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PCN Date: 9/27/2016	Effective Date:	1/2/2017					
Title: CPT112S Revision A02							
PCN Type:							
⊠ Datasheet							
☑ Product Revision							
PCN Details							
<b>Description of Change:</b> Silicon Labs is pleased to announce revision A02 of CPT112S devices and revision 1.2 of the corresponding datasheet for these products.							
The CPT112S A01 devices spend more time than intended in active and optimized active modes when performing sleep mode scans. This causes the overall current consumption of the A01 devices to increase. Revision A02 resolves the current consumption issue in Revision A01.							
After the effective date of this PCN, Silicon Labs reserves the right to deliver CPT112S-A02-GM for customers ordering CPT112S-A01-GM.							
Reason for Change: CPT112S Rev A02 release CPT112S Datasheet 1.2 release							
Impact on Form, Fit, Function, Q		•					
There is no impact to form, fit, qual	ity and reliabili	ty					
Product Identification:							
Existing Part Number	Replacement	Part Number	Drop in Compatible Indicator				
CPT112S-A01-GM	CPT112S-A0	2-GM	Yes				
CPT112S-A01-GMR	CPT112S-A0	2-GMR	Yes				
Note: The part numbers above include tape and reel variants which are denoted with an "R" at the end of the orderable part number.							
Last Date of Unchanged Product: 1/2/2017							
Qualification Samples:							
Samples are available now. Please contact your Silicon Labs sales representative to order samples. A list of Silicon Labs sales representatives is available at <u>www.silabs.com</u> .							

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## **Revision Change Notice #1609271**

Specific conditions of acceptance of this change will be considered on a case by case basis if written notice is submitted within 30 days of this notice. To request further data or inquire about this notification, please contact your local Silicon Labs sales representative. A list of Silicon Labs sales representatives is available at <u>www.silabs.com</u>.

In some cases rejection of a change notice may impact Silicon Labs product pricing, delivery, quality, or reliability.

**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: <u>katherine.haggar@silabs.com</u>

**Qualification Data:** 

See Appendix.



## **Appendix**

## **CPTxxx Qualification Report**



W7101F1 - Product Qualification Report Record Rev. H

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CPTxxx, TSMC	CPTxxx, TSMC 0.18um Fabrication							
				Fail/Pass or			~	
Test Name	Test Condition	Qualification	Start	End	Notes	Summary	Status	
Test Group A – Accelerated Environment Stress Tests - ASECL - QFN - CuPd Wire								
nkoi	JA110		Q33300	Q/40	1			
	100°C, 85%RH	3 lots, N=>25	Q33303	0/40	1			
	Vcc=3.6V, 264 hours		Q33411	Q/40	1			
			Q33408	Q/40	1	5 lots	Pass	
Toron Quelo	_		Q33138	0/40	1	0/200		
Temp Cycle			Q33302	Q/40	1			
	JA104		Q33413	0/40	1			
	Cond C: -65°C to 150°C	3 lots, N=>25	Q33410	0/40	1	4 lots	Pass	
1 5501	500 cycles		Q33337	0/29	1	0/149		
HTSL	JA103		Q33412	0/40				
	150°C, 1000hr	3 lots, N=>25	Q33409	0/40		3 lots	Pass	
T D		T+-	Q33336	0/28		0/108		
· · ·	celerated Lifetime Simulation	1 Tests	1			1 1		
HTOL	JA108		Q27065	0/88			-	
	T <sub>J</sub> ≥ 125°C, Dynamic	3 lots, N=>77	Q28301	0/80		3 lots	Pass	
1701	Vcc=3.6V, 1000 hours		Q.28955	0/80		0/248		
LTOL	JA108						_	
	T <sub>A</sub> = -10°C, Dynamic	1 lot, N⊨>32	Q25548	0/39		1 lots	Pass	
<u> </u>	Vcc=3.6V, 1000 hours					0/39		
ELFR	JA108		Q27592	0/520				
			Q28218	0/514			_	
	T <sub>J</sub> ≥ 125°C, Dynamic	3 lots, N=>500	Q28868	Q/516		4 lots	Pass	
	Vcc=3.6V, 48 hours		Q29440	0/492		0/2042		
NVM Endurance, Retention and	AEC Q100-005		Q26230	0/40				
Operating Life	25°C		Q26233	0/40				
- I , and		3 lots, N=>38	Q28728	0/156		4 lots	Pass	
	_		Q28730	0/156		0/392		
NVM Endurance, Retention and	AEC Q100-005		Q26231	0/40				
Operating Life	125°C		Q26232	0/40				
-   /		3 lots, N=>39	Q28727	Q/126		4 lots	Pass	
			Q28729	0/126		0/332		

Approved by: Vincent Hidajat

Prepared on: 20-Sep-16

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## **CPTxxx Qualification Report**



W7101F1 - Product Qualification Report Record Rev. H

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CPTxxx, TSMC 0.18um Fabrication								
			Lot ID or	Fail/Pass or				
Test Name	Test Condition	Qualification	Start	End	Notes	Summary	Status	
Test Group E – Electrical Verification								
ESD-HBM	JA114							
		1 lot, N⊨>3	Q33027				2.5KV	
		· ·						
ESD-CDM	JC101							
		1 lot, N⊨>3	Q33238				2KV	
Latch Up	JESD78							
	±200mA	1 lot, N⊨>3	Q33029	85 °C			Pass	
	Overvoltage = 3.6V		Q33028	25 °C			Pass	

Notes:

1 - Preceeded by MSL1, 260°C Preconditioning

This report applies to the following part numbers:

CPT007B-A02-GM CPT112S-A02-GM