



Title of Change:	Change from Gold Bump & Palladium Coated Copper Wire bonding (2-Pass) to Palladium Coated Copper (PCC) Bump & Wire bonding (1-Pass) in SPS_55 Package.							
Proposed first ship date:	1 August 2018							
Contact information:	Contact your local ON Semiconductor Sales Office or <Sheila.ovao@onsemi.com>.							
Samples:	Sheila.Oyao@onsemi.com							
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or <KarenMae.Taping@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:	Affected products will be identified with a date code cut-off.							
Change category:	<input type="checkbox"/> Wafer Fab Change <input checked="" type="checkbox"/> Assembly Change <input type="checkbox"/> Test Change <input type="checkbox"/> Other _____							
Change Sub-Category(s):	<input 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 type="checkbox"/> Shipping/Packaging/Marking <input type="checkbox"/> Other: _____							
Sites Affected:	ON Semiconductor Sites: OSPI-Cebu	External Foundry/Subcon Sites: None						
Description and Purpose:								
Change from Gold Bump & Palladium Coated Copper Wire bonding (2-Pass) to Palladium Coated Copper (PCC) Bump & Wire bonding (1-Pass) in SPS_55 Package. This is to standardize process (1-pass) across all SPS and PQFN packages.								
<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>Bonding Wire material</td> <td>Bump on FET Die : 1 mil Au wire Wire bond on FET Die to IC Die : 1 mil PCC (Palladium Coated Copper) wire</td> <td>Bump on FET Die: 1 mil PCC wire Wire bond on FET Die to IC Die : 1 mil PCC (Palladium Coated Copper) wire</td> </tr> </tbody> </table>			Material to be changed	Before Change Description	After Change Description	Bonding Wire material	Bump on FET Die : 1 mil Au wire Wire bond on FET Die to IC Die : 1 mil PCC (Palladium Coated Copper) wire	Bump on FET Die: 1 mil PCC wire Wire bond on FET Die to IC Die : 1 mil PCC (Palladium Coated Copper) wire
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Reliability Data Summary:

QV DEVICE NAME: FDMF5822DC
 QUAL PLAN NO.: Q20160052A
 PACKAGE: SPS55

Test	Specification	Condition	Interval	Results
HTSL	JESD22-A103	Ta= 150°C	1000 hrs	0/77
TC	JESD22-A104	Ta= -65°C to +150°C	1000 cy	0/77
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	192 hrs	0/77
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C	-	0/231
RSH	JESD22- B106	Ta = 265C, 10 sec	-	0/5

QV DEVICE NAME: FDMF5822DC
 QUAL PLAN NO.: Q20160613A
 PACKAGE: SPS55

Test	Specification	Condition	Interval	Results
HTSL	JESD22-A103	Ta= 150°C	1000 hrs	0/77
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C	-	0/77

QV DEVICE NAME: FDMF6821B
 QUAL PLAN NO.: Q20160052A
 PACKAGE: PQFN66

Test	Specification	Condition	Interval	Results
HTSL	JESD22-A103	Ta= 150°C	1000 hrs	0/77
TC	JESD22-A104	Ta= -65°C to +150°C	1000 cy	0/77
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	192 hrs	0/77
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C	-	0/231
RSH	JESD22- B106	Ta = 265C, 10 sec	-	0/5

QV DEVICE NAME: FDPC8016S
 QUAL PLAN NO.: Q20160052A
 PACKAGE: PQFN56C

Test	Specification	Condition	Interval	Results
HTSL	JESD22-A103	Ta = 150°C	1000 hrs	0/77
TC	JESD22-A104	Ta = -65°C to +150°C	1000 cy	0/77
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	192 hrs	0/77
PC	J-STD-020 JESD-A113	MSL1 @260°C	-	0/308
RSH	JESD22- B106	Ta = 265C, 10 sec	-	0/5



Electrical Characteristic Summary:

Electrical characteristics are not impacted.

List of Affected Standard Parts:

Part Number	Qualification Vehicle
FDMF5820DC	FDMF5822DC
FDMF5820TDC	FDMF5822DC
FDMF5821	FDMF5822DC
FDMF5821DC	FDMF5822DC
FDMF5822DC	FDMF5822DC
FDMF5823DC	FDMF5822DC
FDMF5826DC	FDMF5822DC
FDMF5833	FDMF5822DC
FDMF5839	FDMF5822DC

Appendix A: Changed Products

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Product	Customer Part Number	Qualification Vehicle
FDMF5820DC		FDMF5822DC
FDMF5820TDC		FDMF5822DC
FDMF5821		FDMF5822DC
FDMF5821DC		FDMF5822DC
FDMF5822DC		FDMF5822DC
FDMF5823DC		FDMF5822DC
FDMF5826DC		FDMF5822DC
FDMF5833		FDMF5822DC
FDMF5839		FDMF5822DC