



Final Product/Process Change Notification

Document #:FPCN25590Z1

Issue Date:13 Dec 2023

Title of Change:	Update to FPCN25590Z - Backgrinding site change from onsemi Gresham to onsemi ISMF and to include the details related to last order and last shipment dates and update the Proposed Changed Material First Ship Date.
Proposed Changed Material First Ship Date:	01 Jan 2024 or earlier if approved by customer
Current Material Last Order Date:	07 Dec 2023 <i>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.</i>
Current Material Last Delivery Date:	31 Dec 2023 <i>The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory</i>
Product Category:	Active components – Integrated circuits
Contact information:	Contact your local onsemi Sales Office or Adrian.Croitoru@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:	08 Dec 2023
Additional Reliability Data:	Contact your local onsemi Sales Office or Vladislav.Hrachovec@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
Description and Purpose: onsemi would like to notify customers of a change in backgrind location for the devices listed in this PCN. The products in this notification are currently receiving backgrind in the wafer fab, onsemi, Gresham US (USR), but will be moved to our backgrind center of excellence in onsemi Seremban, Malaysia (ISMF). The equipment in USR is reaching the end of life, and will no longer be utilized once this transfer is complete. ISMF has production history spanning more than 10 years as the backgrind center of excellence, and similar wafers fabricated in USR (using the same wafer fabrication technology) are already receiving backgrind in ISMF. Since backgrind is a post wafer fab process, performed while the product is in wafer form, and finished product is identical in form, fit and function, samples will not be prepared for this change. Reliability data is provided. Electrical characteristics have not changed. Since the life expectancy of this equipment is uncertain, your expedited attention and approval of this notice is appreciated and will ensure supply continuity for the future. After January-01, 2024, deliveries of material with backgrind from onsemi, ISMF will begin immediately. If a customer does not wish to receive product from the new backgrind site, they should take action to cancel or push out all future orders. Customers should work with their local sales contacts to cancel or push out orders as needed.	

	From	To
BACKGRIND	onsemi Gresham, USA	onsemi ISMF, Malaysia

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

Reason / Motivation for Change:	Source/Supply/Capacity Changes
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:	Traceability will be managed by lot and date code.
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Reliability Data Summary:

QV DEVICE NAME: NCV20072DR2G

RMS: O86311

PACKAGE: SOIC-8

Test	Specification	Condition	Interval	Results
High Temperature Operating Life	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs	0/77
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hrs	0/77
Early Life Failure Rate	JESD22-A108	Ta=125°C, 100 % max rated Vcc	48 hrs	0/800
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260°C, Pre TC, uHAST, HAST for surface mount pkgs only		0/all
Temperature Cycling	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/77
Highly Accelerated Stress Test	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/77
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/77

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
NCV4333DTBR2G	#NONE	NCV20072DR2G
NCV4333DR2G	#NONE	NCV20072DR2G
NCV21874DTBR2G	#NONE	NCV20072DR2G
NCV21874DR2G	#NONE	NCV20072DR2G
NCV2333DR2G	#NONE	NCV20072DR2G
NCV2333DMR2G	#NONE	NCV20072DR2G
NCV21872DR2G	#NONE	NCV20072DR2G
NCV21872DMR2G	#NONE	NCV20072DR2G
NCV20032DTBR2G	#NONE	NCV20072DR2G
NCV20032DR2G	#NONE	NCV20072DR2G
NCV20032DMR2G	#NONE	NCV20072DR2G
NCV2393DR2G	#NONE	NCV20072DR2G

Appendix A: Changed Products

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DIKG: DIGI-KEY

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
NCV4333DTBR2G		NCV20072DR2G	#NONE	
NCV21874DR2G		NCV20072DR2G	#NONE	
NCV2333DR2G		NCV20072DR2G	#NONE	
NCV2333DMR2G		NCV20072DR2G	#NONE	
NCV21872DR2G		NCV20072DR2G	#NONE	
NCV21872DMR2G		NCV20072DR2G	#NONE	
NCV20032DTBR2G		NCV20072DR2G	#NONE	
NCV20032DR2G		NCV20072DR2G	#NONE	
NCV20032DMR2G		NCV20072DR2G	#NONE	
NCV2393DR2G		NCV20072DR2G	#NONE	
NCV4333DR2G		NCV20072DR2G	#NONE	
NCV21874DTBR2G		NCV20072DR2G	#NONE	