

#### **Product Change Notification: NTDO-09AEDU529**

Date:

12-Sep-2025

#### **Product Category:**

Memory

#### **Notification Subject:**

CCB 7727 Initial Notice: Qualification of MMT as an additional assembly site for SST25WF080BT-40I/NP, SST25WF040BT-40E/NP, SST25WF040BT-40I/NP, SST25WF080BT-40E/NP13GVAO, SST25WF080BT-40E/NP and SST25WF040BT-40E/NP13GVAO catalog part numbers (CPN) in 8L UDFN (2x3x0.55mm) package.

#### **Affected CPNs:**

NTDO-09AEDU529\_Affected\_CPN\_09122025.pdf NTDO-09AEDU529\_Affected\_CPN\_09122025.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 SST25WF080BT-40I/NP, SST25WF040BT-40E/NP, SST25WF040BT-40I/NP, SST25WF080BT-40E/NP13GVAO, SST25WF080BT-40E/NP and SST25WF040BT-40E/NP13GVAO catalog part numbers (CPN) in 8L UDFN (2x3x0.55mm) package.

#### **Pre and Post Summary Changes:**

	Pre Change	Post Change						
A								
S	UTAC Thai Limited (UTL-	UTAC Thai Limited (UTL-	Microchip Technology Thailand					
S	1)	1)	(Branch)					
e	(NSEB)	(NSEB)	(MMT)					
m								

b l y S i t e			
i r e M a t e r i a l	Au	Au	Au
D i e A t t a c h M a t e r i a l	HR-5104	HR-5104	ATB F125E*
M o l	G700LTD	G700LTD	G700LTD

o m p o u n d M a t e r i a l			
L e a d d - F r a m e M a t e r i a l	EFTEC-64T	EFTEC-64T	EFTEC-64T

<sup>\*</sup>PFAS free material

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:** October 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:**

	Sept	ember	2025		October 2025				
Work Week	36	37	38	39	40	41	42	43	44
Initial PCN Issue Date		х							
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:** September 12, 2025: 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:**

PCN\_NTDO-09AEDU529\_Qual Plan.pdf PFAS Elimination and Die Attach\_Explanation.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 <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.

NTDO-09AEDU529 - CCB 7727 Initial Notice: Qualification of MMT as an additional assembly site for SST25WF080BT-40I/NP, SST25WF040BT-40E/NP, SST25WF040BT-40E/NP, SST25WF080BT-40E/NP13GVAO, SST25WF080BT-40E/NP and SST25WF040BT-40E/NP13GVAO catalog part numbers (CPN) in 8L UDFN (2x3x0.55mm) package.

Affected Catalog Part Numbers (CPN)

SST25WF080BT-40I/NP

SST25WF040BT-40E/NP

SST25WF040BT-40I/NP

SST25WF080BT-40E/NP13GVAO

SST25WF080BT-40E/NP

SST25WF040BT-40E/NP13GVAO

Date: Wednesday, September 10, 2025



**PCN #: NTDO-09AEDU529** 

Date:

August 28, 2025

Qualification of MMT as an additional assembly site for SST25WF080BT-40I/NP, SST25WF040BT-40E/NP, SST25WF040BT-40I/NP, SST25WF080BT-40E/NP13GVAO, SST25WF080BT-40E/NP and SST25WF040BT-40E/NP13GVAO catalog part numbers (CPN) in 8L UDFN (2x3x0.55mm) package.

Purpose: Qualification of MMT as an additional assembly site for SST25WF080BT-40I/NP,

 $SST25WF040BT-40E/NP, SST25WF040BT-40I/NP, SST25WF080BT-40E/NP13GVAO, \\SST25WF080BT-40E/NP \ and \ SST25WF040BT-40E/NP13GVAO \ catalog \ part \ numbers$ 

(CPN) in 8L UDFN (2x3x0.55mm) package.

CCB No. 7727

	Assembly site	MMT				
	BD Number	BD-003276-01				
	MP Code (MPC)	X0502YPRXVA1				
Mico	Part Number (CPN)	SST25WF080BT-40E/NP13GVAO				
Misc.	MSL information	MSL1				
	Assembly Shipping Media (T/R, Tube/Tray)	T/R				
	Base Quantity Multiple (BQM)	3000				
	Reliability Site	MTAI				
	Paddle size	Chip on Lead design				
	Material	EFTEC-64T				
	DAP Surface Prep	Ag on lead only				
Load Framo	Treatment	Roughened				
<u>Lead-Frame</u>	Process	Etched				
	Lead-lock	No				
	Part Number	10100875				
	Lead Plating	Matte tin				
Bond Wire	Material	Au				
Dio Attach	Part Number	ATB F125E				
<u>Die Attach</u>	Conductive	No				
<u>MC</u>	Part Number	G700LTD				
	Package Type	UDFN				
<u>PKG</u>	Pin/Ball Count	8				
	PKG width/size	2x3				

Test Name	Conditions	Reliability Stress Read Point  Grade 1: -40°C to +125°C (MCHP E Temp)	Pre & Post Reliability Stress Test Temperature Grade 1: -40°C to +125°C (MCHP E Temp)	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
Wire Bond Pull - WBP	Mil. Std. 883-2011			5	0	1	5	0 fails after TC	5	30 bonds from a min. 5 devices.  Condition C or D. For Au wire diameter >=1mil, minimum pull strength after TC = 3 grams.  For Au wire diameter <1mil, refer to Figure 2011-1 in MIL-STD-883 Method 2011 as a guidelie for minimum pull strength. For Au wire diameter <1mil, wire bond pull shall be performed with the hook over the ball bond and not at mid-wire.
Wire Bond Shear - WBS	CDF-AEC-Q100-001			5	0	1	5	0	5	30 bonds from a min. 5 devices.
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	Grade 1: 500 hrs (+175°C)	Grade 1: +25°C, +85°C, +125°C	45	5	1	50	0	21 - 83	Spares should be properly identified.
Preconditioning - Required for surface mount devices	J-STD-020 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.  MSL-1 @260C°		Grade 1: +25°C, +85°C, +125°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. 45 parts from one lot to be used for PTC test (for devices requiring PTC).
HAST	JESD22-A101 or A110 +130°C/85% RH for 96 hrs	Grade 1: 96 hrs (+130°C/85% RH)	Grade 1: +25°C, +85°C, +125°C	77	5	3	246	0	10 - 14	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
UHAST	JESD22-A102, A118, or A101 +130°C/85% RH for 96 hrs	Grade 1: 96 hrs (+130°C/85% RH)	Grade 1: +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 -55°C to +150°C	Grade 1: 1000 cycles (-55°C to +150°C)	Grade 1: +25°C, +85°C, +125°C	77	5	3	246	0	15 - 60	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.

# Eliminating PFAS from Microchip ICs



A Leading Provider of Smart, Connected and Secure Embedded Control Solutions



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 Microchipowned 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.

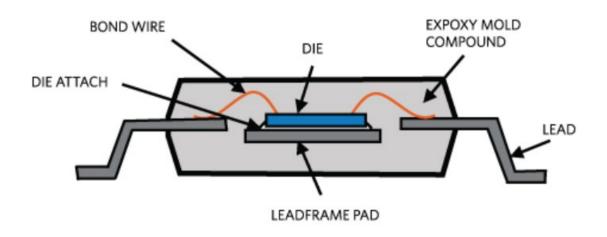
• For PPAP clients IMDS/CAMDS material content declarations will be updated.

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.

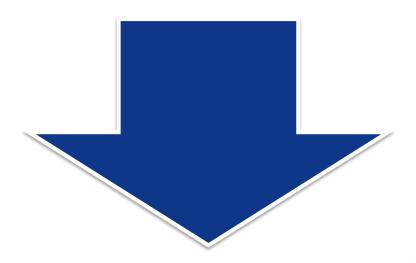
Suppliers of PFAS chemicals and raw materials containing PFAS are already announcing endof-life plans in advance of any formal legislation.

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.

