Product Change Notification / MFOL-12IAAH755

Date:

23-Feb-2023

Product Category:

High Voltage Power Modules

PCN Type:

Manufacturing Change

Notification Subject:

CCB 5402 Initial Notice: Qualification of MP3B as a new assembly site for selected Microsemi products available in SP1 package.

Affected CPNs:

MFOL-12IAAH755_Affected_CPN_02232023.pdf
MFOL-12IAAH755_Affected_CPN_02232023.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 SP1 package.

Pre and Post Change Summary:

	Pre Change	Post Change
Assembly Site	Microchip	Microchip

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

Impacts to Data Sheet: None

Change Impact: None

Reason for Change: To improve on-time delivery performance by qualifying MP3B as an additional 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	01	02	03	04	05		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.
February 23, 2023: Re-issued initial notification to add the catalog part number APTDR90X1601G to the affected CPN list as part of the scope.

The change described in this PCN does not alter Microchip's current regulatory compliance regarding the material content of the applicable products.

Attachments:

PCN_MFOL-12IAAH755_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)

APTDR90X1601G
MSCSM120AM50CT1AG
MSCSM120AM50T1AG
MSCSM120VR1M31C1AG
MSCSM170AM23CT1AG
MSCSM170AM45CT1AG
MSCSM170SKM23CT1AG
MSCSM70AM19CT1AG
MSCSM70AM19T1AG
MSCSM70VR1M19C1AG
APTC60AM24T1G
APTC60AM35T1G
APTC60AM45B1G
APTC60AM45BC1G
APTC60AM45T1G
APTC60DDAM45T1G
APTC60DDAM70T1G
APTC60HM45T1G
APTC60HM70T1G
APTC60SKM24CT1G
APTC60SKM24T1G
APTC60VDAM45T1G
APTC80H15T1G
APTCV40H60CT1G
APTDC10H2401G
APTDF100H601G
APTDF30H1201G
APTDF30H601G
APTDF30X1201G
APTDF60H1201G
APTDF60H601G
APTDR40X1601G
APTGF100DA120T1G
APTGF25H120T1G
APTGF25SK120CT1G
APTGF50H60T1G
APTGL40H120T1G
APTGT75A120T1G
APTGT75A60T1G
APTGT75DA60T1G
APTGT75DH60T1AMG
APTGT75H60T1G
APTGTQ100A65T1G
APTGTQ100DA65T1G
APTGTQ100SK65T1G
APTM100SK33T1G

APTM120DA30CT1G
APTM120DA30T1G
APTM120H140FT1G
APTM50H15FT1G
APTM60A11FT1G
APTM60H23FT1G
APTMC120AM20CT1AG
APTMC120AM34CT1AG
APTMC120AM34CT1AG-L
APTMC120AM55CT1AG
CMANDF30V2401G
CMAXGT50TL601G
CMDEDC104KK1201AG
CMDEDCM104KK1201AG
CMIEDCM30V1701G
CMIEDF60V1201G
CMIEDF75V1701G
CMRTMC120AM20CT1NG
CMSDDF40H60T1G
CMVNMC120DDA10CT1AG
CMVNSM120DDA10CT1AG
MSCC60HM70T1AMG
MSCDC50H1201AG
MSCDC50H1701AG
MSCDC50H701AG
MSCDC50X1201AG
MSCDC50X1701AG
MSCDC50X701AG
MSCGTQ100HD65C1AG
MSCM100DA33CT1AG
MSCM100SK33CT1AG
MSCMC120AM55T1AG
MSCSM120A10CT1AG
MSCSM120AM16CT1AG
MSCSM120AM16T1AG
MSCSM120AM25T1AG
MSCSM120AM25T1AG-L
MSCSM120AM31CT1AG
MSCSM120AM31T1AG
APTGL90A120T1G
APTGL90DA120T1G
APTGLQ100A65T1G
APTGLQ100DA120T1G
APTGLQ25H120T1G
APTGLQ40H120T1G
APTGLQ50H65T1G
APTGLQ75H65T1G
APTGT100A60T1G
APTGT100DA120T1G

APTGT100DA60T1G
APTGT150A60T1G
APTGT150DA60T1G
APTGT150SK60T1G
APTGT20H60T1G
APTGT20TL601G
APTGT30A170T1G
APTGT30H60T1G
APTGT30TL601G
APTGT35A120T1G
APTGT50A120T1G
APTGT50A170T1G
APTGT50DH60T1G
APTGT50H60T1G
APTGT50SK170T1G
APTGT50TL601G

QUALIFICATION PLAN SUMMARY

PCN #: MFOL-12IAAH755

Date:
November 9, 2022

Qualification of MP3B as a new assembly site for selected Microsemi products available in SP1 package.

Purpose: **Qualification of MP3B as a new assembly site for selected Microsemi products available in SP1 package.**

CCB: **5402**

Module Data:

Misc.	Assembly site	MPHIL3
	BD Number	CC9689A-20 ed02 APTDR90X1601G
	Part Number (CPN)	APTDR90X1601G
	Assembly Shipping Media (T/R, Tube/Tray)	Anti-static Tube
	Reliability Site	MPHIL3

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) **MPHIL3:** Get 5 units each from CCB#5402, CCB#5401, CCB#5399, CCB#5395 and CCB#5393 and reserve for reflow trial using Budatec, both DA and DBC.
Isolation Test	• Refer to PI-37311 - Module Isolation Test Specification	130	1	130	0	15	MPHIL-2	Module	
Parametric Test	• Refer to PI-37312 - Module Final Test Specification • Refer to PI-37359 - Module D8580M Test Program Reference	130	1	130	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	
Solder Joint Check	• As per PI-37305 Module and PSDS Die Sales Visual Inspection Criteria Specification	130	1	130	0	1	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
X-Ray Inspection	• As per PI-37339 Module DBC Attach Specification • As per PI-37305 Module and PSDS Die Sales Visual Inspection Criteria Specification	130	1	130	0	1	MPHIL-3	Module	
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	130	1	130	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	130	1	130	0	1	MPHIL-3	Module	• Refer to specific device SOW for the Baseplate flatness requirement