

Product Change Notification: MFOL-15RYZV597

Date:

22-Jul-2025

Product Category:

Platform Root Of Trust Controllers

Notification Subject:

CCB 7657 Initial Notice: Qualification of ATP7 as an additional assembly site for CEC1702 and CEC1712 device families available in 84L WFBGA (7x7x0.8mm) package.

Affected CPNs:

MFOL-15RYZV597_Affected_CPN_07222025.pdf MFOL-15RYZV597_Affected_CPN_07222025.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 ATP7 as an additional assembly site for CEC1702 and CEC1712 device families available in 84L WFBGA (7x7x0.8mm) 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)			
Substrate Core Material	HL832NXA	HL832NXA	HL832NXA			
Substrate SM Material	AUS320	AUS320	AUS320			
Die Attach Material	HR9004-20	HR9004-20	EM760L2-P			

Wire Material	CuPdAu	CuPdAu	CuPdAu
Molding Compound Material	G750E	G750E	G750E

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 Qualification Completion Date: November 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:

	July 2025				>	November 2025					
Work Week	27	28	29	30	31		45	46	47	48	49
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: July 22, 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_MFOL-15RYZV597_Qual Plan.pdf
Please contact your local <u>Microchip sales office</u> 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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Affected Catalog Part Numbers (CPN)

CEC1702Q-B2-I/SX

CEC1702Q-B1-SX-CN1

CEC1702Q-C1-SX

CEC1712H-N2-I/SX-BMGP1-TR

CEC1712H-S2-I/SX-DE2-TR

CEC1712H-N2-I/SX-DL1

CEC1712H-S2-I/SX-DE2

CEC1712H-S2-I/SX

CEC1712H-S2-I/SX-GM

CEC1712H-N2-I/SX-BMGP2

CEC1712H-N2-I/SX-BMGP3

CEC1712H-N2-I/SX-BMGP1

CEC1712H-N2-I/SX

CEC1712H-N2-I/SX-LU1

CEC1712H-B2-I/SX

CEC1702Q-B1-SX-CN2

CEC1702Q-B2-E/SXVAO

CEC1712H-N2-I/SX-TG1

CEC1702Q-S1-I/SX

CEC1702Q-B1-SX-TR

CEC1702Q-C2-I/SX

CEC1702Q-B1-SX

CEC1712H-S2-E/SXVAO

CEC1702Q-B2-I/SX-SM1

Date: Monday, July 21, 2025



QUALIFICATION PLAN SUMMARY

PCN #: MFOL-15RYZV597

Date: July 15, 2025

Qualification of ATP7 as an additional assembly site for CEC1702 and CEC1712 device families available in 84L WFBGA (7x7x0.8mm) package.

Purpose: Qualification of ATP7 as an additional assembly site for CEC1702 and CEC1712 device families available in 84L WFBGA (7x7x0.8mm) package.

CCB No.: 7657

	Assembly site	ATP7					
	MP Code (MPC)	See MPC List					
	Part Number (CPN)	See CPN List					
Misc.	MSL information	3/260					
	Assembly Shipping Media (T/R, Tube/Tray)	Tray (UB07070.751026XA)					
	Base Quantity Multiple (BQM)	260					
	Reliability Site	MTAI					
	Core Material	HL832NXA					
	Core Thickness	0.06 mm					
	SM Material	AUS320					
<u>Substrate</u>	Process	STD					
	SM Thickness	0.02/0.02 mm					
	Part Number	101413722					
	Drill Size	100um					
Bond Wire	Material	CuPdAu					
Die Attach 1	Part Number	EM760L2-P					
Die Attach 1	Conductive	No					
<u>MC</u>	Part Number	G750E					
	Package Type	WFBGA					
	Pin/Ball Count	84					
<u>PKG</u>	PKG width/size	7x7x0.8mm					
	Ball Pitch/Size	0.65/0.25 mm					
	Solder Ball Material	SAC105					

Test Name	Conditions	Reliability Stress Read Point	Pre & Post Reliability Stress Test Temperature	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Qty of Lots	Total Units	Fail Accept Qty	Est. Dur. Days	Special Instruction
Wire Bond Pull - WBP	Mil. Std. 883-2011			5	0	1	5	0 fails after TC	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.
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 +125°C, +150°C or +175°C 2x Stress	1st Readpoint: Grade 1: 500 hrs (+175°C) 2nd Readpoint: Grade 1: 1000 hrs (+175°C)	Grade 1: +25°C, +125°C	45	5	3	150	0	21-67	Perform per the requirements in AEC-Q100/Q101. 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.		Grade 1: +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.

Test Name	Conditions	Reliability Stress Read Point	Pre & Post Reliability Stress Test Temperature	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Qty of Lots	Total Units	Fail Accept Qty	Est. Dur. Days	Special Instruction
HAST	'JESD22-A101 or A110 +130°C/85% RH for 96 hrs or +110°C/85%RH for 264 hrs 2x Stress	1st Readpoint: Grade 1: 96 hrs (+130°C/85% RH) 2nd Readpoint: Grade 1: 192 hrs (+130°C/85% RH)	Grade 1: +25°C, +125°C	77	5	3	246	0	10-22	Perform per the requirements in AEC-Q006. Spares should be properly identified. Use the parts which have gone through Preconditioning.
uHAST	'JESD22-A102, A118, or A101 +130°C/85% RH for 96 hrs or +110°C/85% RH for 264 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 Preconditioning.
Temp Cycle	'JESD22-A104 and Appendix 3 -55°C to +125°C, -55°C to +150°C 2x Stress	1st Readpoint: Grade 1: 1000 cycles (-55°C to +150°C) 2nd Readpoint: Grade 1: 2000 cycles (-55°C to +150°C)	Grade 1: +25°C, +125°C	77	5	3	246	0	15-120	Perform per the requirements in AEC-Q006. Spares should be properly identified. Use the parts which have gone through Preconditioning.