Final Product/Process Change Notification

Document #:FPCN26053XB
Issue Date:14 Jul 2025

Title of Change:	Wafer Fab Site Transfer from LA Semi Fab10 Pocatello to onsemi Gresham
Proposed First Ship date:	21 Oct 2025 or earlier if approved by customer
Contact Information:	Contact your local onsemi Sales Office
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
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:	No change to marking / Changed material may be identified by date code
Change Category:	Wafer Fab Change
Change Sub-Category(s):	Manufacturing Site Transfer

Sites Affected:

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

Description and Purpose:

onsemi would like to notify its customers of the qualification of affected parts at our onsemi Gresham wafer FAB. This qualification enables expanded capacity for this technology and ensures business continuity.

In addition to the fab site transfer, onsemi implemented a minor design tweak to improve communication robustness on a highly loaded KNX bus compared to the NCN51xx. This was achieved by adjusting the receiver detection thresholds: the start of the active pulse was lowered from −0.45 V (typ.) to −0.61 V (typ.), the end of the active pulse from −0.2 V (typ.) to −0.38 V (typ.), and the blanking time was increased to 24 µs.

		From	**To**
Fab Site		LAS Pocatello Fab10, US	onsemi Gresham, US
Design Modification **NCN5110MNTWG** **NCN5121MNTWG** **NCN5130MNTWG**	Detection threshold for the start of the active pulse	-0.45 V (typ)	-0.61 V (typ)
	Detection threshold for the end of the active pulse	-0.2 V (typ)	-0.38 V (typ)

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

Reliability Data Summary:

QV DEVICE NAME: NCN5150MNTWG
RMS: O98427
PACKAGE: QFN 20L

Test	Specification	Condition	Interval	Results
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hrs	0/77
Preconditioning	J-STD-020 JESD-A113	MSL 3 @ 260 °C		0/154
Temperature Cycling	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/77
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, unbiased	96 hrs	0/77

QV DEVICE NAME: NCN5130MNTWG
RMS: O98457
PACKAGE: QFN 40L

Test	Specification	Condition	Interval	Results
High Temperature Storage Life	JESD22-A103	Ta= 125°C	1008 hrs	0/77
Preconditioning	J-STD-020 JESD-A113	MSL 3 @ 260 °C		0/154
Temperature Cycling	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/77
Temperature Humidity Unbiased	JESD22-A118	85°C, 85% RH, unbiased	1008 hrs	0/77

QV DEVICE NAME: NCV78247DQ0R2G
RMS: O78164
PACKAGE: SSOP 36L

Test	Specification	Condition	Interval	Results
High Temperature Operating Life	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs	0/231
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hrs	0/45
Preconditioning	J-STD-020 JESD-A113	MSL 3 @ 260 °C, Pre TC, uHAST, HAST		0/693
Temperature Cycling	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/231
Highly Accelerated Stress Test	JESD22-A110	110°C, 85% RH, bias	264 hrs	0/231
Unbiased Highly Accelerated Stress Test	JESD22-A118	110°C, 85% RH, unbiased	264 hrs	0/231

Electrical Characteristics Summary:

Electrical Characteristics are not impacted for NCN5150/NCN5151. Lower receiver detection threshold voltage for NCN5130/NCN5121/NCN5110 meet specification requirement.

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
NCN5151MNTWG	NCN5150MNTWG / NCV78247DQ0R2G

NCN5121MNTWG	NCN5130MNTWG / NCV78247DQ0R2G
NCN5150MNTWG	NCN5150MNTWG / NCV78247DQ0R2G
NCN5110MNTWG	NCN5130MNTWG / NCV78247DQ0R2G
NCN5130MNTWG	NCN5130MNTWG / NCV78247DQ0R2G