



Initial Product/Process Change Notification

Document #: IPCN24820Z

Issue Date: 30 Sep 2022

Title of Change:	ACMOS1 and ACMOS2 fab process qualification at onsemi Aizu fab location.	
Proposed Changed Material First Ship Date:	01 Sep 2023 or earlier if approved by customer	
Current Material Last Order Date:	01 Jan 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 Aug 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 Don.Beeman@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 Vladislav.Hrachovec@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 <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	
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:		
	From	To
Fab Locations	onsemi, Gresham	onsemi Aizu, onsemi Gresham
There is no product marking change as a result of this change.		
Reason / Motivation for Change:	Capacity improvement	
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	
onsemi Aizu, Japan	None	



Initial Product/Process Change Notification

Document #: IPCN24820Z

Issue Date: 29 Sep 2022

Marking of Parts/ Traceability of Change:

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

Reliability Data Summary:

QV DEVICE NAME : NCV2002SN2T1G

RMS: 85164

PACKAGE : 0672 | TSOP 6 EPOXY MATRIX PBFH

Test	Specification	Condition	Interval
HTOL	JA108	TA=125C, bias at 1.2X Nominal (not to exceed Max rated)	2016 hrs
HTSL	JESD22-A103	Ta= 150°C	2016 hrs
ELFR	AECQ100-008	TA=125C, bias at 1.2X Nominal (not to exceed Max rated)	48 hrs
PC	J STD 020A, JESD22-A113	IR reflow at 245C or 260C (pkg dependant)	
HAST + PC	JESD22-A110	Ta= 130°C, 85% RH, ~18.8 psig, bias = 100% of rated V or 100V max	96 hrs
TC + PC	JESD22-A104	Temp = -55°C to +150°C; for 1000 cycles (or equivalent)	1000 cyc
uHAST + PC	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
SAT	12MSB17722C	12MSB17722C	3 lots
DPA	AEC-Q101-004 Section 4	Post 1X TC	3 lots
CDPA BS	12MSB17722C	Post TC	3 lots
CDPA WP	12MSB17722C	Post TC	3 lots
CDPA X Section	12MSB17722C	Post TC	3 lots
CDPA Xray	12MSB17722C	Post TC	3 lots
Shift	12MSB17722C, AEC-Q100-009	Post 1X HTOL TC	3 lots
ESD	12MSB17722C	HBM	3 lots
ESD	12MSB17722C	CDM	3 lots
LU	JESD78 Class I, AEC Q100-004	-LU, +LU	3 lots

QV DEVICE NAME : NCV500SN33T1G

PACKAGE : 0670 | TSOP 5 EPOXY MATRIX PBFH

Test	Specification	Condition	Interval
HTOL	JA108	TA=125C, bias at 1.2X Nominal (not to exceed Max rated)	2016 hrs
HTSL	JESD22-A103	Ta= 150°C	2016 hrs
PC	J STD 020A, JESD22-A113	IR reflow at 245C or 260C (pkg dependant)	
HAST + PC	JESD22-A110	Ta= 130°C, 85% RH, ~18.8 psig, bias = 100% of rated V or 100V max	96 hrs
TC + PC	JESD22-A104	Temp = -55°C to +150°C; for 1000 cycles (or equivalent)	1000 cyc
uHAST + PC	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
SAT	12MSB17722C	12MSB17722C	3 lots
DPA	AEC-Q101-004 Section 4	Post 1X TC	3 lots
CDPA BS	12MSB17722C	Post TC	3 lots
CDPA WP	12MSB17722C	Post TC	3 lots
CDPA X Section	12MSB17722C	Post TC	3 lots
CDPA Xray	12MSB17722C	Post TC	3 lots
Shift	12MSB17722C, AEC-Q100-009	Post 1X HTOL TC	3 lots



Initial Product/Process Change Notification

Document #: IPCN24820Z

Issue Date: 29 Sep 2022

ESD	12MSB17722C	HBM	3 lots
ESD	12MSB17722C	CDM	3 lots
LU	JESD78 Class I, AEC Q100-004	-LU, +LU	3 lots

QV DEVICE NAME : NCV551SN33T1G

PACKAGE : 0670 | TSOP 5 EPOXY MATRIX PBFR

Test	Specification	Condition	Interval
HTOL	JA108	TA=125C, bias at 1.2X Nominal (not to exceed Max rated)	2016 hrs
HTSL	JESD22-A103	Ta= 150°C	2016 hrs
ELFR	AECQ100-008	TA=125C, bias at 1.2X Nominal (not to exceed Max rated)	48 hrs
PC	J STD 020A, JESD22-A113	IR reflow at 245C or 260C (pkg dependant)	
HAST + PC	JESD22-A110	Ta= 130°C, 85% RH, ~18.8 psig, bias = 100% of rated V or 100V max	96 hrs
TC + PC	JESD22-A104	Temp = -55°C to +150°C; for 1000 cycles (or equivalent)	1000 cyc
uHAST + PC	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
SAT	12MSB17722C	12MSB17722C	3 lots
DPA	AEC-Q101-004 Section 4	Post 1X TC	3 lots
CDPA BS	12MSB17722C	Post TC	3 lots
CDPA WP	12MSB17722C	Post TC	3 lots
CDPA X Section	12MSB17722C	Post TC	3 lots
CDPA Xray	12MSB17722C	Post TC	3 lots
Shift	12MSB17722C, AEC-Q100-009	Post 1X HTOL TC	3 lots
ESD	12MSB17722C	HBM	3 lots
ESD	12MSB17722C	CDM	3 lots
LU	JESD78 Class I, AEC Q100-004	-LU, +LU	3 lots

QV DEVICE NAME : NCV303LSN45T1G

PACKAGE : 0670 | TSOP 5 EPOXY MATRIX PBFR

Test	Specification	Condition	Interval
HTOL	JA108	TA=125C, bias at 1.2X Nominal (not to exceed Max rated)	2016 hrs
HTSL	JESD22-A103	Ta= 150°C	2016 hrs
ELFR	AECQ100-008	TA=125C, bias at 1.2X Nominal (not to exceed Max rated)	48 hrs
PC	J STD 020A, JESD22-A113	IR reflow at 245C or 260C (pkg dependant)	
HAST + PC	JESD22-A110	Ta= 130°C, 85% RH, ~18.8 psig, bias = 100% of rated V or 100V max	96 hrs
TC + PC	JESD22-A104	Temp = -55°C to +150°C; for 1000 cycles (or equivalent)	1000 cyc
uHAST + PC	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
SAT	12MSB17722C	12MSB17722C	3 lots
CDPA SAT Post 1X Stress	12MSB17722C	Post TC	3 lots
DPA	AEC-Q101-004 Section 4	Post 1X TC	3 lots
CDPA BS	12MSB17722C	Post TC	3 lots
CDPA WP	12MSB17722C	Post TC	3 lots



Initial Product/Process Change Notification

Document #: IPCN24820Z

Issue Date: 29 Sep 2022

CDPA X Section	12MSB17722C	Post TC	3 lots
CDPA Xray	12MSB17722C	Post TC	3 lots
Shift	12MSB17722C, AEC-Q100-009	Post 1X HTOL TC	3 lots
ESD	12MSB17722C	HBM	3 lots
ESD	12MSB17722C	CDM	3 lots
LU	JESD78 Class I, AEC Q100-004	-LU, +LU	3 lots

QV DEVICE NAME : NCV8690MN33T2G

PACKAGE : 0670 | DFN 6 3*3*.9MM WBC PBF

Test	Specification	Condition	Interval
HTOL	JA108	TA=125C, bias at 1.2X Nominal (not to exceed Max rated)	2016 hrs
HTSL	JESD22-A103	Ta= 150°C	2016 hrs
ELFR	AECQ100-008	TA=125C, bias at 1.2X Nominal (not to exceed Max rated)	48 hrs
PC	J STD 020A, JESD22-A113	IR reflow at 245C or 260C (pkg dependant)	
HAST + PC	JESD22-A110	Ta= 130°C, 85% RH, ~18.8 psig, bias = 100% of rated V or 100V max	96 hrs
TC + PC	JESD22-A104	Temp = -55°C to +150°C; for 1000 cycles (or equivalent)	1000 cyc
uHAST + PC	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
SAT	12MSB17722C	12MSB17722C	3 lots
CDPA SAT Post 1X Stress	12MSB17722C	Post TC	3 lots
DPA	AEC-Q101-004 Section 4	Post 1X TC	3 lots
CDPA BS	12MSB17722C	Post TC	3 lots
CDPA WP	12MSB17722C	Post TC	3 lots
CDPA X Section	12MSB17722C	Post TC	3 lots
CDPA Xray	12MSB17722C	Post TC	3 lots
Shift	12MSB17722C, AEC-Q100-009	Post 1X HTOL TC	3 lots
ESD	12MSB17722C	HBM	3 lots
ESD	12MSB17722C	CDM	3 lots
LU	JESD78 Class I, AEC Q100-004	-LU, +LU	3 lots

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
NCV2001SN2T1G	N/A	NCV8690MN33T2G
NCV2001SQ2T2G	N/A	NCV8690MN33T2G



Initial Product/Process Change Notification

Document #: IPCN24820Z

Issue Date: 29 Sep 2022

NCV2002SN1T1G	N/A	NCV2002SN2T1G
NCV2002SN2T1G	N/A	NCV2002SN2T1G
NCV2200AMUTBG	N/A	NCV8690MN33T2G
NCV2200SN1T1G	N/A	NCV2002SN2T1G
NCV2200SN2T1G	N/A	NCV2002SN2T1G
NCV2200SQ2T2G	N/A	NCV2002SN2T1G
NCV2202SN2T1G	N/A	NCV2002SN2T1G
NCV300LSN28T1G	N/A	NCV303LSN45T1G
NCV300LSN36T1G	N/A	NCV303LSN45T1G
NCV301LSN22T1G	N/A	NCV303LSN45T1G
NCV301LSN28T1G	N/A	NCV303LSN45T1G
NCV301LSN33T1G	N/A	NCV303LSN45T1G
NCV301LSN40T1G	N/A	NCV303LSN45T1G
NCV301LSN42T1G	N/A	NCV303LSN45T1G
NCV303LSN09T1G	N/A	NCV303LSN45T1G
NCV303LSN10T1G	N/A	NCV303LSN45T1G
NCV303LSN11T1G	N/A	NCV303LSN45T1G
NCV303LSN16T1G	N/A	NCV303LSN45T1G
NCV303LSN20T1G	N/A	NCV303LSN45T1G
NCV303LSN24T1G	N/A	NCV303LSN45T1G
NCV303LSN25T1G	N/A	NCV303LSN45T1G
NCV303LSN27T1G	N/A	NCV303LSN45T1G
NCV303LSN29T1G	N/A	NCV303LSN45T1G
NCV303LSN30T1G	N/A	NCV303LSN45T1G
NCV303LSN31T1G	N/A	NCV303LSN45T1G
NCV303LSN34T1G	N/A	NCV303LSN45T1G
NCV303LSN40T1G	N/A	NCV303LSN45T1G
NCV303LSN42T1G	N/A	NCV303LSN45T1G
NCV303LSN44T1G	N/A	NCV303LSN45T1G
NCV303LSN45T1G	N/A	NCV303LSN45T1G
NCV500SN18T1G	N/A	NCV500SN33T1G
NCV500SN28T1G	N/A	NCV500SN33T1G
NCV500SN33T1G	N/A	NCV500SN33T1G
NCV551SN15T1G	N/A	NCV551SN33T1G
NCV551SN18T1G	N/A	NCV551SN33T1G



Initial Product/Process Change Notification

Document #: IPCN24820Z

Issue Date: 29 Sep 2022

NCV551SN25T1G	N/A	NCV551SN33T1G
NCV551SN28T1G	N/A	NCV551SN33T1G
NCV551SN30T1G	N/A	NCV551SN33T1G
NCV551SN33T1G	N/A	NCV551SN33T1G
NCV551SN36T1G	N/A	NCV551SN33T1G
NCV551SN50T1G	N/A	NCV551SN33T1G
NCV553SQ30T1G	N/A	NCV551SN33T1G
NCV562SQ25T1G	N/A	NCV551SN33T1G
NCV562SQ33T1G	N/A	NCV551SN33T1G
NCV563SQ18T1G	N/A	NCV551SN33T1G
NCV563SQ33T1G	N/A	NCV551SN33T1G
NCV571MN10TBG	N/A	NCV551SN33T1G
NCV571MN12TBG	N/A	NCV551SN33T1G
NCV612SQ18T2G	N/A	NCV551SN33T1G
NCV612SQ37T2G	N/A	NCV551SN33T1G
NCV662SQ15T1G	N/A	NCV551SN33T1G
NCV662SQ27T1G	N/A	NCV551SN33T1G
NCV662SQ30T1G	N/A	NCV551SN33T1G
NCV662SQ50T1G	N/A	NCV551SN33T1G
NCV663SQ15T1G	N/A	NCV551SN33T1G
NCV663SQ25T1G	N/A	NCV551SN33T1G
NCV663SQ27T1G	N/A	NCV551SN33T1G
NCV663SQ33T1G	N/A	NCV551SN33T1G
NCV663SQ50T1G	N/A	NCV551SN33T1G
NCV7101SN1T1G	N/A	NCV2002SN2T1G
NCV7101SN2T1G	N/A	NCV2002SN2T1G
NCV8560MN150R2G	N/A	NCV8690MN33T2G
NCV8560MN330R2G	N/A	NCV8690MN33T2G
NCV8560SN180T1G	N/A	NCV8690MN33T2G
NCV8560SN250T1G	N/A	NCV8690MN33T2G
NCV8690MN33T2G	N/A	NCV8690MN33T2G
NCV8606MN50T2G	N/A	NCV8690MN33T2G
NCV8606MN30T2G	N/A	NCV8690MN33T2G
NCV8606MN25T2G	N/A	NCV8690MN33T2G
NCV8606MN15T2G	N/A	NCV8690MN33T2G



Initial Product/Process Change Notification

Document #: IPCN24820Z

Issue Date: 29 Sep 2022

NCV8605MNADJT2G	N/A	NCV8690MN33T2G
NCV8605MN33T2G	N/A	NCV8690MN33T2G
NCV8605MN30T2G	N/A	NCV8690MN33T2G
NCV8605MN28T2G	N/A	NCV8690MN33T2G
NCV8605MN25T2G	N/A	NCV8690MN33T2G
NCV8605MN18T2G	N/A	NCV8690MN33T2G
NCV8603SN33T1G	N/A	NCV8690MN33T2G
NCV8560SN350T1G	N/A	NCV8690MN33T2G
NCV8560SN330T1G	N/A	NCV8690MN33T2G
NCV8560SN280T1G	N/A	NCV8690MN33T2G
NCV8560SN130T1G	N/A	NCV8690MN33T2G
NCV8560MN500R2G	N/A	NCV8690MN33T2G
NCV663SQ28T1G	N/A	NCV551SN33T1G
NCV612SQ30T2G	N/A	NCV551SN33T1G
NCV571MN09TBG	N/A	NCV551SN33T1G
NCV563SQ30T1G	N/A	NCV551SN33T1G