



<b>Title of Change:</b>	Qualification of ON Semiconductor Binh Duong (OSBD) in Vietnam as metal substrate plant for Intelligent Power Module (IPM) of STK products.																			
<b>Proposed first ship date:</b>	17 July 2017																			
<b>Contact information:</b>	Contact your local ON Semiconductor Sales Office or <Tomohiro.Uda@onsemi.com>																			
<b>Samples:</b>	Contact your local ON Semiconductor Sales Office or <Tomohiro.Uda@onsemi.com>																			
<b>Additional Reliability Data:</b>	Contact your local ON Semiconductor Sales Office or <Kazutoshi.Kitazume@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. 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>	Identification via lot code																			
<b>Change category:</b>	<input type="checkbox"/> Wafer Fab Change <input type="checkbox"/> Assembly Change <input type="checkbox"/> Test Change <input checked="" type="checkbox"/> Other <u>Metal Substrate Mfg.</u>																			
<b>Change Sub-Category(s):</b>	<input checked="" type="checkbox"/> Manufacturing Site Change/Addition <input 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: _____																			
<b>Sites Affected:</b>	<input type="checkbox"/> All site(s) <input type="checkbox"/> not applicable <input checked="" type="checkbox"/> ON Semiconductor site(s) : <u>ON Binh Duong Province, Vietnam</u> _____ <input type="checkbox"/> External Foundry/Subcon site(s) _____																			
<b>Description and Purpose:</b>	<p>As for Insulated Metal Substrate (IMST) using our Intelligent Power Module (IPM) STK series, we plan to build Ni plating process in our Vietnam plant, ON Semiconductor Binh Duong Co., Ltd (OSBD) in order to maintain stable supply.</p> <table border="1"> <thead> <tr> <th></th> <th>Before Change</th> <th>After Change</th> </tr> </thead> <tbody> <tr> <td>Cu foil press</td> <td>OSNC Gunma plant (Japan)</td> <td>OSNC Gunma plant / Material supplier (Japan)</td> </tr> <tr> <td>Shearing</td> <td>OSNC Gunma plant (Japan)</td> <td>OSNC Gunma plant / Material supplier (Japan)</td> </tr> <tr> <td>Ni plating</td> <td>OSNC Gunma plant (Japan)</td> <td>OSNC Gunma plant / OSBD (Vietnam)</td> </tr> <tr> <td>After Cu foil etching process</td> <td>OSBD (Vietnam)</td> <td>OSBD (Vietnam)</td> </tr> <tr> <td>IPM assembly</td> <td>OSV (Vietnam)</td> <td>OSV (Vietnam)</td> </tr> </tbody> </table> <p>The other process and all materials do not change.</p>			Before Change	After Change	Cu foil press	OSNC Gunma plant (Japan)	OSNC Gunma plant / Material supplier (Japan)	Shearing	OSNC Gunma plant (Japan)	OSNC Gunma plant / Material supplier (Japan)	Ni plating	OSNC Gunma plant (Japan)	OSNC Gunma plant / OSBD (Vietnam)	After Cu foil etching process	OSBD (Vietnam)	OSBD (Vietnam)	IPM assembly	OSV (Vietnam)	OSV (Vietnam)
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**Reliability Data Summary:**

QV DEVICE NAME: STK672-632AN-E

RMS: J35468

PACKAGE: SMART

Test	Specification	Condition	Interval	Results
HTSL	JEITA EIAJ ED-4701/201	Ta=125°C	1008 hrs	0/11
TC	JEITA EIAJ ED-4701/105	Ta= -40°C to +125°C	1000 cyc	0/11
AC	JEITA EIAJ ED-4701/102	121°C, 100% RH, 15psig, unbiased	96 hrs	0/11
H3TRB	JEITA EIAJ ED-4701/102	85°C, 85% RH, 80% max rated V	1008 hrs	0/11

QV DEVICE NAME: STK57FU394A-E

RMS: J35450

PACKAGE: SIP2A

Test	Specification	Condition	Interval	Results
HTSL	JEITA EIAJ ED-4701/201	Ta=125°C	1008 hrs	0/11
TC	JEITA EIAJ ED-4701/105	Ta= -40°C to +125°C	1000 cyc	0/11
AC	JEITA EIAJ ED-4701/102	121°C, 100% RH, 15psig, unbiased	96 hrs	0/11
H3TRB	JEITA EIAJ ED-4701/102	85°C, 85% RH, 80% max rated V	1008 hrs	0/11

**Electrical Characteristic Summary:**

Electrical characteristic are not impacted.

**List of Affected Standard Parts:**

Part Number	Qualification Vehicle
STK672-400	STK672-632AN-E
STK672-400B-E	STK672-632AN-E
STK672-400C-E	STK672-632AN-E
STK672-401C-E	STK672-632AN-E
STK672-410	STK672-632AN-E
STK672-410C-E	STK672-632AN-E
STK672-430AN-E	STK672-632AN-E
STK672-432AN-E	STK672-632AN-E
STK672-432BN-E	STK672-632AN-E
STK672-440AN-E	STK672-632AN-E
STK672-440BN-E	STK672-632AN-E



STK672-442AN-E	STK672-632AN-E
STK672-442BN-E	STK672-632AN-E
STK672-600	STK672-632AN-E
STK672-600A	STK672-632AN-E
STK672-610	STK672-632AN-E
STK672-630AN-E	STK672-632AN-E
STK672-630CN-E	STK672-632AN-E
STK672-632AN-E	STK672-632AN-E
STK672-640AN-E	STK672-632AN-E
STK672-640CN-E	STK672-632AN-E
STK672-642AN-E	STK672-632AN-E
STK672-732AN-E	STK672-632AN-E
STK672-740AN-E	STK672-632AN-E
STK681-310N-E	STK672-632AN-E
STK681-320	STK672-632AN-E
STK681-332-E	STK672-632AN-E
STK681-360-E	STK672-632AN-E
STK682-010-E	STK672-632AN-E

**List of Customer Specific Part:**

*NOTE: Please be informed that parts impacted by this PDN/PCN are Special/Customer specific parts, thus MPN & CPN info will be available to affected customers only by clicking the "Custom PCN for Selected Company Button" in the Document Analysis page of PCMS/PCN Alert.*