



Product Change Notification / NTDO-28XWRK640

Date:

27-Jan-2022

Product Category:

Microprocessors

PCN Type:

Manufacturing Change

Notification Subject:

CCB 4758 Final Notice: Qualification of MPHL as an additional final test site for selected ATSAMA5D2xx device family in 289L LFBGA (14x14x1.4mm) package.

Affected CPNs:

[NTDO-28XWRK640_Affected_CPN_01272022.pdf](#)
[NTDO-28XWRK640_Affected_CPN_01272022.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 additional final test site for selected ATSAMA5D2xx device family in 289L LFBGA (14x14x1.4mm) package.

Pre and Post Change Summary:

	Pre Change	Post Change
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Final Test Site		ASE Test (ASE9)	ASE Test (ASE9)	Microchip Technology Operations (Philippines) Corporation (MPHL)
Base Quantity Multiple (BQM)	T/R	1000	1000	1000
	Tray	119	119	119
Packing Color	T/R	White	White	White
	Tray	Black	Black	Black
Pin 1 orientation		Quadrant 1	Quadrant 1	Quadrant 1
Carrier Tape		No dimensional changes*		
Cover Tape		Minor dimensional changes*		
Reel	Color	White	White	White
	Dimension	With dimensional changes*		
Packing Method		See attached Pre and Post comparison		

* See attached Pre and Post Change comparison

Impacts to Data Sheet:None

Change Impact:None

Reason for Change:To improve manufacturability by qualifying MPHL as additional final test site.

Change Implementation Status:In Progress

Estimated First Ship Date:March 2, 2022 (date code: 2210)

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

Time Table Summary:

	August 2021					->	January 2022					->	March 2022				
	3 2	3 3	3 4	3 5	3 6		0 1	0 2	0 3	04	05		10	11	12	13	14
Initial PCN Issue Date			X														
Qual Report Availability											X						
Final PCN Issue Date											X						

Estimated Implementation Date																			X				
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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 30, 2021: Issued Initial Notification

August 23, 2021: Re-issued initial notification to update the Notification Subject, Description of Change, Pre and Post Change Summary and Reason for Change to reflect both ASE9 and MPHL in Post change as final test site.

January 27, 2022: Issued Final Notification. Attached the qualification report and updated the timetable summary. Corrected the typo on one of the final test site listed in the revision history of August 23, 2021 from ASCL to ASE9.

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-28XWRK640 Qual_Report.pdf](#)

[PCN_NTDO-28XWRK640 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 4758
Pre and Post Change Summary
PCN #: NTDO-28XWRK640



A Leading Provider of Smart, Connected and Secure Embedded Control Solutions



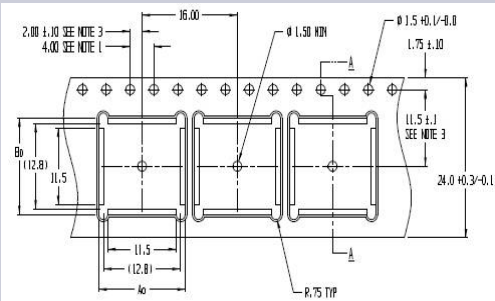
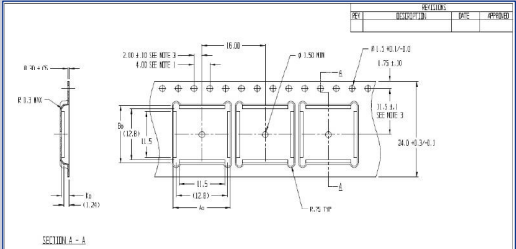
SMART | CONNECTED | SECURE

**Qualification of MPHL as additional final test site for selected
ATSAMA5D2xx device family in 289L LFBGA (14x14x1.4mm) package**

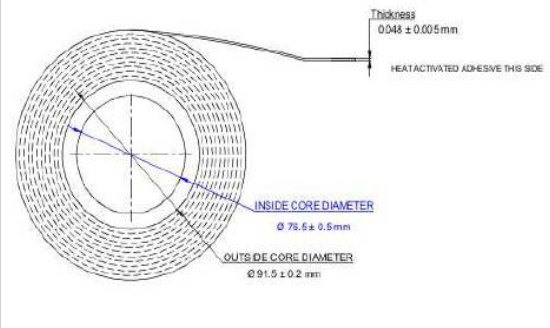
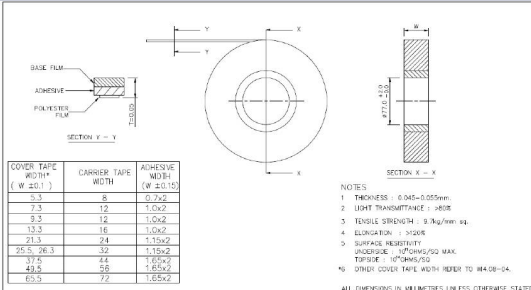
Pre and Post Change Summary

Final Test Location		ASE9	MPHL
Base Quantity Multiple (BQM)	T/R	1000	1000
	Tray	119	119
Packing Color	T/R	White	White
	Tray	Black	Black
Pin 1 Orientation		Quadrant 1	Quadrant 1

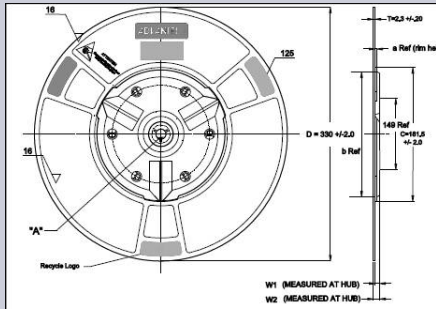
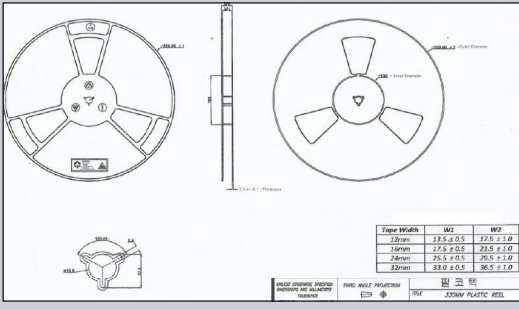
Pre and Post Change Summary

Final Test Location	ASE9	MPHL																								
Carrier Tape for T/R	 <table border="1" data-bbox="524 1213 945 1312"> <thead> <tr> <th>Width (mm)</th> <th>Pitch (mm)</th> <th>A0 (mm)</th> <th>B0 (mm)</th> <th>K0 (mm)</th> <th>Thickness (mm)</th> </tr> </thead> <tbody> <tr> <td>24</td> <td>16</td> <td>14.5</td> <td>14.5</td> <td>1.84</td> <td>0.3</td> </tr> </tbody> </table>	Width (mm)	Pitch (mm)	A0 (mm)	B0 (mm)	K0 (mm)	Thickness (mm)	24	16	14.5	14.5	1.84	0.3	 <table border="1" data-bbox="1101 1207 1521 1306"> <thead> <tr> <th>Width (mm)</th> <th>Pitch (mm)</th> <th>A0 (mm)</th> <th>B0 (mm)</th> <th>K0 (mm)</th> <th>Thickness (mm)</th> </tr> </thead> <tbody> <tr> <td>24</td> <td>16</td> <td>14.5</td> <td>14.5</td> <td>1.84</td> <td>0.3</td> </tr> </tbody> </table>	Width (mm)	Pitch (mm)	A0 (mm)	B0 (mm)	K0 (mm)	Thickness (mm)	24	16	14.5	14.5	1.84	0.3
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Pre and Post Change Summary

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<p>Cover Tape for T/R</p>	 <table border="1" data-bbox="516 1255 979 1350"> <thead> <tr> <th>Carrier Width</th> <th>Cover Tape Width (mm)</th> <th>Thickness (mm)</th> <th>Sealing Methodology</th> </tr> </thead> <tbody> <tr> <td>24</td> <td>21</td> <td>0.048</td> <td>Hot Press</td> </tr> </tbody> </table>	Carrier Width	Cover Tape Width (mm)	Thickness (mm)	Sealing Methodology	24	21	0.048	Hot Press	 <table border="1" data-bbox="1045 1062 1222 1188"> <thead> <tr> <th>COVER TAPE WIDTH (W ± 0.1)</th> <th>CARRIER TAPE WIDTH</th> <th>ADHESIVE WIDTH (W ± 0.10)</th> </tr> </thead> <tbody> <tr> <td>5.3</td> <td>8</td> <td>0.252</td> </tr> <tr> <td>7.5</td> <td>12</td> <td>1.062</td> </tr> <tr> <td>9.3</td> <td>12</td> <td>1.062</td> </tr> <tr> <td>13.3</td> <td>16</td> <td>1.062</td> </tr> <tr> <td>21.3</td> <td>24</td> <td>1.15x2</td> </tr> <tr> <td>25.5, 28.3</td> <td>32</td> <td>1.15x2</td> </tr> <tr> <td>37.5</td> <td>44</td> <td>1.15x2</td> </tr> <tr> <td>49.5</td> <td>55</td> <td>1.65x2</td> </tr> <tr> <td>65.5</td> <td>72</td> <td>1.65x2</td> </tr> </tbody> </table> <p>NOTES</p> <ol style="list-style-type: none"> 1. THICKNESS : 0.048 ± 0.005mm 2. LIGHT TRANSMITTANCE : 90% 3. TENSILE STRENGTH : 9.8kg/cm² 4. ELONGATION : >100% 5. SURFACE WEIGHT : 1.20gms/cm² MAX. TYPICAL 1.07gms/cm² 6. OTHER COVER TAPE WIDTH REFER TO H4-08-04. <p>ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE STATED.</p> <table border="1" data-bbox="1068 1255 1531 1350"> <thead> <tr> <th>Carrier Width</th> <th>Cover Tape Width (mm)</th> <th>Thickness (mm)</th> <th>Sealing Methodology</th> </tr> </thead> <tbody> <tr> <td>24</td> <td>21.3</td> <td>0.05 +/- 0.0005</td> <td>Pressure Seal Activate</td> </tr> </tbody> </table>	COVER TAPE WIDTH (W ± 0.1)	CARRIER TAPE WIDTH	ADHESIVE WIDTH (W ± 0.10)	5.3	8	0.252	7.5	12	1.062	9.3	12	1.062	13.3	16	1.062	21.3	24	1.15x2	25.5, 28.3	32	1.15x2	37.5	44	1.15x2	49.5	55	1.65x2	65.5	72	1.65x2	Carrier Width	Cover Tape Width (mm)	Thickness (mm)	Sealing Methodology	24	21.3	0.05 +/- 0.0005	Pressure Seal Activate
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Pre and Post Change Summary

Final Test Location	ASE9	MPLH																
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Pre and Post Change Summary

Final Test Location	ASE9	MPHL
<p style="text-align: center;">Packing Method for T/R</p>		

Pre and Post Change Summary

Final Test Location	ASE9	MPHL
<p>Packing Method for Tray</p>	<p>1. Pin 1 orientation: near tray chamfer 2. Tray bundling : 10+1, PP strapping : 3S1L</p> 	 <p>Max: 10 full trays + 1 empty tray cover PP Strapping: 3 crosswise & 1 lengthwise</p>



QUALIFICATION REPORT SUMMARY

PCN #: NTDO-28XWRK640

**Date:
January 21, 2022**

**Qualification of MPHL as additional final test site for selected
ATSAMA5D2xx device family in 289L LFBGA (14x14x1.4mm)
package.**

Purpose: Qualification of MPHL as additional final test site for selected ATSAMA5D2xx device family in 289L LFBGA (14x14x1.4mm) package.

CCB No.: 4758

Test / Evaluation	Test Conditions / Parameters	Result
Datalog/Bin Comparison	<ul style="list-style-type: none">• Compare test numbers, test names, test sequence binassignments & pass/fail results• Accept if all match or justify the differences	Passed
Correlation lot report	<ul style="list-style-type: none">• Yield at each step and reject analysis between systems. 3K units are tested for each program conversion we perform.• Accept on yield match within 1%	Passed
Parametric comparison	<ul style="list-style-type: none">• 100% test at room, hot, cold temperature if applicable based on production flow.	Passed

NTDO-28XWRK640 - CCB 4758 Final Notice: Qualification of MPHL as an additional final test site for selecte

Affected Catalog Part Numbers(CPN)

ATSAMA5D27B-CU
ATSAMA5D26B-CU
ATSAMA5D26C-CU
ATSAMA5D27C-CU
ATSAMA5D27B-CN
ATSAMA5D26B-CN
ATSAMA5D26C-CN
ATSAMA5D27C-CN
ATSAMA5D27B-CNR
ATSAMA5D26B-CNR
ATSAMA5D26C-CNR
ATSAMA5D27C-CNR
ATSAMA5D26C-CNR01
ATSAMA5D27B-CUR
ATSAMA5D26B-CUR
ATSAMA5D26C-CUR
ATSAMA5D27C-CUR