

<b>Title of Change:</b>	New PPF leadframe and alternate die qualification for MFP5L
<b>Proposed First Ship date:</b>	08 Jun 2023 or earlier if approved by customer
<b>Contact Information:</b>	Contact your local onsemi Sales Office or Esther.Lau@onsemi.com
<b>PCN Samples Contact:</b>	Contact your local onsemi Sales Office. 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>Additional Reliability Data:</b>	Contact your local onsemi Sales Office or ChangKit.Mok@onsemi.com
<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. 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 PCN.Support@onsemi.com
<b>Marking of Parts/ Traceability of Change:</b>	By datecode
<b>Change Category:</b>	Alternate Die Source, Assembly Change
<b>Change Sub-Category(s):</b>	Material Change

<b>Sites Affected:</b>	
<b>onsemi Sites</b>	<b>External Foundry/Subcon Sites</b>
None	- External Site not in list -

**Description and Purpose:**

1. Change leadframe plating from pure Tin (Sn) to PPF (pre-plated frame) leadframe. All the affected part numbers are listed in this PCN.

Change summary:

Item	Current	After Change
1	Leadframe base material: C194, Cu DAP with Ag plating. Lead finish: Pure Tin (Sn)	Leadframe base material: C194, Cu DAP with NiPdAu (PPF) Lead finish: NiPdAu
2	<p>Leadframe design:</p>	<p>Leadframe design:</p>
3	Lead Finish Category (eCAT): e3	Lead Finish Category (eCAT): e4

2. To introduce an alternate die source. Refer Table 1 for affected part numbers affected by this change.

Change summary:

Item	Current	After Change
1	LED Die: Die from Supplier A, in Japan Die size: 0.24 x 0.24mm	LED Die: Die from Supplier A, in Japan Die size: 0.24 x 0.24mm or LED Die: Die from Supplier B, in Korea Die size: 0.25 x 0.25mm
2	MPN Label: Diffused in: JP	MPN Label: Diffused in: JP Or MPN Label: Diffused in: KR

Table 1: Affected part numbers for alternate die source:

FODM611
FODM611R2
FODM8061
FODM8061R2
FODM8061R2V
FODM8061V

**Reason for change:**

The qualification of the leadframe and alternate die source is for flexible manufacturing planning and continuity of supply.

**Reliability Data Summary:**

**QV DEVICE NAME:** FODM8061  
**RMS:** 2208015063  
**PACKAGE:** MFP5

Test	Specification	Condition	Interval	Results
High Temperature Storage Life	JESD22-A103	Ta=150°C	1008 hours	0/240
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260°C, Pre TC, THB and AC or surface mount pkgs only	-	0/480



## Final Product/Process Change Notification

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Temperature Cycling	JESD22-A104	Ta= -40°C to +125°C	1000 cycles	0/240
Autoclave	JESD22-A102	121°C, 100% RH, 29.7psia, unbiased	96 hours	0/240
Solderability	JSTD002	Ta = 245°C, 5 sec	-	0/45

**QV DEVICE NAME:** FODM8071  
**RMS:** 2209015772  
**PACKAGE:** MFPS

Test	Specification	Condition	Interval	Results
High Temperature Storage Life	JESD22-A103	Ta=150°C	1008 hours	0/80
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260°C, Pre TC, THB and AC or surface mount pkgs only	-	0/160
Temperature Cycling	JESD22-A104	Ta= -40°C to +125°C	1000 cycles	0/80
Autoclave	JESD22-A102	121°C, 100% RH, 29.7psia, unbiased	96 hours	0/80
Solderability	JSTD002	Ta = 245°C, 5 sec	-	0/15

### 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
FODM452R2	FODM8061
FODM452R2V	FODM8061
FODM452V	FODM8061
FODM453	FODM8061
FODM8071R2	FODM8071, FODM8061
FODM8071	FODM8071, FODM8061
FODM8061V	FODM8061
FODM8061R2V	FODM8061
FODM8061R2	FODM8061
FODM8061	FODM8061



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FODM611R2	FODM8061
FODM611	FODM8061
FODM453V	FODM8061
FODM453R2V	FODM8061
FODM453R2	FODM8061
FODM452	FODM8061