

## Initial Product/Process Change Notification Document #:IPCN23139XB

Issue Date:29 Jun 2022

Title of Change:	Qualification of onsemi Mountain Top, USA facility as an additional wafer fab location for PTNG Technology		
Proposed First Ship date:	01 Feb 2023 or earlier if approved by customer		
Contact Information:	Contact your local onsemi Sales Office or Yuna.Im@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.		
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 90 days prior to implementation of the change. In case of questions, contact < PCN.Support@onsemi.com>		
Marking of Parts/ Traceability of Change:	Q1 2023 or earlier if approved by customer		
Change Category:	Wafer Fab Change		
Change Sub-Category(s):	Manufacturing Site Addition		
Sites Affected:			
onsemi Sites		External Foundry/Subcon Sites	
onsemi Mountain Top, United States		None	

#### **Description and Purpose:**

This is an Initial Change Notification to inform customers of the qualification of onsemi Mountain Top, USA facility as an additional wafer fab location for PTNG Technology. All products listed here will be dual sourced from its current location, onsemi wafer fab in Bucheon, Korea.

	Before Change Description	After Change Description	
Fab site	ansami Rushaan Karaa	onsemi Bucheon, Korea	
Fab site	onsemi Bucheon, Korea	onsemi Mountain Top, United States	

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

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#### **Qualification Plan:**

**QV DEVICE NAME: NTMFS3D6N10MCLT1G** 

PACKAGE: S08FL

Test	Specification	Condition	Interval
1631	Specification	Condition	iliteivai
HTRB	JESD22-A108	Ta= <u>175</u> °C, 100% max rated V	<u>1008</u> hrs
HTGB	JESD22-A108	Ta= <u>175</u> °C, 100% max rated Vgss	<u>1008</u> hrs
HTSL	JESD22-A103	Ta= <u>175</u> °C	<u>1008</u> hrs
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = <u>2</u> min	<u>15000</u> cyc
TC	JESD22-A104	Ta= - <u>55</u> °C to + <u>150</u> °C	<u>1000</u> cyc
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias=80V	<u>192</u> hrs
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	<u>96</u> hrs
PC	J-STD-020 JESD-A113	MSL <u>1</u> @ <u>260</u> °C	
RSH	JESD22- B106	Ta = 265C, 10 sec	
SD	JSTD002	Ta = 245C, 5 sec	

#### **QV DEVICE NAME: NTTFS010N10MCLTAG**

PACKAGE: u8FL

Test	Specification	Condition	Interval
HTRB	JESD22-A108	Ta= <u>175</u> °C, 100% max rated V	<u>1008</u> hrs
HTGB	JESD22-A108	Ta= <u>175</u> °C, 100% max rated Vgss	<u>1008</u> hrs
HTSL	JESD22-A103	Ta= <u>175</u> °C	<u>1008</u> hrs
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = <u>2</u> min	<u>15000</u> cyc
TC	JESD22-A104	Ta= - <u>55</u> °C to + <u>150</u> °C	<u>1000</u> cyc
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias=80V	<u>192</u> hrs
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	<u>96</u> hrs
PC	J-STD-020 JESD-A113	MSL <u>1</u> @ <u>260</u> °C	
RSH	JESD22- B106	Ta = 265C, 10 sec	
SD	JSTD002	Ta = 245C, 5 sec	

Estimated date for qualification completion: 1 December 2022

#### **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	
STTFS015N10MCL	NTTFS010N10MCLTAG	

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STTFS010N10MCL	NTTFS010N10MCLTAG	
NTTFS010N10MCLTAG	NTTFS010N10MCLTAG	
NTMFS015N10MCLT1G	NTMFS3D6N10MCLT1G	
NTMFS005N10MCLT1G	NTMFS3D6N10MCLT1G	
NTMFS3D6N10MCLT1G	NTMFS3D6N10MCLT1G	

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### **Appendix A: Changed Products**

PCN#: IPCN23139XB Issue Date: Jun 29, 2022

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
STTFS015N10MCL		NTTFS010N10MCLTAG		
NTTFS010N10MCLTAG		NTTFS010N10MCLTAG		
NTMFS015N10MCLT1G		NTMFS3D6N10MCLT1G		
NTMFS005N10MCLT1G		NTMFS3D6N10MCLT1G		
NTMFS3D6N10MCLT1G		NTMFS3D6N10MCLT1G		
STTFS010N10MCL		NTTFS010N10MCLTAG		