Final Product/Process Change Notification

Document #:FPCN21292XS
Issue Date: 12 Oct 2023

Title of Change:	Qualification of VHVIC (Very High Voltage IC) Technology at AFSM (Aizu Fujitsu Semiconductor Manufacturing) Japan-Phase 1
Proposed First Ship date:	19 Jan 2024 or earlier if approved by customer
Contact Information:	Contact your local onsemi Sales Office or Melai.Obnial@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:

onsemi would like to notify its customers of the qualification of our Very High Voltage IC (VHVIC) Technology at our onsemi Aizu, Japan FAB.

This qualification enables expanded capacity for this technology.

All products listed in this PCN may be dual sourced from either the current onsemi wafer FAB in Gresham, OR US or onsemi Aizu, Japan.

This is the latest PCN associated with this change.

This technology was previously qualified into Aizu and has been running at these FAB for > 5 years for other products in this technology.

Reference FPCN21292X-FPCN21292XL for previous notifications on this equivalent change.

	Before Change Description	**After Change Description**	
FAB	onsemi Gresham, USA	onsemi Aizu, Japan	onsemi Gresham, USA

There are no product material changes as a result of this change.

There is no product marking change as a result of this change.

Reliability Data Summary:

QV DEVICE NAME: NCV5183ADR2G
RMS: O89561
PACKAGE: SOIC8N STD VHVIC PBFH

Test	Specification	Condition	Interval	Results
High Temperature Operating Life	JESD22-A108	Ta=125°C, 100 % max rated Vcc, HV = 600V	1008 hrs	0/240
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hrs	0/240
Preconditioning	J-STD-020 JESD-A113	MSL 1 @260 °C, Pre TC, uHAST, HAST for surface mount pkgs only		0/1080
Temperature Cycling	JESD22-A104	Ta= -65°C to +150°C	1000 cyc	0/381
Highly Accelerated Stress Test	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/240
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/240

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
NCP5183DR2G	NCV5183DR2G

onsemi

Appendix A: Changed Products

PCN#: FPCN21292XS
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DIKG: DIGI-KEY

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
NCP5183DR2G		NCV5183DR2G	NA	