

Final Product/Process Change Notification

Document #:FPCN22966XQ Issue Date:29 Oct 2021

Title of Change:	Wafer Fab Capacity Expansion for MV7 MOSFET Technology at Global Foundries in New York, US.			
Proposed First Ship date:	05 Feb 2022 or earlier if approved by customer			
Contact Information:	Contact your local onse	Contact your local onsemi Sales Office or Gapyeol.Kim@onsemi.com		
PCN Samples Contact:	Contact your local onsemi Sales Office or < PCN.samples@onsemi.com . 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 onse	Contact your local onsemi Sales Office or <u>Jacob.Saliba@onsemi.com</u>		
Type of Notification:	days prior to implemer onsemi will consider th	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:	Material will be traceable with ONs lot trace code & tracking			
Change Category:	Wafer Fab Change	Wafer Fab Change		
Change Sub-Category(s):	Manufacturing Site Add	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 onsemi 60V, 75V, 80V MV7 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, back metal and probe 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 result of this change.

	Before Change Description	After Change Description
Wafer Fabrication, Back Grind, Back Metal, Probe Site	onsemi Bucheon, Korea	onsemi Bucheon, Korea Global Foundries East Fishkill, New York, United States
Wafer Diameter	200mm (existing sites)	200mm (existing sites) 300mm (Global Foundries)

TEM001793 Rev. E Page 1 of 3



Final Product/Process Change Notification Document #:FPCN22966XQ

Issue Date:29 Oct 2021

Reliability Data Summary:

QV DEVICE NAME: FDD86569-F085(QV11)

RMS: 68916 PACKAGE: DPAK

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=175°C, 100% max rated V	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	MSL 1 @ 260°C		
RSH	JESD22- B106	Ta = 265C, 10 sec		0/30

QV DEVICE NAME: FDBL86361-F085(QV8)

RMS: 69063 PACKAGE: TOLL

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=175°C, 100% max rated V	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	MSL 1 @ 260°C		
RSH	JESD22- B106	Ta = 265C, 10 sec		0/30

TEM001793 Rev. E Page 2 of 3



Final Product/Process Change Notification Document #:FPCN22966XQ

Issue Date:29 Oct 2021

QV DEVICE NAME: FDP023N08B-F102(QV9)

RMS: 68946 PACKAGE: TO-220

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=150°C, 100% max rated V	1008 hrs	0/231
HTGB	JESD22-A108	Ta=150°C, 100% max rated Vgss	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	96 hrs	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
RSH	JESD22- B106	Ta = 265C, 10 sec		0/30

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	
FDP020N06B-F102	FDD86569-F085,FDP023N08B-F102
FDP023N08B-F102	FDBL86361-F085,FDP023N08B-F102
FDP053N08B-F102	FDBL86361-F085,FDP023N08B-F102
FDP032N08B-F102	FDBL86361-F085,FDP023N08B-F102
FDP030N06B-F102	FDD86569-F085,FDP023N08B-F102
FDP027N08B-F102	FDBL86361-F085,FDP023N08B-F102

TEM001793 Rev. E Page 3 of 3



Appendix A: Changed Products

PCN#: FPCN22966XQ

Issue Date: Oct 28, 2021

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
FDP020N06B-F102		FDD86569-F085,FDP023N08B-F102	NA	
FDP023N08B-F102		FDBL86361-F085,FDP023N08B-F102	NA	
FDP032N08B-F102		FDBL86361-F085,FDP023N08B-F102	NA	
FDP027N08B-F102		FDBL86361-F085,FDP023N08B-F102	NA	