## 1 Microchip

Product Change Notification / ASER-22FIFB086

## Date:

29-M ar-2022

## Product Category:

8-bit M icrocontrollers

## PCN Type:

M anufacturing Change

## Notification Subject:

CCB 3104.002, 3104.003 \& 3104.004 Final Notice: Qualification of M TAI as a new final test site for selected ATM EGA8xxx, ATM EGA168xxx \& ATM EGA88xxx device families available in 32L TQFP (7x7x1.0mm) package

## Affected CPNs:

ASER-22FIFB086_Affected_CPN 03292022.pdf
ASER-22FIFB086_Affected_CPN_03292022.csv

## Notification Text:

PCN Status:Final Notification

PCN Type:M anufacturing Change
Microchip Parts Affected:Please open one of the files found in the Affected CPNs section.
Note: For your convenience M icrochip includes identical files in two formats (.pdf and .xls)
Description of Change:Qualification of MTAI as a new final test site for selected ATM EGA8xxx, ATM EGA168xxx \& ATM EGA88xxx device families available in 32L TQFP (7x7x1.0mm) package.

Pre and Post Change Summary:

|  | Pre Change | Post Change |
| :--- | :---: | :---: |


| Final Test Site |  | Amkor Technology Philippine (P1/P2), INC. | Microchip Technology Thailand (HQ) |
| :---: | :---: | :---: | :---: |
| Base Quantity Multiple <br> (BQM) | Tray | 250 | 250 |
|  | Tape and Reel | 2000 | 2000 |
| Moisture Sensitivity Level(MSL) |  | 3 | 1 |
| Pin1 Orientation | Tray | Near tray chamfer | Near tray chamfer |
|  | Tape and Reel | Q1 | Q1 |
| Carrier Tape |  | With minor dimensional changes. <br> See attached Pre and Post Change Summary for comparison. |  |
| Reel | Color | White | Dark Blue |
|  | Dimension | With minor dimensional changes. <br> See attached Pre and Post Change Summary for comparison. |  |
| Packing M ethod |  | See attached Pre and Post Change Summary for comparison. |  |

## Impacts to Data Sheet:None

## Change ImpactNone

Reason for Change:To improve manufacturability by qualifying MTAI as a new final test site.

## Change Implementation Status:In Progress

Estimated First Ship Date:M ay 9, 2022 (date code: 2220)

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:

|  | March 2022 | $>$ | May 2022 |
| :--- | :---: | :---: | :---: |


|  | Workweek | 10 | 11 | 12 | 13 | 14 |  | 19 | 20 | 21 | 22 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Method to Identify Change:Traceability code

Qualification Report:Please open the attachments included with this PCN labeled as PCN_\#_Qual_Plan.
Revision History:M arch 1, 2022: Issued initial notification.
March 29, 2022: Issued final notification. Attached the Qualification Report. Provided estimated first ship date to be on May 9, 2022.

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-22FIFB086 Qual Report.pdf
PCN_ASER-22FIFB086_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 M icrochip 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 M icrochips 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 myM icrochip account. Select a profile option from the left navigation bar and make the applicable selections.

Affected Catalog Part Numbers (CPN)

ATMEGA8-16AU
ATMEGA8-16AUR
ATMEGA8L-8AU
ATMEGA8L-8AUR
ATMEGA8L-8AURA5
ATMEGA168A-AU
ATMEGA168A-AUR
ATMEGA88A-AU
ATMEGA88A-AUR
ATMEGA88PA-AUA6
ATMEGA88PA-AURA3

## CCB 3104.002, 3104.003 \& 3104.004 Pre and Post Change Summary PCN \#: ASER-22FIFB086 <br> Microchip

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## Tape and Reel - BQM and Pin 1 Orientation

|  | ANAP | MTAI |
| :---: | :---: | :---: |
| Base <br> Quantity <br> Multiple <br> (BQM) | 2000 | 2000 |
| Pin 1 <br> orientation | Quadrant 1 | Quadrant 1 |

## Tape and Reel - Carrier Tape



## Tape and Reel - Plastic Reel



## Tape and Reel - Packaging



## Tray - BQM and Pin 1 Orientation

|  | ANAP | MTAI |
| :---: | :---: | :---: |
| Base <br> Quantity <br> Multiple <br> (BQM) | 250 | 250 |
| Pin 1 <br> orientation | Pin1 near Tray Chamfer | Pin1 near Tray Chamfer |

## Tray



## Tray - Packaging



# QUALIFICATION REPORT SUMMARY 

## PCN \#: ASER-22FIFB086

## Date:

March 22, 2022

Qualification of MTAI as a new final test site for selected ATMEGA8xxx, ATMEGA168xxx \& ATMEGA88xxx device families available in 32L TQFP ( $7 \times 7 \times 1.0 \mathrm{~mm}$ ) package.

Purpose: Qualification of MTAI as a new final test site for selected ATMEGA8xxx, ATMEGA168xxx \& ATMEGA88xxx device families available in 32L TQFP ( $7 \times 7 \times 1.0 \mathrm{~mm}$ ) package.
CCB No.: $\quad 3104.002,3104.003$ \& 3104.004

| Test Name | Test Conditions | Results |
| :---: | :---: | :---: |
| Datalog/Bin Comparison | - Compare test numbers, test names, test sequence bin assignments \& pass/fail results <br> - Accept if all match or justify the differences | Passed |
| Site by site verification | - Verifies the channel map has the correct site assignments and tester/handler communications work correctly | Passed |
| Correlation lot report | - Yield at each step and reject analysis between systems. 5 K units are tested for each program conversion we perform. <br> - Accept on yield match within 0.1\% | Passed |
| Unit to unit parametric correlation | - A full assembly strip characterized on both systems and graphed vs each other \& the data sheet limits | Passed |
| Test stability verification | - 50 loop test performed with no datalog delays <br> - Accept on 0 fails | Passed |
| Parametric test stability verification | - Use Real Time Statistics software to create CPK report of all parametric tests | Passed |

