



Product Change Notification - KSRA-08OFYX715

Date:

27 Mar 2020

Product Category:

Others; 8-bit Microcontrollers; Temperature Sensors

Affected CPNs:**Notification subject:**

CCB 3833 Final Notice: Qualification of Global Foundries Fab 3/5 (GF35) fabrication site for the selected products of EMC14xx and MCP99xx device families

Notification text:**PCN Status:**

Final Notification

PCN Type:

Manufacturing Change

Microchip Parts Affected:

Please open one of the icons found in the Affected CPNs section above.

NOTE: For your convenience Microchip includes identical files in two formats (.pdf and .xls).

Description of Change:

Qualification of Global Foundries Fab 3/5 (GF35) fabrication site for the selected products of EMC14xx and MCP99xx device families

Pre Change:

Fabricated at Global Foundries, Singapore (Fab 3E) / GF3E using 8 inch wafers.

Post Change:

Fabricated at Global Foundries, Singapore (Fab 3/5) / GF35 using 8 inch wafers.

Pre and Post Change Summary:

	Pre Change	Post Change
Fab Site	Global Foundries, Singapore (Fab 3E) / GF3E	Global Foundries, Singapore (Fab 3/5) / GF35
Wafer Size	8 inch	8 inch
Quality Certification	ISO/TS16949	ISO/TS16949
Design / Lay-Out	No Change	No Change
Die Size	No Change	No Change

Impacts to Data Sheet:

None

Change Impact:

None

Reason for Change:

To improve on time delivery performance by qualifying Global Foundries Fab 3/5 (GF35) Fabrication site

Change Implementation Status:

In Progress

Estimated First Ship Date:

March 24, 2020 (date code: 2013)

NOTE: Please be advised that after the estimated first ship date customers may receive pre and post change parts.



Time Table Summary:

	July 2019					-->	February 2020					March 2020				
Workweek	27	28	29	30	31		05	06	07	08	09	10	11	12	13	14
Initial PCN Issue Date				X												
Qual Report Availability											X					
Final PCN Issue Date											X					
Estimated Implementation Date															X	

Method to Identify Change:

Traceability code

Qualification Report:

Please open the attachments included with this PCN labeled as PCN_#_Qual_Report

Revision History:

July 22, 2019: Issued initial notification.

February 24, 2020: Issued final notification. Attached the qualification report. Provided estimated first ship date to be on March 24, 2020.

March 27, 2020: Re-issued final notification to include reference qualification report from CCB 3834.

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

Attachment(s):

[PCN_KSRA-08OFYX715_Qual_Report.pdf](#)

Please contact your local [Microchip sales office](#) with questions or concerns regarding this notification.

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Affected Catalog Part Numbers (CPN)

EMC1402-1-ACZL-TR
EMC1402-3-ACZL-TR
EMC1402-4-ACZL-TR
EMC1412-1-ACZL-TR
EMC1412-A-ACZL-TR
EMC1412-2-ACZL-TR
EMC1422-1-ACZL-TR
EMC1422-2-ACZL-TR
EMC1403-1-AIZL-TR
EMC1403-2-AIZL-TR
EMC1403-3-AIZL-TR
EMC1403-4-AIZL-TR
EMC1404-1-AIZL-TR
EMC1404-2-AIZL-TR
EMC1404-3-AIZL-TR
EMC1404-4-AIZL-TR
EMC1413-1-AIZL-TR
EMC1413-3-AIZL-TR
EMC1413-A-AIZL-TR
EMC1414-1-AIZL-TR
EMC1414-A-AIZL-TR
EMC1423-1-AIZL-TR
EMC1424-1-AIZL-TR
EMC1412-1-AC3-TR
EMC1412-A-AC3-TR
EMC1442-A-AC3-TR
EMC1462-A-AC3-TR
MCP9903T-1E/9Q
MCP9903T-2E/9Q
MCP9903T-AE/9Q
MCP9904T-1E/9Q
MCP9904T-2E/9Q
MCP9904T-AE/9Q
EMC1403-1-AIA-TR
EMC1403-2-AIA-TR
EMC1413-A-AIA-TR
EMC1414-A-AIA-TR
EMC1444-A-AIA-TR
EMC1464-A-AIA-TR
EMC1464T-AE/9R
EMC1403-1-YZT-TR
EMC1403-2-YZT-TR
MCP9902T-1E/RW
MCP9902T-2E/RW
MCP9902T-AE/RW
EMC1462T-AE/RW

EMC1438-1-AP-TR

EMC1438-2-AP-TR



QUALIFICATION REPORT SUMMARY

PCN#: KSRA-08OFYX715

**Date:
February 16, 2020**

Qualification of Global Foundries Fab 3/5 (GF35) fabrication site for the selected products of EMC14XX and MCP99XX device families.

Purpose: Qualification of Global Foundries Fab 3/5 (GF35) fabrication site for the selected products of EMC14XX and MCP99XX device families.

CCB No.: 3833

Test / Evaluation	Test Conditions / Parameters	Result
WAT (Wafer Acceptance Test)	<ul style="list-style-type: none"> Compare WAT distribution of 5 wafers/mask 3 lots - one from each mask. (15 wafers in total) 	PASSED
Test Yield and Electrical Distribution	<ul style="list-style-type: none"> Compare Final Test Yield and Electrical Distribution of 5 wafers/mask 3 lots – one from each mask. (15 wafers in total) 	PASSED

Note: This Qualification will be QBS to products that were qualified and have been running at FAB 35

Reference qual data from CCB 3834:

Test Description	Test Method and Conditions	Pass Criteria	Results
HTOL High Temperature Operating Life Test	JESD22- A108, 1 lot 77pcs HTOL 1008hrs 125C	77 units 1008 Hrs @ 125C	Pass
ELFR Early Life Failure Rate	JESD74 1 lot 800pcs ELFR 48hrs 125C	800 units 48 HRS @ 125C	Pass
ESD-HBM Human-Body Model	JESD22-A114 R= 1500 Ohms C= 100 pF 1X +/- Voltage	2KV	Pass
ESD-MM Machine model	JESD22A115 R=0 Ohm, C=200 pF +/- Voltage	200V	Pass

Test Description	Test Method and Conditions	Pass Criteria	Results
ESD-CDM Charge device model	JESD22-C101 1X +/- Voltage	500V all Pins and 750V corner pins	Pass
Latch up	JESD78 TA = +25°C	+/-100ma	Pass