



<b>Title of Change:</b>	Qualification of ON Semiconductor Binh Duong, Vietnam as metal substrate plant for Intelligent Power Module (IPM) of STK products.	
<b>Proposed first ship date:</b>	19 April 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) : ON Binh Duong Province, Vietnam _____	
<b>Description and Purpose:</b>		
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) in order to stable supply.		
	<b>Before Change</b>	<b>After Change</b>
Cu foil press	OSNC Gunma plant (Japan)	OSNC Gunma plant / Material supplier (Japan)
Shirring	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)
The other process and all materials do not change.		



## Reliability Data Summary:

QV DEVICE NAME: STK534UC90A-E

RMS: J35448

PACKAGE: SIP05F

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: STK554U362C-E

RMS: J35446

PACKAGE: SIP1A

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



QV DEVICE: NAME: STK5C4U332J-E

RMS: J35466

PACKAGE: DIP-S

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: STK5F1U3C3D-E

RMS: J35467

PACKAGE: DIP4

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: STK621-068S-E

RMS: J35454

PACKAGE: SIP3

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
STK531-344A-E	STK534UC90A-E
STK531-367A-E	STK534UC90A-E
STK531-392A-E	STK534UC90A-E
STK531U340A-E	STK534UC90A-E
STK531U360A-E	STK534UC90A-E
STK531U369A-E	STK534UC90A-E
STK531U369C-E	STK534UC90A-E
STK531U36AA-E	STK534UC90A-E
STK531U390A-E	STK534UC90A-E
STK531U394A-E	STK534UC90A-E
STK531U395A-E	STK534UC90A-E
STK534U342C-E	STK534UC90A-E
STK534U362C-E	STK534UC90A-E
STK534U363C-E	STK534UC90A-E
STK534UC60A-E	STK534UC90A-E
STK534UC90A-E	STK534UC90A-E
STK541UC60C-E	STK554U362C-E
STK541UC62K-E	STK554U362C-E
STK544UC62K-E	STK554U362C-E
STK551-3A0A1-E	STK554U362C-E
STK551U362A-E	STK554U362C-E
STK551U392A-E	STK554U362C-E
STK551U3A2A-E	STK554U362C-E
STK554U361A-E	STK554U362C-E
STK554U362A-E	STK554U362C-E
STK554U362C-E	STK554U362C-E
STK554U392A-E	STK554U362C-E
STK554U394A-E	STK554U362C-E
STK554U3A1A-E	STK554U362C-E
STK57FU394AG-E	STK57FU394A-E
STK581U3A0D-E	STK621-068S-E
STK581U3C0D-E	STK621-068S-E



STK581U3C2D-E	STK621-068S-E
STK58AUNP0D-E	STK621-068S-E
STK5C4-330J1-E	STK5C4U332J-E
STK5C4-340J-E	STK5C4U332J-E
STK5C4U332J-E	STK5C4U332J-E
STK5F1U3C2D-E	STK5F1U3C3D-E
STK5F1U3C3D-E	STK5F1U3C3D-E
STK5F1U3E0D-E	STK5F1U3C3D-E
STK5F1U3E2D-E	STK5F1U3C3D-E
STK5F1U3E3D-E	STK5F1U3C3D-E
STK5F4U3C2D-E	STK5F1U3C3D-E
STK5F4U3E2D-E	STK5F1U3C3D-E
STK5FK-CA0D-E	STK5F1U3C3D-E
STK5FK-CA1D-E	STK5F1U3C3D-E
STK5MFU3C1A-E	STK621-068S-E
STK621-014-E	STK554U362C-E
STK621-015B-E	STK554U362C-E
STK621-024A-E	STK554U362C-E
STK621-033A-E	STK554U362C-E
STK621-033D-E	STK554U362C-E
STK621-033N-E	STK554U362C-E
STK621-043C-E	STK57FU394A-E
STK621-043D-E	STK57FU394A-E
STK621-051F-E	STK621-068S-E
STK621-061-E	STK621-068S-E
STK621-068C-E	STK621-068S-E
STK621-068R-E	STK621-068S-E
STK621-068S-E	STK621-068S-E
STK621-140B-E	STK554U362C-E
STK621-141A-E	STK554U362C-E
STK621-150A-E	STK57FU394A-E
STK621-728S-E	STK534UC90A-E
STK625-728-E	STK534UC90A-E
STK625-728SG-E	STK534UC90A-E
STK760-211A-E	STK57FU394A-E
STK760-211C-E	STK57FU394A-E
STK760-213A-E	STK621-068S-E



STK760-216-E	STK5F1U3C3D-E
STK760-220A-E	STK621-068S-E
STK760-221A-E	STK621-068S-E