



<b>Title of Change:</b>	Update Notice of FPCN22966XA - Reliability Data Update for QV Devices.			
<b>Proposed First Ship date:</b>	28 Jul 2020 or earlier if approved by customer			
<b>Contact Information:</b>	Contact your local ON Semiconductor Sales Office or <a href="mailto:guokun.yeng@onsemi.com">guokun.yeng@onsemi.com</a>			
<b>PCN Samples Contact:</b>	Contact your local ON Semiconductor 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 ON Semiconductor 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. ON Semiconductor 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			
<b>Sites Affected:</b>				
<b>ON Semiconductor Sites</b>		<b>External Foundry/Subcon Sites</b>		
None		Global Foundries East Fishkill, New York, United States		
<b>Description and Purpose:</b>				
This Update Notification is issued to provide update on Reliability data for qualification vehicle (QV) devices in FPCN22966XA issued in 29 April 2020.				
FPCN22966XA was issued to add capacity for ON's 30V Trench 6 MOSFET technology products, addition of the Global Foundries Fab located in New York, US, for the manufacturing of these products.				
<b>Reliability Data Summary:</b>				
<b>QV DEVICE NAME:</b> <u>(QV11) NTMFS4C020NT1G</u>				
<b>RMS</b> : <u>S59879 &amp; P66395</u>				
<b>PACKAGE</b> : <u>SO8FL (Assembly in Amkor Malaysia)</u>				
Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=150°C, 100% max rated Vds	1008 hrs	0/231
HTGB	JESD22-A108	Ta= 150°C, 100% max rated Vgs	1008 hrs	0/231
HTSL	JESD22-A103	Ta= 150°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	192 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		
RSH	JESD22- B106	Ta = 265C, 10 sec		0/30
SD	JSTD002	Ta = 245C, 10 sec		0/15

QV DEVICE NAME: (QV15) NTMFS4C020NT1GRMS : S63768 & P66397PACKAGE : SO8FL (Assembly in ON Seremban)

Test	Specification	Condition	Interval	Results
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	192 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		
RSH	JESD22- B106	Ta = 265C, 10 sec		0/30
SD	JSTD002	Ta = 245C, 10 sec		0/15

QV DEVICE NAME: (QV2) NTTFS4C50NTAGRMS : S59880 & P66398PACKAGE : u8FL

Test	Specification	Condition	Interval	Results
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	192 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		
RSH	JESD22- B106	Ta = 265C, 10 sec		
SD	JSTD002	Ta = 245C, 10 sec		

**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
NTMFS4C020NT3G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C022NT3G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C027NT3G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C028NT3G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C05NAT3G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C06NAT3G	NTMFS4C020NT1G, NTTFS4C50NTAG



NTMFS4C06NBT3G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C09NBT3G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C10NAT3G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C10NBT3G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C155NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C55NT3G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C59NT3G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C705NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C750NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C806NAT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C808NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTTFS4C50NTWG	NTMFS4C020NT1G, NTTFS4C50NTAG
NTTFS4C58NTAG	NTMFS4C020NT1G, NTTFS4C50NTAG
NTTFS4C58NTWG	NTMFS4C020NT1G, NTTFS4C50NTAG
NTTFS4C55NTAG	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C020NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C022NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C024NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C025NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C028NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C029NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C03NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C05NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C06NBT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C06NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C08NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C09NAT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C09NBT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C10NBT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C10NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C250NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C302NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C55NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4CS22NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG



NTTFS4C02NTAG	NTMFS4C020NT1G, NTTFS4C50NTAG
NTTFS4C05NTAG	NTMFS4C020NT1G, NTTFS4C50NTAG
NTTFS4C06NTAG	NTMFS4C020NT1G, NTTFS4C50NTAG
NTTFS4C08NTAG	NTMFS4C020NT1G, NTTFS4C50NTAG
NTTFS4C10NTAG	NTMFS4C020NT1G, NTTFS4C50NTAG
NTTFS4C50NTAG	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C01NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C01NT3G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C022NAT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C024NAT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C024NT3G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C025NT3G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C027NAT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C027NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C029NAT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C029NT3G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C03NT3G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C05NAT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C05NT3G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C06NAT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C06NT3G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C08NAT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C08NT3G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C09NAT3G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C09NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C09NT3G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C10NAT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C10NT3G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C290NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C324NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C50NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C59NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C760NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C800NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG



# Final Product/Process Change Notification

Document #:FPCN22966XA1

Issue Date:09 Jul 2020

NTMFS4C805NAT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C805NAT3G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C805NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C806NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C808NAT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C808NAT3G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C810NAT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C810NAT3G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C810NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C822NAT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C822NAT3G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4C822NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTMFS4CS20NT1G	NTMFS4C020NT1G, NTTFS4C50NTAG
NTTFS4C05NTWG	NTMFS4C020NT1G, NTTFS4C50NTAG
NTTFS4C06NTWG	NTMFS4C020NT1G, NTTFS4C50NTAG
NTTFS4C10NTWG	NTMFS4C020NT1G, NTTFS4C50NTAG



## Appendix A: Changed Products

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Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
NTMFS4C025NT1G		NTMFS4C020NT1G, NTTFS4C50NTAG		
NTMFS4C029NT1G		NTMFS4C020NT1G, NTTFS4C50NTAG		
NTMFS4C55NT1G		NTMFS4C020NT1G, NTTFS4C50NTAG		
NTTFS4C02NTAG		NTMFS4C020NT1G, NTTFS4C50NTAG		
NTTFS4C06NTAG		NTMFS4C020NT1G, NTTFS4C50NTAG		
NTTFS4C08NTAG		NTMFS4C020NT1G, NTTFS4C50NTAG		
NTMFS4C09NT1G		NTMFS4C020NT1G, NTTFS4C50NTAG		
NTMFS4C59NT1G		NTMFS4C020NT1G, NTTFS4C50NTAG		
NTMFS4C03NT1G		NTMFS4C020NT1G, NTTFS4C50NTAG		
NTMFS4C05NT1G		NTMFS4C020NT1G, NTTFS4C50NTAG		
NTMFS4C06NT1G		NTMFS4C020NT1G, NTTFS4C50NTAG		
NTMFS4C08NT1G		NTMFS4C020NT1G, NTTFS4C50NTAG		
NTMFS4C10NT1G		NTMFS4C020NT1G, NTTFS4C50NTAG		
NTMFS4C250NT1G		NTMFS4C020NT1G, NTTFS4C50NTAG		
NTTFS4C05NTAG		NTMFS4C020NT1G, NTTFS4C50NTAG		
NTTFS4C10NTAG		NTMFS4C020NT1G, NTTFS4C50NTAG		
NTTFS4C06NTWG		NTMFS4C020NT1G, NTTFS4C50NTAG		
NTTFS4C10NTWG		NTMFS4C020NT1G, NTTFS4C50NTAG		