



Initial Product/Process Change Notification

Document #:IPCN24715X

Issue Date:10 May 2022

Title of Change:	Replace Gold Wire with bare Copper Wire for MOSFET Products in onsemi Leshan, China	
Proposed First Ship date:	01 Dec 2022 or earlier if approved by customer	
Contact Information:	Contact your local onsemi Sales Office or York.Yu@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:	Traceability will be maintained by date code	
Change Category:	Assembly Change	
Change Sub-Category(s):	Material Change	
Sites Affected:		
onsemi Sites	External Foundry/Subcon Sites	
Leshan Phoenix Semiconductor, China	None	
Description and Purpose:		
onsemi is notifying customers to replace 0.8mil or 1.0mil Gold wire with 0.8mil bare Copper Wire, for their SOT23 and SC88 package Mosfet Products assembled at Leshan site, China.		
Purpose for changing: Today's market is driving for better electrical performance and higher thermal dissipation. Copper wire has higher thermal conductivity and lower resistivity which indicate better thermal dissipation.		
	From	To
Bond Wire	0.8mil or 1.0mil Gold wire	0.8mil Bare copper wire



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Qualification Plan:

QV DEVICE NAME: FDG6306P & 2N7002DW & FDV305N & BSS123-G

RMS: 83418 & L83426 & L83376 & L83369

PACKAGE: SC88 & SOT23

Test	Specification	Condition	Interval
HTRB	JESD22-A108	Ta=150°C, 100% max rated V	1008 hrs
HTGB	JESD22-A108	Ta=150°C, 100% max rated Vgss	1008 hrs
HTSL	JESD22-A103	Ta=150°C	1008 hrs
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15K cyc
TC	JESD22-A104	Ta= -65°C to +150°C	1000 cyc
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
PC	J-STD-020, JESD-A113	MSL 1 @ 260 °C	-
RSH	JESD22- B106	Ta = 265C, 10 sec	-
SD	JSTD002	Ta = 245C, 5 sec	-

Estimated date for qualification completion: 15 August 2022

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
FDG6306P	FDG6306P
FDG6308P	FDG6306P
FDG6316P	FDG6306P
FDG6317NZ	FDG6306P
FDG6332C	FDG6306P
FDG6335N	FDG6306P
FDV305N	FDV305N
BSS123-G	BSS123-G
BSS138-G	BSS123-G
BSS84	BSS123-G
FDG6301N	2N7002DW
FDG6303N	2N7002DW
FDG6304P	2N7002DW
FDG6321C	2N7002DW
FDG6322C	2N7002DW



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NDS0605	BSS123-G
NDS0610-G	BSS123-G
FDG1024NZ	FDG6306P
FDG8842CZ	2N7002DW
FDG8850NZ	2N7002DW
2N7002DW-G	2N7002DW
2N7002DW	2N7002DW
2N7002-G	BSS123-G

Appendix A: Changed Products

PCN#: IPCN24715X
Issue Date: May 09, 2022

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
FDG6306P		FDG6306P	NA	
FDG6316P		FDG6306P	NA	
FDG6317NZ		FDG6306P	NA	
FDG6332C		FDG6306P	NA	
FDG6335N		FDG6306P	NA	
FDV305N		FDV305N	NA	
BSS84		BSS123-G	NA	
FDG6301N		2N7002DW	NA	
FDG6303N		2N7002DW	NA	
FDG6304P		2N7002DW	NA	
FDG6321C		2N7002DW	NA	
FDG6308P		FDG6306P	NA	
NDS0605		BSS123-G	NA	
FDG6322C		2N7002DW	NA	
FDG1024NZ		FDG6306P	NA	
NDS0610-G		BSS123-G	NA	
FDG8850NZ		2N7002DW	NA	
FDG8842CZ		2N7002DW	NA	
2N7002DW		2N7002DW	NA	