Product Change Notification: ALAN-15XDFJ812

Date:

06-Jun-2025

Product Category:

Inductive Position Sensors

Notification Subject:

CCB 7159 Final Notice: Qualification of 8008MD as a new die attach material for selected LX34070, LX3302A, LX34050 and LX34311 device families available in 14L TSSOP (4.4mm) package.

Affected CPNs:

ALAN-15XDFJ812_Affected_CPN_06062025.pdf
ALAN-15XDFJ812_Affected_CPN_06062025.csv

PCN Status: Final Notification

PCN Type: Manufacturing Change

Microchip Parts Affected: Please open one of the files found in the Affected CPNs section.
Note: For your convenience Microchip includes identical files in two formats (.pdf and .xls)

Description of Change: Qualification of 8008MD as a new die attach material for selected LX34070, LX3302A, LX34050 and LX34311 device families available in 14L TSSOP (4.4mm) package.

Pre and Post Summary Changes:

	Pre Change	**Post Change**
Assembly Site	Microchip Technology Thailand (Branch) (MMT)	Microchip Technology Thailand (Branch) (MMT)
Wire Material	Au	Au
Die Attach Material	2200D	8008MD
Molding Compound Material	G600V	G600V

Lead-Frame Material	C7025	C7025

Impacts to Datasheet: None

Change Impact: None

Reason for Change: To improved manufacturability by qualifying 8008MD as a new die attach material.

Change Implementation Status: In Progress

Estimated First Ship Date: 15 July 2025 (date code: 2529)

Note Below EFSD: Note: Please be advised that after the estimated first ship date customers may receive pre and post change parts.

Timetable Summary:

	September 2024					**>**	**June 2025**				**July 2025**				
Work Week	36	37	38	39	40		23	24	25	26	27	28	29	30	31
Initial PCN Issue Date			X												
Qual Report Availability							X								
Final PCN Issue Date							X								
Estimated Implementation Date													X		

Method to Identify Change: Traceability Code

Qualification Report: Please open the attachments included with this PCN labeled as PCN_#_Qual_Report.

Revision History: September 18, 2024: Issued initial notification.
September 19, 2024: Re-issued initial PCN to correct the die attach pre-change material from 3280 to 2200D.
November 08, 2024: Re-issued initial PCN to update affected parts list to add CPN LX3302AQPW-TR-C01 and remove LX34211QPW-TR, LX34211QPW-TR-VAO, LX3301AQPW and LX3301AQPW-

TR catalog part numbers. Revised "Notification Subject", "Description of Change" and “Qualification Plan” title to reflect the removed parts numbers. Updated Pre and Post Change Summary table to include Lead-frame paddle size and DAP Surface Prep. Added Pre and post change comparison for the Lead-frame drawing.
February 19, 2025: Re-issued initial PCN. Updated Pre and Post Change Summary table by removing the Lead-frame paddle size and DAP Surface Prep, as there no changes to these. Removed Pre and post change comparison for the Lead-frame drawing. Updated the affected parts list.
June 06, 2025: Issued final notification. Attached the Qualification Report. Provided estimated first ship date to be on July 15, 2025.

Note: The change described in this PCN does not alter Microchip's current regulatory compliance regarding the material content of the applicable product.

Attachments:

PCN_ALAN-15XDFJ812_Qual_Report.pdf

Please contact your local **Microchip sales office** with questions or concerns regarding this notification.

Terms and Conditions:

If you wish to receive Microchip PCNs via email please register for our PCN email service at our **PCN home page** select register then fill in the required fields. You will find instructions about registering for Microchips PCN email service in the **PCN FAQ** section.

If you wish to change your PCN profile, including opt out, please go to the **PCN home page** select login and sign into your myMicrochip account. Select a profile option from the left navigation bar and make the applicable selections.

ALAN-15XDFJ812 - CCB 7159 Final Notice: Qualification of 8008MD as a new die attach material for selected LX34070, LX3302A, LX34050 and LX34311 device families available in 14L TSSOP (4.4mm) package.

Affected Catalog Part Numbers (CPN)

LX3302AQPW

LX3302AQPW-EASY

LX3302AQPW-TR

LX3302AQPW-TR-C01

LX3302AQPW-TR-EASY

LX3302AQPW-TR-GM

LX34050QPW

LX34050QPW-TR

LX34050QPW-TR-VAO

LX34050QPW-VAO

LX34070AT-H/ST

LX34070AT-H/STVAO

LX34070-H/ST

LX34070-H/STVAO

LX34070T-H/ST

LX34070T-H/STVAO

LX34311T-H/ST

LX34311T-H/STVAO

QUALIFICATION REPORT SUMMARY
RELIABILITY LABORATORY

PCN#: ALAN-15XDFJ812

Date:
May 23, 2025

Qualification of 8008MD as a new die attach material for selected LX34070, LX3302A, LX34050 and LX34311 device families available in 14L TSSOP (4.4mm) package.

MICROCHIP

PACKAGE QUALIFICATION REPORT

Purpose	Qualification of 8008MD as a new die attach material for selected LX34070, LX3302A, LX34050 and LX34311 device families available in 14L TSSOP (4.4mm) package.
CN	E000261690
QUAL ID	R2500314 Rev. A
MP CODE	VXBC19D4XVA2
Part No.	LX34050QPW-VAO
Bonding No.	BD-002533 Rev.02
CCB No.	7159
Package	
Type	14L TSSOP
Package size	4.4mm
Lead Frame	
Paddle size	118 x 153mils
Material	C7025
Surface	BARE CU
Process	Stamped
Lead Lock	No
Part Number	10101406
Treatment	BOT
Material	
Epoxy	8008MD
Wire	Au wire
Mold Compound	G600V
Plating Composition	Matte Sn

MICROCHIP

PACKAGE QUALIFICATION REPORT

Manufacturing Information

Assembly Lot No.	Wafer Lot No.	Date Code
MMT-254900478.000	XFML925463143.100	2510H7P
MMT-254900916.000	XFML925463143.100	2510M4P
MMT-254900917.000	XFML925463143.100	2510M4Y

Result [X] Pass [ ] Fail [ ] _____

14L TSSOP (4.4mm) assembled by MMT pass reliability test per QCI-39000. This package was qualified the Moisture/Reflow Sensitivity Classification Level 1 at 260°C reflow temperature per IPC/JEDEC J-STD-020E standard.

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS	Result	Remarks
Precondition Prior Perform Reliability Tests (At MSL Level 1)	**Electrical Test:** +25°C and 150°C System: ETS88	JESD22-A113	693(0)	0/693	Pass	Good Devices
	Bake 150°C, 24 hrs. System: CHINEE 85°C/85%RH Moisture Soak 168 hrs. System: TABAI ESPEC Model PR-3SPH	JIP/ IPC/JEDEC J-STD-020E		693 693		
	3x Convection-Reflow 265°C max System: Vitronics Soltec MR1243			693		
	Electrical Test: +25°C and 150°C System: ETS88		693(0)	0/693	Pass	

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
Temp Cycle	**Stress Condition:** -55°C to +150°C, 1500 Cycles System: TABAI ESPEC TSA-70H	JESD22-A104		231		Parts had been pre-conditioned at 260°C
	Electrical Test: +25°C and 150°C System: ETS88		231(0)	0/231	Pass	77 units / lot
	Bond Strength: Wire Pull (>4.00 grams)		15(0)	0/15	Pass	
UNBIASED-HAST	**Stress Condition:** +130°C/85%RH, 96 hrs. System: HAST 6000X	JESD22-A118		231		Parts had been pre-conditioned at 260°C
	Electrical Test: +25°C System: ETS88		231(0)	0/231	Pass	77 units / lot
HAST	**Stress Condition:** +130°C/85%RH, 96 hrs. **Bias Volt:** 6.0 Volts System: HAST 6000X	JESD22-A110		231		Parts had been pre-conditioned at 260°C
	Electrical Test: +25°C and 150°C System: ETS88		231(0)	0/231	Pass	77 units / lot

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
High Temperature Storage Life	**Stress Condition:** Bake 175°C, 1000 hrs. System: TPS Bake Oven	JESD22-A103		45		45 units
	Electrical Test: +25°C and 150°C System: ETS88		45(0)	0/45	Pass	
Solderability Temp 215°C	**Steam Aging:** Temp 93°C,8Hrs System: SAS-3000 **Solder Dipping:** Solder Temp.215°C **Solder material:** SnPb Sn63, Pb37 System: ERSA RA 2200D **Visual Inspection:** External Visual Inspection	J-STD-002	22(0)	22 22 0/22	Pass	
Solderability Temp 245°C	**Steam Aging:** Temp 93°C,8Hrs System: SAS-3000 **Solder Dipping:** Solder Temp.245°C **Solder material:** Pb Free Sn 95.5Ag3.9 Cu0.6 System: ERSA RA 2200D **Visual Inspection**: External Visual Inspection	J-STD-002	22(0)	22 22 0/22	Pass	
Bond Strength Data Assembly	Wire Pull (>4.00 grams)	Mil. Std. 883-2011	30(0) Wires	0/30	Pass	
	Bond Shear (>18.00 grams)	CDF-AEC-Q100-001	30(0) Bonds	0/30	Pass	