Initial Product/Process Change Notification

Document #: IPCN24870Z
Issue Date: 29 Sep 2022

Title of Change:	Dual source of TOLL package to ATX WEIHAI, China (ATXWH).
Proposed Changed Material First Ship Date:	01 Sep 2023 or earlier if approved by customer
Current Material Last Order Date:	N/A *Orders received after the Current Material Last Order Date expiration are to be considered as orders for new changed material as described in this PCN. Orders for current (unchanged) material after this date will be per mutual agreement and current material inventory availability*.
Current Material Last Delivery Date:	N/A *The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory*
Product Category:	Active components – Discrete components
Contact information:	Contact your local onsemi Sales Office or Daryl.Cruz@onsemi.com
PCN Samples Contact:	Contact your local onsemi Sales Office to place sample order. Sample requests are to be submitted no later than 45 days after publication of this change notification. 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 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 6 months prior to implementation of the change. In case of questions, contact <PCN.Support@onsemi.com>.

Change Category

Category	**Type of Change**
Test Flow	Move of all or part of electrical wafer test and/or final test to a different location/site/subcontractor
Equipment	Production from a new equipment/tool which uses the same basic technology (replacement equipment or extension of existing equipment pool) without change of process.
Process - Assembly	Move of all or part of assembly to a different location/site/subcontractor., Change of mold compound, Change in process technology (e.g., die attach, bonding, moulding, plating, trim and form, lead frame preperation, …), Change of direct material supplier

Description and Purpose:

This is the Initial Notification announcing the plan to qualify ATX WEIHAI, China (ATXWH) as an additional Assembly and Test Operations manufacturing site of H−PSOF8L (TOLL) packaged products listed below.

Upon the Final Product Change Notification (FPCN) expiry, TOLL products will be processed at ATXWH under new part number using ATXWH's Bill of Material and parts processed at onsemi Cebu, Philippines will continue to be ordered under current part number (OPN).

	Before	After	
Assembly	onsemi Cebu, Philippines	onsemi Cebu, Philippines	ATX Weihai, China
Leadframe	LF NA PackTypeL CKFC STAMPED	LF NA PackTypeL CKFC STAMPED	TOLL T-post Ni/NiP Plating (Bondtron)
Adhesion Promoter	DA PRMTR AP8000	DA PRMTR AP8000	Fujifilm QZ3289
Mold Compound	CEL-9240HF 10LS	CEL-9240HF 10LS	EME-G700LH
Case outline #	100CU	100CU	100BQ
Site code Marking	D	D	S
Final Test	onsemi Cebu, Philippines	onsemi Cebu, Philippines	ATX Weihai, China

Reason / Motivation for Change:	Source/Supply/Capacity Changes Process/Materials Change
Anticipated impact on fit, form, function, reliability, product safety or manufacturability:	The device will be qualified and validated based on the same Product Specification. No anticipated impacts.

Sites Affected:

onsemi Sites	**External Foundry/Subcon Sites**
None	ATX WEIHAI, China (ATXWH)

Marking of Parts/ Traceability of Change:	Products from ATXWH will be marked with site code "S" prior to date code while Cebu has "D" site code on the marking

Reliability Data Summary:

QV DEVICE NAME: FDBL86361-F085
PACKAGE: TOLL

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	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	96 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: NVBLS0D5N04C
PACKAGE: TOLL

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	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	96 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: FDBL86062-F085
PACKAGE: TOLL

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	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	96 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	

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****.*

Current Part Number (onsemi Cebu Part Number)	New Part Number (ATXWH Part Number)	Qualification Vehicle
NVBLS0D5N04CTXG	NVBLS0D5N04CTXGAW	NVBLS0D5N04CTXG
FDBL9401-F085T6	FDBL9401-F085T6AW	NVBLS0D5N04CTXG
FDBL9406-F085T6	FDBL9406-F085T6AW	NVBLS0D5N04CTXG
FDBL9403-F085T6	FDBL9403-F085T6AW	NVBLS0D5N04CTXG
FDBL86062-F085	FDBL86062-F085AW	FDBL86062-F085
FDBL86063-F085	FDBL86063-F085AW	FDBL86062-F085
FDBL86066-F085	FDBL86066-F085AW	FDBL86062-F085
FDBL86366-F085	FDBL86366-F085AW	FDBL86361-F085
FDBL86363-F085	FDBL86363-F085AW	FDBL86361-F085
FDBL86361-F085	FDBL86361-F085AW	FDBL86361-F085

Appendix A: Changed Products

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
NVBLS0D5N04CTXG		NVBLS0D5N04CTXG	NVBLS0D5N04CTXGAW	
FDBL9406-F085T6		NVBLS0D5N04CTXG	FDBL9406-F085T6AW	
FDBL9403-F085T6		NVBLS0D5N04CTXG	FDBL9403-F085T6AW	
FDBL86062-F085		FDBL86062-F085	FDBL86062-F085AW	
FDBL86063-F085		FDBL86062-F085	FDBL86063-F085AW	
FDBL86066-F085		FDBL86062-F085	FDBL86066-F085AW	
FDBL86366-F085		FDBL86361-F085	FDBL86366-F085AW	
FDBL86363-F085		FDBL86361-F085	FDBL86363-F085AW	
FDBL9401-F085T6		NVBLS0D5N04CTXG	FDBL9401-F085T6AW	
FDBL86361-F085		FDBL86361-F085	FDBL86361-F085AW	