

Product Change Notification: CAAN-10DTK0161

Date:

23-Jun-2025

Product Category:

Wireless Modules

Notification Subject:

CCB 7215 Initial Notice: Qualification of MMT as an additional assembly site for PIC32CX5109BZ31048-V/ZWX and PIC32CX5109BZ31048T-V/ZWX catalog part numbers (CPN) available in 48L VQFN (6x6x0.9mm) wettable flank packages.

Affected CPNs:

CAAN-10DTKO161_Affected_CPN_06232025.pdf CAAN-10DTKO161_Affected_CPN_06232025.csv

PCN Status: Initial 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 PIC32CX5109BZ31048-V/ZWX and PIC32CX5109BZ31048T-V/ZWX catalog part numbers (CPN) available in 48L VQFN (6x6x0.9mm) wettable flank packages.

Pre and Post Summary Changes:

	Pre Change	Post Change	
Assembly Site	ASE Group Chung-Li (ASCL)	ASE Group Chung-Li (ASCL)	Microchip Technology Thailand (Branch) (MMT)
Wire Material	CuPdAu	CuPdAu	CuPdAu

Die Attach Material	EN4900	EN4900	3280NP				
Molding Compound Material	G700LA	G700LA	G700LTD				
Lead-Frame Material	C194	C194	C194				
Lead-Frame Paddle Size	173x173 mils	173x173 mils	181x181 mils				
Lead-Frame Design	See Pre and Post Change Comparison						
DAP Surface Prep	Double Ring Plating	Double Ring Plating	Ag ring with Roughening				

Impacts to Datasheet: None

Change Impact: None

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

assembly site.

Change Implementation Status: In Progress

Estimated Qualification Completion Date: July 2025

Note: Please be advised the qualification completion times may be extended because of unforeseen business conditions however implementation will not occur until after qualification has completed and a final PCN has been issued. The final PCN will include the qualification report and estimated first ship date. Also note that after the estimated first ship date guided in the final PCN customers may receive pre and post change parts.

Timetable Summary:

	November 2024					>	July 2025				
Work Week	44	45	46	47	48		27	28	29	30	31
Initial PCN Issue Date				X							
Qual Report Availability									X		
Final PCN Issue Date									X		

Method to Identify Change: Traceability Code

Qualification Plan: Please open the attachments included with this PCN labeled as PCN_#_Qual_Plan.

Revision History: November 21, 2024: Issued initial notification.

January 24, 2025: Re-issued initial notification to update the die attach material from QMI519 to 3280NP.

June 23, 2025: Re-issued initial notification to update Qual Plan. Updated the estimated qualification completion date and the time table summary.

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_CAAN-10DTK0161 Qual Plan.pdf
PCN_CAAN-10DTK0161 Pre and Post Change Summary.pdf

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

Terms and Conditions:

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

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

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(6x6x0.9mm) wettable flank packages.
Affected Catalog Part Numbers (CPN)
PIC32CX5109BZ31048-V/ZWX
PIC32CX5109BZ31048T-V/ZWX
Date: Sunday, June 22, 2025

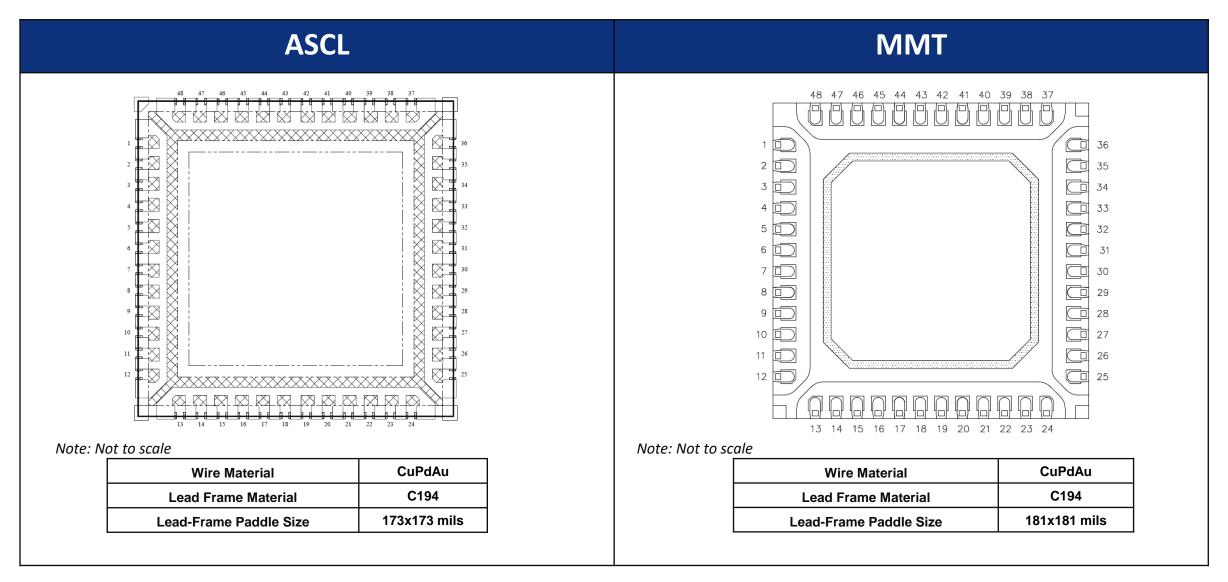
CCB 7215 Pre and Post Change Summary PCN #: CAAN-10DTKO161



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LEAD FRAME COMPARISON







QUALIFICATION PLAN SUMMARY

PCN #: CAAN-10DTKO161

Date: June 10, 2025

Qualification of MMT as an additional assembly site for PIC32CX5109BZ31048-V/ZWX and PIC32CX5109BZ31048T-V/ZWX catalog part numbers (CPN) available in 48L VQFN (6x6x0.9mm) wettable flank packages.

Purpose: Qualification of MMT as an additional assembly site for

 $\label{eq:pic32CX5109BZ31048-V/ZWX} PIC32CX5109BZ31048T-V/ZWX \ catalog part numbers (CPN) available in 48L VQFN (6x6x0.9mm)$

wettable flank packages.

CCB No.: 7215

	Assembly site	MMT					
	BD Number	BDM-002713 Rev. M					
	MP Code (MPC)	SG4069ZWXA00					
Mico	Part Number (CPN)	PIC32CX5109BZ31048-V/ZWX					
<u>Misc.</u>	MSL information	MSL1@260°C					
	Assembly Shipping Media	Tray					
	Base Quantity Multiple (BQM)	490					
	Reliability Site	MPHIL					
	Paddle size	181x181 mils					
	Material	C194					
	DAP Surface Prep	Ag ring with roughening					
<u>Lead-Frame</u>	Treatment	ВОТ					
<u>Leau-Fraille</u>	Process	Etched					
	Lead-lock	Yes					
	Part Number	10104814					
	Lead Plating	Matte Tin					
Bond Wire	Material	CuPdAu					
Die Attach	Part Number	3280NP					
DIE Attacii	Conductive	Yes					
<u>MC</u>	Part Number	G700LTD					
	Package Type	VQFN-WFS					
<u>PKG</u>	Pin/Ball Count	48					
	PKG width/size	6x6x0.9 mm					

Test Name	Conditions	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Qty of Lots	Total Units	Fail Accept Qty	Est. Dur. Days	ATE Test Site	REL Test Site	Special Instructions
Standard Pb-free Solderability	J-STD-002D; Perform 8 hour steam aging for Matte tin finish and 1 hour steam aging for NiPdAu finish prior to testing. Standard Pb-free: Matte tin/ NiPdAu finish, SAC solder, wetting temp 245°C for both SMD & through hole packages.	22	5	1	27	> 95% lead coverage	5		MMT	Standard Pb-free solderability is the requirement.
Wire Bond Pull - WBP	Mil. Std. 883-2011	5	0	1	5	0 fails after TC	5		MMT	30 bonds from a min. 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	1	5		5		MMT	30 bonds from a min. 5 devices.
Physical Dimmensions	Measure per JESD22 B100 and B108	10	0	3	30		5		MPHIL	
External Visual	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	5		MMT	
HTSL (High Temp Storage Life)	JESD22-A103. +175 C for 504 hours or 150°C for 1008 hrs. Electrical test pre and post stress at +25C and hot temp.	45	5	1	50	0	10	MPHL	MPHL	
Preconditioning - Required for surface mount devices	JESD22-A113. +150°C Bake for 24 hours, moisture loading requirements per MSL level + 3X reflow at peak reflow temperature per Jedec-STD-020E for package type; Electrical test pre and post stress at +25°C. MSL 1@260°C	231	15	3	738	0	15	MPHL	MPHL	Spares should be properly identified. 77 parts from each lot to be used for HAST, uHAST, Temp Cycle test.
HAST	JESD22-A110. +130°C/85% RH for 96 hours Electrical test pre and post stress at +25°C, +105°C and +125°C.	77	5	3	246	0	10	MPHL	MPHL	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
UHAST	JESD22-A118. +130°C/85% RH for 96 hrs Electrical test pre and post stress at +25°C	77	5	3	246	0	10	MPHL	MPHL	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
Temp Cycle	JESD22-A10455°C to +150°C for 1000 cycles. Electrical test pre and post stress at +105°C and +125°C; 3 gram force WBP, on 5 devices from 1 lot, test following Temp Cycle stress.	77	5	3	246	0	15	MPHL	MPHL	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.