



Initial Product/Process Change Notification

Document #: IPCN24938X

Issue Date: 30 Sep 2022

Title of Change:	Au- bare Cu wire conversion SOT223 package.	
Proposed First Ship date:	28 Apr 2023 or earlier if approved by customer	
Contact Information:	Contact your local onsemi Sales Office or Ernesto.Villamor@onsemi.com or Joseph.Mendoza@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:	Identification through date code cut off.	
Change Category:	Assembly Change	
Change Sub-Category(s):	Material Change	
Sites Affected:		
onsemi Sites	External Foundry/Subcon Sites	
onsemi Cebu, Philippines	None	
Description and Purpose:		
Material changes from Au – bare Cu of 1.5mil and 2.0 mils wire size. Standardization of bonding wire uses in SOT223 package.		
	Before Change Description	After Change Description
Bond Wire	1.5 and 2.0 mils Au wire	1.5 and 2.0 mils bare Cu wire
There is no product marking change as a result of this change.		

Qualification Plan:

QV DEVICE NAME: NDT3055

RMS: 86079

PACKAGE: F790 | SOT223 4L AU SNGL PBF)

Test	Specification	Condition	Interval
HTRB	JESD22-A108	Ta= 150°C, 80% 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
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C	
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15,000 cyc
TC	JESD22-A104	Ta= -55 C to + 150°C	1000 cyc
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	192 hrs
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
RSH	JESD22- B106	Ta = 265°C, 10 sec Required for through hole devices only	
SD	JSTD002	Ta = 245°C, 5 sec	

QV DEVICE NAME: FDT86256

RMS: FDT86256

PACKAGE: F797 | SOT223 4L AU SNGL HPBF

Test	Specification	Condition	Interval
HTRB	JESD22-A108	Ta= 150°C, 80% 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
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C	
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15,000 cyc
TC	JESD22-A104	Ta= -55 C to + 150°C	1000 cyc
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	192 hrs
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
RSH	JESD22- B106	Ta = 265°C, 10 sec Required for through hole devices only	
SD	JSTD002	Ta = 245°C, 5 sec	

Estimated date for qualification completion: **23 December 2022**



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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
FDT458P	FDT86256
FDT86256	FDT86256
NDT452AP	NDT3055
NDT451AN	NDT3055
NDT3055L	NDT3055
NDT3055	NDT3055
NDT014L	NDT3055
NDT014	NDT3055