

Product Change Notification / ALAN-12PSXU630

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17-Jan-2023

Product Category:

High Voltage Power Modules, Power Discrete Products

PCN Type:

Manufacturing Change

Notification Subject:

CCB 5401 Initial Notice: Qualification of MP3B as new assembly site for selected Microsemi APTxx, CMxx, and MSCxx device families available in SP3F package.

Affected CPNs:

ALAN-12PSXU630_Affected_CPN_01172023.pdf ALAN-12PSXU630_Affected_CPN_01172023.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 MP3B as new assembly site for selected Microsemi APTxx, CMxx, and MSCxx device families available in SP3F package.

Pre and Post Change Summary:

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

| Assembly Site | Microchip Technology Inc. (MPH2)/ | Microchip Technology Inc. (MPHIL-3)/ |
|---------------|--------------------------------------|---|
| | (MPH2) | MP3B |

Impacts to Data Sheet:None

Change ImpactNone

Reason for Change:To improve on time delivery performance by qualifying MP3B as a new assembly site.

Change Implementation Status:In Progress

Estimated Qualification Completion Date:May 2023

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:

| | January 2023 | | | | | ^ | May 2023 | | | | |
|-----------------------------|--------------|---|---|---|---|---|----------|----|----|----|----|
| Workweek | 1 | 2 | 3 | 4 | 5 | | 18 | 19 | 20 | 21 | 22 |
| Initial PCN Issue Date | | | Χ | | | | | | | | |
| Qual Report Availability | | | | | | | | Х | | | |
| Final PCN Issue Date | | | | | | | | Χ | | | |

Method to Identify Change:Traceability code

Qualification Plan:Please open the attachments included with this PCN labeled as PCN_#_Qual_Plan.

Revision History: January 17, 2023: 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. |
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| Attachments: |
| PCN_ALAN-12PSXU630 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. |
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QUALIFICATION PLAN SUMMARY

PCN# ALAN-12PSXU630

Date: November 9, 2022

Qualification of MP3B as new assembly site for selected Microsemi APTxx, CMxx, and MSCxx device families available in SP3F package.

Purpose: Qualification of MP3B as new assembly site for selected Microsemi APTxx, CMxx, and MSCxx device families available in SP3F package.

| Misc. | Assembly site | MPHIL3 | | | | |
|-------|--|-------------------------------------|--|--|--|--|
| | BD Number | CC9380D-20 ed04 CMTDDR150X175S3G | | | | |
| | Part Number (CPN) | CMTDDR150X175S3G | | | | |
| | Assembly Shipping Media (T/R, Tube/Tray) | Anti-static Tube | | | | |
| | Reliability Site | MPHIL3 | | | | |
| | CCB# | 5401 | | | | |

| Test Name | Conditions | Sample Size | Qty of Lots | Total Units | Fail Acce pt Qty | Est. Dur. Days | Start Date | End Date | ATE Test Site | REL Test Site | Pkg. Type | Special Instructions | Test Results |
|---|---|----------------|-------------------|----------------|---------------------------|----------------------|---------------|----------|------------------|------------------|--------------|--|-----------------|
| Temp Cycle | JESD22-A10440°C to +125°C • Ramp at 7°C/min • 15 minutes per cycle for 1000 cycles with cross-section every 250 cycles. | 5 | 1 | 5 | 0 | 12 | | | | MPHIL-2 | Module | 1 unit for cross-section will be taken out during temp cycle: at t=0 - 1 unit each CCB + 1 unit from MPHIL-2 build 250th cycle - 1 unit each CCB + 1 unit from MPHIL-2 build 500th cycle - 1 unit each CCB + 1 unit from MPHIL-2 build 750th cycle - 1 unit each CCB + 1 unit from MPHIL-2 build 1000th cycle - 1 unit each CCB + 1 unit from MPHIL-2 build 1000th cycle - 1 unit each CCB + 1 unit from MPHIL-2 build | |
| Isolation Test | Refer to PI-37311 - Module Isolation Test Specification | 130 | 1 | 130 | 0 | 15 | | | N/A | MPHIL-2 | Module | | |
| Parametric Test | Refer to PI-37312 - Module Final Test Specification | 130 | 1 | 130 | 0 | 3 | | | N/A | MPHIL-2 | Module | | |
| Mechanical Inspection (External Visual) | As per PI-37305 Module and PSDS Die Sales Visual Inspection Criteria Specification | 1 | 1 | 1 | 0 | 2 | | | N/A | MPHIL-3 | Module | | |
| Solder Joint Check | | 130 | 1 | 130 | 0 | 1 | | | N/A | MPHIL-3 | Module | | |
| X-Ray Inspection | As per PI-37339 Module DBC Attach Specification | 130 | 1 | 130 | 0 | 1 | | | N/A | MPHIL-3 | Module | | |
| Internal Visual (3rd Optical Inspection) | As per PI-37323 KPTM/KPTV Module Assembly Specification | 130 | 1 | 130 | 0 | 1 | | | N/A | MPHIL-3 | Module | | |
| Flatness Check | As per PI-37358 Module Die/DBC Attach for AlSiC Baseplate Specification | 130 | 1 | 130 | 0 | 1 | | | N/A | MPHIL-3 | Module | | |

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Affected Catalog Part Numbers (CPN)

APTC60BBM24T3G

APTC60DDAM24T3G

APTC60DDAM35T3G

APTC60DHM24T3G

APTC60DSKM24T3G

APTC60HM24T3G

APTC60HM35T3G

APTC60HM70BT3G

APTC60HM70RT3G

APTC60HM70T3G

APTC60VDAM24T3G

APTC80DDA15T3G

APTC80H15T3G

APTC80H29T3G

APTCV50H60T3G

APTCV60HM45BC20T3G

APTCV60HM45BT3G

APTCV60HM45RCT3G

APTCV60HM45RT3G

APTCV60TLM24T3G

APTCV60TLM45T3G

APTCV60TLM70T3G

APTCV60TLM99T3G

APTGF150A120T3AG

APTGF25H120T3G

APTGF25X120T3G

APTGF50DSK120T3G

APTGF50H60T3G

APTGF50X60T3G

APTGF90H60T3G

APTGL180A120T3AG

APTGL40X120T3G

APTGL60DDA120T3G

APTGL60H120T3G

APTGL60TL120T3G

APTGL90DDA120T3G

APTGL90DSK120T3G

APTGL90H120T3G

APTGLQ100A120T3AG

APTGLQ100H65T3G

APTGLQ200A120T3AG

APTGLQ200V65T3AG

APTGLQ30H65T3G

APTGLQ40DDA120CT3G

APTGLQ40HR120CT3G

APTGLQ50DDA65T3G

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ALAN-12PSXU630 - CCB 5401 Initial Notice: Qualification of MP3B as new assembly site for selected Microsemi APTxx, CMxx, and MSCxx device families available in SP3F package. APTM50H10FT3G APTM50H14FT3G APTM50HM65FT3G APTM50HM75FT3G APTMC120AM12CT3AG APTMC120AM25CT3AG APTMC120HM17CT3AG APTMC120TAM34CT3AG APTMC60TLM55CT3AG CMALDF100H1203EG CMCRMC90AM12C3AG CMDHMC120DAM09CT3AG CMDHMC120DAM12CT3AG CMDHSM120DAM11CT3AG CMGIGLQ300DA65T3AG CMHUC60DAM41RT3EAG CMHUGT40V120RT3EG CMHUM120VC120CT3EAG CMHUSM120VC120CT3EAG CMIEGLQ80H120T3AG CMKYSM120TAM31CT3AG CMLOGU50H60T3FG CMLRGLQ80HR120T3G-AS CMMVGF100V120T3AG CMMVGLQ100V120T3AG CMRMGL180V120T3AG CMSDC60H19B3G CMSEGF50DU120T3AG CMSEGU40H120T3AG CMSSML202UM11R005T3AG CMTDDF100H120T3AG CMTDDF200H120T3AG CMTDGF50H603G

CMTDGF90H603G

CMTDGLQ100H603G

CMTDGLQ50H603G

MSCC60VRM99CT3AG

MSCDCM100H1203AG

MSCDF100H1203AG

MSCGL40X120T3AG

MSCGLQ40X120T3G

MSCGLQ50DSK120T3G

MSCMC120AM09T3AG

MSCMC120HM17T3AG

MSCMC90HM12CT3AG

MSCMC90HM12T3AG

MSCSM120AM08CT3AG

MSCSM120AM08T3AG

MSCSM120AM11CT3AG

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MSCSM70DUM10T3AG

MSCSM70HM10T3AG

MSCSM70HM19CT3AG

MSCSM70HM19T3AG

MSCSM70HM19T3EAG

MSCSM70TAM19CT3AG

MSCSM70TAM19T3AG

MSCSM70TLM10C3AG

MSCSM70TLM10C3NG

MSCSM70TLM19C3AG

MSCSM70TLM44C3AG

MSCSM70VM19C3AG

MSCSM70VR1M10CT3AG