

## **Process Change Notice #1011231**

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PCN Date: 23Nov10	Effective Date: 21Feb11							
Title: C8051T326/7, C8051T622/3 and CP2104 Series Product Revision F								
Originator: Pedro Pachuca	Phone: 512 532	2 5978	Dept: EMS					
Customer Contact: Kathy Haggar	Phone: 512-532-5261		Dept: Business Operations					
PCN Type:								
☐ Assembly ☐ Discontinu	uance 🗌 P	ackage	☐ Test					
☐ Datasheet ☐ Fabrication ☐ Product Revision								
☐ Packing ☐ Labeling	Location		☐ Other					
Last Order Date: 21Feb11								
PCN Details								
Description of Change: Silicon Laboratories (Silicon labs) is pleased to announce revision F of the C8051T326/7, C8051T622/3 and CP2104 series product. This revision eliminates Rev A through E errata with the release of revision F.								
Reason for Change: Eliminate Rev A through E errata that had no available work around								
Impact on Form, Fit, Function, Quality, Reliability: There is no impact on Form, Fit, Quality and Reliability. The Function has changed to eliminate errata including repair of the output impedance drivers on the USB D+ and D- data lines. It is now nominally 36 Ω. In addition, the UART, GPIO and suspend signals are no longer driven low after power cycling the device. Revision F eliminates all known errata observed in rev A through E. The C8051T326/7, C8051T622/3 and CP2104 series revision F products are 100% functionally compatible with previous revisions.								

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#### **Product Identification:**

This PCN applies to devices ordered using the following ordering part numbers:

Affected Ordering Part Numbers				
Old number	New Number			
C8051T326-GM	No Change			
C8051T622-GM	No Change			
CP2104-A00-GM				
CP2104-B01-GM	CP2104-F03-GM			
CP2104-C01-GM				
CP2104-D01-GM				
CP2104-E01-GM				
CP2104-E02-GM				
CP3000-E01-GM	CP3000-F01-GM			

Note: Affected part numbers also include all custom parts made from the above listed based parts and tape and reel equivalents ("R" suffix)

#### Last Date of Unchanged Product: 21Feb11

Subsequent to the effective date of this PCN, Silicon labs will supply the new Rev F parts for all C8051T326/7, C8051T622/3 and CP2104 series product orders.

#### **Qualification Samples:**

Samples are available now. Please contact your local Silicon Laboratories sales representative to order samples. A list of authorized sales representatives may be found at <a href="https://www.silabs.com">www.silabs.com</a>

#### **Customer Early Acceptance Sign Off:**

Customers may approve early PCN acceptance by completing the information below:

Early Acceptance Date:

Name:

Company:

Email your early Acceptance approval to: katherine.haggar@silabs.com

#### Qualification Data:

See Appendix A for Qualification Report



# Appendix A: Qualification Report C8051T622/CP210x Qualification Report

W7101F1 Product Qualification Plan and Report Rev. D

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C8051T622/CP210x Rev F, GSMC 0.18um Fabrication, Unisem QFN Assembly except as noted								
			Lot ID or	Fail/Pass				
Test Name	Test Condition	Qualification	Start	or End	Notes	Summary	Status	
Test Group A - A	ccelerated Environment Stress	Tests						
HAST	JA110		Q26334	0/81				
	130°C, 85%RH	3 lots, N=>25	Q25823	0/80	1	3 lots	Pass	
Vcc	Vcc=3.6V, 96 hours		Q25877	0/80		0/241		
UHAST	JA110		Q25825	0/80				
	130°C, 85%RH	3 lots, N=>77	Q25879	0/81	1	3 lots	Pass	
	Vcc=3.6V, 96 hours		Q29462	0/77		0/238		
Temp Cycle	JA104		Q25827	0/80				
	Cond C: -65°C to 150°C	3 lots, N=>25	Q25878	0/80	1	3 lots	Pass	
	500 cycles		Q29461	0/77		0/237		
HTSL	JA103		Q25817	0/80				
	150°C, 1000hr	3 lots, N=>25	Q25863	0/80	1	4 lots	Pass	
	<b>'</b>	,	Q26485	0/40				
			Q26486	0/40		0/240		
Test Group B - A	ccelerated Lifetime Simulation	Tests						
HTOL .	JA108		Q26406	0/80				
	125°C, Dynamic	3 lots, N=>77	Q27166	0/80		3 lots	Pass	
	Vcc=3.6V, 1000 hours		Q27686	0/82		0/242		
LTOL	JA108		-					
	-10°C, Dynamic	1 lot, N=>32	Q25468	0/40		1 lots	Pass	
	Vcc=3.6V, 1000 hours			ο, .c		0/40		
ELFR	JA108		Q27370	0/520		0, 10		
	125°C, Dynamic	3 lots, N=>500	Q27897	0/520		3 lots	Pass	
	Vcc=3.6V, 48 hours	3 (663) 11 3 3 3 3	Q29231	0/520		0/1560	1 433	
Test Group E - El	lectrical Verification							
ESD-HBM	JA114		I					
		1 lot, N=>3	Q29206				4kV	
		`						
ESD-MM	JA115		1					
		1 lot, N=>3	Q29207				200V	
		1,						
ESD-CDM	JC101							
		1 lot, N=>3	Q29205				2kV	
							_,	
Latch Up	JESD78							
	±200mA	1 lot, N=>6	Q29208	85C			Pass	
	Overvoltage = 3.6V		Q29204	25C				

#### Notes:

1. Devices subjected to moisture preconditioning at MSL1@260°C