ON Semiconductor®

Initial Product/Process Change Notification

Document #:IPCN23824Z
Issue Date:03 Feb 2021

Title of Change:	Gresham Devices as Drop-In Replacements for Current FAB2 Devices
Proposed Changed Material First Ship Date:	24 Jun 2022 or earlier if approved by customer
Current Material Last Order Date:	30 Jun 2021
Current Material Last Delivery Date:	12 months after FPCN issue date, unless otherwise mutually agreed
Product Category:	Active components – Integrated circuits
Contact information:	Contact your local ON Semiconductor Sales Office or Kevin.Mathews@onsemi.com
PCN Samples Contact:	Contact your local ON Semiconductor Sales Office to place sample order or <PCN.samples@onsemi.com>. 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.
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or Tomas.Vajter@onsemi.com
Type of Notification:	This is an Initial Product/Process Change Notification (IPCN) sent to customers. An IPCN is an advance notification about an upcoming change and contains general information regarding the change details and devices affected. It also contains the preliminary reliability qualification plan.The completed qualification and characterization data will be included in the Final Product/Process Change Notification (FPCN). This IPCN notification will be followed by a Final Product/Process Change Notification (FPCN) at least 12 months prior to implementation of the change. In case of questions, contact <PCN.Support@onsemi.com>.

Change Category

Category	**Type of Change**
Design	Design Change in Active Elements
Process - Wafer Production	Change in process technology (e. g. process changes like lithography, etch, oxide deposition, diffusion, die back surface preparation/backgrind, ...), Move of all or part of wafer fab to a different location/site/subcontractor, New wafer diameter
Data Sheet	Correction of data sheet / errata

Description and Purpose:

Change of design to new wafer technology to support new wafer technology. Change of wafer processing technology from PS5B currently manufactured in Fab2, Oudenaarde, Belgium (150 mm fab) to I3T50 in Gresham, Oregon, USA (200 mm fab). Old PS5B technology replaced by the more advanced I3T50 wafer process. PS5B wafer technology is nearing end of life and cannot support future production needs.

These changes are also related to the Fab2 manufacturing site sale.

Wafer fab location	**Fab2, Oudenaarde, Belgium (Current Fab)**	**ON Gresham, Oregon, USA (New Fab)**
Wafer Diameter	Substrate: Si (150mm) 6”	Substrate: Si (200mm) 8"
Wafer Technology	PS5B	I3T50

Product marking change	From	To
NCV85081BPD50R2G	Line1:5081B5	Line1:5081C5
NCV86601BDT50RKG	Line1:6601B5G	Line1:7601C5G
NCV86602BDT33RKG	Line1:6602B3G	Line1:7602C3G
NCV86603BDT33RKG	Line1:6603B3G	Line1:7603C3G
NCV8668ABD133R2G	Line1:668AB3	Line1:768CAB3
NCV8668ABD150R2G	Line1:668AB5	Line1:768CAB5
NCV8668ABPD50R2G	Line1:668AB5	Line1:768CAB5
NCV87722D5S33R4G	Line2:V8772233	Line2:V8772C34
NCV87722DT33RKG	Line1:772233G	Line1:772C34G
NCV87722DT50RKG	Line1:772250G	Line1:772C54G
NCV8851-1DBR2G	Line2: 51-1	Line2: 56A

Reason / Motivation for Change:	Source/Supply/Capacity Changes
Anticipated impact on fit, form, function, reliability, product safety or manufacturability:	No anticipated impacts.

Sites Affected:

ON Semiconductor Sites	**External Foundry/Subcon Sites**
ON Semiconductor Gresham, Oregon, USA	None
ON Semiconductor Oudenaarde, Belgium	

Marking of Parts/ Traceability of Change:	New OPNs with updated package markings.

Reliability Data Summary:

Qual plans are device specific and will be provided upon request.

Electrical Characteristics Summary:

Differences to electrical characteristics are part specific will be provided in final notification.

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
NCV85081BPD50R2G	NCV8508CPD501R2G	NCV8508CPD501R2G
NCV86601BDT50RKG	NCV8760CDT501RKG	NCV8760CDT501RKG
NCV86602BDT33RKG	NCV8760CDT332RKG	NCV8760CDT501RKG
NCV86603BDT33RKG	NCV8760CDT333RKG	NCV8760CDT501RKG
NCV8668ABD133R2G	NCV8768CD33ABR2G	NCV8768CD50ABR2G

NCV8668ABD150R2G	NCV8768CD50ABR2G	NCV8768CD50ABR2G
NCV8668ABPD50R2G	NCV8768CPD50ABR2G	NCV8768CPD50ABR2G
NCV87722D5S33R4G	NCV8772CDS334R4G	NCV8772CDS334R4G
NCV87722DT33RKG	NCV8772CDT334RKG	NCV8772CDT504RKG
NCV87722DT50RKG	NCV8772CDT504RKG	NCV8772CDT504RKG
NCV8851-1DBR2G	NCV8856ADBR2G	NCV8856ADBR2G