



## Product Change Notification / RMES-20LCEZ199

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### Date:

12-Feb-2024

### Product Category:

8-Bit Microcontrollers

### PCN Type:

Manufacturing Change

### Notification Subject:

CCB 6369 Final Notice: Qualification of ASE9 as a new final test site for selected ATMEGA16xx, ATMEGA32xx, ATMEGA644xx, and ATMEGA85xx device families available in 44L TQFP (10x10x1mm) package.

### Affected CPNs:

[RMES-20LCEZ199\\_Affected\\_CPN\\_02122024.pdf](#)

[RMES-20LCEZ199\\_Affected\\_CPN\\_02122024.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 ASE9 as a new final test site for selected ATMEGA16xx, ATMEGA32xx, ATMEGA644xx, and ATMEGA85xx device families available in 44L TQFP (10x10x1mm) package.

### Pre and Post Change Summary:

	Pre Change	Post Change
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Final Test Site		Lingsen Precision Industries, LTD. (LPI)	ASE Test (ASE9)	
Base Quantity Multiple (BQM)		Tape and Reel	2000	2000
Pin 1 Orientation			Quadrant 1	Quadrant 1
Carrier Tape			No dimensional changes. See Pre and Post Change Summary for comparison.	
Reel	Dimension		No dimensional changes.	
	Color		White	White
Packing Method			See Pre and Post Change Summary for comparison.	
Base Quantity Multiple (BQM)		Tray	160	160
Pin 1 Orientation			Near Tray Chamfer	Near Tray Chamfer
Packing Method			See Pre and Post Change Summary for comparison.	

**Impacts to Data Sheet:**None

**Change Impact:**None

**Reason for Change:**To improve productivity by qualifying ASE9 as a new final test site.

**Change Implementation Status:**In Progress

**Estimated First Ship Date:**April 01, 2024 (date code: 2414)

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

**Time Table Summary:**

	July 2023					>	February 2024					>	April 2024				
Workweek	27	28	29	30	31		05	06	07	08	09		14	15	16	17	19
Initial PCN Issue Date				x													
Qual Report Availability									x								
Final PCN Issue Date									x								
Estimated Implementation													x				

Date																			
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**Method to Identify Change:**Traceability code

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

**Revision History:**

**July 25, 2023:** Issued initial notification.

**August 02, 2023:** Re-issued initial notification to correct the typo error for LPI carrier tape data. Updated the PCN letter and ppt file to reflect that there are no dimensional changes in carrier tape.

**February 12, 2024:** Issued final 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\\_RMES-20LCEZ199\\_Pre\\_and\\_Post\\_Change\\_Summary.pdf](#)  
[PCN\\_RMES-20LCEZ199\\_Qual\\_Report.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)

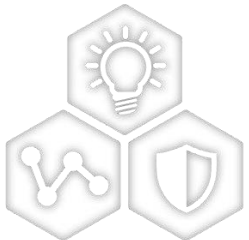
ATMEGA164A-AUA2  
ATMEGA164A-AURA2  
ATMEGA16-16AU  
ATMEGA16L-8AU  
ATMEGA16-16AUR  
ATMEGA16L-8AUR  
ATMEGA32-16AU  
ATMEGA32L-8AU  
ATMEGA32A-AURA5  
ATMEGA32L-8AUR  
ATMEGA32-16AUR  
ATMEGA164PA-AN  
ATMEGA164PA-ANR  
ATMEGA644PA-AN  
ATMEGA644PA-ANR  
ATMEGA16-16AUA6  
ATMEGA16L-8AQ  
ATMEGA16L-8AQRA5  
ATMEGA16L-8AQR  
ATMEGA16L-8AURA0  
ATMEGA16L-8AURA5  
ATMEGA16-16AURA5  
ATMEGA8515-16AUR  
ATMEGA8535-16AU  
ATMEGA8535L-8AU  
ATMEGA8535-16AUR  
ATMEGA8535L-8AUR  
ATMEGA32L-8AURA0  
ATMEGA32L-8AURA2  
ATMEGA32L-8AURA4  
ATMEGA644-20AU  
ATMEGA644V-10AU  
ATMEGA644-20AUR  
ATMEGA644V-10AUR  
ATMEGA324P-20AURA0  
ATMEGA644PV-10AU  
ATMEGA644P-20AU  
ATMEGA644PV-10AUR  
ATMEGA644P-20AUR

**CCB 6369**  
**Pre and Post Change Summary**  
**PCN #: RMES-20LCEZ199**



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# Pre and Post Change – Tape and Reel

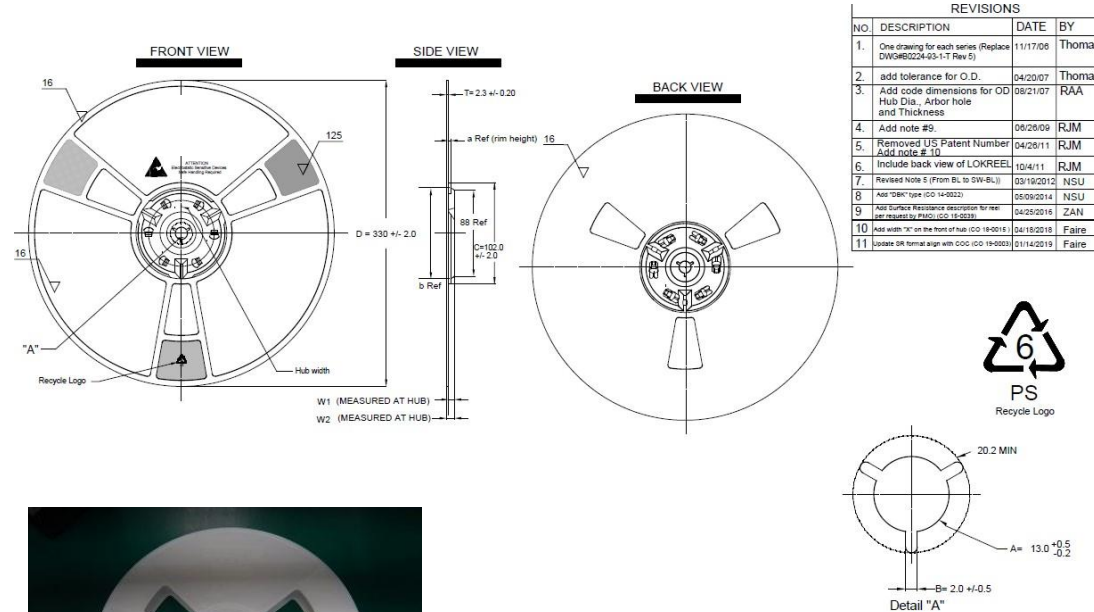
	LPI	ASE9
BQM (Base Quantity Multiple)	2000 units per tray	2000 units per tray
Pin 1 orientation	Quadrant 1	Quadrant 1

# Pre and Post Change – Tape and Reel

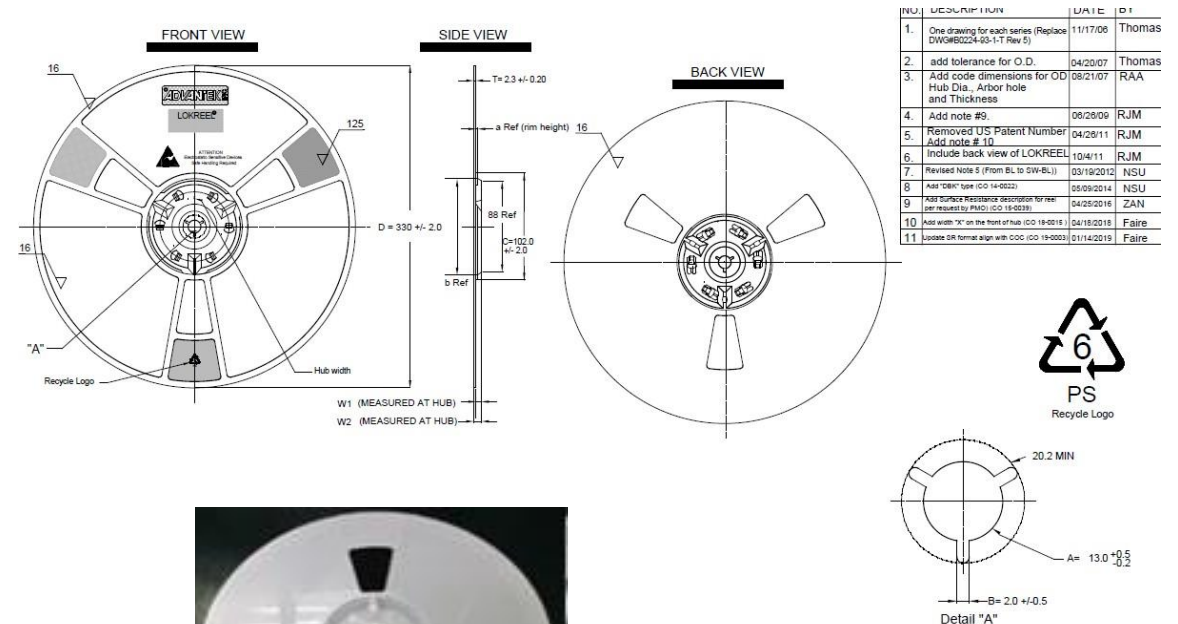
	LPI					ASE9				
Carrier Tape										
	Width	Pitch	A0	B0	K0	Width	Pitch	A0	B0	K0
	24mm	16mm	12.35mm	12.35mm	1.65mm	24mm	16mm	12.35mm	12.35mm	1.65mm

# Pre and Post Change – Tape and Reel

## LPI





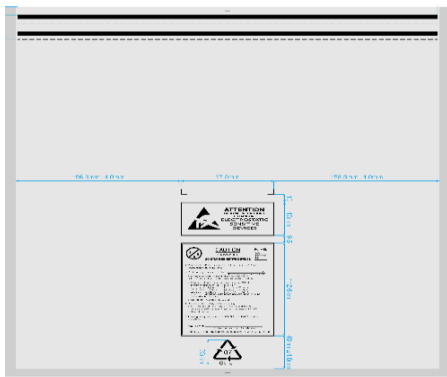


## ASE9



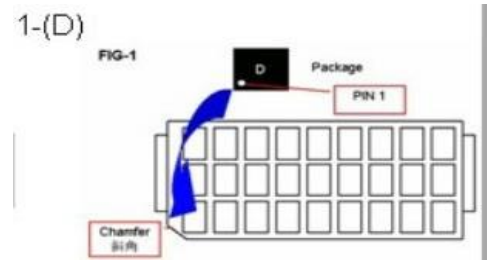
Final Test Site	Color	Diameter	Hub Dia	W1	W2
LPI	White	330	102mm	8.4mm 16.4mm	11.1mm 19.1mm
ASE9	White	330	102mm	8.4mm 16.4mm	11.1mm 19.1mm




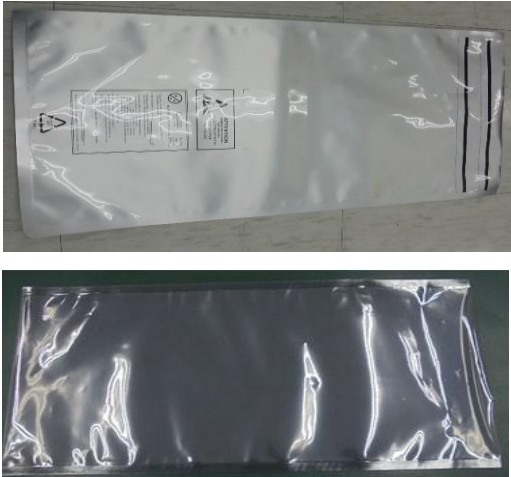


# Pre and Post Change – Tape and Reel

	LPI	ASE9												
Moisture Barrier Bag	<div></div> <table><tr><th>Length</th><th>Width</th></tr><tr><td>430mm</td><td>470mm</td></tr><tr><td>392mm</td><td>430mm</td></tr></table>	Length	Width	430mm	470mm	392mm	430mm	<div></div> <table><tr><th>Length</th><th>Width</th></tr><tr><td>450 mm</td><td>420 mm</td></tr></table>	Length	Width	450 mm	420 mm		
	Length	Width												
430mm	470mm													
392mm	430mm													
Length	Width													
450 mm	420 mm													
Pizza Box	<div></div> <table><tr><th>Length</th><th>Width</th><th>Height</th></tr><tr><td>370mm</td><td>351mm</td><td>53mm</td></tr></table>	Length	Width	Height	370mm	351mm	53mm	<div></div> <table><tr><th>Length</th><th>Width</th><th>Height</th></tr><tr><td>370mm</td><td>353mm</td><td>78mm</td></tr></table>	Length	Width	Height	370mm	353mm	78mm
	Length	Width	Height											
370mm	351mm	53mm												
Length	Width	Height												
370mm	353mm	78mm												

# Pre and Post Change - Tray

	LPI	ASE9
BQM (Base Quantity Multiple)	160 units per tray	160 units per tray
Pin 1 orientation	Chamfer Side	 <p>1-(D) FIG-1 Package PIN 1 Chamfer (A)</p> <p>Chamfer Side</p>

# Pre and Post Change - Tray

	LPI	ASE9												
Moisture Barrier Bag														
Inner Box	 <table><tr><td>Length</td><td>Width</td><td>Height</td></tr><tr><td>37.15mm</td><td>162mm</td><td>88mm</td></tr></table>	Length	Width	Height	37.15mm	162mm	88mm	 <table><tr><td>Length</td><td>Width</td><td>Height</td></tr><tr><td>37.15mm</td><td>162mm</td><td>88mm</td></tr></table>	Length	Width	Height	37.15mm	162mm	88mm
Length	Width	Height												
37.15mm	162mm	88mm												
Length	Width	Height												
37.15mm	162mm	88mm												



## **QUALIFICATION REPORT SUMMARY**

**PCN #: RMES-20LCEZ199**

**Date:  
February 02, 2024**

**Qualification of ASE9 as a new final test site for selected  
ATMEGA16xx, ATMEGA32xx, ATMEGA644xx, and  
ATMEGA85xx device families available in 44L TQFP  
(10x10x1mm) package.**

**Purpose:** Qualification of ASE9 as a new final test site for selected ATMEGA16xx, ATMEGA32xx, ATMEGA644xx, and ATMEGA85xx device families available in 44L TQFP (10x10x1mm) package.

**CCB:** 6369

Test Name	Test Conditions	Result
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
Test Stability	<ul style="list-style-type: none"><li>- 50 loop test performed with no datalog delays.</li><li>• Accept on 0 fails</li></ul>	PASSED
Correlation Lot Report	<ul style="list-style-type: none"><li>- Yield at each step and reject analysis between systems.</li><li>• Accept on yield match within 2%</li></ul>	PASSED