sent to customers. An IPCEN 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 IPCEN 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>  | Changed Parts will be identified by a new plant code.   |  |
| <b>Change Category:</b>   | Assembly Change, Test Change, Bump Site Change  |  |
| <b>Change Sub-Category(s):</b>  | Shipping/Packaging/Marking, Manufacturing Site Transfer   |  |
| <b>Sites Affected:</b>  |   |  |
| <b>onsemi Sites</b>   | <b>External Foundry/Subcon Sites</b>  |  |
| onsemi, Niigata Japan   | ASEKH, Taiwan (Kaohsiung)   |  |
| onsemi, Seremban Malaysia   |   |  |
| onsemi Cebu, Philippines  |   |  |
| <b>Description and Purpose:</b>   |   |  |
| This Product Change Notification is to announce the Qualification of ASE foundry for WLCSP and onsemi, Cebu site for probe and assembly. Carrier tape dimensions are changed and include corner relief. |   |  |
|   | <b>Before Change Description</b>  | <b>After Change Description</b>                                |
| WLCSP Bump/Backgrind/Backside Coating location  | onsemi, Niigata Japan   | Subcontractor ASEKH, Kaohsiung Taiwan                          |
| Final Test and Assembly Site  | onsemi, Seremban Malaysia   | onsemi, Cebu Philippines                                       |
| Under Bump Metal Composition  | Ni/Au   | Cu   |
| Backside Coating  | ADWILLC2821(LINTEC)   | ADWILL LC2850H (LINTEC)  |
| Pocket Dimension  | Ao = 1.07 +/-0.05mm<br>Bo = 1.42 +/-0.05mm<br>Ko = 0.74 +/-0.05mm   | Ao = 1.20+/-0.05mm<br>Bo = 1.45+/-0.05mm<br>Ko = 0.69+/-0.05mm |
| Pocket Design   | No corner relief  | With Corner relief   |
|   | <b>From</b>   | <b>To</b>  |
| Product marking change  | onsemi Malaysia: R  | onsemi, Cebu Philippines: D                                    |



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### Qualification Plan:

QV DEVICE NAME : FPF2498BUCX

RMS : 74804

PACKAGE : WLCSP

| Test  | Specification       | Condition                         | Interval |
|-------|---------------------|-----------------------------------|----------|
| TC    | JESD22-A104         | Ta = -40°C to +125°C              | 850 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    | Per outline         | Per outline drawing               | 20 units |

### 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 |
|-------------|-----------------------|
| FPF2498BUCX | FPF2498BUCX           |