



| Title of Change: | SOIC-8 Insourcing to ON Semiconductor Philippines (OSPI) Factory from HANA (Thailand) – Phase 2 | | | | | | | | | | |
|--|--|--|------------------------|---------------------------|--------------------------|---------------|------------------------|---------------|------------|----------------|------------------|
| Proposed first ship date: | 22 August 2018 | | | | | | | | | | |
| Contact information: | Contact your local ON Semiconductor Sales Office or <Scott.Brow@onsemi.com> | | | | | | | | | | |
| Samples: | Contact your local ON Semiconductor Sales Office | | | | | | | | | | |
| Additional Reliability Data: | Contact your local ON Semiconductor Sales Office or <Kyungwon.Kang@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. 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>. | | | | | | | | | | |
| Change Part Identification: | Product marked with date code 1820 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 "P" as the assembly location will be from OSPI. Additionally on the label of the box and reel, the ASSY LOC: PO will also indicate product assembled in OSPI. 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: | <input type="checkbox"/> Wafer Fab Change <input checked="" type="checkbox"/> Assembly Change <input checked="" type="checkbox"/> Test Change <input type="checkbox"/> Other _____ | | | | | | | | | | |
| Change Sub-Category(s): | <input checked="" type="checkbox"/> Manufacturing Site Change/Addition <input checked="" type="checkbox"/> Material Change <input type="checkbox"/> Datasheet/Product Doc change <input type="checkbox"/> Manufacturing Process Change <input type="checkbox"/> Product specific change <input checked="" type="checkbox"/> Shipping/Packaging/Marking <input type="checkbox"/> Other: _____ | | | | | | | | | | |
| Sites Affected: | ON Semiconductor Sites: ON Carmona, Philippines | External Foundry/Subcon Sites: HANA, Thailand | | | | | | | | | |
| Description and Purpose: | | | | | | | | | | | |
| <p>ON Semiconductor would like to inform its customers of the qualification of ON Semiconductor Philippines (OSPI) for the assembly and test of all of the SOIC-8 products listed in this Final Product Change Notification (FPCN). This is a capacity expansion, and at the end of the FPCN approval cycle, these products may be dual sourced from either HANA, Thailand or from OSPI.</p> <p>For Test, consigned testers and handlers as HANA have been transferred to OSPI to support the testing of products. The same load boards, test programs and other necessary hardware used in HANA, will be used to test the products listed.</p> <p>For assembly, BOM changes associated with this FPCN are shown here:</p> | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Material to be changed</th> <th>Before Change Description</th> <th>After Change Description</th> </tr> </thead> <tbody> <tr> <td>Mold Compound</td> <td>Hitachi CEL8240HF10LYR</td> <td>Sumitomo G600</td> </tr> <tr> <td>Die Attach</td> <td>Henkel QMI 519</td> <td>Henkel ABP-8062T</td> </tr> </tbody> </table> | | | Material to be changed | Before Change Description | After Change Description | Mold Compound | Hitachi CEL8240HF10LYR | Sumitomo G600 | Die Attach | Henkel QMI 519 | Henkel ABP-8062T |
| Material to be changed | Before Change Description | After Change Description | | | | | | | | | |
| Mold Compound | Hitachi CEL8240HF10LYR | Sumitomo G600 | | | | | | | | | |
| Die Attach | Henkel QMI 519 | Henkel ABP-8062T | | | | | | | | | |



Additionally, this FPCN serves to notify customers of a change in the marking for all products listed for **BOTH** sites, HANA and OSPI. The new marking will be of the form:



Line 1 is the Product Identification (see table for new Product IDs)

Line 2 is the Trace code with the following nomenclature: A = Assy Location, L = Wafer Lot ID, YW = 2 digit date code. The X at the end of the line is a wrap character if additional identification is needed from Line 1.

HANA: A = H

OSPI: A = P

| OPN | Line 1 Marking |
|--------------|----------------|
| FAN7930BMX | 7930B |
| FAN7930BMX-G | 7930B |
| FAN7930CMX | 7930C |

| OPN | Line 1 Marking |
|--------------|----------------|
| FAN7930CMX-G | 7930C |
| FL7930BMX-G | FL7930B |
| FL7930CMX-G | FL7930C |

Reliability Data Summary:

QV DEVICE NAME FAN7930BMX

RMS K46691, O47069

PACKAGE SOIC 8

| Test | Specification | Condition | Interval | Results |
|--------------|---------------------|-------------------------------------|----------|---------|
| HTOL | JESD22-A108 | Ta=125°C, 80 % max rated <u>Vcc</u> | 1008 hrs | 0/80 |
| HTSL | JESD22-A103 | Ta= 150°C | 1008 hrs | 0/77 |
| TC | JESD22-A104 | Ta= -55°C to +150°C | 1000 cyc | 0/80 |
| THB | JESD22-A101C | 85°C, 85% RH, bias | 504 hrs | 0/80 |
| <u>uHAST</u> | JESD22-A118 | 130°C, 85% RH, 18.8psig, unbiased | 96 hrs | 0/80 |
| PC | J-STD-020 JESD-A113 | MSL 1 @ 260°C | - | 0/320 |
| SAT | JEDEC STD 035 | Pre and Post MSL 1 | - | 0/25 |
| RSH | JESD22- B106 | Ta = 265C, 10 sec | - | 0/30 |
| SD | JSTD002 | Ta = 245C, 10 sec | - | 0/15 |
| PD | JESD22-B100 | Per POD, case 751EB | - | 0/30 |

Electrical Characteristic Summary:

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



List of Affected Standard Parts:

| Part Number | Qualification Vehicle |
|--------------|-----------------------|
| FAN7930BMX | FAN7930BMX |
| FAN7930BMX-G | |
| FAN7930CMX | |
| FAN7930CMX-G | |
| FL7930BMX-G | |
| FL7930CMX-G | |