ON Semiconductor®

Final Product/Process Change Notification

Document #:FPCN22659X1
Issue Date:11 Mar 2020

Title of Change:	**Update to FPCN22659X** - announcing that FDMS8050 and FDMS8050ET30 will no longer undergo the change described in FPCN22659X.
Proposed First Ship date:	11 Mar 2020 or earlier if approved by customer.
Contact Information:	Contact your local ON Semiconductor Sales Office or Ernesto.Villamor@onsemi.com
PCN Samples Contact:	Contact your local ON Semiconductor 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 ON Semiconductor Sales Office or KarenMae.Taping@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. ON Semiconductor 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:	Identified through date code
Change Category:	Assembly Change
Change Sub-Category(s):	Material Change

Sites Affected:

ON Semiconductor Sites	**External Foundry/Subcon Sites**
ON Semiconductor Cebu, Philippines	None

Description and Purpose:

This Update Notification is being issued announcing that **FDMS8050** and **FDMS8050ET30** will no longer undergo the change described in FPCN22659X, while the rest of list affected parts will proceed with the previously announced change.

FPCN22659X – previously announced that 1.3 mil gold to 1.0 mil Palladium Coated Copper (PCC) wire conversion for gate wire bonding on Power Quad Flatpack No-lead (PQFN) Packages qualification.

	Before Change Description	**After Change Description**
Bond Wire	1.3 mil Gold gate wire only	1.0 mil Palladium Coated Copper (PCC) gate wire only

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

Reliability Data Summary:

QV DEVICE NAME: FDMD82100
RMS# : F47535
PACKAGE : PQFN12 AU COMP HPBF

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=150°C, 80% max rated V	1008 hrs	0/77
HTGB	JESD22-A108	Ta=150°C, 100% max rated Vgss	1008 hrs	0/77
HTSL	JESD22-A103	Ta=150°C	1008 hrs	0/77
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C	-	0/308
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15000 cyc	0/77
TC	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/77
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	192 hrs	0/77
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/77
RSH	JESD22- B106	Ta = 265C	10 secs	0/30

QV DEVICE NAME: FDMS3606S
RMS# : F50287
PACKAGE : PQFN8 CUAU COMP HPBF

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=150°C, 80% max rated V	1008 hrs	0/77
HTGB	JESD22-A108	Ta=150°C, 100% max rated Vgss	1008 hrs	0/77
HTSL	JESD22-A103	Ta=150°C	1008 hrs	0/77
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C	-	0/308
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15000 cyc	0/77
TC	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/77
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	192 hrs	0/77
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/77
RSH	JESD22- B106	Ta = 265C	10 secs	0/30

QV DEVICE NAME:FDMS86255
RMS# :F50349
PACKAGE :PQFN8 AU SNGL HPBF

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=150°C, 80% max rated V	1008 hrs	0/77
HTGB	JESD22-A108	Ta=150°C, 100% max rated Vgss	1008 hrs	0/77
HTSL	JESD22-A103	Ta=150°C	1008 hrs	0/77
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C	-	0/308
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15000 cyc	0/77
TC	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/77
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	192 hrs	0/77
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/77
RSH	JESD22- B106	Ta = 265C	10 secs	0/30

QV DEVICE NAME: FDMC86260
RMS# : F51526
PACKAGE : PQFN8 AU SNGL HPBF

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=150°C, 80% max rated V	1008 hrs	0/77
HTGB	JESD22-A108	Ta=150°C, 100% max rated Vgss	1008 hrs	0/77
HTSL	JESD22-A103	Ta=150°C	1008 hrs	0/77
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C	-	0/308
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15000 cyc	0/77
TC	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/77
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	192 hrs	0/77
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/77
RSH	JESD22- B106	Ta = 265C	10 secs	0/30

Electrical Characteristics Summary:

There's no significant impact on Electrical Characteristic. The leakage and RDSon shoulder to shoulder performance are comparable. All readings are meeting the spec 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
FDMC86340	FDMC86260
FDPC8011S	FDMC86260
FDMS86152	FDMS86255
FDMS86202	FDMS86255
FDMS86204	FDMS86255
FDMS86255	FDMS86255
FDMS86350	FDMS86255
FDMS86550	FDMS86255
FDMS3604S	FDMS3606S
FDMC86012	FDMC86260
FDMC86570L	FDMC86260
FDMC012N03	FDMC86260
FDMC86160	FDMC86260
FDMC86260	FDMC86260
FDMC86260ET150	FDMC86260
FDPC8012S	FDMC86260
FDPC8013S	FDMC86260
FDMC86259P	FDMC86260
FDMC8360L	FDMC86260
FDMD8280	FDMD82100
FDMD82100	FDMD82100
FDMS86150A	FDMS86255
FDMS8050ET30	FDMS86255
FDMS86255ET150	FDMS86255
FDMS86350ET80	FDMS86255
FDMS86550ET60	FDMS86255
FDMS8050	FDMS86255
FDMS8350L	FDMS86255
FDMS86150	FDMS86255

FDMS86150ET100	FDMS86255
FDMS3660S	FDMS3606S
FDMS3664S	FDMS3606S
FDMS3668S	FDMS3606S
FDMS3669S	FDMS3606S
FDMS3669S-SN00345	FDMS3606S
FDMS3660AS	FDMS3606S
FDMC8010	FDMC86260
FDMS3606S	FDMS3606S
FDMC8010ET30	FDMC86260
FDMC86160ET100	FDMC86260