



## Product Change Notification - LIAL-21SDJX488

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**Date:**

04 Jun 2019

**Product Category:**

8-bit Microcontrollers

**Affected CPNs:****Notification subject:**

CCB 3397 Final Notice: Qualification of MPHL as an additional final test site for selected Atmel products available in 32L VQFN package.

**Notification text:****PCN Status:**

Final 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 MPHL as an additional final test site for selected Atmel products available in 32L VQFN package.

**Pre Change:**

Tested at ANAC final test site

**Post Change:**

Tested at ANAC or MPHL final test site

**Pre and Post Change Summary:**

	Pre Change	Post Change	
<b>Final test site</b>	Amkor Assembly & Test (Shanghai) Co., LTD (ANAC)	Amkor Assembly & Test (Shanghai) Co., LTD (ANAC)	Microchip Technology Operations (Philippines) Corporation (MPHL)
<b>Package</b>	32L VQFN (5x5x1mm)	32L VQFN (5x5x1mm)	32L VQFN (5x5x0.9mm)
<b>Base Quantity Multiple (BQM)</b>	6000	6000	6000
<b>Pin 1 Orientation</b>	Quadrant 1	Quadrant 1	Quadrant 1
<b>Carrier Tape</b>	Minor dimensional changes (see attached pre and post change attachment)		
<b>Plastic Reel</b>	Clear or White	Clear or White	Clear or White
<b>Plastic Reel Dimension</b>	Minor dimensional changes (see attached pre and post change attachment)		
<b>Packing Method</b>	Minor Packing changes (see attached pre and post change attachment)		

**Impacts to Data Sheet:**

None



**Change Impact:**

None

**Reason for Change:**

To improve on-time delivery performance by qualifying MPHL as an additional final test site.

**Change Implementation Status:**

In Progress

**Estimated First Ship Date:**

June 30, 2019 (date code: 1927)

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

**Time Table Summary:**

Workweek	May 2018					-->	June 2019				
	18	19	20	21	22		23	24	25	26	27
Initial PCN Issue Date					X						
Qual Report Availability							X				
Final PCN Issue Date							X				
Estimated Implementation Date										X	

**Method to Identify Change:**

Traceability code

**Qualification Report:**

Please open the attachments included with this PCN labeled as PCN\_#\_Qual Report.

**Revision History:**

**May 30, 2018:** Issued initial notification.

**June 4, 2019:** Issued final notification. Attached the qualification report. Provided estimated first ship date to be on June 30, 2019. Updated affected CPN list to remove parts not affected by the scope. The change described in this PCN does not alter Microchip's current regulatory compliance regarding the material content of the applicable products.

**Attachment(s):**

[PCN\\_LIAL-21SDJX488\\_Qual\\_Report.pdf](#)

[PCN\\_LIAL-21SDJX488\\_PRE\\_AND\\_POST\\_CHANGE\\_CCB\\_3397.pdf](#)

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

**Terms and Conditions:**

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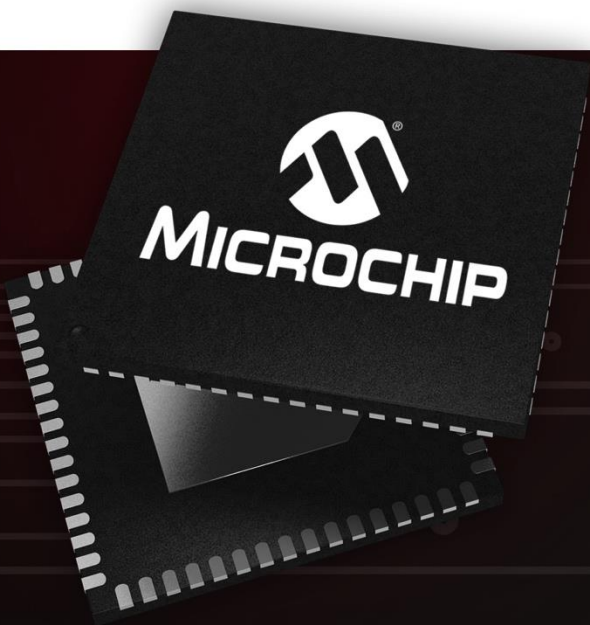
If you wish to [change your PCN profile, including opt out](#), please go to the [PCN home page](#) select login and sign into your myMicrochip account. Select a profile option from the left navigation bar and make the applicable selections.

Affected Catalog Part Numbers (CPN)

ATMEGA168A-MU  
ATMEGA168A-MUR  
ATMEGA168PA-MU  
ATMEGA168PA-MUR  
ATMEGA328P-MU  
ATMEGA328P-MUR  
ATMEGA48A-MU  
ATMEGA48A-MUR  
ATMEGA48PA-MU  
ATMEGA48PA-MUR  
ATMEGA88A-MU  
ATMEGA88A-MUR  
ATMEGA88PA-MU  
ATMEGA88PA-MUR  
ATTINY48-MU  
ATTINY48-MUR  
ATTINY861A-MU  
ATTINY861A-MUR  
ATTINY88-MU  
ATTINY88-MUR



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**PCN # LIAL-21SDJX488**  
**CCB 3658 Pre and Post Changes Summary**

# Carrier Tape Dimension

Pre Change					Post Change				
Width	Pitch	A0	B0	K0	Width	Pitch	A0	B0	K0
12 mm	8 mm	5.25 mm	5.25 mm	1.1 mm	12.0 +0.3/-0.1 mm	8.0 +/-0.1 mm	5.25 +/-0.1 mm	5.25 +/-0.1 mm	1.10 +/-0.1 mm

# Carrier Reel Dimension

## Pre Change

Color	Diameter	Hub Dia	W1	W2
White	330	102 mm	12.8 mm	18.2 mm



## Post Change

Color	Diameter	Hub Dia	W1	W2
White	330	100 mm +/- 1.5	12.4 mm	18.4 mm



# Desiccant

## Pre Change



## Post Change



# Moisture Barrier Bag

## Pre Change

Length	Width
500 mm	380 mm



## Post Change

Length	Width
457.2 mm	406.4 mm





# Carton Box

## Pre Change

Length	Width	Height
370 mm	350 mm	50 mm



## Post Change

Length	Width	Height
354mm	352mm	53mm





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**QUALIFICATION REPORT SUMMARY**

**PCN #: LIAL-21SDJX488**

**Date**

**May 28, 2019**

**Qualification of MPHL as an additional final test site for selected Atmel products available in 32L VQFN package.**

**Purpose:** Qualification of MPHL as an additional final test site for selected Atmel products available in 32L VQFN package.

**CCB No.:** 3397

<b>Test / Evaluation</b>	<b>Test Conditions / Parameters</b>	<b>RESULT</b>
<b>Site by Site Verification</b>	<ul style="list-style-type: none"><li>• Correct site location from actual vs. OI.</li></ul>	PASS
<b>Datalog Comparison</b>	<ul style="list-style-type: none"><li>• Accept if all match or justify the differences</li></ul>	PASS
<b>Bin-to-Bin Comparison</b>	<ul style="list-style-type: none"><li>• 100% correlated or explainable</li></ul>	PASS
<b>Single-Site Test Time</b>	<ul style="list-style-type: none"><li>• Comparable or explainable</li></ul>	PASS
<b>Test Stability</b>	<ul style="list-style-type: none"><li>• 100% pass or explainable</li></ul>	PASS
<b>Parametric Test Stability</b>	<ul style="list-style-type: none"><li>• Accept on Cpk &gt; 1.67 or explainable</li></ul>	PASS
<b>Correlation Lot Run</b>	<ul style="list-style-type: none"><li>• Accept on yield match within 1% Bin-to-bin difference should be within 0.1%</li></ul>	PASS