



# Final Product/Process Change Notification

Document #: FPCN25163X

Issue Date: 15 Feb 2023

|   |  |  |                           |                |
|---|--|--|---------------------------|----------------|
| <b>Title of Change:</b>   | Smart Power Stage Device Wirebond Change from Stand off Stitch Bond (SSB) to Forward Bonding on Leadpost.  |  |                           |                |
| <b>Proposed First Ship date:</b>  | 22 May 2023 or earlier if approved by customer   |  |                           |                |
| <b>Contact Information:</b>   | Contact your local onsemi Sales Office or <a href="mailto:ArnulfoJr.Cabonillas@onsemi.com">ArnulfoJr.Cabonillas@onsemi.com</a>   |  |                           |                |
| <b>PCN Samples Contact:</b>   | Contact your local onsemi Sales Office.<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.  |  |                           |                |
| <b>Additional Reliability Data:</b>   | Contact your local onsemi Sales Office or <a href="mailto:Aileen.Allado@onsemi.com">Aileen.Allado@onsemi.com</a>   |  |                           |                |
| <b>Type of Notification:</b>  | This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change.<br>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 <a href="mailto:PCN.Support@onsemi.com">PCN.Support@onsemi.com</a> |  |                           |                |
| <b>Marking of Parts/ Traceability of Change:</b>  | Changed material can be identified by lot code   |  |                           |                |
| <b>Change Category:</b>   | Assembly Change  |  |                           |                |
| <b>Change Sub-Category(s):</b>  | Manufacturing Process Change   |  |                           |                |
| <b>Sites Affected:</b>  |  |  |                           |                |
| <b>onsemi Sites</b>   |  | <b>External Foundry/Subcon Sites</b>                           |                           |                |
| onsemi Cebu, Philippines  |  | None   |                           |                |
| <b>Description and Purpose:</b>   |  |  |                           |                |
| Capacity Improvement for manufacturing of SPS Packages by changing from Forward bond to Single Stitch Bond on Lead post |  |  |                           |                |
|   |  | <b>From</b>  | <b>To</b>                 |                |
| <b>Wire Bonding Method</b>  |  | Single Stitch Bond on Lead post                                | Forward Bond on Lead post |                |
| There is no product marking change as a result of this change.  |  |  |                           |                |
| <b>Reliability Summary</b>  |  |  |                           |                |
| QV DEVICE NAME: FDMF3170  |  |  |                           |                |
| RMS: F86119, W67764, F83348, F81535   |  |  |                           |                |
| PACKAGE: SPS56  |  |  |                           |                |
| <b>Test</b>   | <b>Specification</b>   | <b>Condition</b>   | <b>Interval</b>           | <b>Results</b> |
| HTSL  | JESD22-A103  | Ta= 150°C  | 1008 hrs                  | 0/231          |
| PC  | J-STD-020 JESD-A113  | MSL 1 @ 260°C, Pre TC, uHAST, HAST for surface mount pkgs only |                           | 0/539          |
| 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                    | 0/77           |
| uHAST   | JESD22-A118  | 130°C, 85% RH, 18.8psig, unbiased                              | 96 hrs                    | 0/231          |



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### Electrical Characteristics Summary:

Electrical Characteristics are not affected

### 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 |
|-------------|-----------------------|
| FDMF5068    | FDMF3170              |
| FDMF5085    | FDMF3170              |
| FDMF5062    | FDMF3170              |
| FDMF5071    | FDMF3170              |