

Title of Change:	Transfer wafer fabrication from Gresham to Aizu for NCD570x family of gate driver products.			
Proposed Changed Material First Ship Date:	07 Mar 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 David.Craig@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.			
Additional Reliability Data:	Contact your local onsemi Sales Office or Nicky.Siu@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 6 months prior to implementation of the change. In case of questions, contact < <u>PCN.Support@onsemi.com</u> >.			
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:				
Change wafer fab and backgrind site from onsemi Gresham, Oregon USA to onsemi Aizu, Japan.				
	From	То		
Fab Site	onsemi Gresham, Oregan USA	onsemi Aizuwakamastu, Japan		
Equipment/tool	Gresham fab toolset	Aizu fab toolset		
There are no product material changes as a result of this change.				



Initial Product/Process Change Notification Document #: IPCN25297Z Issue Date: 17 May 2023

Reason / Motivation for Change:	Process/Materials Change			
Anticipated impact on fit, form, function, reliability, product safety or manufacturability:	The device will be qualified and validated based on the same Product Specification. No anticipated impacts.			
Sites Affected:				
onsemi Sites		External Foundry/Subcon Sites	al Foundry/Subcon Sites	
onsemi Aizu, Japan		None		
Marking of Parts/ Traceability of Change:	Part marking shows assembly site and assembly date. Assembly lot (marked on reel and shipping boxes) is traceable to source wafer fab.			
Reliability Data Summary:				
QV DEVICE NAME NCV5700DR2G	T) and O89114 (FLER)			
QV DEVICE NAME NCV5700DR2G RMS 088670 (HAST, HTOL, HTSL, RSH, TC, UHAS PACKAGE SOIC16	T) and O89114 (ELFR)	Condition	Interval	
QV DEVICE NAME NCV5700DR2G RMS 088670 (HAST, HTOL, HTSL, RSH, TC, UHAS PACKAGE SOIC16 Test High Temperature Operating Life	T) and O89114 (ELFR) Specification JESD22-A108	Condition Ta= 125 °C. 100 % max rated Vcc	Interval 2016 hrs	
QV DEVICE NAME NCV5700DR2G RMS 088670 (HAST, HTOL, HTSL, RSH, TC, UHAS PACKAGE SOIC16 Test High Temperature Operating Life Early Life Failure Rate	T) and O89114 (ELFR) Specification JESD22-A108 AECQ100-008	Condition           Ta= 125 °C, 100 % max rated Vcc           Ta= 125 °C, 100 % max rated Vcc	Interval 2016 hrs 48 hrs	
QV DEVICE NAME NCV5700DR2G RMS 088670 (HAST, HTOL, HTSL, RSH, TC, UHAS PACKAGE SOIC16 Test High Temperature Operating Life Early Life Failure Rate High Temperature Storage Life	T) and O89114 (ELFR) Specification JESD22-A108 AECQ100-008 JESD22-A103	Condition           Ta= 125 °C, 100 % max rated Vcc           Ta= 125 °C, 100 % max rated Vcc           Ta= 150 °C	Interval 2016 hrs 48 hrs 2016 hrs	
QV DEVICE NAME NCV5700DR2G RMS 088670 (HAST, HTOL, HTSL, RSH, TC, UHAS PACKAGE SOIC16 High Temperature Operating Life Early Life Failure Rate High Temperature Storage Life Preconditioning	T) and O89114 (ELFR) Specification JESD22-A108 AECQ100-008 JESD22-A103 J-STD-020 JESD-A1	ConditionTa= 125 °C, 100 % max rated VccTa= 125 °C, 100 % max rated VccTa= 150 °CMSL 1 @ 260 °C, Pre TC, uHAST, HAST for surface mount pkgs only	Interval 2016 hrs 48 hrs 2016 hrs	
QV DEVICE NAME NCV5700DR2G RMS 088670 (HAST, HTOL, HTSL, RSH, TC, UHAS PACKAGE SOIC16 High Temperature Operating Life Early Life Failure Rate High Temperature Storage Life Preconditioning Temperature Cycling	Specification           JESD22-A108           AECQ100-008           JESD22-A103           J-STD-020 JESD-A1           JESD22-A104	Condition           Ta= 125 °C, 100 % max rated Vcc           Ta= 125 °C, 100 % max rated Vcc           Ta= 150 °C           MSL 1 @ 260 °C, Pre TC, uHAST, HAST for surface mount pkgs only           Ta= -65 °C to + 150 °C	Interval 2016 hrs 48 hrs 2016 hrs 1000 cyc	
QV DEVICE NAME NCV5700DR2G RMS 088670 (HAST, HTOL, HTSL, RSH, TC, UHAS PACKAGE SOIC16 High Temperature Operating Life Early Life Failure Rate High Temperature Storage Life Preconditioning Temperature Cycling Highly Accelerated Stress Test	Specification           JESD22-A108           AECQ100-008           JESD22-A103           JESD22-A103           JESD22-A103           JESD22-A104           JESD22-A104	Condition           Ta= 125 °C, 100 % max rated Vcc           Ta= 125 °C, 100 % max rated Vcc           Ta= 150 °C           MSL 1 @ 260 °C, Pre TC, uHAST, HAST for surface mount pkgs only           Ta= -65 °C to + 150 °C           130°C, 85% RH, 18.8psig, bias	Interval 2016 hrs 48 hrs 2016 hrs 1000 cyc 96 hrs	
QV DEVICE NAME NCV5700DR2G RMS 088670 (HAST, HTOL, HTSL, RSH, TC, UHAS PACKAGE SOIC16 Test High Temperature Operating Life Early Life Failure Rate High Temperature Storage Life Preconditioning Temperature Cycling Highly Accelerated Stress Test Unbiased Highly Accelerated Stress Test	Specification           JESD22-A108           AECQ100-008           JESD22-A103           J-STD-020 JESD-A1           JESD22-A104           JESD22-A104           JESD22-A104	Condition           Ta= 125 °C, 100 % max rated Vcc           Ta= 125 °C, 100 % max rated Vcc           Ta= 150 °C           MSL 1 @ 260 °C, Pre TC, uHAST, HAST for surface mount pkgs only           Ta= -65 °C to + 150 °C           130°C, 85% RH, 18.8psig, bias           130°C, 85% RH, 18.8psig, unbiased	Interval 2016 hrs 48 hrs 2016 hrs 2016 hrs 1000 cyc 96 hrs 96 hrs	
QV DEVICE NAME NCV5700DR2G RMS 088670 (HAST, HTOL, HTSL, RSH, TC, UHAS PACKAGE SOIC16 Test High Temperature Operating Life Early Life Failure Rate High Temperature Storage Life Preconditioning Temperature Cycling Highly Accelerated Stress Test Unbiased Highly Accelerated Stress Test Resistance to Solder Heat	T) and O89114 (ELFR) Specification JESD22-A108 AECQ100-008 JESD22-A103 J-STD-020 JESD-A1 JESD22-A104 JESD22-A110 JESD22-A118 JESD22-B106	Condition           Ta= 125 °C, 100 % max rated Vcc           Ta= 125 °C, 100 % max rated Vcc           Ta= 150°C           MSL 1 @ 260 °C, Pre TC, uHAST, HAST for surface mount pkgs only           Ta= -65 °C to + 150 °C           130°C, 85% RH, 18.8psig, bias           130°C, 85% RH, 18.8psig, unbiased           Ta= 265°C, 10 sec           Required for through hole devices only	Interval 2016 hrs 48 hrs 2016 hrs 1000 cyc 96 hrs 96 hrs	

## 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 <u>PCN Customized Portal</u>.

Current Part Number	New Part Number	Qualification Vehicle
NCV5700DR2G	NA	NCV5700DR2G
NCV5701ADR2G	NA	NCV5700DR2G
NCV5701CDR2G	NA	NCV5700DR2G
SNCV5700DR2G	NA	NCV5700DR2G
NCV5707BDR2G	NA	NCV5700DR2G



## Initial Product/Process Change Notification Document #: IPCN25297Z Issue Date: 17 May 2023

NCV5705BDR2G	NA	NCV5700DR2G
NCV5703DDR2G	NA	NCV5700DR2G
NCV5703CDR2G	NA	NCV5700DR2G
NCV5703BDR2G	NA	NCV5700DR2G
NCV5703ADR2G	NA	NCV5700DR2G
NCV5702DR2G	NA	NCV5700DR2G
NCV5701BDR2G	NA	NCV5700DR2G