



Final Product/Process Change Notification

Document #: FPCN21292XN

Issue Date: 24 Nov 2022

Title of Change:	Qualification of VHVIC3 Products to onsemi Aizu, Japan.		
Proposed First Ship date:	03 Mar 2023 or earlier if approved by customer		
Contact Information:	Contact your local onsemi Sales Office or Anh.Vo@onsemi.com		
PCN Samples Contact:	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.		
Additional Reliability Data:	Contact your local onsemi Sales Office or Tomas.Vajter@onsemi.com		
Type of Notification:	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 PCN.Support@onsemi.com		
Marking of Parts/ Traceability of Change:	Product out of Aizu, Japan can be identified on the label by referring to the "Diffused In" location. If produced in Aizu, it will show JP, if produced in Gresham, it will show US.		
Change Category:	Wafer Fab Change		
Change Sub-Category(s):	Manufacturing Site Addition		
Sites Affected:			
onsemi Sites	External Foundry/Subcon Sites		
onsemi Aizu, Japan	None		
Description and Purpose:			
<p>onsemi would like to notify its customers of the qualification of our Very High Voltage IC (VHVIC) Technology at our onsemi Aizu, Japan FAB.</p> <p>This qualification enables expanded capacity for this technology.</p> <p>All products listed in this FPCN may be dual sourced from either the current onsemi wafer FAB in Gresham, OR US or onsemi Aizu, Japan.</p> <p>This is the latest PCN associated with this change.</p> <p>This technology was previously qualified into Aizu and has been running at this FAB for > 5 years for other products in this technology.</p> <p>Reference FPCN21292X-FPCN21292XM for previous notifications on this equivalent change.</p>			
	Before Change Description	After Change Description	
FAB	onsemi Gresham, USA	onsemi Aizu, Japan	onsemi Gresham, USA
<p>There are no product material changes as a result of this change.</p> <p>There is no product marking change as a result of this change.</p>			



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Reliability Data Summary:

QV DEVICE NAME: NCP1396ADR2G

PACKAGE: SOIC-16

RMS#: P31418, O36903, O37701

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta=125°C, 600V	1000 hrs	0/231
HTSL	JESD22-A103	Ta= 150°C	1000 hrs	0/231
PC-TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/231
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/231
PC- uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/693

QV DEVICE NAME: NCP1399AADR2G

PACKAGE: SOIC-16

RMS#: P31421

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta=125°C, 600V	1000 hrs	0/77

QV DEVICE NAME: NCP1236BD65R2G

PACKAGE: SOIC 8 (Less Pin 7)

RMS#: P31397, O30920

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta=125°C, 500V	1000 hrs	0/231
HTSL	JESD22-A103	Ta= 150°C	1000 hrs	0/231
PC-TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/231
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/231
PC-uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/693

Electrical Characteristics Summary:

Electrical characteristics are not impacted.



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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
STK544UC63K-E-01	NCP1396ADR2G, NCP1399AADR2G
STK544UC63K-E	NCP1396ADR2G, NCP1399AADR2G
STK544UC62K-E	NCP1396ADR2G, NCP1399AADR2G
STK541UC62K-E	NCP1396ADR2G, NCP1399AADR2G
NFCS1060L3TT-01	NCP1396ADR2G, NCP1399AADR2G
NFCS1060L3TT	NCP1396ADR2G, NCP1399AADR2G
NCP785AH150T1G	NCP1236BD65R2G
NCP785AH120T1G	NCP1236BD65R2G
NCP785AH50T1G	NCP1236BD65R2G
NCP785AH33T1G	NCP1236BD65R2G
NCP786LSTADJT3G	NCP1236BD65R2G

Appendix A: Changed Products

**PCN#: FPCN21292XN
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DIKG: DIGI-KEY

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
STK544UC63K-E		NCP1396ADR2G, NCP1399AADR2G	NA	
STK541UC62K-E		NCP1396ADR2G, NCP1399AADR2G	NA	
NFCS1060L3TT		NCP1396ADR2G, NCP1399AADR2G	NA	
NCP785AH150T1G		NCP1236BD65R2G	NA	
NCP785AH120T1G		NCP1236BD65R2G	NA	
NCP785AH50T1G		NCP1236BD65R2G	NA	
NCP785AH33T1G		NCP1236BD65R2G	NA	
NCP786LSTADJT3G		NCP1236BD65R2G	NA	
STK544UC62K-E		NCP1396ADR2G, NCP1399AADR2G	NA	