Product Change Notification / ASER-15CAKZ286

Date:

05-May-2021

Product Category:

Capacitive Touch Sensors, USB Transceivers

PCN Type:

Manufacturing Change

Notification Subject:

CCB 4630.001 Initial Notice: Qualification of STA as an additional assembly site for selected CAP1188 and USB33xx device families available in 24L VQFN (4x4x0.9mm) package.

Affected CPNs:

ASER-15CAKZ286_Affected_CPN_05052021.pdf
ASER-15CAKZ286_Affected_CPN_05052021.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 STA as an additional assembly site for selected CAP1188 and USB33xx device families available in 24L VQFN (4x4x0.9mm) package.

Pre and Post Change Summary:

	Pre Change		Post Change		
Assembly Site	ASE Inc. (ASE)		ASE Inc. (ASE)		STATS Chippac Ltd. (STA)
Wire material	CuPd	Au	CuPd	Au	CuPdAu
Die attach material	EN-4900F		EN-4900F		8290

Molding compound material	G631B	G631B	G700E
Lead frame material	C194	C194	C194

Impacts to Data Sheet: None

Change Impact: None

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

Change Implementation Status:

In Progress

Estimated Qualification Completion Date: September 2021

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 2021					-->	**September 2021**				
Workweek	19	20	21	22	23		36	37	38	39	40
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 5, 2021: 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_ASER-29WFJP505_Pre and Post Change Summary.pdf
PCN_ASER-29WFJP505_Qual Plan.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 #: ASER-29WFJP505

Date:
April 28, 2021

Qualification of MTAI as an additional assembly site for selected ATA66xx device family available in 8L SOIC (3.90mm) package.

Purpose: Qualification of MTAI as an additional assembly site for selected ATA66xx device family available in 8L SOIC (3.90mm) package.

CCB# 4640

Misc.	Assembly site	MTAI
	BD Number	BDM-002864A
	MP Code (MPC)	75016YC2XVA1
	Part Number (CPN)	ATA6631-GAQW
	MSL information	1
	Assembly Shipping Media (T/R, Tube/Tray)	T/R
	Base Quantity Multiple (BQM)	4000
	Reliability Site	MPHIL
Lead-Frame	Paddle size	95 x 130
	Material	A194
	DAP Surface Prep	Selective Ag plating
	Treatment	Roughened
	Process	Stamp
	Lead-lock	Yes
	Part Number	10100859
	Lead Plating	Sn
	Strip Size	239,6 x 70mm
	Strip Density	320
Bond Wire	Material	CuPdAu
Die Attach	Part Number	8390A
	Conductive	yes
MC	Part Number	G600V
PKG	PKG Type	SOIC
	Pin/Ball Count	8
	PKG width/size	150mil

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 Instructions
Wire Bond Pull - WBP	Mil. Std. 883-2011			5	0	1	5	0	5	30 bonds from a min. 5 devices.
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 *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 - 167	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 1+ 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.
HAST	JESD22-A101 or A110 +130°C/85% RH for 96 hrs *2x Stress*	<u>1st Readpoint:</u> Grade 1: 96 hrs (+130°C/85% RH) <u>2nd Readpoint:</u> 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 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 and Appendix 3 -65°C to +150°C *2x Stress*	<u>1st Readpoint:</u> 500 cycles (-65ºC to 150ºC) <u>2nd Readpoint:</u> 1000 cycles (-65ºC to 150ºC)	Grade 1: +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 Pre-conditioning.
Wire Bond Integrity (AEC-Q006 Requirements)	AEC-Q006									Wire pull / ball shear is performed after stress testing and decapsulation.

CCB 4640
Pre and Post Change Summary
PCN #: ASER-29WFJP505

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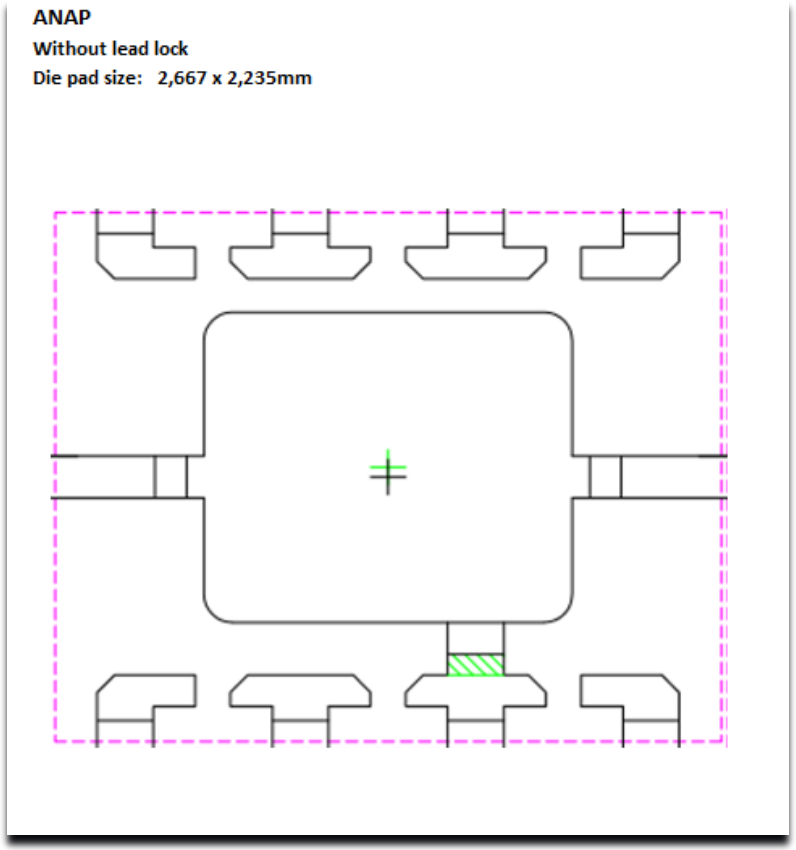
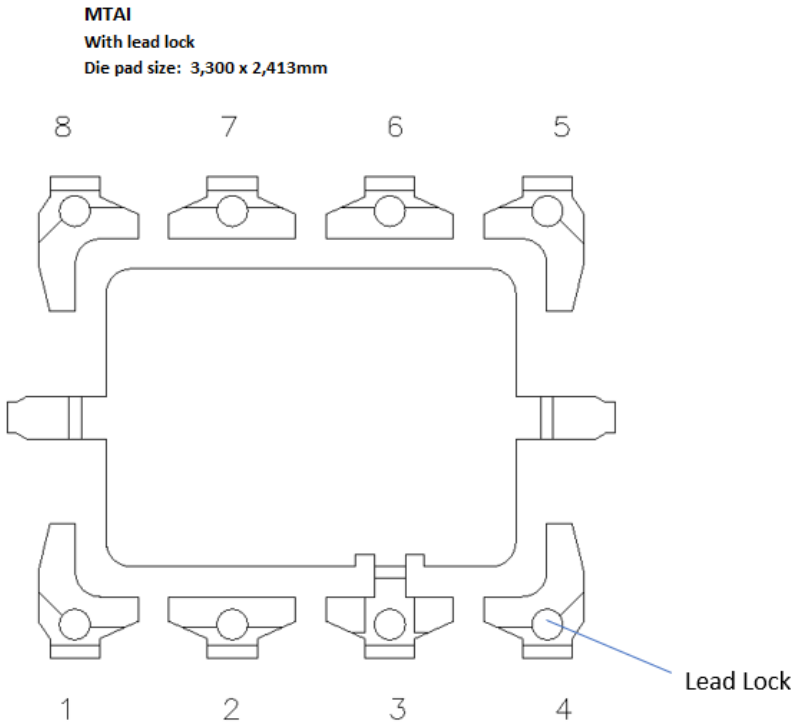
Qualification of MTAI as an additional assembly site for selected ATA66xx device family available in 8L SOIC (3.90mm) package.

Lead Frame Comparison – Fused 3

ANAP	MTAI
	

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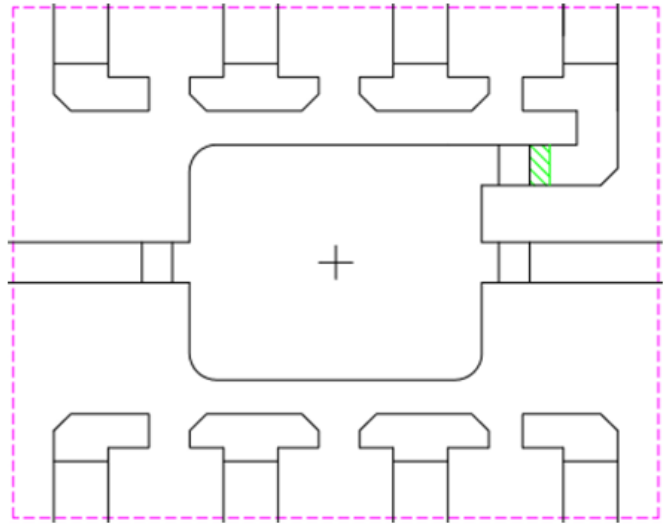
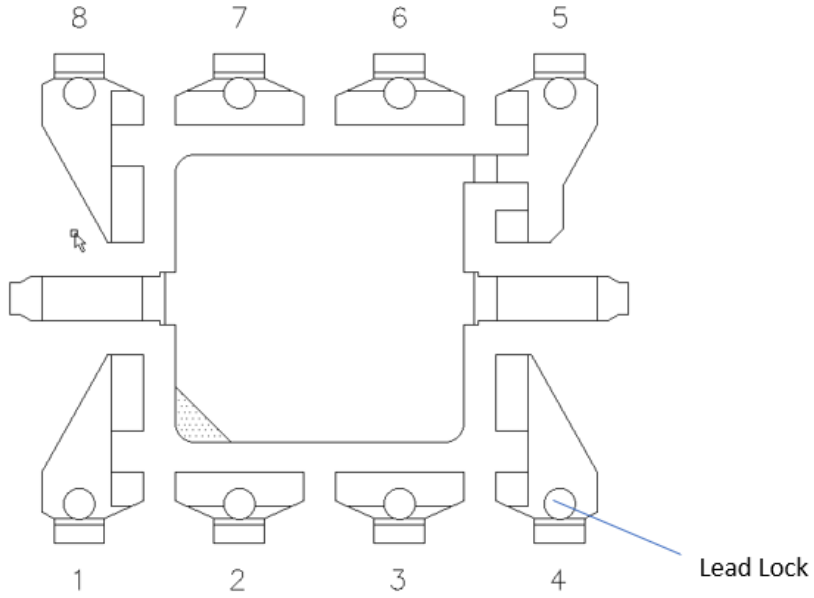
Lead Frame Comparison – Fused 5

ANAP	MTAI
ANAP Without lead lock Die pad size: 1,778 x 2,184mm 	MTAI With lead lock Die pad size: 2,286 x 2,286mm 

Affected Catalog Part Numbers (CPN)

CAP1188-1-CP-TR
USB3343-CP
USB3343-CP-TR
USB3318-CP
USB3318-CP-TR
USB3311C-CP-TR
USB3315C-CP-TR
USB3317C-CP-TR
USB3318C-CP-TR