



Product Change Notification / GBNG-30FQBG264

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**Date:**

02-Mar-2022

**Product Category:**

8-bit Microcontrollers

**PCN Type:**

Manufacturing Change

**Notification Subject:**

CCB 3397.005 Final Notice: Qualification of MPHL as an additional final test site for selected Atmel ATMEGA168PB-MU and ATMEGA168PB-MUR catalog part numbers (CPN) available in 32L VQFN (5x5x0.9mm) package.

**Affected CPNs:**

[GBNG-30FQBG264\\_Affected\\_CPN\\_03022022.pdf](#)

[GBNG-30FQBG264\\_Affected\\_CPN\\_03022022.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 MPHL as an additional final test site for selected Atmel ATMEGA168PB-MU and ATMEGA168PB-MUR catalog part numbers (CPN) available in 32L VQFN (5x5x0.9mm) package.

**Pre and Post Change Summary:**



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:**

February 2, 2022: Issued initial notification.

February 17, 2022: Issued final notification. Attached the Qualification Report. Updated Pre and Post Change Summary. Provided estimated first ship date to be on March 21, 2022  
 March 02, 2022: Re-issued final notification. Corrected the typo error in MPHL BQM to 6000.

The change described in this PCN does not alter Microchip’s current regulatory compliance regarding the material content of the applicable products.

**Attachments:**

- [PCN\\_GBNG-30FQBG264\\_Qual\\_Report.pdf](#)
- [PCN\\_GBNG-30FQBG264 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.

Affected Catalog Part Numbers (CPN)

ATMEGA168PB-MU

ATMEGA168PB-MUR

**CCB 3397.005**  
**Pre and Post Change Summary**  
**PCN #: GBNG-30FQBG264**





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# Pre and Post Change Summary: Tape and Reel

	ASE9					MPHL				
Base Quantity Multiple (BQM) – Tape and Reel	6000 units per reel					6000 units per reel				
Pin1 Orientation	Quadrant 2					Quadrant 1				
Carrier Tape	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
Reel	Color	Diameter	Hub Dia	W1	W2	Color	Diameter	Hub Dia	W1	W2
	White	330	102 mm	4.4 mm 8.4 mm	7.1 mm 11.1 mm	White	330	100 mm +/- 1.5	12.4 mm	18.4 mm
										

# Pre and Post Change Summary: Tape and Reel



	ASE9	MPHL
Desiccant	No Desiccant for MSL1	

# Pre and Post Change Summary: Tape and Reel

	ASE9		MPHL	
Moisture Barrier Bag	Length	Width	Length	Width
	495 mm	430 mm	457.2 mm	406.4 mm
				



# Pre and Post Change Summary: Tape and Reel

	ASE9			MPHL		
	Length	Width	Height	Length	Width	Height
	370 mm	351 mm	53 mm	354mm	352mm	53mm
Pizza Box						



# Pre and Post Change Summary: Tray Packing

	ASE9	MPHL
Base Quantity Multiple (BQM) – Tray	490 units per tray	490 units per tray
Pin1 Orientation	1-(D)	near tray chamfer
Tray Bundling	   <p>10+1</p>	<p>10 full trays + 1 empty tray cover</p> <p>PP Strapping: 3 crosswise &amp; 1 lengthwise</p> 

# Pre and Post Change Summary: Tray Packing

	ASE9	MPHL
Moisture Barrier Bag Labels		 

# Pre and Post Change Summary: Tray Packing

	ASE9			MPHL		
	Length	Width	Height	Length	Width	Height
	371.5 mm	162 mm	88 mm	371mm	162 mm	88 mm
Inner Box	 <p>A photograph of a closed cardboard inner box for ASE9. The box is light brown and features the Microchip logo and 'MICROCHIP' text. It also has red warning symbols (fragile, no drop, no open flame) and the text 'DO NOT DROP' in English, Chinese, and Thai.</p>			 <p>A photograph of a closed cardboard inner box for MPHL. The box is light brown and features the Microchip logo and 'MICROCHIP' text. It has red warning symbols and the text 'DO NOT DROP' in English, Chinese, and Thai. An arrow points to the top edge of the box labeled 'Open Side of Box'. A white label on the front of the box is labeled 'Intermediate Label'.</p>		



**MICROCHIP**

## **QUALIFICATION REPORT SUMMARY**

**PCN #: GBNG-30FQBG264**

**Date:  
January 26, 2022**

**Qualification of MPHL as an additional final test site for  
selected Atmel ATMEGA168PB-MU and ATMEGA168PB-MUR  
catalog part numbers (CPN) available in 32L VQFN  
(5x5x0.9mm) package.**

**Purpose: Qualification of MPHL as an additional final test site for selected Atmel ATMEGA168PB-MU and ATMEGA168PB-MUR catalog part numbers (CPN) available in 32L VQFN (5x5x0.9mm) package.**

**CCB No. 3397.005**

Test Name	Test Conditions	Results
Datalog/Bin Comparison	<ul style="list-style-type: none"> <li>- Compare test numbers, test names, test sequence bin assignments &amp; pass/fail results</li> <li>- Accept if all match or justify the differences</li> </ul>	PASSED
Site by site verification	<ul style="list-style-type: none"> <li>- Verifies the channel map has the correct site assignments and tester/handler communications work correctly</li> </ul>	PASSED
Correlation lot report	<ul style="list-style-type: none"> <li>- Yield at each step and reject analysis between systems. 5K units are tested for each program conversion we perform.</li> <li>- Accept on yield match within 0.1%</li> </ul>	PASSED
Unit to unit parametric correlation	<ul style="list-style-type: none"> <li>- A full assembly strip characterized on both systems and graphed vs each other &amp; the data sheet limits</li> </ul>	PASSED
Test stability verification	<ul style="list-style-type: none"> <li>- 50 loop test performed with no datalog delays</li> <li>- Accept on 0 fails</li> </ul>	PASSED
Parametric test stability verification	<ul style="list-style-type: none"> <li>- Use Real Time Statistics software to create CPK report of all parametric tests</li> <li>- Accept on Cpk &gt; 1.67 or explainable</li> </ul>	PASSED