



Product Change Notification / ASER-15CAKZ286

Date:

28-Oct-2021

Product Category:

Capacitive Touch Sensors, USB Transceivers

PCN Type:

Manufacturing Change

Notification Subject:

CCB 4630.001 Final 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_10282021.pdf](#)
[ASER-15CAKZ286_Affected_CPN_10282021.csv](#)

Notification Text:

PCN Status:Final 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	PdCu	Au	PdCu	Au	CuPdAu
Die Attach Material	EN-4900F		EN-4900F		8290
Molding Compound Material	G631B		G631B		G700E
Lead-Frame Material	C194		C194		C194
	See Pre and Post Change Summary for comparison.				

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:January 2022

Note: Please be advised that after the estimated first ship date customers may receive pre and post change parts.

Due to unforeseen circumstances, that are out of Microchip's control, full qualification will be made available as soon as it is approved which may be after the estimated first ship date so that Microchip can maintain continuity of supply and not disrupt customer orders.

Time Table Summary:

		May 2021					>	October 2021					November 2021					>	January 2022				
	Workweek	1 9	20	2 1	2 2	2 3		40	4 1	4 2	4 3	4 4	4 5	4 6	4 7	4 8	4 9		1	2	3	4	5
Initial PCN Issue Date				x																			
Qual Report Availability									x														
Final PCN Issue Date																				x			
Estimated Implementation																x							

[illegible]

Method to Identify Change:Traceability code

:Traceability code

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

Please open the attachments included with this PCN labeled as PCN # Qual Plan.

Note 1: This final PCN will be updated to include the Qualification report as soon as it is completed.

Note 2: Please be advised the qualification completion times may be extended because of unforeseen business conditions.

Revision History: May 5, 2021: Issued initial notification.

May 5, 2021: Issued initial notification.

May 11, 2021: Re-issued initial notification. Corrected the attached Qualification Plan and Pre and Post Change Summary.

October 28, 2021: Issued final notification. Updated estimated qualification completion date to be on January 2022.

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-15CAKZ286_Qual Plan.pdf

PCN_ASER-15CAKZ286_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.

CCB 4630.001

Pre and Post Change Summary

PCN #: ASER-15CAKZ286



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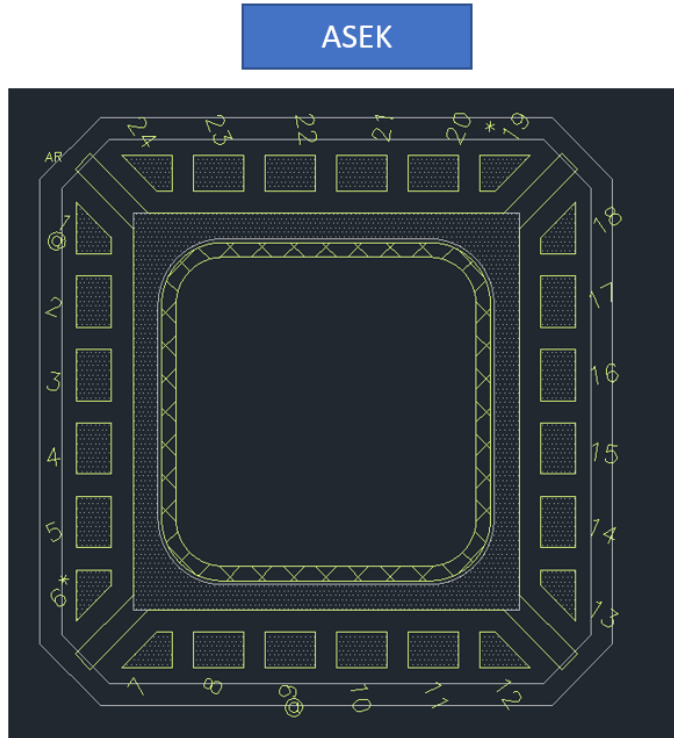


SMART | CONNECTED | SECURE

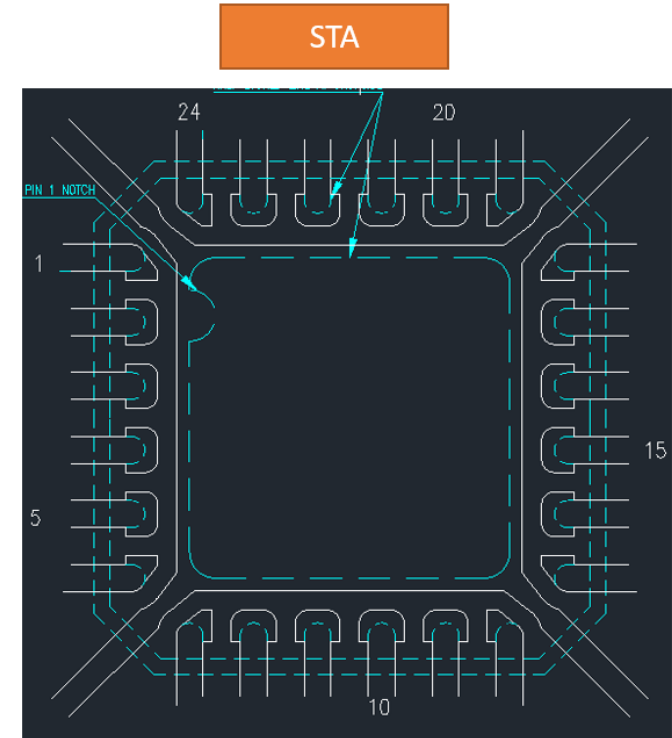
**Qualification of STA as an additional assembly site for selected
CAP1188 and USB33xx device families available in 24L VQFN
(4x4x0.9mm) package.**

Lead frame Comparison

ASE



STA





MICROCHIP

QUALIFICATION PLAN SUMMARY

PCN#: ASER-15CAKZ286

Date

March 22, 2021

Qualification of STA as an additional assembly site for selected LAN9303 device family available in 56L VQFN (8x8x0.9mm) package. The qualification for selected CAP1188 and USB33xx device families available in 24L VQFN (4x4x0.9mm) package will qualify by similarity (QBS).

Purpose: Qualification of STA as an additional assembly site for selected LAN9303 device family available in 56L VQFN (8x8x0.9mm) package. The qualification for selected CAP1188 and USB33xx device families available in 24L VQFN (4x4x0.9mm) package will qualify by similarity (QBS).

CCB No: 4630 & 4630.001

<u>Misc.</u>	Assembly site	STA
	MP Code (MPC)	TA3017RTXB0C
	Part Number (CPN)	LAN9303I-ABZJ
	MSL information	MSL-3 @260C
	Assembly Shipping Media (T/R, Tube/Tray)	UBOT Tray (UF08081.01026XB 02)
	Base Quantity Multiple (BQM)	Tray - 260
	Reliability Site	MTAI
<u>Lead-Frame</u>	Paddle size	236X236 mils
	Material	C194
	DAP Surface Prep	Double Ring
	Treatment	Non-Rough
	Process	Etched
	Lead-lock (With Locking Holes)	Yes
	Lead Plating	Matte Sn
	Strip Size	250mmX70 mm
	Strip Density	108 units / strip
<u>Bond Wire</u>	Material	CuPdAu
<u>Die Attach</u>	Part Number	8290
	Conductive	Yes
<u>MC</u>	Part Number	G700E
<u>PKG</u>	PKG Type	VQFN
	Pin/Ball Count	56L
	PKG width/size	8X8X0.9 mm

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	ATE Test Site	REL 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	MTAI	56LVQFN	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.
Wire Bond Pull - WBP	Mil. Std. 883-2011	5	0	1	5	0	5	MTAI	MTAI	56LVQFN	30 bonds from a min. 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	1	5	0	5	MTAI	MTAI	56LVQFN	30 bonds from a min. 5 devices.
Physical Dimensions	Measure per JESD22 B100 and B108	10	0	3	30	0	5	MTAI	MTAI	56LVQFN	
External Visual	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	5	MTAI	MTAI	56LVQFN	
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 at room temp 25°C and hot temp 100°C. MSL3 / 260c	231	15	3	738	0	15	MTAI	MTAI	56LVQFN	Spares should be properly identified. 77 parts from each lot to be used for HAST, uHAST, Temp Cycle test.
UHAST	+130°C/85% RH for 96 hrs or +110°C/85% RH for 264 hrs. Electrical test pre and post stress at room temp 25°C. Requires 2X Rel stress Testing	77	5	3	246	0	10	MTAI	MTAI	56LVQFN	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 hot temp 100°C; 3gram force WBP, on 5 devices from 1 lot, test following Temp Cycle stress. Requires 2X Rel stress Testing	77	5	3	246	0	15	MTAI	MTAI	56LVQFN	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.

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