

	;e:		ation of HVIC Characteristics improvement (Vdd robustness) and Wafer fabrication site for Intelligent Power Module (IPM) of STK5C4U332J-E products at ON Semiconductor I (OSV).					
Proposed First Ship date:			04 Dec 2020 or earlier if approved by customer					
Contact Information:		Contact	Contact your local ON Semiconductor Sales Office or Mitsuru.Oyagi@onsemi.com					
PCN Samples Contact:		Sample r Initial PC Samples	Contact your local ON Semiconductor Sales Office or < <u>PCN.samples@onsemi.com</u> >. 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.					
Additional Reliability Data:		Contact y	Contact your local ON Semiconductor Sales Office or Yasuhiro.lgarashi@onsemi.com					
Type of Notification:		days prio ON Semi	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					
Marking of Parts/ Traceability of Change:		Date Cod	Date Code					
Change Category:		Wafer Fa	Wafer Fab Change, (Wafer Fab site change), HVIC Change.					
Change Sub-Category(s):		Manufac	Manufacturing Site Transfer					
Sites Affected	l:	I						
ON Semiconductor Sites			External Foundry/Subcon Sites					
ON Semiconductor Gresham			None					
ON Semiconduo	ctor Aizu							
Decembratie ::	nd Purpose:							
vescription a								
Description a		Before (	Change Descri	ption	After Cha	ange Description		
	IC Change	Before		ption	Modify HVIC Cha	racteristics improv	vement	
HV	IC Change		Original	-	Modify HVIC Cha (Vdd	racteristics improv robustness).	vement	
HVIC W	Vafer Fab site			-	Modify HVIC Cha (Vdd	racteristics improv	vement	
HVIC W Reliability Dat	Vafer Fab site ta Summary: ME: <u>STK5C4U332J-E</u>		Original	-	Modify HVIC Cha (Vdd	racteristics improv robustness).	vement	
HVI HVIC V Reliability Dat QV DEVICE NAN RMS: <u>J62540</u>	Vafer Fab site ta Summary: ME: <u>STK5C4U332J-E</u>	ON Semi	Original	-	Modify HVIC Cha (Vdd ON Sem	racteristics improv robustness).	vement	
HVI HVIC W Reliability Dat QV DEVICE NAN RMS: J62540 PACKAGE: <u>DIP-</u> Test HTRB	Vafer Fab site ta Summary: ME: <u>STK5C4U332J-E</u> <u>S</u> Specifi JESD22	ON Semi cation 2-A108	Original	esham Conditi °C, VCE=600V, VC	Modify HVIC Cha (Vdd ON Sem on GE=0V, VDD=19.5V	racteristics improv robustness). iconductor Aizu <b>Interval</b> 1008 hours	Results 0/11	
HVI HVIC W Reliability Dat QV DEVICE NAN RMS: <u>J62540</u> PACKAGE: <u>DIP-</u> Test HTRB HTSL	Vafer Fab site ta Summary: ME: <u>STK5C4U332J-E</u> <u>S</u> <u>Specifi</u> JESD22	ON Semi cation 2-A108 2-A103	Original	esham Conditi <sup>o</sup> C, VCE=600V, VC Ta=125	Modify HVIC Cha (Vdd ON Sem <b>on</b> GE=0V, VDD=19.5V °C	racteristics improv robustness). iconductor Aizu Interval 1008 hours 1008 hours	<b>Results</b> 0/11 0/11	
HVI HVIC W Reliability Dat QV DEVICE NAN RMS: <u>J62540</u> PACKAGE: <u>DIP-</u> Test HTRB HTSL LTSL	Vafer Fab site ta Summary: ME: <u>STK5C4U332J-E</u> <u>S</u> <u>Specifi</u> JESD22 JESD22 JESD22-A1:	ON Semi cation 2-A108 2-A103 19, cond. A	Original	esham Conditi <sup>o</sup> C, VCE=600V, VC Ta=125 Ta=-45	Modify HVIC Cha (Vdd ON Sem ON SE=0V, VDD=19.5V °C °C	racteristics improv robustness). iconductor Aizu Interval 1008 hours 1008 hours 1008 Hrs	<b>Results</b> 0/11 0/11 0/11	
HVI HVIC W Reliability Dat QV DEVICE NAN RMS: J62540 PACKAGE: <u>DIP-</u> Test HTRB HTRL LTSL THU	Vafer Fab site ta Summary: ME: <u>STK5C4U332J-E</u> <u>S</u> <u>Specifi</u> JESD22 JESD22 JESD22 JESD22 JESD22	ON Semi cation 2-A108 2-A103 19, cond. A 2-A101	Original iconductor Gre Tj=150	esham Conditi °C, VCE=600V, VC Ta=125 Ta=-45 Ta=85°C, Rł	Modify HVIC Cha (Vdd ON Sem on 6E=0V, VDD=19.5V °C °C 1=85%	racteristics improv robustness). iconductor Aizu Interval 1008 hours 1008 hours 1008 Hrs 1008 hours	Results           0/11           0/11           0/11           0/11	
HVIC W HVIC W Reliability Dat QV DEVICE NAM RMS: J62540 PACKAGE: <u>DIP-</u> Test HTRB HTRB HTSL LTSL THU H3TRB	Vafer Fab site ta Summary: ME: <u>STK5C4U332J-E</u> <u>S</u> <u>Specifi</u> JESD22 JESD22 JESD22 JESD22 JESD22 JESD22 JESD22	ON Semi cation -A108 -A103 19, cond. A -A101 -A101	Original iconductor Gre Tj=150	esham Conditi °C, VCE=600V, VC Ta=125 Ta=-45 Ta=85°C, Rł H=85%, VCE=480\	Modify HVIC Cha (Vdd ON Sem 6E=0V, VDD=19.5V °C °C 1=85% /, VGE = 0V, VDD=15.6V	racteristics improv robustness). iconductor Aizu Interval 1008 hours 1008 hours 1008 Hrs 1008 hours 1008 hours 1008 hours	Results           0/11           0/11           0/11           0/11           0/11	
HVIC W HVIC W Reliability Dat QV DEVICE NAM RMS: J62540 PACKAGE: <u>DIP-</u> Test HTRB HTSL LTSL THU H3TRB TC	Vafer Fab site ta Summary: ME: <u>STK5C4U332J-E</u> <u>S</u> <u>Specifi</u> JESD22 JESD22 JESD22 JESD22 JESD22 JESD22 JESD22 JESD22	ON Semi Cation 2-A108 2-A103 19, cond. A 2-A101 2-A101 d. G, soak mode 4	Original iconductor Gre Tj=150 Ta=85°C, RH	Conditi           °C, VCE=600V, VC           Ta=125           Ta=-45'           Ta=85°C, RI           H=85%, VCE=480N           Ta=-40°C to	Modify HVIC Cha (Vdd ON Sem 6E=0V, VDD=19.5V °C °C °C H=85% /, VGE = 0V, VDD=15.6V 125°C	racteristics improv robustness). iconductor Aizu Interval 1008 hours 1008 hours 1008 Hrs 1008 hours 1008 hours 1008 hours 1008 hours	Results           0/11           0/11           0/11           0/11           0/11           0/11	
HVIC W HVIC W Reliability Dat QV DEVICE NAM RMS: J62540 PACKAGE: <u>DIP-</u> Test HTRB HTRL LTSL THU H3TRB	Vafer Fab site ta Summary: ME: <u>STK5C4U332J-E</u> <u>S</u> <u>Specifi</u> JESD22 JESD22 JESD22 JESD22 JESD22 JESD22 JESD22	ON Semi Cation 2-A108 2-A103 19, cond. A 2-A101 2-A101 d. G, soak mode 4	Original iconductor Gre Tj=150 Ta=85°C, RH	esham Conditi °C, VCE=600V, VC Ta=125 Ta=-45 Ta=85°C, Rł H=85%, VCE=480\	Modify HVIC Cha (Vdd ON Sem 6E=0V, VDD=19.5V °C °C H=85% /, VGE = 0V, VDD=15.6V 125°C j max=125°C)	racteristics improv robustness). iconductor Aizu Interval 1008 hours 1008 hours 1008 Hrs 1008 hours 1008 hours 1008 hours	Results           0/11           0/11           0/11           0/11           0/11	

All reliability test passed.

**ON Semiconductor®** 



**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
STK5C4U332J-E	STK5C4U332J-E

## Appendix A: Changed Products

D

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
STK5C4U332J-E		STK5C4U332J-E		