Product Change Notification: MAAN-10LJUU618

Date:

21-Jul-2025

Product Category:

32-Bit Microcontrollers

Notification Subject:

CCB 7241 Final Notice: Qualification of ATP7 as an additional assembly site for PIC32CZ4010CA90208-I/8MX-SL3, PIC32CZ8110CA90208-I/8MX-SL3, PIC32CZ4010CA80208-I/8MX, PIC32CZ8110CA80208-I/8MX-SL3 and PIC32CZ8110CA80208-I/8MX catalog part numbers (CPN) available in 208L TFBGA (15x15x1.19mm) package.

Affected CPNs:

MAAN-10LJUU618_Affected_CPN_07212025.pdf
MAAN-10LJUU618_Affected_CPN_07212025.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 ATP7 as an additional assembly site for PIC32CZ4010CA90208-I/8MX-SL3, PIC32CZ8110CA90208-I/8MX-SL3, PIC32CZ4010CA80208-I/8MX, PIC32CZ8110CA80208-I/8MX-SL3 and PIC32CZ8110CA80208-I/8MX catalog part numbers (CPN) available in 208L TFBGA (15x15x1.19mm) package.

Pre and Post Summary Changes:

	Pre Change	**Post Change**	
Assembly Site	Amkor Assembly & Test (Shanghai) Co., LTD (ANAC)	Amkor Assembly & Test (Shanghai) Co., LTD (ANAC)	Amkor Technology Philippines (P3/P4), INC. (ATP7)

Wire Material	CuPdAu	CuPdAu	CuPdAu
Die Attach Material	2300	2300	2300
Molding Compound Material	G750E	G750E	G750E
Core Material	HL832NXA	HL832NXA	HL832NXA
Substrate Material	AUS320	AUS320	AUS320

Impacts to Datasheet: None

Change Impact: None

Reason for Change: To improve on time delivery performance by qualifying ATP7 as an additional assembly site.

Change Implementation Status: In Progress

Estimated First Ship Date: 30 August 2025 (date code: 2535)

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

Timetable Summary:

	November 2024					>	**July 2025**					**August 2025**				
Work Week	44	45	46	47	48		27	28	29	30	31	32	33	34	35	36
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: November 13, 2024: Issued initial notification.
December 06, 2024: Re-issued initial notification to update the qualification plan to automotive grade 2 qualification.
July 21, 2025: Issued final notification. Attached the Qualification Report. Provided the estimated first ship date to be on August 30, 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_MAAN-10LJUU618_Qualification Report.pdf

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

Terms and Conditions:

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MAAN-10LJUU618 - CCB 7241 Final Notice: Qualification of ATP7 as an additional assembly site for PIC32CZ4010CA90208-I/8MX-SL3, PIC32CZ8110CA90208-I/8MX-SL3, PIC32CZ4010CA80208-I/8MX, PIC32CZ8110CA80208-I/8MX-SL3 and PIC32CZ8110CA80208-I/8MX catalog part numbers (CPN) available in 208L TFBGA (15x15x1.19mm) package.

Affected Catalog Part Numbers (CPN)

PIC32CZ4010CA80208-I/8MX

PIC32CZ4010CA90208-I/8MX-SL3

PIC32CZ8110CA80208-I/8MX

PIC32CZ8110CA80208-I/8MX-SL3

PIC32CZ8110CA90208-I/8MX-SL3

QUALIFICATION REPORT SUMMARY

RELIABILITY LABORATORY

PCN#: MAAN-10LJUU618

Date:
June 3, 2025

Qualification of ATP7 as an additional assembly site for PIC32CZ4010CA90208-I/8MX-SL3, PIC32CZ8110CA90208-I/8MX-SL3, PIC32CZ4010CA80208-I/8MX, PIC32CZ8110CA80208-I/8MX-SL3 and PIC32CZ8110CA80208-I/8MX catalog part numbers (CPN) available in 208L TFBGA (15x15x1.19mm) package. This is a grade 2 qualification.

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Package Qualification Report

Purpose: Qualification of ATP7 as an additional assembly site for PIC32CZ4010CA90208-I/8MX-SL3, PIC32CZ8110CA90208-I/8MX-SL3, PIC32CZ4010CA80208-I/8MX, PIC32CZ8110CA80208-I/8MX-SL3 and PIC32CZ8110CA80208-I/8MX catalog part numbers (CPN) available in 208L TFBGA (15x15x1.19mm) package. This is a grade 2 qualification.

CCB No.: 7241

Misc.	Assembly site	ATP7
	BD Number	BD-002783-02
	MP Code (MPC)	SG20478MXCXA
	Part Number (CPN)	PIC32CZ8110CA90208-I/8MX
	MSL information	MSL3, 260'C
	Assembly Shipping Media (T/R, Tube/Tray)	Tray
	Base Quantity Multiple (BQM)	119
	Reliability Site	MTAI
Substrate	Core Material	HL832NXA
	Core Thickness	250um
	L1/L2 Thickness	12/18/18/12
	SM Material	AUS320
	Process	NiAu
	SM Thickness	25um
	Part Number	101415277
	Drill Size	250um
	Line/Space Specs	100um
Bond Wire	Material	CuPdAu
Die Attach	Part Number	2300
	Conductive	Yes
MC	Part Number	G750E
PKG	Package Type	TFBGA
	Pin/Ball Count	208
	PKG width/size	15x15x1.19mm
	Ball Pitch/Size	0.8/0.4
	Solder Ball Material	SAC405

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Package Qualification Report

Manufacturing Information

Assembly Lot No.
ATP7253800001.000
ATP7253800002.000
ATP7253800003.000

Result ☑ Pass ☐ Fail ☐ _____

SG204 for GF_0.18um in 208 TFBGA 15x15x1.19 mm_8MX Package assembled at ATP7 pass reliability test that was conducted at MPHL rel lab. This package is qualified Moisture/Reflow Sensitivity Classification Level 3 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 3)	**Electrical Test :** 25°C D1X_GX1_UC 85°C D1X_GX1_UC 105°C D1X_GX1_UC 85°C D1X_GX1_UC 105°C D1X_GX1_UC	JESD22-A113, JIP/ IPC/JEDEC J-STD-020E	231 per lot	Lot 1 0/231 Lot 2 0/231 Lot 3 0/231	Pass Pass Pass	Good Devices
	Bake 150°C, 24 hrs System: HERAEUS		231 per lot			
	Moisture Soak 192h(30°C/60%RH) System: VOTSCH VC4034		231 per lot			
	Reflow 3x Convection-Reflow 265°C max System: Mancorp CR.5000F		231 per lot	Lot 1 0/231 Lot 2 0/231 Lot 3 0/231	Pass Pass Pass	
	Electrical Test : 25°C D1X_GX1_UC 85°C D1X_GX1_UC 105°C D1X_GX1_UC		231 per lot	Lot 1 0/231 Lot 2 0/231 Lot 3 0/231	Pass Pass Pass	

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
High Temperature Storage Life	**Stress Condition:** Bake 150°C, 500 hrs System: HERAEUS **Electrical Test:** 25°C D1X_GX1_UC 85°C D1X_GX1_UC 105°C D1X_GX1_UC	JESD22-A103	45 units 1 lot	Lot 1 0/45 Lot 2 0/45 Lot 3 0/45	Pass Pass Pass	
	Stress Condition: Bake 150°C, 1000 hrs System: HERAEUS **Electrical Test:** 25°C D1X_GX1_UC 85°C D1X_GX1_UC 105°C D1X_GX1_UC	JESD22-A103	44 units 1 lot	Lot 1 0/44 Lot 2 0/44 Lot 3 0/44	Pass Pass Pass	

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
HAST	**Stress Condition:** (Standard) 130°C, 85%RH, 96 hrs. VOLTS=5.5V System: HIRAYAMA HASTEST PC-422R8 **Electrical Test:** 25°C D1X_GX1_UC 85°C D1X_GX1_UC 105°C D1X_GX1_UC	JESD22-A110	77 units per lot	Lot 1 0/77 Lot 2 0/77 Lot 3 0/77	Pass Pass Pass	Parts had been pre-conditioned at 260°C
	Wire Bond / Pull WBP	Mil. Std. 883-2011	6 units per lot	Lot 1 0/6 Lot 2 0/6 Lot 3 0/6	Pass Pass Pass	

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
HAST	**Stress Condition:** (Standard) 130°C, 85%RH, 192 hrs. VOLTS=5.5V System: HIRAYAMA HASTEST PC-422R8 **Electrical Test:** 25°C D1X_GX1_UC 85°C D1X_GX1_UC 105°C D1X_GX1_UC	JESD22-A110	70 units per lot	Lot 1 0/70 Lot 2 0/70 Lot 3 0/70*	Pass Pass Pass	Parts had been pre-conditioned at 260°C
	Wire Bond / Pull WBP	Mil. Std. 883-2011	6 units per lot	Lot 1 0/6 Lot 2 0/6 Lot 3 0/6	Pass Pass Pass	

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
UNBIASED HAST	**Stress Condition:** (Standard) + 110°C, 85%RH, 264 hrs. System: HIRAYAMA HASTEST PC-422R8 **Electrical Test:** 25°C D1X_GX1_UC	JESD22-A118	77 units per lot	Lot 1 0/77 Lot 2 0/77 Lot 3 0/77	Pass Pass Pass	Parts had been pre-conditioned at 260°C

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS	Result	Remarks
Temp Cycle	**Stress Condition:** (Standard) - 55°C/125°C, 1000 Cycles System : Votsch VTS^{2}7012 **Electrical Test:** 25°C D1X_GX1_UC 85°C D1X_GX1_UC 105°C D1X_GX1_UC	JESD22-A104	77 units per lot	Lot 1 0/77 Lot 2 0/77 Lot 3 0/77	Pass Pass Pass	Parts had been pre-conditioned at 260°C
	Wire Bond / Pull WBP	Mil. Std. 883-2011	6 units per lot	Lot 1 0/6 Lot 2 0/6 Lot 3 0/6	Pass Pass Pass	

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS	Result	Remarks
Temp Cycle	**Stress Condition:** (Standard) - 55°C/125°C, 2000 Cycles System : Votsch VTS^{2}7012 **Electrical Test:** 25°C D1X_GX1_UC 85°C D1X_GX1_UC 105°C D1X_GX1_UC	JESD22-A104	70 units per lot	Lot 1 0/70 Lot 2 0/70 Lot 3 0/70	Pass Pass Pass	Parts had been pre-conditioned at 260°C
	Wire Bond / Pull WBP	Mil. Std. 883-2011	6 units per lot	Lot 1 0/6 Lot 2 0/6 Lot 3 0/6	Pass Pass Pass	

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS	Result
Wire Bond Pull WBP		Mil. Std. 883-2011	5 units, 30 bonds 1 lot	Lot 1 0/30	Pass
Wire Bond Shear WBS		CDF-AEC-Q100-001	5 units, 30 bonds 1 lot	Lot 1 0/30	Pass