Final Product/Process Change Notification

Document #:FPCN21292ZP
Issue Date:07 Jun 2024

Title of Change:	Backgrind site change from onsemi Aizu to onsemi ISMF
Proposed Changed Material First Ship Date:	31 Dec 2024 or earlier if approved by customer
Current Material Last Order Date:	N/A *Orders received after the Current Material Last Order Date expiration are to be considered as orders for new changed material as described in this PCN. Orders for current (unchanged) material after this date will be per mutual agreement and current material inventory availability*.
Current Material Last Delivery Date:	N/A *The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory*
Product Category:	Active components – Integrated circuits
Contact information:	Contact your local onsemi Sales Office or manuel.mangawangjr@onsemi.com
PCN Samples Contact:	Contact your local onsemi Sales Office to place sample order. Sample requests are to be submitted no later than 45 days after publication of this change notification. Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.
Sample Availability Date:	N/A
PPAP Availability Date:	26 Apr 2024
Additional Reliability Data:	Contact your local onsemi Sales Office or Jacob.Saliba@onsemi.com
Type of Notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. The change will be implemented at 'Proposed Change Material First Ship Date' in compliance to J-STD-46 or ZVEI, or earlier upon customer approval, or per our signed agreements. onsemi will consider this proposed change and it's conditions acceptable, unless an inquiry is made in writing within 45 days of delivery of this notice. To do so, contact PCN.Support@onsemi.com.

Change Category

Category	Type of Change
Process - Wafer Production	Move of all or part of wafer fab to a different location/site/subcontractor
Equipment	Production from a new equipment/tool which uses the same basic technology (replacement equipment or extension of existing equipment pool) without change of process.

Description and Purpose:

onsemi would like to inform the customer about a change in the backgrinding location for the devices listed in this PCN. This product is currently undergoing backgrinding at onsemi Aizu Japan (JND).

To improve capacity and avoid disruptions or discontinuity in supply, the backgrinding process will be moved to our center of excellence for backgrind at onsemi ISMF Malaysia (MY2).

	From	To
Backgrind Location	onsemi Aizu Japan (JND)	onsemi ISMF Malaysia (MY2)

Reason / Motivation for Change:	Capacity improvement
Anticipated impact on fit, form, function, reliability, product safety or manufacturability:	The device has been qualified and validated based on the same Product Specification. The device has successfully passed the qualification tests. Potential impacts can be identified, but due to testing performed by onsemi in relation to the PCN, associated risks are verified and excluded. No anticipated impacts.

Sites Affected:

onsemi Sites	**External Foundry/Subcon Sites**
onsemi, ISMF Malaysia	None

Marking of Parts/ Traceability of Change:	Product will be identifiable by trace codes and lot numbers associated with the product.

Reliability Data Summary:

QV DEVICE NAME :NCV5183DR2G
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

QV DEVICE NAME: NCV333ASQ3T2G
RMS: S89520
PACKAGE: SC-88A-5

Test	Specification	Condition	Interval	Results
High Temperature Operating Life	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs	0/238
Early Life Failure Rate	JESD22-A108	Ta=125°C, 100 % max rated Vcc	48 hrs	0/2398
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hrs	0/240
ESD-HBM	JS-001-2017	3000V	-	pass
LU Class II	JESD-78	100mA		pass
Electrical Distribution / Thermal Characterization	onsemi DataSheet	Test @ Cold & Room & Hot Cpk ≥ 1.67	-	pass

Note: AEC-1 pager are attached.

To view attachments:
1. Download pdf copy of the PCN to your computer
2. Open the downloaded pdf copy of the PCN
3. Click on the paper clip icon available on the menu provided in the left/bottom portion of the screen to reveal the Attachment field
4. Then click on the attached file

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****.*

Current Part Number	New Part Number	Qualification Vehicle
NCV1362ACDR2G	#NONE	NCV333ASQ3T2G
NCV1362ABDR2G	#NONE	NCV333ASQ3T2G
NCV1362AADR2G	#NONE	NCV333ASQ3T2G
NCV1075P100G	#NONE	NCV5183DR2G
NCV1075P065G	#NONE	NCV5183DR2G
NCV1072P100G	#NONE	NCV5183DR2G
NCV1072P065G	#NONE	NCV5183DR2G
NCV1077P065G	#NONE	NCV5183DR2G
NCV1076P130G	#NONE	NCV5183DR2G
NCV1076P100G	#NONE	NCV5183DR2G
NCV1076P065G	#NONE	NCV5183DR2G