



<b>Title of Change:</b>	Qualify alternate assembly & test site, SP Semiconductor for TO3PF3 package in addition to current Suzhou site.																																			
<b>Proposed first ship date:</b>	Sep. 10, 2017																																			
<b>Contact information:</b>	Contact your local ON Semiconductor Sales Office or < ci.fong@onsemi.com >																																			
<b>Samples:</b>	Contact your local ON Semiconductor Sales Office																																			
<b>Additional Reliability Data:</b>	Contact your local ON Semiconductor Sales Office																																			
<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. 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>.																																			
<b>Change Part Identification:</b>	1737																																			
<b>Change category:</b>	<input type="checkbox"/> Wafer Fab Change <input checked="" type="checkbox"/> Assembly Change <input type="checkbox"/> Test Change <input type="checkbox"/> Other																																			
<b>Change Sub-Category(s):</b> <input checked="" type="checkbox"/> Manufacturing Site Change/Addition <input type="checkbox"/> Manufacturing Process Change <input type="checkbox"/> Material Change <input type="checkbox"/> Product specific change <input type="checkbox"/> Datasheet/Product Doc change <input type="checkbox"/> Shipping/Packaging/Marking <input type="checkbox"/> Other																																				
<b>Sites Affected:</b> <input checked="" type="checkbox"/> All site(s) <input type="checkbox"/> Not applicable <input type="checkbox"/> ON Semiconductor site(s) <input type="checkbox"/> External Foundry/Subcon site(s) <div style="display: flex; justify-content: space-around;"> <span>Select site:</span> <span>Select site:</span> </div>																																				
<b>Description and Purpose:</b> <hr/> <p><u><a href="#">Change Description</a></u> Qualify alternate assembly &amp; test site SP Semiconductor for TO3PF3 package.</p> <p><u><a href="#">Description of Change (From):</a></u> TO3PF3 Diode(FFAF60UA60DN) assembly and test single source in Suzhou in-house</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Current</td> <td>FSSZ, China</td> </tr> <tr> <td>Package</td> <td>TO3PF3</td> </tr> <tr> <td>Lead Frame</td> <td>TO-3PF-3L Bare</td> </tr> <tr> <td>Adhesive</td> <td>93.5Pb5Sn1.5Ag</td> </tr> <tr> <td>Wire</td> <td>Al 99.99%</td> </tr> <tr> <td>EMC</td> <td>KTMC-3090FP</td> </tr> <tr> <td>Lead Finish</td> <td>Pure Tin</td> </tr> </table> <p><u><a href="#">Description of Change (To):</a></u> SP Semi is being added as secondary assembly &amp; test site to improve capacity and flexibility.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Proposed</td> <td>FSSZ, China</td> <td>SPSemi, Korea</td> </tr> <tr> <td>Package</td> <td>TO3PF3</td> <td>TO3PF3</td> </tr> <tr> <td>Lead Frame</td> <td>TO-3PF-3L Bare</td> <td>TO-3PF-3L Bare</td> </tr> <tr> <td>Adhesive</td> <td>93.5Pb5Sn1.5Ag</td> <td>93.5Pb5Sn1.5Ag</td> </tr> <tr> <td>Wire</td> <td>Al 99.99%</td> <td>Al 99.99%</td> </tr> <tr> <td>EMC</td> <td>KTMC-3090FP</td> <td>ST-7100HF</td> </tr> <tr> <td>Lead Finish</td> <td>Pure Tin</td> <td>Pure Tin</td> </tr> </table> <p><u><a href="#">Reason of Change:</a></u> To Improve Capacity and Supply Flexibility of TO3PF3</p>		Current	FSSZ, China	Package	TO3PF3	Lead Frame	TO-3PF-3L Bare	Adhesive	93.5Pb5Sn1.5Ag	Wire	Al 99.99%	EMC	KTMC-3090FP	Lead Finish	Pure Tin	Proposed	FSSZ, China	SPSemi, Korea	Package	TO3PF3	TO3PF3	Lead Frame	TO-3PF-3L Bare	TO-3PF-3L Bare	Adhesive	93.5Pb5Sn1.5Ag	93.5Pb5Sn1.5Ag	Wire	Al 99.99%	Al 99.99%	EMC	KTMC-3090FP	ST-7100HF	Lead Finish	Pure Tin	Pure Tin
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<b>Reliability Data Summary:</b>																																				



Qualification Plan	Device	Package	Process	No. of Lots
Q20160832	FFAF60UA60DN	TO3PF	Diode	3 (77pcs/Lot)

Test Description:	Condition:	Standard :	Duration:	Results:
Power cycle	Delta 100CC, 2 Min cycle	MIL-STD-750-1036	6000cycles	0/231
Temperature Humidity Bias Test	85C, 85%RH, 100V	JESD22-A101	1000 hrs	0/231
High Temperature Storage Life	175C	JESD22-A103	1000 hrs	0/231
High Temperature Reverse Bias	175C, 80% BV	JESD22-A108	1000 hrs	0/231
Temperature Cycle	-65C, 150C	JESD22-A104	500 cycles	0/231

FFAF60UA60DN, Ass'y Site Transfer(From Suzhou to SP Semi) Qualification loaded on TO3PF 3Lots had been passed with required reliability test without any failures.

#### Electrical Characteristic Summary:

Electrical characteristics are not impacted.

#### Qualification Plan:

Qualification Plan	Device	Package	Process	No. of Lots
Q20160832	FFAF60UA60DN	TO3PF	Diode	3 (77pcs/Lot)

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Temperature Cycle	-65C, 150C	JESD22-A104	500 cycles	0/231



## List of Affected Part(s):

Part Number	Qualification Vehicle
FFAF60UA60DN	FFAF60UA60DN