

Final Product/Process Change Notification Document #:FPCN24832X Issue Date:09 Mar 2023

Title of Change:	External Solderable Top Metal fab process qualification at onsemi Aizu fab location.		
Proposed First Ship date:	14 Jun 2023 or earlier if approved by customer		
Contact Information:	Contact your local onsemi Sales Office or MohdHezri.AbuBakar@onsemi.com or Guo Kun Yeng <guokun.yeng@onsemi.com></guokun.yeng@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 songyong.sim@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:	There is no product marking change as a result of this change.		
Change Category:	Wafer Fab Change		
Change Sub-Category(s):	Material Change		
Sites Affected:			
onsemi Sites		External Foundry/Subcon Sites	
onsemi Aizu, Japan		None	

### Description and Purpose:

This is the final product change notification (FPCN) of IPCN24832X, announcing that onsemi is qualifying below changes on selected industrial qualified Orderable Part Numbers (OPNs) listed in this FPCN. Details changes as below:

	From	То	
Fab Site, external			
Solderable Top	onsemi Gresham	onsemi Aizu	
Metal			
Ag metal layer thickness	8.0kA	2.5kA	
thickness	0.004	2.384	

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



**Reliability Data Summary:** 

### QV DEVICE NAME: NRVTS1545EMFST1G RMS: S87154 + S87558 PACKAGE: DFN-5

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Tj= 175°C, 80% max rated V	1008 hrs	0/84
HTSL	JESD22-A103	Ta= 175°C	2016 hrs	0/82
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C, Pre IOL, TC, uHAST, H3TRB for surface mount pkgs only	-	-
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	30,000 cyc	0/84
TC	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/84
H3TRB	JESD22-A110	85°C, 85% RH, 18.8psig, bias	2016 hrs	0/84
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/84

### QV DEVICE NAME: NVTFS5116PLTAG RMS: S85097 PACKAGE: WDFN-8

Test	Specification	Condition		Results
HTRB	JESD22-A108	Tj= 175°C, 80% max rated V		0/84
HTGB	JESD22-A108	Tj= 175°C, 100% max rated Vgss		0/84
HTSL	JESD22-A103	Ta= 175°C		0/84
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C, Pre IOL, TC, uHAST, HAST for surface mount pkgs only	-	-
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	30000 cyc	0/84
TC	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/84
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	192 hrs	0/84
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/84



### QV DEVICE NAME: NRVTSA4100ET3G RMS: S85112 PACKAGE: SMA-2

Test	Specification	Condition		Results
HTRB	JESD22-A108	Tj= 175°C, 80% max rated V		0/83
HTSL	JESD22-A103	Ta= 175°C 2		0/84
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C, Pre IOL, TC, uHAST, H3TRB for surface mount pkgs only	-	-
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	30000 cyc	0/84
TC	JESD22-A104	Ta= -55°C to +150°C	1000 сус	0/84
H3TRB	JESD22-A110	85°C, 85% RH, 18.8psig, bias	1512 hrs	0/84
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/84

#### **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	
NTTFS5116PLTWG	QV1 + QV2 + QV3	
NTTFS5116PLTAG	QV1 + QV2 + QV3	
NTS12100MFST1G	QV1 + QV2 + QV3	

# Appendix A: Changed Products

## PCN#: FPCN24832X Issue Date: Mar 08, 2023

## DIKG: DIGI-KEY

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
NTTFS5116PLTWG		QV1	NA	
		+		
		QV2		
		+		
		QV3		
NTS12100MFST1G		QV1	NA	
		+		
		QV2		
		+		
		QV3		
NTTFS5116PLTAG		QV1	NA	
		+		
		QV2		
		+		
		QV3		