



Final Product/Process Change Notification
 Document #:FPCN24715X
 Issue Date:20 Sep 2022

Title of Change:	Replace Gold Wire with bare Copper Wire for MOSFET Products in onsemi Leshan, China	
Proposed First Ship date:	27 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.	
Additional Reliability Data:	Contact your local onsemi Sales Office or c.l.yang@lps.com.cn	
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:	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	
onsemi Leshan, 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: 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



Reliability Data Summary:

QV DEVICE NAME: 2N7002DW, BSS123-G
 RMS#: L83426, L83376
 PACKAGE: SC88 & SOT23

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	2016 hrs	0/231
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	30K cyc	0/231
TC	JESD22-A104	Ta= -65°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	MSL 1 @ 260 °C	-	
RSH	JESD22- B106	Ta = 265C, 10 sec	-	0/30
SD	JSTD002	Ta = 245C, 5 sec	-	0/30

Electrical Characteristics Summary:

Electrical characteristics are not impacted, detail data summary can be provided upon customer requirement.

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
2N7002-G	2N7002DW
FDG8850NZ	2N7002DW
FDG8842CZ	2N7002DW
FDG1024NZ	2N7002DW
FDG6303N	2N7002DW
FDG6301N	2N7002DW
BSS138-G	BSS123-G
BSS123-G	BSS123-G
2N7002DW-G	2N7002DW
2N7002DW	2N7002DW

Appendix A: Changed Products

PCN#: FPCN24715X
Issue Date: Sep 19, 2022

DIKG: DIGI-KEY

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
FDG8850NZ		2N7002DW	NA	
FDG8842CZ		2N7002DW	NA	
FDG1024NZ		2N7002DW	NA	
FDG6303N		2N7002DW	NA	
FDG6301N		2N7002DW	NA	
2N7002DW		2N7002DW	NA	