



## Final Product/Process Change Notification

Document #:FPCN23971XA

Issue Date:18 Apr 2022

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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| <b>Title of Change:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Transfer of FS50 wafer technology from Macronix (MXIC) Taiwan to onsemi South Portland Maine FAB                                                                                                                                                                                                                                                                                               |                           |
| <b>Proposed First Ship date:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 25 Jul 2022 or earlier if approved by customer                                                                                                                                                                                                                                                                                                                                                 |                           |
| <b>Contact Information:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Contact your local onsemi Sales Office or <a href="mailto:Seok-Ho.Choi@onsemi.com">Seok-Ho.Choi@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:Marco.kang@onsemi.com">Marco.kang@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>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | As material from different FABs cannot be combined in to (1) reel, product from Maine will show "Diffused In: US" on the label of the reel and box.<br>Please see sample MPN on page 2 at the following link<br><a href="http://www.onsemi.com/pub_link/Collateral/LABELRM-D.PDF">http://www.onsemi.com/pub_link/Collateral/LABELRM-D.PDF</a> to see the location of the Diffused In notation. |                           |
| <b>Change Category:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Wafer Fab Change                                                                                                                                                                                                                                                                                                                                                                               |                           |
| <b>Change Sub-Category(s):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Manufacturing Site Transfer                                                                                                                                                                                                                                                                                                                                                                    |                           |
| <b>Sites Affected:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                |                           |
| <b>onsemi Sites</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>External Foundry/Subcon Sites</b>                                                                                                                                                                                                                                                                                                                                                           |                           |
| onsemi Maine, United States                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | None                                                                                                                                                                                                                                                                                                                                                                                           |                           |
| <b>Description and Purpose:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                |                           |
| <p>onsemi would like to inform out customers of the qualification of our FS50 Technology into our 8" South Portland Maine FAB, USA. This technology is currently processed out of our 6" foundry Macronix (MXIC) in Taiwan. MXIC has announced it will discontinue this technology, thus necessitating the transfer.</p> <p>While the language of the FPCN is to wait 90 days until shipments of first material, as there is no inventory of MXIC wafer, die, assembly WIP or finished goods either at onsemi or at our distributors, there will be no waiting period for approval or rejection of the PCN and deliveries will start immediately.. If a customer does not wish to receive product from the new wafer FAB, they should take action to cancel or push out all future orders. onsemi can no longer provide material from the original MXIC FAB site. Customers should work with their local sales contacts to cancel or push orders as needed.</p> |                                                                                                                                                                                                                                                                                                                                                                                                |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>From</b>                                                                                                                                                                                                                                                                                                                                                                                    | <b>To</b>                 |
| FAB Site                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Macronix (MXIC) Taiwan                                                                                                                                                                                                                                                                                                                                                                         | onsemi, S. Portland Maine |
| Wafer Size                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 6"                                                                                                                                                                                                                                                                                                                                                                                             | 8"                        |
| There is no product marking change as a result of this change.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                |                           |



## Final Product/Process Change Notification

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### Reliability Data Summary:

QV DEVICE NAME: FL7734MX

RMS: K72380, O79760

PACKAGE: SOIC16

| Test  | Specification       | Condition                         | Interval | Results |
|-------|---------------------|-----------------------------------|----------|---------|
| HTOL  | JESD22-A108         | Ta=125°C, 100 % max rated Vcc     | 1008hrs  | 0/231   |
| HTSL  | JESD22-A103         | Ta= 150°C                         | 1008hrs  | 0/231   |
| TC    | JESD22-A104         | Ta= -55°C to + 150°C              | 1000cyc  | 0/231   |
| HAST  | JESD22-A110         | 130°C, 85% RH, 18.8psig, bias     | 96hrs    | 0/231   |
| uHAST | JESD22-A118         | 130°C, 85% RH, 18.8psig, unbiased | 96hrs    | 0/231   |
| PC    | J-STD-020 JESD-A113 | MSL3 @260°C                       |          | Pass    |

QV DEVICE NAME: FL7733AMX

RMS: K72044, O80421, O81140, K82841

PACKAGE: SOIC-8

| Test  | Specification       | Condition                         | Interval | Results |
|-------|---------------------|-----------------------------------|----------|---------|
| HTOL  | JESD22-A108         | Ta=125°C, 100 % max rated Vcc     | 1008hrs  | 0/231   |
| HTSL  | JESD22-A103         | Ta= 150°C                         | 1008hrs  | 0/231   |
| TC    | JESD22-A104         | Ta= -55°C to + 150°C              | 1000cyc  | 0/231   |
| HAST  | JESD22-A110         | 130°C, 85% RH, 18.8psig, bias     | 96hrs    | 0/231   |
| uHAST | JESD22-A118         | 130°C, 85% RH, 18.8psig, unbiased | 96hrs    | 0/231   |
| PC    | J-STD-020 JESD-A113 | MSL1 @260°C                       |          | Pass    |

### 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 |
|-------------|-----------------------|
| FAN9673Q    | FL7733AMX, FL7734MX   |
| FAN9672Q    | FL7733AMX, FL7734MX   |