



Final Product/Process Change Notification

Document #:FPCN24938X

Issue Date: 30 May 2023

Title of Change:	Au to bare Cu wire conversion for SOT223 package.	
Proposed First Ship date:	29 Sep 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.	
Additional Reliability Data:	Contact your local onsemi Sales Office or Aileen.Allado@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. 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:	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:		
This FPCN is to notify customers of the change from Au to bare Cu wire for 1.5mils and 2.0 mils wire size in order to standardize the bonding wire used in SOT223 package.		
	From	To
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.		



Final Product/Process Change Notification

Document #:FPCN24938X

Issue Date: 30 May 2023

Reliability Data Summary:

QV DEVICE NAME: NDT3055

RMS: F86079

PACKAGE: SOT223

Test	Specification	Condition	Interval	Results
High Temperature Reverse Bias	JESD22-A108	Ta=150°C, 80% max rated V	1008 hrs	0/231
High Temperature Gate Bias	JESD22-A108	Ta=150°C, 100% max rated Vgss	1008 hrs	0/231
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hrs	0/231
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260°C		0/231
Intermittent Operating Life	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15000 cyc	0/231
Temperature Cycling	JESD22-A104	Ta= -55°C to + 150°C	1000 cyc	0/231
Highly Accelerated Stress Test	JESD22-A110	130°C, 85% RH, 18.8psig, bias	192 hrs	0/231
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
Resistance to Solder Heat	JESD22- B106	Ta = 265°C, 10 sec Required for through hole devices only		0/90

QV DEVICE NAME: FDT86256

RMS: F86164

PACKAG: SOT223

Test	Specification	Condition	Interval	Results
High Temperature Reverse Bias	JESD22-A108	Ta=150°C, 80% max rated V	1008 hrs	0/231
High Temperature Gate Bias	JESD22-A108	Ta=150°C, 100% max rated Vgss	1008 hrs	0/231
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hrs	0/231
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260°C		0/231
Intermittent Operating Life	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15000 cyc	0/231
Temperature Cycling	JESD22-A104	Ta= -55°C to + 150°C	1000 cyc	18/231
Highly Accelerated Stress Test	JESD22-A110	130°C, 85% RH, 18.8psig, bias	192 hrs	0/231
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	3/231
Resistance to Solder Heat	JESD22- B106	Ta = 265°C, 10 sec Required for through hole devices only		0/90



Final Product/Process Change Notification

Document #:FPCN24938X

Issue Date: 30 May 2023

Electrical Characteristics Summary:

Electrical characteristics are not impacted.

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

Appendix A: Changed Products

PCN#: FPCN24938X
Issue Date: May 30, 2023

DIKG: DIGI-KEY

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
NDT014		NDT3055	NA	
NDT3055		NDT3055	NA	
NDT3055L	NDT3055LTR-ND	NDT3055	NA	
NDT451AN	NDT451ANTR-ND	NDT3055	NA	
FDT458P		FDT86256	NA	
FDT86256		FDT86256	NA	
NDT452AP		NDT3055	NA	
NDT014L		NDT3055	NA	