



Product Change Notification / NTDO-16ZPQO768

Date:

22-Feb-2022

Product Category:

USB Hubs

PCN Type:

Manufacturing Change

Notification Subject:

CCB 4969 Initial Notice: Qualification of A194 lead frame material and new DAP surface prep for USB5806, USB5807, USB5816, USB5826, USB5906, USB5916 and USB5926 device families in 100L VQFN (12 x 12 x 0.9mm) package.

Affected CPNs:

[NTDO-16ZPQO768_Affected_CPN_02222022.pdf](#)

[NTDO-16ZPQO768_Affected_CPN_02222022.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 A194 lead frame material and new DAP surface prep for USB5806, USB5807, USB5816, USB5826, USB5906, USB5916 and USB5926 device families in 100L VQFN (12 x 12 x 0.9mm) package.

Pre and Post Change Summary:

Availability																						
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:February 22, 2022: 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_NTDO-16ZPQ0768_Qual_Plan.pdf](#)
- [PCN_NTDO-16ZPQ0768_Pre and Post Change Summary.pdf](#)

Please contact your local [Microchip sales office](#) with questions or concerns regarding this notification.

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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 4969

Pre and Post Change Summary
PCN #: NTDO-16ZPQ0768



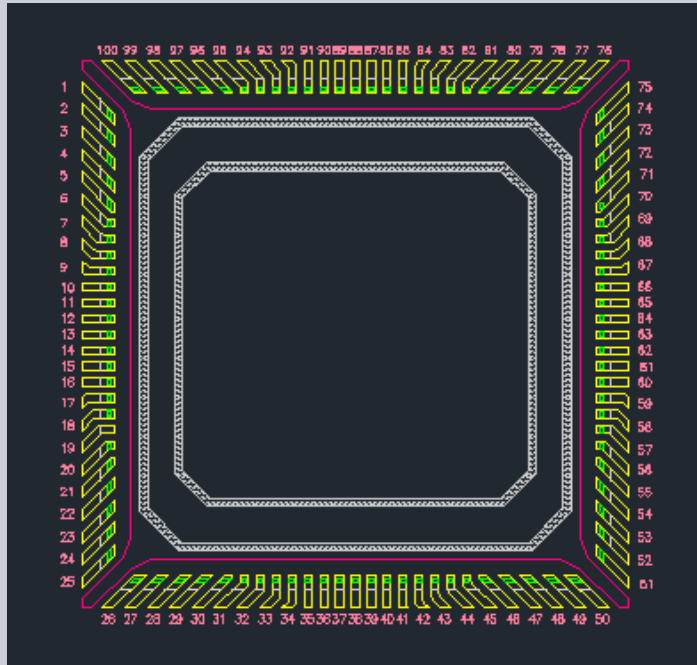
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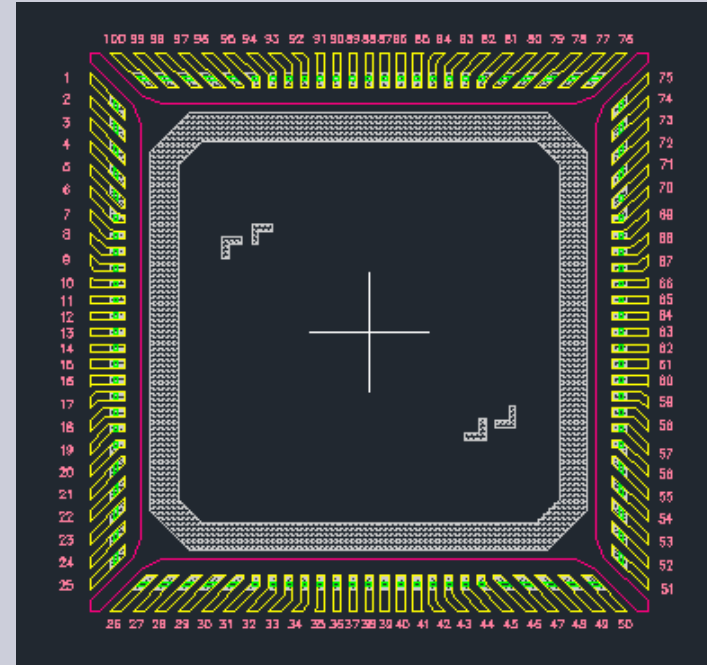
Leadframe Comparison

Pre Change



Leadframe Material	EFTEC64T
DAP Surface Prep	Double Ag ring plated
Lead Plating	Matte Tin

Post Change



Material	A194
DAP Surface Prep	Single Ag ring plated
Lead Plating	Matte Tin



MICROCHIP

QUALIFICATION PLAN SUMMARY

PCN #: NTDO-16ZPQO768

**Date:
January 19, 2022**

Qualification of A194 lead frame material and new DAP surface prep for USB5806, USB5807, USB5816, USB5826, USB5906, USB5916 and USB5926 device families in 100L VQFN (12x12x0.9mm) package.

Purpose: Qualification of A194 lead frame material and new DAP surface prep for USB5806, USB5807, USB5816, USB5826, USB5906, USB5916 and USB5926 device families in 100L VQFN (12x12x0.9mm) package.

<u>Misc.</u>	Assembly site	MTAI
	BD Number	BD-000461 rev.01
	MP Code (MPC)	STB07SKDXCH3
	Part Number (CPN)	USB5807CT/KDH01
	MSL information	MSL3/260
	Assembly Shipping Media (T/R, Tube/Tray)	Tray & T/R
	Base Quantity Multiple (BQM)	168 / 2500
	Reliability Site	MTAI
	CCB No.	4969
<u>Lead-Frame</u>	Paddle size	323x323
	Material	A194
	DAP Surface Prep	Ag ring plated on DAP
	Treatment	Roughening
	Process	Etched
	Lead-lock	No
	Part Number	10110012
	Lead Plating	Matte Tin
<u>Bond Wire</u>	Material	CuPdAu
<u>Die Attach</u>	Part Number	3280
	Conductive	Yes
<u>MC</u>	Part Number	G700LTD
<u>PKG</u>	PKG Type	VQFN
	Pin/Ball Count	100
	PKG width/size	12x12x0.9 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	Start Date	End Date	Test Site	Pkg. Type	Special Instructions
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.
External Visual	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	5			MTAI		
Physical Dimensions	Measure per JESD22 B100 and B108	10	0	3	30	0	5			MTAI		
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 +25C MSL3/260	231	15	3	738	0	15			MTAI		Spares should be properly identified.
HAST	+130°C/85% RH for 96 hours. Electrical test pre and post stress at +25°C and hot temp 105C	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	-55°C to +125°C for 1,000 cycles. Electrical test pre and post stress at hot temp 105C; 3 grams 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)

USB5807/KD
USB5806/KD
USB5816/KD
USB5906/KD
USB5916/KD
USB5926/KD
USB5826/KD
USB5807C/KD
USB5806C/KD
USB5816C/KD
USB5826C/KD
USB5906C/KD
USB5916C/KD
USB5926C/KD
USB5816C/KDH01
USB5816C/KDH02
USB5807C/KDH01
USB5807-I/KD
USB5806-I/KD
USB5816-I/KD
USB5906-I/KD
USB5916-I/KD
USB5926-I/KD
USB5826-I/KD
USB5807C-I/KD
USB5806C-I/KD
USB5816C-I/KD
USB5826C-I/KD
USB5906C-I/KD
USB5916C-I/KD
USB5926C-I/KD
USB5816C-I/KDH02
USB5807C-I/KDH01
USB5807T/KD
USB5806T/KD
USB5816T/KD
USB5906T/KD
USB5916T/KD
USB5926T/KD
USB5826T/KD
USB5807CT/KD
USB5806CT/KD
USB5816CT/KD
USB5826CT/KD
USB5906CT/KD
USB5916CT/KD

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USB5926CT/KD

USB5806CT/KDD01

USB5816CT/KDH01

USB5816CT/KDH02

USB5807CT/KDH01

USB5807T-I/KD

USB5806T-I/KD

USB5816T-I/KD

USB5906T-I/KD

USB5916T-I/KD

USB5926T-I/KD

USB5826T-I/KD

USB5807CT-I/KD

USB5806CT-I/KD

USB5816CT-I/KD

USB5826CT-I/KD

USB5906CT-I/KD

USB5916CT-I/KD

USB5926CT-I/KD

USB5816CT-I/KDH02

USB5807CT-I/KDH01