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PCN Date: 9/27/2016 Effective Date: 1/2/2017

Title: CPT007B Revision A02

**PCN Type:** 

□ Datasheet

□ Product Revision

#### **PCN Details**

#### **Description of Change:**

Silicon Labs is pleased to announce revision A02 of CPT007B devices and revision 1.2 of the corresponding datasheet for these products.

The CPT007B 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 CPT007B-A02-GM for customers ordering CPT007B-A01-GM.

### Reason for Change:

CPT007B Rev A02 release

CPT007B Datasheet 1.2 release

### Impact on Form, Fit, Function, Quality, Reliability:

There is no impact to form, fit, quality and reliability

### **Product Identification:**

Existing Part Number	Replacement Part Number	Drop in Compatible Indicator
CPT007B-A01-GM	CPT007B-A02-GM	Yes
CPT007B-A01-GMR	CPT007B-A02-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 <a href="https://www.silabs.com">www.silabs.com</a>.



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 <a href="www.silabs.com">www.silabs.com</a>.

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: <a href="mailto:katherine.haggar@silabs.com">katherine.haggar@silabs.com</a>

Qualification Data:

Please see appendix.



### **Appendix**

### **CPTxxx Qualification Report**

W7101F1 - Product Qualification Report Record Rev. H

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			1	Fail/Pass or		_	<b>-</b>
Test Name	Test Condition	Qualification	Start	End	Notes	Summary	Status
Test Group A – Acce HAST	elerated Environment Stress	s Tests-ASECL					
HASI	JA110		Q33300	0/40	1		
	100°C, 85%RH	3 lots, N=>25	Q33303	0/40	1		
	Vcc=3.6V, 264 hours		Q33411	0/40	1		
			Q33408	0/40	1	5 lots	Pass
			Q33138	0/40	1	0/200	
Temp Cycle			Q33302	0/40	1		
	JA104		Q33413	0/40	1		
	Cond C: -65°C to 150°C	3 lots, N=>25	Q33410	0/40	1	4 lots	Pass
	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
			Q33336	0/28		0/108	
Test Group B – Acce	elerated Lifetime Simulation	Tests					
HTOL	JA108		Q27065	0/88			
	T <sub>J</sub> ≥ 125°C, Dynamic	3 lots, N=>77	Q28301	0/80		3 lots	Pass
	Vcc=3.6V, 1000 hours		Q28955	0/80		0/248	
LTOL	JA108						
	T <sub>A</sub> = -10°C, Dynamic	1 lot, N⊨>32	Q25548	0/39		1 lots	Pass
	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	0/516		4 lots	Pass
	Vcc=3.6V, 48 hours		Q29440	0/492		0/2042	
NVM Endurance,	AEC Q100-005		Q26230	0/40			
Retention and	25°C		Q26233	0/40			
Operating Life		3 lots, N=>38	Q28728	0/156		4 lots	Pass
			Q28730	0/156		0/392	
NVM Endurance,	AEC Q100-005		Q26231	0/40			
Retention and	125°C		Q26232	0/40			
Operating Life		3 lots, N=>39	Q28727	0/126		4 lots	Pass
			Q28729	0/126		0/332	

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

#### Notes

1 - Preceeded by MSL1, 260°C Preconditioning

	This report applies to the following part pumpers:	
	This report applies to the following part numbers:	
CPT007B-A02-GM		
CPT112S-A02-GM		