

Title of Change:	TOLL packages alternative option ATX WEIHAI, China (ATXWH).
Effective date:	15 Feb 2024
Contact information:	Contact your local onsemi Sales Office or Daryl.Cruz@onsemi.com
Type of notification:	This Product Bulletin is for notification purposes only. onsemi will proceed with implementation of this change upon publication of this Product Bulletin.
Change Category:	Test Change, Assembly Change
Change Sub-Category(s):	Manufacturing Site Addition

Sites Affected:

onsemi Sites	External Foundry/Subcon Sites
None	ATX WEIHAI, China

Description and Purpose:

This Product Bulletin is the follow up of IPCN24870Z announcing ATX WEIHAI, China (ATXWH) has been qualified as an additional Assembly and Test Operations manufacturing site of H-PSOF8L (TOLL) packages as listed below.

TOLL products processed at ATXWH will use ATXWH Bill of Material as shown below and can be ordered using the new part numbers. Parts processed at onsemi Cebu, Philippines can continue to be ordered under the existing OPN.

The BOM for each assembly site is shown below.

	Current BOM	Additional BOM
Assembly	onsemi Cebu, Philippines	ATX Weihai, China
Lead frame	LF NA PackTypeL CKFC STAMPED	TOLL T-post Ni/NiP Plating
Adhesion Promoter	DA PRMTR AP8000	DA PRMTR AP8000
Die attach solder	95.5Pb2Sn2.5Ag	95.5Pb2Sn2.5Ag
Bonding wire	Aluminium wire 5mil & 20mil	Aluminium wire 5mil & 20mil
Mold Compound	CEL-9240HF 10LS	EME-G700LH
Case outline #	100CU	100BQ
Final Test	onsemi Cebu, Philippines	ATX Weihai, China

Reliability Data Summary:

QV DEVICE NAME: FDBL86361-F085

PACKAGE: TOLL

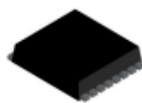
Test	Specification	Condition	Interval	Results
High Temperature Reverse Bias	JESD22-A108	Ta=175°C, 100% max rated V	1008 hrs	0/231
High Temperature Gate Bias	JESD22-A108	Ta=175°C, 100% max rated Vgss	1008 hrs	0/231
High Temperature Storage Life	JESD22-A103	Ta= 175°C	1008 hrs	0/231
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260 °C, Pre IOL, TC, uHAST, HAST for surface mount pkgs only		0/924
Intermittent Operating Life	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15,000 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	96 hrs	0/231
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
Physical Dimensions	JESD22-B120			0/30

QV DEVICE NAME: FDBL86062-F085

PACKAGE: TOLL

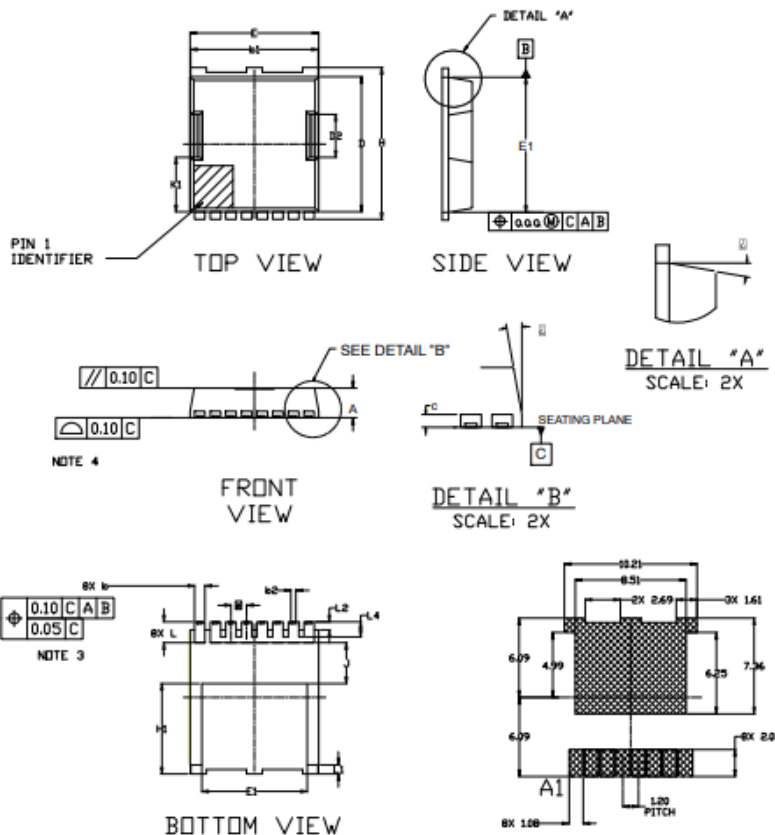
Test	Specification	Condition	Interval	Results
High Temperature Reverse Bias	JESD22-A108	Ta=175°C, 100% max rated V	1008 hrs	0/231
High Temperature Gate Bias	JESD22-A108	Ta=175°C, 100% max rated Vgss	1008 hrs	0/231
High Temperature Storage Life	JESD22-A103	Ta= 175°C	1008 hrs	0/231
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260 °C, Pre IOL, TC, uHAST, HAST for surface mount pkgs only		0/924
Intermittent Operating Life	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15,000 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	96 hrs	0/231
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
Physical Dimensions	JESD22-B120			0/30

Case Outline:



H-PSOF8L 9.90x10.38x2.30
CASE 100BQ
ISSUE O

DATE 20 SEP 2022



NOTES:

- DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 1994.
- CONTROLLING DIMENSION: MILLIMETERS
- DIMENSION b APPLIES TO PLATED TERMINAL AND IS MEASURED BETWEEN 0.15 AND 0.30 MM FROM THE TERMINAL TIP.
- PROFILE TOLERANCE APPLIES TO THE EXPOSED PAD AS WELL AS THE TERMINALS.
- DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH, PROTRUSIONS, OR GATE BURRS.
- SEATING PLANE IS DEFINED BY THE TERMINALS. A1 IS DEFINED AS THE DISTANCE FROM THE SEATING PLANE TO THE LOWEST POINT ON THE PACKAGE BODY.
- A VISUAL INDICATOR FOR PIN 1 MUST BE LOCATED IN THIS AREA.

DIM	MIN.	NOM.	MAX.
A	2.20	---	2.40
b	0.70	---	0.90
b1	9.70	---	9.90
b2	0.42	---	0.50
c	0.40	---	0.60
D	10.28	---	10.58
D2	3.10	3.30	3.50
E	9.70	9.90	10.10
E1	7.90	8.10	8.30
e	1.20 BSC		
H	11.48	11.68	11.880
H1	6.75	6.95	7.15
N	B		
J	3.00	3.15	3.30
K1	3.98	4.18	4.38
L	1.40	1.60	1.80
L1	0.60	0.70	0.80
L2	0.50	0.60	0.70
L4	1.00	1.15	1.30
Ø	4*	7*	10*

Affected Part Numbers:

Current Part Number (Cebu)	New Part Number (ATX WH)	Qual Vehicle
FDBL86361-F085	FDBL86361-F085AW	FDBL86361-F085
FDBL86363-F085	FDBL86363-F085AW	FDBL86361-F085
FDBL86366-F085	FDBL86366-F085AW	FDBL86361-F085
FDBL86062-F085	FDBL86062-F085AW	FDBL86062-F085
FDBL86063-F085	FDBL86063-F085AW	FDBL86062-F085
FDBL86066-F085	FDBL86066-F085AW	FDBL86062-F085

List of Affected Standard 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**](#).

FDBL86361-F085	FDBL86363-F085	FDBL86366-F085
FDBL86062-F085	FDBL86063-F085	FDBL86066-F085