Product Change Notification: ALAN-11HRNL205

Date:

27-May-2025

Product Category:

Capacitive Touch Sensors

Notification Subject:

CCB 7040 Final Notice: Qualification of MMT as an additional assembly site for CAP1106-1-AIA-TR and CAP1133-1-AIA-TR catalog part numbers (CPN) available in 10L VDFN (3x3x0.9mm) package.

Affected CPNs:

ALAN-11HRNL205_Affected_CPN_05272025.pdf
ALAN-11HRNL205_Affected_CPN_05272025.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 MMT as an additional assembly site for CAP1106-1-AIA-TR and CAP1133-1-AIA-TR catalog part numbers (CPN) available in 10L VDFN (3x3x0.9mm) package.

Pre and Post Summary Changes:

	Pre Change		**Post Change**		
Assembly Site	HANA Microelectronics-China (HANC)	Amkor Technology Philippines (P3/P4), INC. (ATP7)	HANA Microelectronics-China (HANC)	Amkor Technology Philippines (P3/P4), INC. (ATP7)	Microchip Technology Thailand (Branch (MMT)
Wire Material	Au	Au	Au	Au	Au
Die Attach Material	2200D	AMK06	2200D	AMK06	8600

Molding Compound Material	CEL9220HF13H	G700Y	CEL9220HF13H	G700Y	G700LTD
Lead-Frame Material	C194	C194	C194	C194	A194
Lead-Frame Paddle Size	70 x 98 mils	71 x 98 mils	70 x 98 mils	71 x 98 mils	71 x 98 mils
Lead-Lock Design	No	No	No	No	Yes
Lead-Frame Design	See Pre and Post Change Summary for comparison.				

*Note: C194, A194, or CDA194 Lead frame material are the same, it is just a MCHP internal labelling difference.

Impacts to Datasheet: None

Change Impact: None

Reason for Change: To improve on-time delivery by qualifying MMT as an additional assembly site.

Change Implementation Status: In Progress

Estimated First Ship Date: 16 June 2025 (date code: 2525)

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					**>**	**May 2025**					**June 2025**				
Work Week	36	37	38	39	40		18	19	20	21	22	23	24	25	26	27
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 09, 2024: Issued initial notification.
May 27, 2025: Issued final notification. Attached the Qualification Report. Provided estimated first ship date to be on June 16, 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-11HRNL205 Pre_and_Post_Change Summary.pdf
PCN_ALAN-11HRNL205_Qual Report_RevA.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-11HRNL205 - CCB 7040 Final Notice: Qualification of MMT as an additional assembly site for CAP1106-1-AIA-TR and CAP1133-1-AIA-TR catalog part numbers (CPN) available in 10L VDFN (3x3x0.9mm) package.

Affected Catalog Part Numbers (CPN)

CAP1133-1-AIA-TR

CAP1106-1-AIA-TR

CCB 7040
Pre and Post Change Summary
PCN# ALAN-11HRNL205

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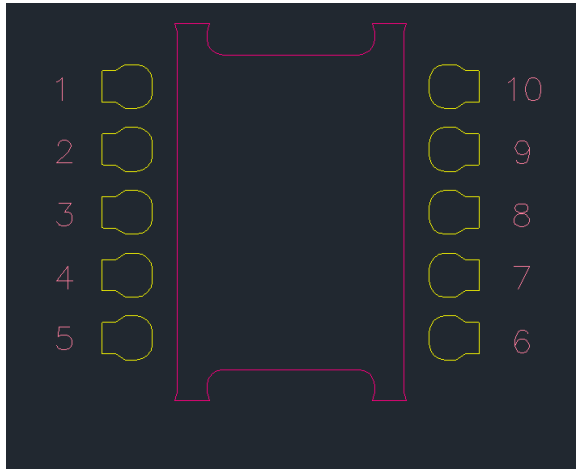
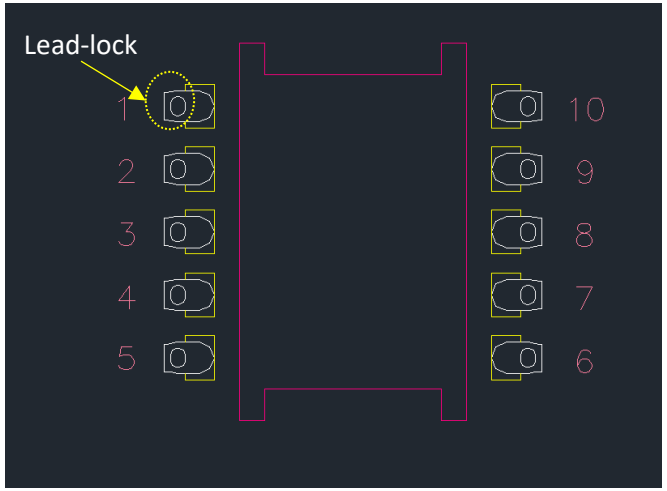
Pre and Post Change Summary

HANC/ATP7	MMT
	

*Note: Not to scale.

Assembly Site	HANC	ATP7	MMT
Lead-Frame Material	C194	C194	A194
Lead-Frame Paddle Size	70 x 98 mils	71 x 98 mils	71 x 98 mils
Lead-Lock Design	No	No	Yes

QUALIFICATION REPORT SUMMARY
RELIABILITY LABORATORY

PCN #: ALAN-11HRNL205

Date:
May 07, 2025

Qualification of MMT as an additional assembly site for CAP1106-1-AIA-TR and CAP1133-1-AIA-TR catalog part numbers (CPN) available in 10L VDFN (3x3x0.9mm) package.

PACKAGE QUALIFICATION REPORT

Purpose	Qualification of MMT as an additional assembly site for CAP1106-1-AIA-TR and CAP1133-1-AIA-TR catalog part numbers (CPN) available in 10L VDFN (3x3x0.9mm) package.
CN	E000245162
QUAL ID	R2401308 Rev. A
MP CODE	TA214Y9QXAD0
Part No.	CAP1106-1-AIA-TR
Bonding No.	BD-002490 Rev. 01
CCB No.:	7040
Package	
Type	10L VDFN
Package size	3 x 3 x 0.9 mm
Lead Frame	
Paddle size	71 x 98 mils
Material	A194
Surface	NiPdAu
Process	Etched
Lead Lock	Yes
Part Number	10101004
Treatment	ME2
Material	
Epoxy	8600
Wire	Au wire
Mold Compound	G700LTD
Plating Composition	NiPdAu (PPF)

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PACKAGE QUALIFICATION REPORT

Manufacturing Information

Assembly Lot No.	Wafer Lot No.	Date Code
MMT-252500649.000	TC03925102882.200	2438QMT
MMT-252501269.000	TC03925102882.200	2438T4B
MMT-252501270.000	TC03925102882.200	2438T4Q

Result [X] Pass [ ] Fail [ ] _____

10L VDFN (3x3x0.9 mm) 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 System: EX_HCOVI	JESD22-A113	693(0)	0/693	Pass	Good Devices
	Bake 150°C, 24 hrs. System: CHINEE	JIP/ IPC/JEDEC J-STD-020E		693		
	85°C/85%RH Moisture Soak 168 hrs. System: TABAI ESPEC Model PR-3SPH			693		
	3x Convection-Reflow 265°C max System: Vitronics Soltec MR1243			693		
	Electrical Test: +25°C System: EX_HCOVI		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:** -65°C to +150°C, 500 Cycles System: TABAI ESPEC TSA-70H	JESD22-A104		0/231		Parts had been pre-conditioned at 260°C
	Electrical Test: + 25°C System: EX_HCOVI		231(0)	0/231	Pass	77 units / lot
	Bond Strength: Wire Pull (>2.50 grams)		15(0)	0/15	Pass	
UNBIASED-HAST	**Stress Condition:** +130°C/85%RH, 96 hrs. System: HAST 6000X	JESD22-A118		0/231		Parts had been pre-conditioned at 260°C
	Electrical Test: +25°C System: EX_HCOVI		231(0)	0/231	Pass	77 units / lot
HAST	**Stress Condition:** +130°C/85%RH, 96 hrs. **Bias Volt:** 3.6 Volts System: HAST 6000X	JESD22-A110		0/231		Parts had been pre-conditioned at 260°C
	Electrical Test: +25°C System: EX_HCOVI		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, 504 hrs. System: TPS Bake Oven	JESD22-A103		0/45		45 units
	Electrical Test: +25°C System: EX_HCOVI		45(0)	0/45	Pass	
Bond Strength Data Assembly	Wire Pull (>2.50 grams)	Mil. Std. 883-2011	30(0) Wires	0/30	Pass	
	Bond Shear (>12.60 grams)	CDF-AEC-Q100-001	30(0) bonds	0/30	Pass	