Product Change Notification / CENO-12EJZF989

Date:

17-Jan-2023

Product Category:

High Voltage Power Modules

PCN Type:

Manufacturing Change

Notification Subject:

CCB 5399 Initial Notice: Qualification of MP3B as a new assembly site for selected Microsemi products available in SP4 package.

Affected CPNs:

CENO-12EJZF989_Affected_CPN_01172023.pdf
CENO-12EJZF989_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 a new assembly site for selected Microsemi products available in SP4 package.

Pre and Post Change Summary:

	Pre Change	Post Change
Assembly Site	Microchip Technology	Microchip Technology

	Inc. (MPH2)	Inc. (MPHIL-3) (MP3B)

Impacts to Data Sheet: None

Change Impact None

Reason for Change: To improve manufacturability 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			x								
Qual Report Availability								x			
Final PCN Issue Date								x			

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.

Attachments:

PCN_CENO-12EJZF989_Qual Plan.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)

APTC60AM24SCTG
APTC60AM35SCTG
APTC60DAM18CTG
APTC60HM45SCTG
APTC60HM70SCTG
APTC80A10SCTG
APTC80A15SCTG
APTC80H29SCTG
APTDF100H100G
APTDF100H20G
APTGF100A120DTWG
APTGF100A120TG
APTGF150A120TG
APTGF75DSK120TG
APTGF75H120TG
APTGLQ100A120TG
APTGLQ150A120TG
APTGLQ75H120TG
APTGT100A120TG
APTGT100A170TG
APTGT100DH120TG
APTGT100DH60TG
APTGT100DU120TG
APTGT100DU170TG
APTGT100DU60TG
APTGT100H60TG
APTGT100SK170TG
APTGT150A120TG
APTGT150A170TG
APTGT150DH60TG
APTGT150DU120TG
APTGT150H60TG
APTGT200DU60TG
APTGT50A170TG
APTGT50DA120TG
APTGT50DH120TG
APTGT50DH170TG
APTGT50DU120TG
APTGT50H170TG
APTGT50SK120TG
APTGT50SK170TG
APTGT75DA120TG
APTGT75DU120TG
APTGT75H120TG
APTGT75SK120TG
APTM100A18FTG

APTM100A23STG
APTM100DA18TG
APTM100H35FTG
APTM100H45SCTG
APTM100H45STG
APTM10AM05FTG
APTM10DAM05TG
APTM10SKM05TG
APTM10XM09F4G
APTM120A29FTG
APTM20AM08FTG
APTM20AM10FTG
APTM20AM10STG
APTM20DAM08TG
APTM20DUM08TG
APTM20HM16FTG
APTM20HM20FTG
APTM20HM20STG
APTM20SKM08TG
APTM50AM35FTG
APTM50AM38FTG
APTM50AM38SCTG
APTM50AM38STG
APTM50HM65FTG
APTM50HM75FTG
APTM50HM75SCTG
APTM50HM75STG
CMCRC60AM23C4G
CMENGU140A60TG
CMMOM10XM09F4G
CMNVC60AM23C4G
CMPOM100DA23CTG
MSCC60AM23C4AG
MSCDF200H1204G
MSCGLQ100A65TG
MSCGLQ150A120DTWG
MSCGLQ200A65TG
MSCGLQ200SK65TG
MSCM20XM16F4G
MSCSM70VM10C4AG

QUALIFICATION PLAN SUMMARY

PCN #: CENO-12EJZF989

Date:
November 9, 2022

Qualification of MP3B as a new assembly site for selected Microsemi products available in SP4 package.

Purpose: Qualification of MP3B as a new assembly site for selected Microsemi products available in SP4 package.

CCB No.: 5339

Misc.	Assembly site	MP3B
	BD Number	CC4109B-20 ed05 APTGT300A60TG
	Part Number (CPN)	APTGT300A60TG
	Assembly Shipping Media (T/R, Tube/Tray)	Anti-static Tube
	Reliability Site	MP3B

Test Name	Conditions	Sample Size	Qty of Lots	Total Units	Fail Accept Qty	Est. Dur. Days	REL Test Site	Pkg. Type	Special Instructions
Temp Cycle	JESD22-A104. -40°C to +125°C • Ramp at 7ºC/min • 15 minutes per cycle for 1000 cycles with cross-section every 250 cycles.	5	1	5	0	12	MPHIL-2	Module	**MPHIL-2:** Build dummy units in MPHIL-2 using the following packages: SP1 - 5 units (DA using VLO and DBC using PiNK) SP3F - 5 units (DA using VLO and DBC using PiNK) SP4 - 5 units (DA using VLO and DBC using PiNK) SP6P - 5 units (DA using VLO and DBC using PiNK) SP6Li - 5 units (DA using VLO and DBC using PiNK) **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
Isolation Test	• Refer to PI-37311 - Module Isolation Test Specification	100	1	100	0	15	MPHIL-2	Module	
Parametric Test	• Refer to PI-37312 - Module Final Test Specification • Refer to PI-37359 - Module D8580M Test Program Reference (TESEC) TST File Name 6375 V01.tst	100	1	100	0	3	MPHIL-2	Module	
Mechanical Inspection (External Visual)	• As per PI-37305 Module and PSDS Die Sales Visual Inspection Criteria Specification • As per PI-37310 Module Final Visual Inspection Specification • As per device assembly diagram for mechanical inspection	1	1	1	0	2	MPHIL-3	Module	

Test Name	Conditions	Sample Size	Qty of Lots	Total Units	Fail Accept Qty	Est. Dur. Days	REL Test Site	Pkg. Type	Special Instructions
Solder Joint Check	• As per PI-37305 Module and PSDS Die Sales Visual Inspection Criteria Specification	100	1	100	0	1	MPHIL-3	Module	
X-Ray Inspection	• As per PI-37339 Module DBC Attach Specification • As per PI-37305 Module and PSDS Die Sales Visual Inspection Criteria Specification	100	1	100	0	1	MPHIL-3	Module	• All BDX packages with AlSiC baseplate will be subject to X-Ray instead of CSAM to prevent moisture absorption of plate (as per 9.13.1 of PI-37339)
Internal Visual (3rd Optical Inspection)	• As per PI-37323 KPTM/KPTV Module Assembly Specification • As per PI-37305 Module and PSDS Die Sales Visual Inspection Criteria Specification • As per PI-37310 Final Visual Specification Module	100	1	100	0	1	MPHIL-3	Module	
Flatness Check	• As per PI-37358 Module Die/DBC Attach for AlSiC Baseplate Specification (Bordeaux) • As per PI-37305 Module and PSDS Die Sales Visual Inspection Criteria Specification • As per PI-37310 Final Visual Specification Module	100	1	100	0	1	MPHIL-3	Module	• Refer to specific device SOW for the Baseplate flatness requirement