

September 2008

Silicon Errata for the CY8C22x13 PSoC® Mixed Signal Arrays

This document describes the errata for the PSoC® Mixed Signal Arrays CY8C22x13. Details include errata trigger conditions, scope of impact, available workarounds, and silicon revision applicability. Compare this document to the device's data sheet for a complete functional description.

Contact your local Cypress Sales Representative if you have questions.

Part Numbers Affected

Part Number	Ordering Information
CY8C22x13	CY8C22113-24PI
	CY8C22113-24SI
	CY8C22113-24SIT
	CY8C22213-24PI
	CY8C22213-24PVI
	CY8C22213-24PVIT
	CY8C22213-24SI
	CY8C22213-24SIT
	CY8C22213-24LFI

CY8C22x13 Qualification Status

Product Status: Production

CY8C22x13 Errata Summary

The following table defines the errata applicability to available CY8C22x13 family devices. An "X" indicates that the errata pertains to the selected device.

Note Errata items, in the table below, are hyperlinked. Click on any item entry to jump to its description.

Items	Part Number	Silicon Revision	Fix Status
[1]. Internal Main Oscillator (IMO) Tolerance Deviation at Temperature Extremes	CY8C22x13	A	Silicon fix is planned.

1. Internal Main Oscillator (IMO) Tolerance Deviation at Temperature Extremes

■ PROBLEM DEFINITION

Asynchronous Digital Communications Interfaces may fail framing beyond 0 to 70°C. This problem does not affect end-product usage between 0 and 70°C.

■ PARAMETERS AFFECTED

The IMO frequency tolerance. The worst case deviation when operated below 0°C and above +70°C and within the upper and lower datasheet temperature range is ±5%.

■ **TRIGGER CONDITION(S)**

The asynchronous Rx/Tx clock source IMO frequency tolerance may deviate beyond the data sheet limit of $\pm 2.5\%$ when operated beyond the temperature range of 0 to $+70^{\circ}\text{C}$.

■ **SCOPE OF IMPACT**

This problem may affect UART, IrDA, and FSK implementations.

■ **WORKAROUND**

Implement a quartz crystal stabilized clock source on at least one end of the asynchronous digital communications interface.

■ **FIX STATUS**

The cause of this problem and its solution has been identified. Silicon fix is planned to correct the deficiency in silicon.

References

[1] Document # 38-12009, CY8C22113 and CY8C22213 PSoC® Mixed-Signal Array Final Data Sheet



Document History Page

Document Title: Silicon Errata for the CY8C22x13 PSoC [®] Mixed Signal Arrays Document Number: 001-48788				
Rev.	ECN No.	Issue Date	Orig. of Change	Description of Change
**	2567361	09/16/08	XSG/AESA	IMO tolerance deviation

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