Initial Product/Process Change Notification

Document #:IPCN25811X
Issue Date:27 Sep 2023

Title of Change:	Additional Backgrind/Backmetal Site of onsemi Seremban, Malaysia in addition to JS Foundry Niigata, Japan for SOT223 and SC88 Product
Proposed First Ship date:	08 Apr 2024 or earlier if approved by customer
Contact Information:	Contact your local onsemi Sales Office or guokun.yeng@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:	Lot traceability will identify by datecode
Change Category:	Back Grind Back Metal
Change Sub-Category(s):	Manufacturing Site Transfer

Sites Affected:

onsemi Sites	**External Foundry/Subcon Sites**
onsemi, ISMF Malaysia	None

Description and Purpose:

This Product Change Notification is to notify customer that onsemi is adding capacity for back grind back metal process for Mosfet technology in SOT23 and SC88 package, addition of the onsemi ISMF site located in Seremban, Malaysia

	From	To
Back Grind Back Metal Site	JS Foundry	JS Foundry, onsemi ISMF

No change to orderable part number.

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

Qualification Plan:

QV DEVICE NAME: FDG6303N
RMS: S91927
PACKAGE: SC88

Test	Specification	Condition	Interval
HTGB	JESD22-A108	Tj = 150C, bias = 100% of rated V	1008 hours
HTRB	JESD22-A108	Tj = 150C, bias =100% of rated V (Not to exceed max rated)	1008 hours
PC	J STD 020, JESD22-A113	IR reflow at 245C or 260C (pkg dependant)	
HAST+PC	JESD22-A110	Temp = 130C, 85% RH, ~ 18.8 psig, bias = 80% of rated V or 100V max	96 hours
TC+PC	JESD22-A104	Temp = -55°C to +150°C; for 1000 cycles	1000 cycles
UHAST+ PC	JESD22-A118	Temp = 130C, RH=85%, ~ 18.8 psig	96 hours
IOL + PC	MIL STD750, M 1037 AEC Q101	Ta=+25°C, deltaTj=100°C max, 2 min= Ton=Toff (pkg dependent)	15000 cycles
SAT	12MSB17722C	12MSB17722C	
ED		12MRB19009C	

QV DEVICE NAME: BSS138-G
RMS: S91915
PACKAGE: SOT23

Test	Specification	Condition	Interval
HTGB	JESD22-A108	Tj = 150C, bias = 100% of rated V	1008 hours
HTRB	JESD22-A108	Tj = 150C, bias =100% of rated V (Not to exceed max rated)	1008 hours
PC	J STD 020, JESD22-A113	IR reflow at 245C or 260C (pkg dependant)	
HAST+PC	JESD22-A110	Temp = 130C, 85% RH, ~ 18.8 psig, bias = 80% of rated V or 100V max	96 hours
TC+PC	JESD22-A104	Temp = -55°C to +150°C; for 1000 cycles	1000 cycles
UHAST+ PC	JESD22-A118	Temp = 130C, RH=85%, ~ 18.8 psig	96 hours
IOL + PC	MIL STD750, M 1037 AEC Q101	Ta=+25°C, deltaTj=100°C max, 2 min= Ton=Toff (pkg dependent)	15000 cycles
SAT	12MSB17722C	12MSB17722C	
ED		12MRB19009C	

Estimated date for qualification completion: 31 December 2023

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
FDG6317NZ	FDG6303N, BSS138-G
FDG6301N	FDG6303N, BSS138-G
FDG6303N	FDG6303N, BSS138-G
BSS84	FDG6303N, BSS138-G

NDS0605	FDG6303N, BSS138-G
FDG6335N	FDG6303N, BSS138-G
FDG8850NZ	FDG6303N, BSS138-G
BSS138-G	FDG6303N, BSS138-G
FDG6322C	FDG6303N, BSS138-G
FDG6304P	FDG6303N, BSS138-G
FDG6321C	FDG6303N, BSS138-G
FDV305N	FDG6303N, BSS138-G
FDG6316P	FDG6303N, BSS138-G
FDG1024NZ	FDG6303N, BSS138-G
FDG6332C	FDG6303N, BSS138-G