



Product Change Notification: CBOL-09ARRR148

Date:

13-Aug-2026

Product Category:

Analog to Digital Converters, Digital Potentiometers, Digital to Analog Converters

Notification Subject:

CCB 8445 Initial Notice: Qualification of MTAI as an additional assembly site for selected MCP3423, MCP3427, MCP4232, MCP4242, MCP4262, MCP4252, MCP4632, MCP4642, MCP4652, MCP4662, MCP48FVB01, MCP48FVB11, MCP48FVB21, MCP48FEB01, MCP48FEB11, MCP48FEB21, MCP48FVB02, MCP48FVB12, MCP48FVB22, MCP48FEB02, MCP48FEB12, MCP48FEB22 and MCP4728 device families available in 10L MSOP (3x3mm) package.

Affected CPNs:

[CBOL-09ARRR148_Affected_CPN_08132026.pdf](#)

[CBOL-09ARRR148_Affected_CPN_08132026.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 MTAI as an additional assembly site for selected MCP3423, MCP3427, MCP4232, MCP4242, MCP4262, MCP4252, MCP4632, MCP4642, MCP4652, MCP4662, MCP48FVB01, MCP48FVB11, MCP48FVB21, MCP48FEB01, MCP48FEB11, MCP48FEB21, MCP48FVB02, MCP48FVB12, MCP48FVB22, MCP48FEB02, MCP48FEB12, MCP48FEB22 and MCP4728 device families available in 10L MSOP (3x3mm) package.

Pre and Post Summary Changes:

	Pre Change	Post Change	Change (Yes/No)

Assembly Site	UTAC Thai Limited (UTL-2) (NSEB)	UTAC Thai Limited (UTL-2) (NSEB)	Microchip Technology Thailand (HQ) (MTAI)	Yes
Wire Material	Au	Au	CuPdAu	Yes
Die Attach Material	8200T (PFAS)	8200T (PFAS)	8390A (PFAS free)	Yes
Molding Compound Material	G600	G600	G600V	Yes
Lead-Frame Material	C7025	C7025	A194	Yes
DAP Surface Prep	Ag	Ag	Cu-RT	Yes

Impacts to Datasheet: None

Change Impact: None

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

Change Implementation Status: In Progress

Estimated Qualification Completion Date: August 2026

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:

	August 2026				
Work Week	32	33	34	35	36
Initial PCN Issue Date		X			
Qual Report Availability			X		

Final PCN Issue Date			X		
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Method to Identify Change: Traceability Code

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

Revision History: August 13, 2026: Issued initial notification.

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

Attachments:

PFAS Elimination and Die Attach_Explanation.pdf
PCN_CBOL-09ARRR148_Qualification_Plan.pdf

Please contact your local [Microchip sales office](#) with questions or concerns regarding this notification.

Terms and Conditions:

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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.

Affected Catalog Part Numbers (CPN):

MCP48FVB21-E/UN
MCP48FEB01-E/UN
MCP48FEB11-E/UN
MCP48FEB21-E/UN
MCP48FVB01T-E/UN
MCP48FVB11T-E/UN
MCP48FVB21T-E/UN
MCP48FEB01T-E/UN
MCP48FEB11T-E/UN
MCP48FEB21T-E/UN
MCP48FVB02-E/UN
MCP48FVB12-E/UN
MCP48FVB22-E/UN
MCP48FEB02-E/UN
MCP48FEB12-E/UN
MCP48FEB22-E/UN
MCP48FVB02T-E/UN
MCP48FVB12T-E/UN
MCP48FVB22T-E/UN
MCP48FEB02T-E/UN
MCP48FEB12T-E/UN
MCP48FEB22T-E/UN
MCP4728-E/UN
MCP4728A0-E/UN
MCP4728A1-E/UN
MCP4728A2-E/UN
MCP4728A3-E/UN
MCP4728A4-E/UN
MCP4728A5-E/UN
MCP4728A6-E/UN
MCP4728A7-E/UN
MCP4728T-E/UN

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MCP4728A0T-E/UN

MCP4728A1T-E/UN

MCP4728A2T-E/UN

MCP4728A3T-E/UN

MCP4728A4T-E/UN

MCP4728A5T-E/UN

MCP4728A6T-E/UN

MCP4728A7T-E/UN

MCP3423-E/UN

MCP3427-E/UN

MCP3423T-E/UN

MCP3427T-E/UN

MCP4232-502E/UN

MCP4232-103E/UN

MCP4232-104E/UN

MCP4232-503E/UN

MCP4242-502E/UN

MCP4242-103E/UN

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MCP4242-503E/UN

MCP4262-502E/UN

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MCP4652T-104E/UN

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MCP4662T-502E/UN

MCP4662T-103E/UN

MCP4662T-104E/UN

MCP4662T-503E/UN

MCP48FVB01-E/UN

MCP48FVB11-E/UN



QUALIFICATION PLAN SUMMARY

PCN#: CBOL-09ARRR148

DATE:
August 03, 2026

Qualification of MTAI as an additional assembly site for selected MCP3423, MCP3427, MCP4232, MCP4242, MCP4262, MCP4252, MCP4632, MCP4642, MCP4652, MCP4662, MCP48FVB01, MCP48FVB11, MCP48FVB21, MCP48FEB01, MCP48FEB11, MCP48FEB21, MCP48FVB02, MCP48FVB12, MCP48FVB22, MCP48FEB02, MCP48FEB12, MCP48FEB22 and MCP4728 device families available in 10L MSOP (3x3mm) package.

Purpose: Qualification of MTAI as an additional assembly site for selected MCP3423, MCP3427, MCP4232, MCP4242, MCP4262, MCP4252, MCP4632, MCP4642, MCP4652, MCP4662, MCP48FVB01, MCP48FVB11, MCP48FVB21, MCP48FEB01, MCP48FEB11, MCP48FEB21, MCP48FVB02, MCP48FVB12, MCP48FVB22, MCP48FEB02, MCP48FEB12, MCP48FEB22 and MCP4728 device families available in 10L MSOP (3x3mm) package.

CCB: 8445

<u>Misc.</u>	Assembly site	MTAI
	BD Number	BD-004599/01
	MP Code (MPC)	DFAY14E3XA00
	Part Number (CPN)	MCP4728-E/UN
	MSL information	MSL-1
	Assembly Shipping Media (T/R, Tube/Tray)	Tube
	Base Quantity Multiple (BQM)	100
	Reliability Site	MTAI
<u>Lead-Frame</u>	Paddle size	82 x 94
	Material	A194
	DAP Surface Prep	Cu-RT
	Treatment	Roughened
	Process	Etched
	Lead-lock	No
	Part Number	10101007
	Lead Plating	Matte Tin
<u>Bond Wire</u>	Material	CuPdAu
<u>Die Attach</u>	Part Number	8390A (PFAS free)
	Conductive	Yes
<u>MC</u>	Part Number	G600V
<u>PKG</u>	Package Type	MSOP
	Pin/Ball Count	10
	PKG width/size	3x3mm

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	Special Instructions
Standard Pb-free Solderability	J-STD-002E ; 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	Standard Pb-free solderability is the requirement. SnPb solderability (backward solderability- SMD reflow soldering) is required for any plating related changes and highly recommended for other package BOM changes.
Standard SnPB Solderability	J-STD-002E ; Perform 8 hour steam aging prior to testing. Standard SnPB: SnPb finish, SnPb solder, wetting temp 215°C for SMD & 245°C for through hole packages.	22	5	1	27	> 95% lead coverage	5	
Backward Solderability	J-STD-002E ;Perform 8 hours steam aging for Matte tin finish and 1 hour steam aging for NiPdAu finish prior to testing. Backward: Matte tin/ NiPdAu finish, SnPb solder, wetting temp 215°C for SMD.	22	5	1	27	> 95% lead coverage	5	
Wire Bond Pull - WBP	Mil. Std. 883-2011	5	0	1	5		5	30 bonds from a min. 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	1	5		5	30 bonds from a min. 5 devices.
Wire Sweep								Required for any reduction in wire bond thickness.
Physical Dimensions	Measure per JESD22 B100 and B108	10	0	3	30		5	
External Visual	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	5	
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 +25°C and hot temp. <u>Note:</u> Prefer to use 150°C HTSL temperature for Cu wire qual; The 175°C temperature is acceptable as a parallel back-up test to avoid extending qual cycle time.	45	5	3 (Cu wire qual)	150 (Cu wire qual)	0	10	
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.	231	15	3	738	0	15	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 or 110°C/85%RH for 264 hours. Electrical test pre and post stress at +25°C and hot temp.	77	5	3	246	0	10	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
UHASt	JESD22-A118. +130°C/85% RH for 96 hrs or +110°C/85% RH for 264 hrs. Electrical test pre and post stress at +25°C	77	5	3	246	0	10	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
Temp Cycle	JESD22-A104. -65°C to +150°C for 500 cycles. Electrical test pre and post stress at hot temp; 3 gram force WBP, on 5 devices from 1 lot, test following Temp Cycle stress.	77	5	3	246	0	15	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.

Eliminating PFAS from Microchip ICs



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SMART | CONNECTED | SECURE

Microchip
August 2025

Eliminating PFAS from MCHP ICs

- **What is PFAS**
- **Microchip's Environmental Stewardship**
- **Microchip Products with PFAS**
- **Time Frame to PFAS-Free Die Attach**
- **What is Die Attach**
- **Will clients be required to switch to PFAS free products**
- **Risk Assessment**

What is PFAS: Poly(Per) FluoroAlkyL Substances (**PFAS**)

Poly(Per) FluoroAlkyL Substances (PFAS)

- There may be 12,000 or more PFAS chemicals that are used in small amounts in many different items
 - PFAS can be in the product itself.
 - PFAS can also be used to manufacture products while not in the product itself

PFAS is the new “buzzword” throughout many industries

- Often nicknamed “forever chemicals” because once released into the environment, it never degrades and will accumulate over time
- As PFAS accumulates in the environment over long periods of time, there can be increasing toxicity and polluting effects
- Therefore, government agencies around the globe are considering legislation toward removal of PFAS although PFAS legislations are not fully defined yet

Microchip's Environmental Stewardship

Although very few laws have been enacted regarding PFAS to date, there is a rapidly growing movement among governments around the world to eliminate PFAS

- Initial legislation has targeted on clothing and food products
- Additional legislation and their timings continue to evolving

Companies such as Microchip, which are committed to addressing contaminants in water, air, food, and living organisms, are proactively working to remove PFAS even in the absence of specific legal requirements.

Microchip's suppliers are also taking proactive steps to eliminate PFAS chemicals from the materials they provide to Microchip.

Microchip believes it is prudent to take immediate action toward offering PFAS-free products to all clients, regardless of application, industry, country, or current regulatory requirements.

Achieving “PFAS-Free” status may serve as a competitive advantage for both Microchip and its clients.

Microchip products with PFAS

The primary material in Microchip products containing PFAS is known as die attach. PFAS-free die attach is not new to either Microchip or the industry; in fact, Microchip has shipped hundreds of millions of units utilizing PFAS-free die attach.

Both PFAS and PFAS-free die attach materials are currently in use because PFAS was not previously identified as a substance of concern.

The change announced in this Product Change Notification (PCN) for Microchip-owned factories involves transitioning to the same PFAS-free die attach that has already been qualified and used in other products.

Time Frame to PFAS-Free Die Attach

Qualification of products assembled at Microchip-owned factories has been completed.

While inventory containing PFAS die attach will continue to be shipped, the implementation of PFAS-free die attach in the assembly process is scheduled to begin as early as September 3, 2025.

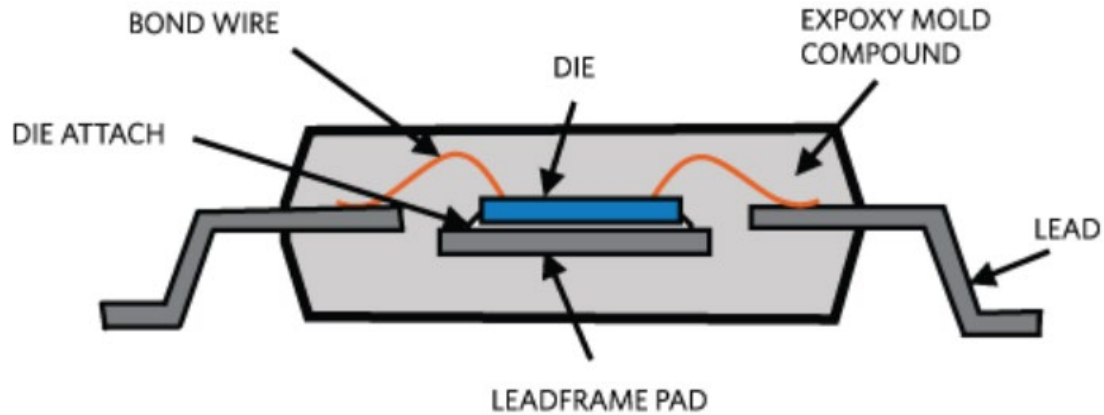
Microchip will consume all existing inventory and die attach, so the exact implementation date will depend on when current inventories are depleted.

- For PPAP clients IMDS/CAMDS material content declarations will be updated.

Schedules for assembly locations not owned by Microchip (subcontractors or "subcons") are currently under review. We anticipate a similar mix of products already utilizing both PFAS and PFAS-free die attach at these locations.

Product Change Notifications (PCNs) announcing die attach changes at subcontractor sites will be issued once schedules are finalized. We expect these timelines to be similar to those for our internal factories.

What is die attach



A thin layer of epoxy between the silicon die and copper pad portion of the lead frame.

- Holds the die in place during the wire bond and mold encapsulation processes
- The bottom of the die has no transistors or active circuits.
- The interface is identical regardless of device type, fab location, technology node, wire material etc.
- **Therefore, allows extremely broad range of products to be grouped into a single qualification.**

Will Clients be required to switch to PFAS-Free Products

The timeline for legislation to eliminate PFAS chemicals remains uncertain; however, regulatory action is anticipated.

Suppliers of PFAS chemicals and raw materials containing PFAS are already announcing end-of-life plans in advance of any formal legislation.

It is expected that suppliers will discontinue offering die attach materials containing PFAS within the next two years, regardless of when government regulations take effect.

While Microchip is committed to providing as much transition time as possible for our clients, we strongly encourage you to begin planning now to avoid potential supply interruptions.

Risk Assessment:



Microchip does not anticipate that this change will impact our clients for the following reasons:

- Microchip has been using PFAS-free die attach material for several years.
- We have shipped hundreds of millions of units utilizing this material without incident.
- Die Attach is not application relevant.

Given these factors, Microchip believes there is minimal cause for concern regarding this change, and additional client qualifications would be redundant and time-consuming. However, if you have any questions that are not addressed in the PCN or this presentation, please do not hesitate to contact us.

