



Final Product/Process Change Notification
 Document #:FPCN23593XB
 Issue Date:19 Nov 2021

Title of Change:	Qualify Bucheon 8" UNIFET2 for SPM7 OPNs using existing UNIFET2 process	
Proposed First Ship date:	26 Feb 2022 or earlier if approved by customer	
Contact Information:	Contact your local onsemi Sales Office or Daniel.Jeon@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 onsemi Sales Office or Jayoung.Hong@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:	Date Code.	
Change Category:	Wafer Fab Change	
Change Sub-Category(s):	Manufacturing Site Addition	
Sites Affected:		
onsemi Sites	External Foundry/Subcon Sites	
onsemi Bucheon, Korea	None	
Description and Purpose:		
	Before Change Description	After Change Description
Fab site addition	6inch onsemi Bucheon, Korea	6inch onsemi Bucheon, Korea 8inch onsemi Bucheon, Korea
There are no product material changes as a result of this change.		
There is no product marking change as a result of this change.		



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Reliability Data Summary:

Page 1 of 1		Industrial Module Component Qualification Summary						onsemi	
Supplier: ON Semiconductor Supplier PN: FSB70450, FSB70550 Product Description: SPM7 INV 500V 2.2ohm , 1.85ohm Supplier Fab info: BK Binch Supplier Assy info: Cebu, On semi Reason for Qual: Qual for Binch Unifet			Customer PN: NA General Specification: JESD22 Reliability Qualification Date: Sep. 2021 Family Type: SPM7						
#	Test	Stress Name	Reference	Test Conditions	Comments	# Lots	S.S.	Results Fail/Total	Comments/ Test Results
1	TEST	Pre and post stress electrical test	Device specification	Performed on surface mount devices prior to TC, AC, H3TRB or HAST, and IOL.	MSL3	All	All	0 Fails	
2	PC	Preconditioning	JESD22 A113			3	26	0/156	N/A. Nor for through hole type
3	EV	External Visual	JESD22 B101	Device construction, marking, and workmanship		3	all	0 fails	all samples
4	PV	Parametric Verification	Device specification	Tested to device specification requirements		3	all	0 fails	all samples
5	HTRB	High Temperature Reverse Bias	JESD22-A108	150oC Tj, 5vps & Vicc 100% bias, 1000hrs		3	26	0 fails	FSB70450 2lots + FSB705501 lot
7	TC	Temperature Cycling	JESD22 A104: Q101 appendix 6	-40oC to +125oC, t(dwell):10 min, 200 Cycles		3	26	0 fails	FSB70450 2lots + FSB705501 lot
8	HAST	Highly Accelerated Stress Test	JESD22 A110	130C/85%RH, ~18.8psig, 80% bias, 96 hours		3	26	0 fails	FSB70450 2lots + FSB705501 lot
10	ESD	ESD - CDM/HBM/MM	JESD22-A114	HBM		1	3	0 fails	Contact PE
11	ESD	ESD - CDM/HBM/MM	JESD22-C101	CDM		1	3	0 fails	Contact PE
Notes: 79075, 79085			NOT Recommended for Military, Medical or Aerospace Not for Automotive						

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
FSB70550	FSB70550, FSB70450
FSB70450	FSB70550, FSB70450
FSB70250	FSB70550, FSB70450