

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

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

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