

#### **Product Change Notification / ASER-18FQMI580**

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16-Feb-2022

### **Product Category:**

32-bit Microcontrollers

### **PCN Type:**

Manufacturing Change

### **Notification Subject:**

CCB 4381.002 Initial Notice: Qualification of MTAI as an additional final test site for selected ATSAMD21E15Bxxx and ATSAMD21E16Bxxx device families available in 32L TQFP (7x7x1.0mm) package.

#### **Affected CPNs:**

ASER-18FQMI580\_Affected\_CPN\_02162022.pdf ASER-18FQMI580\_Affected\_CPN\_02162022.csv

#### **Notification Text:**

PCN Status:Initial 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 MTAI as an additional final test site for selected ATSAMD21E15Bxxx and ATSAMD21E16Bxxx device families available in 32L TQFP (7x7x1.0mm) package.

#### **Pre and Post Change Summary:**

		Pre Change		Post Change		
Final Test Site		Amkor Technology Philippines (P3/P4), INC. (ATP7)	Microchip Technology Operations (Philippines) Corporation (MPHL)	Amkor Technology Philippines (P3/P4), INC. (ATP7)	Microchip Technology Operations (Philippines) Corporation (MPHL)	Microchip Technology Thailand (MTAI)
Base Quantity	Tape and Reel	2000	2000	2000	2000	2000
Multiple (BQM)	Tray	250	250	250	250	250
Pin 1	Tape and Reel	Quadrant 1	Quadrant 1	Quadrant 1	Quadrant 1	Quadrant 1
Orientation	Tray	Chamfer Side	Chamfer Side	Chamfer Side	Chamfer Side	Chamfer Side
Carrier Tape		Minor dimensional changes. See Pre and Post Change Summary for Comparison.				Summary for
Cover Tape		Minor dimensional changes. See Pre and Post Change Summary for Comparison.				Summary for
Reel Color		White	White	White	White	Dark Blue
Reel Dimension		Minor dimensional changes. See Pre and Post Change Summary for Comparison.				
Packing Method		See Pre and Post Change Summary for Comparison				

#### Impacts to Data Sheet:None

Change ImpactNone

**Reason for Change:**To improve manufacturability by qualifying MTAI as an additional final test site.

**Change Implementation Status:**In Progress

### **Estimated Qualification Completion Date:**February 2022

Note: Please be advised the qualification completion times may be extended because of unforeseen business conditions however implementation will not occur until after qualification has completed and a final PCN has been issued. The final PCN will include the qualification report and estimated first ship date. Also note that after the estimated first ship date guided in the final PCN customers may receive pre and post change parts.

#### **Time Table Summary:**

	ı	February 2022			2
Workweek	6	7	8	9	1 0
Initial PCN Issue Date			Х		
Qual Report Availability					Х
Final PCN Issue Date					Х

Method to Identify Change: Traceability code

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

**Revision History:**February 16, 2022: Issued initial 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\_ASER-18FQMI580\_Pre and Post Change Summary.pdf PCN\_ASER-18FQMI580\_Qual\_Plan.pdf

Please contact your local Microchip sales office with questions or concerns regarding this notification.

#### **Terms and Conditions:**

If you wish to <u>receive Microchip PCNs via email</u> please register for our PCN email service at our <u>PCN</u> home page select register then fill in the required fields. You will find instructions about registering for Microchips PCN email service in the <u>PCN FAQ</u> section.

If you wish to <u>change your PCN profile</u>, <u>including opt out</u>, please go to the <u>PCN home page</u> select login and sign into your myMicrochip account. Select a profile option from the left navigation bar and make the applicable selections.

# CCB 4381.001 Pre and Post Change Summary PCN #: ASER-18FQMI580



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# **Tape and Reel - BQM and Pin 1 Orientation**

	ATP7	MPHL	MTAI
Base Quantity Multiple (BQM)	2000	2000	2000
Pin 1 orientation	Quadrant 1	Quadrant 1	Quadrant 1



## **Tape and Reel - Carrier Tape**

ATP7	MPHL	MTAI
NOTES  L 10 SPROCRET HOLE PICH CUMLATIVE TOLERANCE 192  2. CAMBER IN COMPLANIE VITE EN 481  3. PRIDET PROTIENT RELETANCE, MUT PRICKET HOLE MEASURED  AS TRUE POSITION OF PROCRET, MUT PRICKET HOLE  SECTION A - A	T 2,0±0,1 (i) Pq 4,0±01 (ii) 1,75±0,1 (ii) 1,75±0,1 (iii) 1,75±0,1	P7
W: 16.00 +/-0.3 mm P1: 12.00 +/-0.1 mm A0: 9.30 +/- 0.1 mm B0: 9.30 +/- 0.1 mm K0: 1.80 +/- 0.1 mm K1: 1.20 +/- 0.1 mm Thickness 0.30 +/- 0.05 mm Color: Black	W: 16.00 +/-0.3 mm P1: 12.00 +/-0.1 mm A0: 9.60 +/- 0.1 mm B0: 9.60 +/- 0.1 mm K0: 1.85 +/- 0.1 mm K1: 1.25 +/- 0.1 mm Thickness 0.30 +/- 0.05 mm Color: Black	W: 16.00 +/-0.3 mm P1: 12.00 +/-0.1 mm A0: 9.60 +/- 0.1 mm B0: 9.60 +/- 0.1 mm K0: 1.85 +/- 0.1 mm K1: 1.25 +/- 0.1 mm Thickness 0.30 +/- 0.05 mm Color: Black



## **Tape and Reel - Cover Tape**

ATP7	MPHL	MTAI	
PART NO. VIDIH "V"  ABX0053 53 ± 0.005  ABX0054 54 ± 0.006  ABX0055 55 ± 0.006  ABX0059 92 ± 0.006  ABX0059 95 ± 0.006  ABX0051 31 ± 0.006  ABX0051 31 ± 0.006  ABX0051 21 ± 0.006  ABX0051 21 ± 0.006  ABX0052 23 ± 0.006  ABX0053 23 ± 0.006  ABX0053 23 ± 0.006  ABX0055 55 ± 0.006  ABX0056 26 ± 0.006  ABX0056 26 ± 0.006  ABX0056 26 ± 0.006  ABX0056 49 ± 0.006  ABX005	ADRESIVE  POLISSIENT FILM  SECTION Y - Y  SECTION Y - Y  SECTION X - X  NOTES  1 THICKNESS: 0.055-0.055mm. 1 THICK	Detail A Cover Tape Width SIDE VIEW	
Cover Tape Width: 13.3 +/-0.1 mm Cover Tape thickness: 0.053 +/- 0.005 mm Color: Clear	Cover Tape Width: 13.3mm Cover Tape Thickness: 0.05mm Color: Clear	Cover Tape Width: 13.3 +/-0.1 mm Cover Tape thickness: 0.050 +/- 0.010 mm Color: Clear	



## Tape and Reel – Plastic Reel

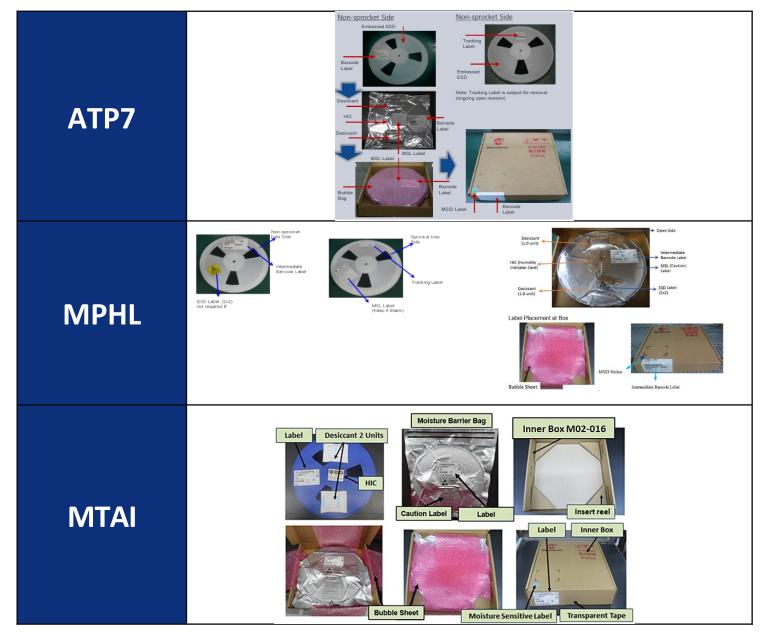
### ATP7 **MPHL MTAI** PHILKOTECH CORP. Reel Diameter: 330.2 +/-2.0mm Reel Diameter: 330mm Hub: 100mm Reel Diameter: 330mm Hub: 100mm W1: 17 +/-0.3 mm Hub: 100mm W1: 16.40mm W2: 19.4+/- 0.8 mm W1: 17.5mm W2(Max): 22.40mm Color: White W2: 21.5mm Color: Dark Blue Color: White



# Tape and Reel - Packaging

Final Test Site	АТР7	MPHL	MTAI
Desiccant	Sorb Magastrating School Magastrating School Magastrating	SOLUDAKTA	SPECIFICATION MILEOSAGE TYPE IS IS IN THE SERVICE TYPE IS IN THE SERVICE TYPE IS IN THE SERVICE TYPE IS IN THE SERVICE DEPOSITION SPECIFICATION SPECIFICATION IN THE SHAPE TYPE IS IN THE SERVICE THE SERVICE THE IS IN THE SERVICE TH
HIC	COBALT FREE Humidity Indicator Brown - Dry LEVEL 2 PARTS Brake parts if 60% is NOT Brown and 5% is NOT Brown and 5% is NOT Free Cocception of the cord into a large if 60% is green  Indial Use: Do not par the cord into a large if 60% is green	5% 10%  LEVEL 2A-SA PARTS Bate parts 10% is NOT smiches and on it ASLES.  BROWN-DRY AZURE-WET  COMAL PRESENTANTONIC GARD  ACTION SET OF CONTONIC GARD  COMPLES WITH PROJECTS JETTO ON M18 5 4 3	60%  LEVEL 2 PARTS Bake parts if 60% ISNOT BROWN ISNOT BROWN INITIAL USE:  DO NOT put his Card into a bag If 5%, 10%, 0,60%  ISNOT BROWN BROWN-DRY AZURE-WET COMPLIER WITH IPC/JEDEC, J-STD-933
Boxes	MICROCHIP SONOTOOD STATES WILLIAM WILLIAM	MICROCHIP  DO NOT GROP  \$\frac{1}{2}\frac{1}	MICHOCHIP DO NOT DROP 禁止摔落
Bags		©	

# **Tape and Reel – Packing Procedure**



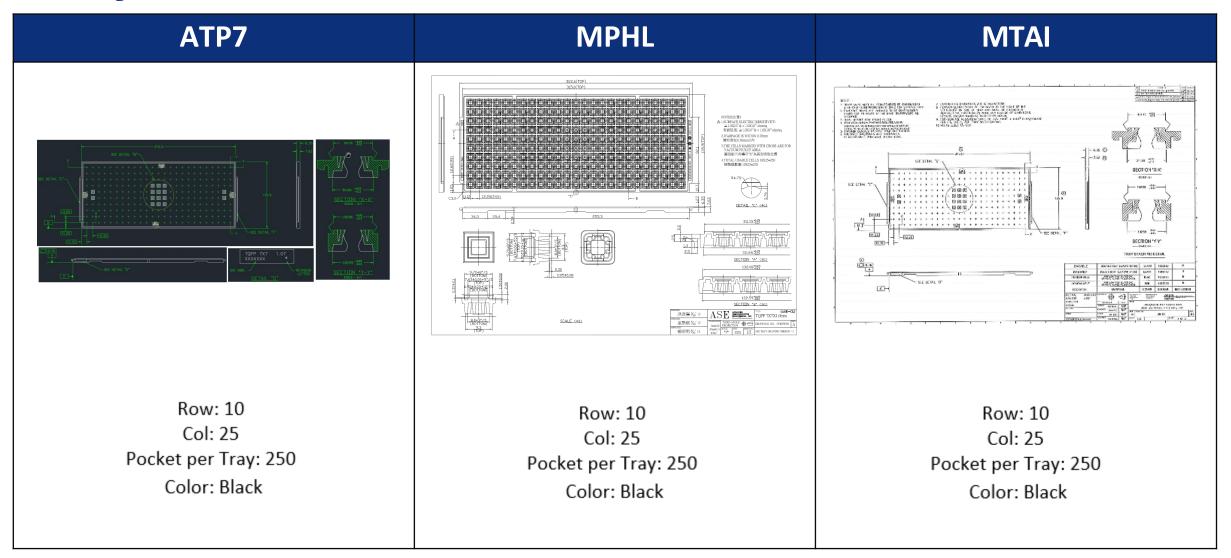


### **Tray - BQM and Pin 1 Orientation**

	ATP7	MPHL	MTAI
Base Quantity Multiple (BQM)	250 per bundle (10+1 cover tray)	250 per bundle (10+1 cover tray)	250 per bundle (10+1 cover tray)
Pin 1 orientation	Chamfer Side	Chamfer Side	Chamfer Side



### **Tray - Size**

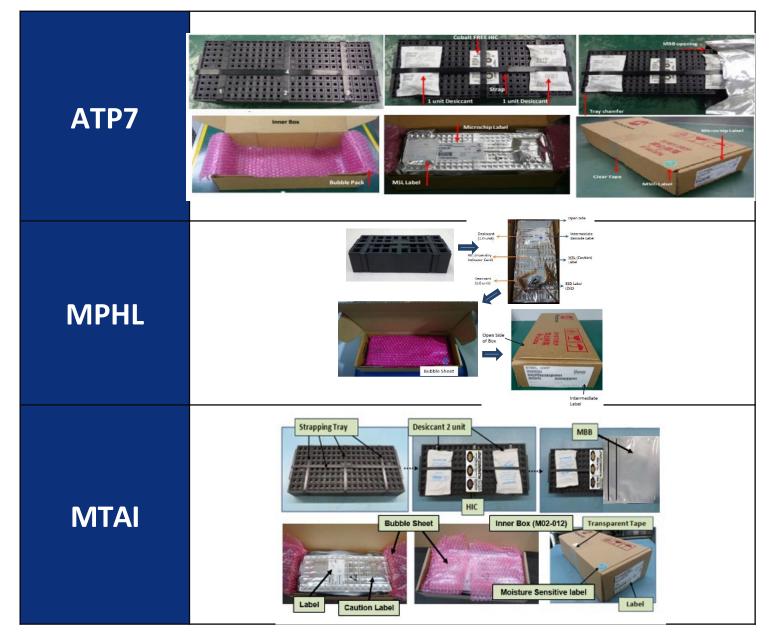




# Tray - Packaging

Final Test Site	АТР7	MPHL	MTAI
Desiccant	SOLD MUSCHELL IN THE SECRET IN	SCOLUBARY  SOLUBARY  SOLUB	SPECIFICATION MILES SAFE TIPE I. IN. SPECIFICATION MILES SAFE TIPE I. IN. FREADMINION MILES SAFE TIPE I. IN. FREADMINION SAFE TO COMMINION MILES SAFE TO BE AND STATIC DEFUNDING MILES SAFE TIPE I. IN. RECOMPLIANT THE WARGE TO SAFE THE I. IN. RECOMPLIANT S
HIC	COBALT FREE Humidity Indicator Brown - Dry Green-Wet LEVEL 2 PARTS ESSENSION ESSENSION ENGINE ENGIN ENGINE ENGIN ENGINE ENGINE ENGINE ENGINE ENGINE ENGINE ENGINE E	5% 10%  LEWEL SA-SA PARTS  Belanche I TON S NOT SHOWN WIT ON SA AZARE  BROWN-DRY AZIRE-WET  CORALT PACK RESERVE CONTROL  COMPLES WITH POLICIDE J-8TO-080  M18 5 4 3	LEVEL 2 PARTS Bake parts if 50% IS NOT BROWN  Initial use: DO NOT put this card ring a bag if 50 cobalt FREE HUMIDITY INDICATOR 1/5%, 15% of COBALT FREE HUMIDITY INDICATOR COMPLIES WITH IPC/JEDEC J-STD-033
Boxes	MICROCHIP DO NOT DROP 禁止摔落 常知证明	MICROCHIP DO NOT DROP 禁止摔落 第1218年 10	MICROCHIP DO NOT DROP 禁止摔落 附加证此
Bags			

# **Tray – Packing Procedure**







### **QUALIFICATION PLAN SUMMARY**

**PCN #: ASER-18FQMI580** 

**Date: January 11, 2022** 

Qualification of MTAI as an additional final test site for selected ATSAMD21E15Bxxx and ATSAMD21E16Bxxx device families available in 32L TQFP (7x7x1.0mm) package.

Purpose: Qualification of MTAI as an additional final test site for selected

ATSAMD21E15Bxxx and ATSAMD21E16Bxxx device families available

in 32L TQFP (7x7x1.0mm) package.

CCB No.: 4381.002

Test Name	Test Conditions			
Datalog/Bin Comparison	<ul> <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>			
Test Stability	50 loop test performed with no datalog delays			
, , , , , , , , , , , , , , , , , , , ,	<ul> <li>Can compare the data of the above analysis with 48L/64L TQFP results.</li> </ul>			
Monitor Test Yield	Strip test yields should be comparable to the singulated final test yield trends as following.			

ASER-18FQMI580 - CCB 4381.002 Initial Notice: Qualification of MTAI as an additional final test site for selected ATSAMD21E15Bxxx and ATSAMD21E16Bxxx device families available in 32L TQFP (7x7x1.0mm) package.

Affected Catalog Part Numbers (CPN)

ATSAMD21E16B-AF

ATSAMD21E15B-AF

ATSAMD21E16B-AU

ATSAMD21E15B-AU

ATSAMD21E16B-AUT

ATSAMD21E15B-AUT

ATSAMD21E16B-AFT

ATSAMD21E15B-AFT

Date: Wednesday, February 16, 2022