



Product Change Notification / ASER-12XNS0828

Date:

01-Feb-2022

Product Category:

32-bit Microcontrollers

PCN Type:

Manufacturing Change

Notification Subject:

eSign E000087577 Final Notice: Product test flow change impacting primary oscillator specifications of ATSAMC20xxx and ATSAMC21xxx device families.

Affected CPNs:

[ASER-12XNS0828_Affected_CPN_02012022.pdf](#)

[ASER-12XNS0828_Affected_CPN_02012022.csv](#)

Notification Text:

PCN Status:Final Notification

PCN Type:Manufacturing Change

Microchip Parts Affected:Please open one of the files found in the Affected CPNs section. Note that select new devices have been added to the product family maintaining the original specifications.

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

Description of Change:Alteration of final test program for ATSAMC20xxx and ATSAMC21xxxx devices effecting the accuracy of the primary oscillator. Alternative High Accuracy replacement part numbers have been created for a limited subset of devices.

Please reference Errata Document SAM-C20C21-Family-Silicon-Errata tables 2.2, 2.3, and 2.4 for clarification on the impacted specifications.

Please review the attached parts affected list for details about replacement parts if applicable.

Pre and Post Change Summary:

	Pre Change	Post Change
Test Program	+/- 2.5 % Primary Oscillator Error	+/- 5 % Primary Oscillator Error

Note:

Please reference Errata Document SAM-C20C21-Family-Silicon-Errata tables 2.2, 2.3, and 2.4 for clarification on the impacted specifications.

Impacts to Data Sheet: Modified chapters in Datasheet:

2. ordering information (distinction between standard and enhanced accuracy factory calibration)

45. Electrical characteristics 85°C (SAMC20/C21 E/G/J), RC Oscillator (OSC48M) Characteristics table (introduction of standard accuracy timings)

46. Electrical characteristics 105°C (SAMC20/C21 E/G/J), 48 MHz RC Oscillator (OSC48M) Characteristics table (introduction of standard accuracy timings)

48. Electrical Characteristics AEC - Q100 Grade 1, 125°C (SAM C20/C21 E/G/J), 48 MHz RC Oscillator (OSC48M) Characteristics table (introduction of standard accuracy timings)

Modified chapters in Errata:

2. Data Sheet Clarifications (Description of the parameters changed in the Datasheet due to the new manufacturing process)

Change Impact: None

Reason for Change: To improve productivity by reducing multi-temperature test insertions.

Change Implementation Status: In Progress

Estimated First Ship Date: March 1, 2022 (date code: 2210)

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

Time Table Summary:

	February 2022	March 2022
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Workweek	6	7	8	9	10	11	12	13	14
Final PCN Issue Date	x								
Estimated Implementation Date					x				

Method to Identify Change:Traceability code

Qualification Report:Not applicable

Revision History:February 1, 2022: Issued final notification.

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

Please contact your local **Microchip sales office** with questions or concerns regarding this notification.

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Affected Catalog Part Numbers (CPN)

ATSAMC20G15A-AZ
ATSAMC20G15A-AZT
ATSAMC20G15A-MNT
ATSAMC20G15A-MUT
ATSAMC20G15A-MZ
ATSAMC20G15A-MZT
ATSAMC20G16A-ANT
ATSAMC20G16A-AUN01
ATSAMC20G16A-AUT
ATSAMC20G16A-AZ
ATSAMC20G16A-AZT
ATSAMC20G16A-MNT
ATSAMC20G16A-MUT
ATSAMC20G16A-MZ
ATSAMC20G16A-MZT
ATSAMC20G17A-ANT
ATSAMC20G17A-AUT
ATSAMC20G17A-AZ
ATSAMC20G17A-AZT
ATSAMC20G17A-MNT
ATSAMC20G17A-MUT
ATSAMC20G17A-MUTS2
ATSAMC20G17A-MZ
ATSAMC20G17A-MZT
ATSAMC20G18A-ANT
ATSAMC20G18A-AUT
ATSAMC20G18A-AZ
ATSAMC20G18A-AZT
ATSAMC20G18A-MNT
ATSAMC20G18A-MUT
ATSAMC20G18A-MZ
ATSAMC20G18A-MZT
ATSAMC20J15A-ANT
ATSAMC20J15A-AUT
ATSAMC20J15A-AZ
ATSAMC20J15A-AZT
ATSAMC20J15A-MMZ
ATSAMC20J15A-MMZT
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ATSAMC20J17A-MZ
ATSAMC20J17A-MZT
ATSAMC20J17A-UUT
ATSAMC20J18A-ANT
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