Product Change Notification / ALAN-18KFQO196

Date:

22-May-2023

Product Category:

Memory

PCN Type:

Manufacturing Change

Notification Subject:

CCB 6017 Initial Notice: Qualification of MMT as an additional assembly site for selected AT24Cxx device family available in 8L TSSOP (4.4mm) package.

Affected CPNs:

ALAN-18KFQO196_Affected_CPN_05222023.pdf
ALAN-18KFQO196_Affected_CPN_05222023.csv

Notification Text:

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 selected AT24Cxx device family available in 8L TSSOP (4.4mm) package.

Pre and Post Change Summary:

	Pre Change	Post Change

Assembly Site	Amkor Technology Philippine (P1/P2), INC. (ANAP)	ATX Semiconductor (Shanghai)Co. Ltd (ASSH)	Amkor Technology Philippine (P1/P2), INC. (ANAP)	ATX Semiconductor (Shanghai)Co. Ltd (ASSH)	Microchip Technology Thailand (Branch) (MMT)
Wire Material	PdCu	PdCu	PdCu	PdCu	Au
Die Attach Material	8290	EN-4900G	8290	EN-4900G	2200D
Molding Compound Material	G700A	G700LY	G700A	G700LY	G600V
Lead-Frame Material	C7025	C7025	C7025	C7025	C7025
Lead-Frame Paddle Size	98 x 87 mils	126 x 87 mils	98 x 87 mils	126 x 87 mils	118 x 87
DAP Surface Prep	PPF	PPF	PPF	PPF	Bare Cu

Impacts to Data Sheet: None

Change Impact None

Reason for Change: To improve manufacturability by qualifying MMT as an additional assembly site.

Change Implementation Status: In Progress

Estimated Qualification Completion Date: May 2023

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.

Time Table Summary:

	May 2023			
Workweek	19	20	21	22
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: May 22, 2023: Issued initial notification.

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

Attachments:

PCN_ALAN-18KFQO196 Qual Plan.pdf
PCN_ALAN-18KFQO196_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 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 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.

QUALIFICATION PLAN SUMMARY

PCN# ALAN-18KFQO196

Date:
January 16, 2023

Qualification of MMT as an additional assembly site for selected AT24Cxx device family available in 8L TSSOP (4.4mm) package.

Purpose: **Qualification of MMT as an additional assembly site for selected AT24Cxx device family available in 8L TSSOP (4.4mm) package.**

MP code: **35833TC5XC05**

Part No.: **AT24CM01-XHM-T**

BD No: **BD-001211-03**

CCB: **6017**

Package:

Type 8 lead TSSOP

Width or Size 4.4 mm

Leadframe:

Material C7025

Plating None- Bare Cu

Part Number 10100848

Surface treatment BOT

Paddle size 118 x 87 mils

Process Stamped

Solder plating material Matte tin

Wire:

Material Au

Die Attach:

Part Number 2200D

Conductive Yes

Mold Compound:

Type/Supplier G600V

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	Start Date	End Date	Test Site	Pkg. Type	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			MTAI		Standard Pb-free solderability is the requirement.
Backward Solderability	J-STD-002D ;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			MTAI		Standard Pb-free solderability is the requirement.
Wire Bond Pull - WBP	Mil. Std. 883-2011	5	0	1	5	0	5			MTAI		30 bonds from a min. 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	1	5	0	5			MTAI		30 bonds from a min. 5 devices.
Physical Dimmensions	Measure per JESD22 B100 and B108	10	0	3	30	0	5			MTAI		
External Visual	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	5			MTAI		

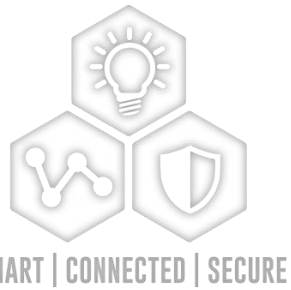
Test Name	Conditions	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Qty of Lots	Total Units	Fail Accept Qty	Est. Dur. Days	Start Date	End Date	Test Site	Pkg. Type	Special Instructions
Preconditioning - Required for surface mount devices	+150°C Bake for 24 hours, moisture loading requirements 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			MTAI		"Spares should be properly identified. 77 parts from each lot to be used for HAST, uHAST, Temp Cycle test.
HAST	+130°C/85% RH for 96 hours. Electrical test pre and post stress at +25°C , +85°C	77	5	3	246	0	10			MTAI		Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
UHAST	+130°C/85% RH for 96 hrs. Electrical test pre and post stress at 25°C	77	5	3	246	0	10			MTAI		Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
Temp Cycle	-65°C to +150°C for 500 cycles. Electrical test pre and post stress at 85C; 3 gram force WBP, on 5 devices from 1 lot, test following Temp Cycle stress.	77	5	3	246	0	15			MTAI		Spares should be properly identified. Use the parts which have gone through Pre-conditioning.

Affected Catalog Part Numbers (CPN)

AT24C128C-XHM-T-834
AT24C16C-XHMAU-T
AT24C64D-XHMAU-T
AT24C512C-XHM-B
AT24C512C-XHD-B
AT24C512C-XHM-T
AT24C512C-XHD-T
AT24C512C-XHMEU-T
AT24C512C-XHDHB-T
AT24C08C-XHM-B
AT24C08C-XHM-T
AT24C256C-XHL-B
AT24C256C-XHL-T
AT24C16C-XHM-B
AT24C16C-XHM-T
AT24C64D-XHM-B
AT24C64D-XHM-T
AT24CM01-XHM-B
AT24CM01-XHD-B
AT24CM01-XHM-T
AT24CM01-XHD-T
AT24C128C-XHM-B
AT24C128C-XHMAU-T
AT24C128C-XHMEU-T
AT24C128C-XHM-T
AT24C32D-XHM-B
AT24C32D-XHM-T

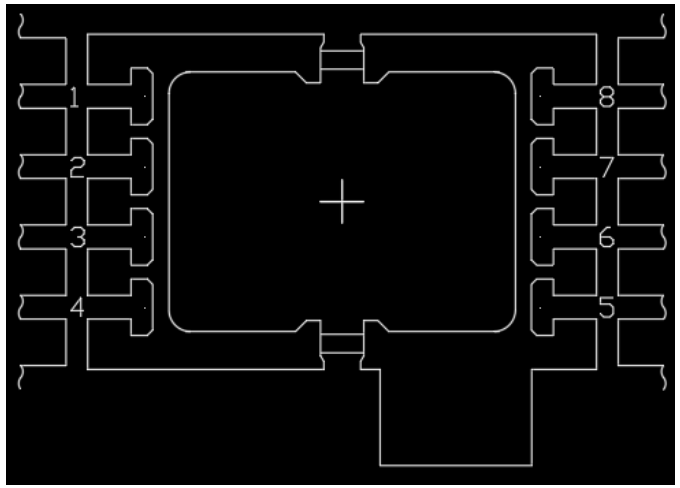
CCB 6017
Pre and Post Change Summary
PCN# ALAN-18KFQO196

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



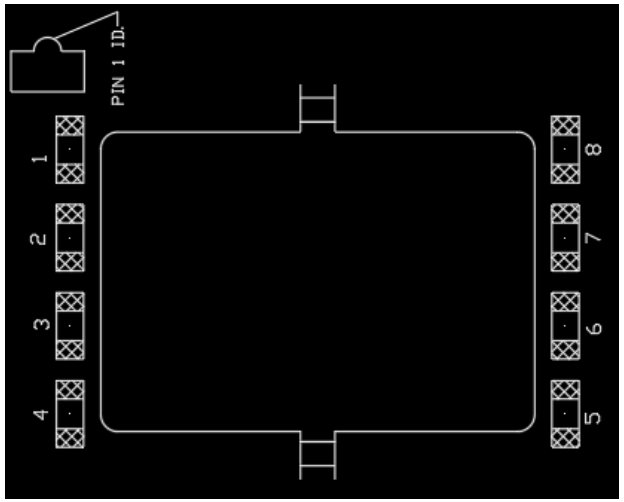
Pre and Post Change Summary

ANAP



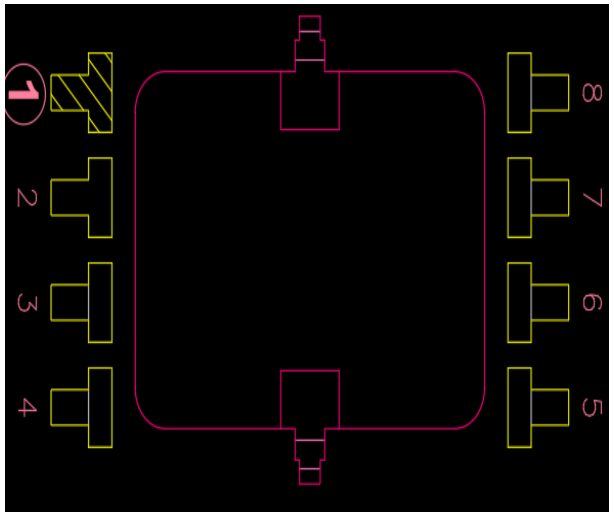
Bond Wire Material	PdCu
Die Attach material	8290
Mold compound material	G700A
Lead-Frame Paddle Size	98 x 87 mils

ASSH



Bond Wire Material	PdCu
Die Attach material	EN-4900G
Mold compound material	G700LY
Lead-Frame Paddle Size	126 x 87 mils

MMT



Bond Wire Material	Au
Die Attach material	2200D
Mold compound material	G600V
Lead-Frame Paddle Size	118 x 87 mils

*Not fit to scale

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