



# Final Product/Process Change Notification

Document #: FPCN24793X

Issue Date: 09 Nov 2022

<b>Title of Change:</b>	Wafer top metal change and Auto Cu wire conversion for SOD123 CCR (Constant Current Regulator) Parts.	
<b>Proposed First Ship date:</b>	16 Feb 2023 or earlier if approved by customer	
<b>Contact Information:</b>	Contact your local onsemi Sales Office or <a href="mailto:Jonney.Hu@onsemi.com">Jonney.Hu@onsemi.com</a>	
<b>PCN Samples Contact:</b>	Contact your local onsemi Sales Office. 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.	
<b>Additional Reliability Data:</b>	Contact your local onsemi Sales Office or <a href="mailto:Nicky.Siu@onsemi.com">Nicky.Siu@onsemi.com</a>	
<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. onsemi will consider this change accepted, unless an inquiry is made in writing within 30 days of delivery of this notice. To do so, contact <a href="mailto:PCN.Support@onsemi.com">PCN.Support@onsemi.com</a>	
<b>Marking of Parts/ Traceability of Change:</b>	Changed material will be identified by date code.	
<b>Change Category:</b>	Assembly Change, Wafer Fab Change	
<b>Change Sub-Category(s):</b>	Material Change	
<b>Sites Affected:</b>		
<b>onsemi Sites</b>	<b>External Foundry/Subcon Sites</b>	
onsemi Leshan, China	None	
onsemi Roznov, Czech Republic		
<b>Description and Purpose:</b>		
<p>onsemi is notifying customers of its use of 0.8 mil pd doped Cu wire for SOD123 CCR (Constant Current Regulator) parts at onsemi Leshan, China facility, while changing the wafer top metal from 15KA AICu to 20KA AICu.</p> <p>Upon the expiration of this PCN, these devices will be built with 0.8 mil pd doped Cu wire at the same site. Datasheet specifications and product electrical performance remain unchanged.</p> <p>Reliability Qualification and full electrical characterization over temperature has been performed</p>		
	<b>Before Change Description</b>	<b>After Change Description</b>
<b>Bond Wire</b>	0.8 mil Au wire	0.8mil pd doped Cu wire
<b>Wafer top metal</b>	15KA AICu	20KA AICu



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### Reliability Data Summary:

QV DEVICE NAME: NSV45030AT1G

RMS: L85786

PACKAGE: SOD123

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta= 125°C, 100% max rated V	1008 hrs	0/231
HTSL	JESD22-A103	Ta= 150°C	2016 hrs	0/231
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C, Pre TC, uHAST, HAST for surface mount pkgs only		0/693
TC	JESD22-A104	Ta= -65°C to +150°C	1000 cyc	0/231
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	192 hrs	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
RSH	JESD22- B106	Ta = 265°C, 10 sec Required for through hole devices only		0/30
SD	JSTD002	Ta = 245°C, 5 sec		0/30

### Electrical Characteristics Summary:

Three temperature characterization and ESD performance has been performed, Electrical characterization result is available upon request.

### 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
NSI45015WT1G	NSV45030AT1G
NSI45020AT1G	NSV45030AT1G
NSI50010YT1G	NSV45030AT1G
NSI45030T1G	NSV45030AT1G
NSI45030AT1G	NSV45030AT1G
NSI45025T1G	NSV45030AT1G
NSI45025AT1G	NSV45030AT1G
NSI45020T1G	NSV45030AT1G

**Appendix A: Changed Products**

**PCN#: FPCN24793X**  
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DIKG: DIGI-KEY

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
NSI45015WT1G		NSV45030AT1G		
NSI50010YT1G		NSV45030AT1G		
NSI45030T1G		NSV45030AT1G		
NSI45030AT1G		NSV45030AT1G		
NSI45025T1G		NSV45030AT1G		
NSI45025AT1G		NSV45030AT1G		
NSI45020T1G		NSV45030AT1G		
NSI45020AT1G		NSV45030AT1G		