Final Product/Process Change Notification

Document #:FPCN24684X
Issue Date: 30 Jun 2022

Title of Change:	NCP1618B Design Change - silicon modification update.
Proposed First Ship date:	07 Oct 2022 or earlier if approved by customer
Contact Information:	Contact your local onsemi Sales Office or Scott.Brow@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 marked with date code WW38 2022 or later
Change Category:	Wafer Fab Change
Change Sub-Category(s):	Design Change

Sites Affected:

onsemi Sites	**External Foundry/Subcon Sites**
onsemi, Gresham United States	None

Description and Purpose:

onsemi would like to inform it customers about release change of the NCP1618BDR2G device. The updated silicon incorporates improved logic block and high voltage block.

Upgraded silicon version is running in production status and die will be replaced after FPCN expiration period.

Silicon design change details:

- Improved logic block and high voltage block
- Istart1 current is increased for faster start-up
- Fault management logic modification

Reliability Data Summary:

QV DEVICE NAME NCP1618CDR2G
RMS P74529; P75737
PACKAGE: SOIC-9

Test	Specification	Condition	Interval	Results (fail/pass)
HTOL	JESD22-A108	TA=110°C for 1008 hours	1008 hrs	0/80
HTSL	JESD22-A103	TA=150°C for 1008 hours	1008 hrs	0/80
PC	J-STD-020 JESD-A113	IR reflow at 245C or 260C (pkg dependant)	Result	pass
TC+PC	JESD22-A104	Temp = -65°C to +150°C; for 500 cycles (or equivalent)	500 cyc	0/80
HAST+PC	JESD22-A110	Temp = 130C, 85% RH, ~ 18.8 psig, bias = 100V max	96 hrs	0/80
UHAST+PC	JESD22-A118	Temp = 130C, RH=85%, ~ 18.8 psig	96 hrs	0/80
SAT	as outlined in MSB17722C	12MSB17722C	Result	pass
ESD	12MSB17722C	HBM, CDM, IEC	Result	pass
LU	JESD78	-LU, +LU	Result	pass
ED	Electrical Distribution	Critical Parameters (-40°C, 25°C, 125°C)	Result	pass

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
NCP1618BDR2G	NCP1618CDR2G

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
NCP1618BDR2G		NCP1618CDR2G		