



Final Product/Process Change Notification  
 Document #: FPCN22966XO  
 Issue Date: 13 Sep 2021

<b>Title of Change:</b>	Wafer Fab Capacity Expansion for Trench 6 MOSFET Technology at Global Foundries in New York, US.
<b>Proposed First Ship date:</b>	13 Dec 2021 or earlier if approved by customer
<b>Contact Information:</b>	Contact your local onsemi Sales Office or <a href="mailto:guokun.yeng@onsemi.com">guokun.yeng@onsemi.com</a>
<b>PCN Samples Contact:</b>	Contact your local onsemi Sales Office or < <a href="mailto:PCN.samples@onsemi.com">PCN.samples@onsemi.com</a> >. 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.
<b>Additional Reliability Data:</b>	Contact your local onsemi Sales Office or <a href="mailto:Robert.Baran@onsemi.com">Robert.Baran@onsemi.com</a>
<b>Type of Notification:</b>	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 <a href="mailto:PCN.Support@onsemi.com">PCN.Support@onsemi.com</a>
<b>Marking of Parts/ Traceability of Change:</b>	Material will be traceable with ONs lot trace code & tracking
<b>Change Category:</b>	Wafer Fab Change
<b>Change Sub-Category(s):</b>	Manufacturing Site Addition

**Sites Affected:**

onsemi Sites	External Foundry/Subcon Sites
None	Global Foundries East Fishkill, New York, United States

**Description and Purpose:**

This Product Change Notification, which is intended to add capacity for ON's 40V Trench 6 MOSFET technology products, is announcing the addition of the Global Foundries Fab located in New York, US, for the manufacturing of these products.

The changes include Global Foundries as an additional site for wafer fabrication, back grind and back metal, utilizing 300mm diameter wafers, as compared to our existing sites using 200mm wafers.

There is no change to the orderable part number.

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

	Before Change Description	After Change Description
<b>Wafer Fabrication Site</b>	onsemi Aizu, Japan onsemi, Gresham United States	onsemi Aizu, Japan onsemi, Gresham United States Global Foundries, US
<b>Wafer Diameter</b>	200mm (existing sites)	300mm (Global Foundries)
<b>Wafer Probe Site</b>	onsemi Seremban, Malaysia onsemi Bucheon, Korea	onsemi Seremban, Malaysia onsemi Bucheon, Korea Global Foundries, US
<b>Back Grind, Back Metal Site</b>	onsemi ISMF, Malaysia onsemi Bucheon, Korea	onsemi ISMF, Malaysia onsemi Bucheon, Korea Global Foundries, US



**Reliability Data Summary:**

QV DEVICE NAME: NVMF55C404NLT1G

RMS : 66099, 67744, 67566, 67986

PACKAGE : SO8FL-HE

Test	Specification	Condition	Interval	Result
HTRB	JESD22-A108	Ta=175°C, 100% max rated Vds	1008 hrs	0/231
HTGB	JESD22-A108	Ta=175°C, 100% max rated Vgss	1008 hrs	0/231
HTSL	JESD22-A103	Ta= 175°C	1008 hrs	0/231
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off =2 min	15000 cyc	0/231
TC	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/231
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
PC	J-STD-020 JESD-A113	MSL1 @ 260°C		

QV DEVICE NAME: NVTFS5C680NLTAG

RMS : 66103, 67569

PACKAGE : u8FL

Test	Specification	Condition	Interval	Result
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off =2 min	15000 cyc	0/231
TC	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/231
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
PC	J-STD-020 JESD-A113	MSL1 @ 260°C		

**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
NTTFS5C454NLTAG	NVMF55C404NLT1G, NVTFS5C680NLTAG

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**Appendix A: Changed Products**

**PCN#: FPCN22966XO**  
**Issue Date: Sep 12, 2021**

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Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
NTTFS5C454NLTAG		NVMFS5C404NLT1G, NVTFS5C680NLTAG		