



## Product Change Notification / RMES-19RHZI746

---

**Date:**

21-Jul-2020

**Product Category:**

USB Hubs

**PCN Type:**

Manufacturing Change

**Notification Subject:**

CCB 4318 Initial Notice: Qualification of ASCL as an additional assembly site for selected products available in 100L VQFN (12X12X0.9mm) package.

**Affected CPNs:**

[RMES-19RHZI746\\_Affected\\_CPN\\_07212020.pdf](#)  
[RMES-19RHZI746\\_Affected\\_CPN\\_07212020.csv](#)

**Notification Text:****PCN Status:**

Initial notification

**PCN Type:**

Manufacturing Change

**Microchip Parts Affected:**

Please open one of the icons found in the Affected CPNs section above.

NOTE: For your convenience Microchip includes identical files in two formats (.pdf and .xls).

**Description of Change:**

Qualification of ASCL as an additional assembly site for selected products available in 100L VQFN (12X12X0.9mm) package.

**Pre Change:**

Assembled at ASE using CDA194 leadframe and G631H molding compound material

**Post Change:**





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

USB5926CT/KD  
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



**MICROCHIP**

# **QUALIFICATION PLAN SUMMARY**

**PCN #: RMES-19RHZI746**

**Date:  
July 09, 2020**

**Qualification of ASCL as an additional assembly site for  
selected products available in 100L VQFN (12X12X0.9mm)  
package.**

**Purpose: Qualification of ASCL as an additional assembly site for selected products available in 100L VQFN (12X12X0.9mm) package.**

<u>Misc.</u>	Assembly site	ASECL
	BD Number	TBD
	MP Code (MPC)	STB07SKDXCH3
	Part Number (CPN)	USB5807CT/KDH01
	MSL information	3
	Assembly Shipping Media (T/R, Tube/Tray)	Tray
	Base Quantity Multiple (BQM)	168
	Reliability Site	MTAI
	CCB No.	4318
<u>Lead-Frame</u>	Paddle size	323X323 mils
	Material	C7025
	DAP Surface Prep	DOUBLE RING
	Treatment	Roughened
	Process	Etched
	Lead-lock	No
	Part Number	A0100QN008F01
	Lead Plating	Matte Sn
	Strip Size	78X258mm
	Strip Density	90ea/Strip
<u>Bond Wire</u>	Material	CuPdAu
<u>Die Attach</u>	Part Number	EN-4900
	Conductive	Yes
<u>MC</u>	Part Number	G700LA
<u>PKG</u>	PKG Type	VQFN
	Pin/Ball Count	100L
	PKG width/size	12X12X0.9mm

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	VQFN100L	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 fails after TC	5	MTAI	MTAI	VQFN100L	30 bonds from a min. 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	1	5	0	5	MTAI	MTAI	VQFN100L	30 bonds from a min. 5 devices.
Physical Dimmensions	Measure per JESD22 B100 and B108	10	0	3	30	0	5	MTAI	MTAI	VQFN100L	
External Visual	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	5	MTAI	MTAI	VQFN100L	
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 and hot temp.  MSL3 260	231	15	3	738	0	15	MTAI	MTAI	VQFN100L	Spares should be properly identified. 77 parts from each lot to be used for HAST, uHAST, Temp Cycle test.

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
HAST	1st Read Point +130°C/85% RH for 96 hours Electrical test pre and post stress at +25°C and hot temp.  2nd Read Point +130°C/85% RH for 192 hours Electrical test pre and post stress at +25°C.	77	5	3	246	0	10	MTAI	MTAI	VQFN100L	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
UHAST	1st Read Point +130°C/85% RH for 96 hours Electrical test pre and post stress at +25°C and hot temp.  2nd Read Point +130°C/85% RH for 192 hours Electrical test pre and post stress at +25°C	77	5	3	246	0	10	MTAI	MTAI	VQFN100L	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
Temp Cycle	1st Read point: -65°C to +150°C for 500 cycles. Electrical test pre and post stress at hot temp; 3 gram force WBP, on 5 devices from 1 lot, test following Temp Cycle stress.  2nd Read point: -65°C to +150°C for 1000 cycles. Electrical test pre and post 25c	77	5	3	246	0	15	MTAI	MTAI	VQFN100L	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.