

12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN#20200304005.1 Qualification of Carsem Suzhou an additional Assembly site for Select Devices Change Notification / Sample Request

Date: March 05, 2020

Dear TI Customer:

This is an announcement of a change to a device that is currently offered by Texas Instruments. The details of this change are on the following pages.

The customer should acknowledge receipt of this notification by email within **30** days of the date of receipt. Lack of acknowledgement of this notice within 30 days constitutes customer acceptance of the change.

Samples or additional data to support customer evaluation must be requested within 30 days of receipt of this notification. If samples are requested for evaluation the customer must provide evaluation results within the sample evaluation period indicated on page 3 of this notification. The Sample Evaluation Period begins on the date the customer receives samples from TI.

If the customer approved the change TI can proceed with implementation of the change. The proposed first ship date is shown on page 3.

If the customer does not approve the PCN or the approval response is not provided within the Sample Evaluation Period, TI can implement the change, but the customer may elect to place an order for unchanged product by the Last Time Buy Date for delivery by the Last Time Ship Date. TI cannot guarantee that shipments to the customer after any last time order is delivered will not include the changed material. If the customer places an order with delivery after the Last Time Shipment Date, the order may be fulfilled with changed material or any material processed to TI specifications at that future time.

This notice does not change the end-of-life status of any product. Should product affected be on a previously issued product withdrawal/discontinuance notice, this notification does not extend the life of that product or change the life time buy offering/discontinuance plan.

For questions regarding this notice, contact your local Field Sales Representative or the PCN Team (<u>PCN ww admin team@list.ti.com</u>). For sample requests or sample related questions, contact your field sales representative.

Sincerely, PCN Team SC Business Services

20200304005.1 Change Notification / Sample Request Attachments

Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, these are the devices that you have purchased within the past twenty-four (24) months. The corresponding customer part number is also listed, if available.

DEVICE

CUSTOMER PART NUMBER

BQ25713RSNR BQ25713RSNR 39070397 99056KBB

Technical details of this Product Change follow on the next page(s).

	PCN Number: 20200304005.1 PCN Date: Mar 05, 2020)20		
Title: Qualification of Carsem Suzhou an additional Assembly site for Select Devices										
Customer Cor	ntact:	PCN Manager		Dept:	Dept:			Quality Services		
Proposed 1st Ship Date:		June 05, 2020		Sample Eval Period:		90	90 days			
Last Time Buy Date:		Aug 05, 2020		Last Time Ship Date:		Nov 05, 2020				
Change Type:										
✓ Assembly Site Design Wafer Bump Site								ump Site		
Assembly			Sheet	Wafer Bump Material						
Assembly		Part number change				Wafer Bump Process				
Mechanica	ion	Test Site			ĪΠ	☐ Wafer Fab Site				
Packing/Shipping/Labe			Test Process				Wafer Fab Materials			
		<u> </u>					Wafer Fab Process			
			D(CN Detail	S					
Description of	f Change:			ort Detail						
Texas Instruments is pleased to announce the qualification Carsem Suzhou as an additional assembly site for the list of devices below. Current assembly site and Material differences are as follows:								e as		
			CDAT			Carsem				
Mount Compo		und	420712	3 5		43156				
			Compound			SID#44108				
Reason for Change:										
Continuity of Supply										
Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):) :		
None										
Anticipated impact on Material Declaration										
□ No Impact to the □ Material Declarations or Product Content reports are driven										
Material D										
production release. Upon production release the revised										
reports can be obtained at the site link below										
http://www.ti.com/quality/docs/materialcontentsearch.tsp										
Changes to product identification resulting from this PCN:										
Assembly Site Asser		mbly Site Origin (22L)		Assembly Country Code (BL)	Assembly City		
TI Chengdu		CDA		CHN				Chengdu		
Carsem	Carsem CSZ			CHN				Jiangsu		
Sample product shipping label (not actual product label)										
	- 1.53	'								





(1P) SN74LS07NSR (a) 2000 (D) 0336 (31T)LOT: 3959047MLA 4W) TKY(1T) 7523483SI2 (20L) CSO: SHE (21L) CCO:USA (22L) ASO: MLA (23L) ACO: MVC (23L) ACO: MYS

Product Affected:

BQ25713RSNR



Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

Туре	Test Name / Condition	Duration	QBS Product Reference: BQ25700ARSNR	QBS Product Reference: BQ25710RSNR	QBS Process Reference: <u>TPS51217DSC</u>	QBS Package Reference: <u>TLC5951RTA</u>
AC	Autoclave 121C	96 Hours	-	-	6/462/0	-
ED	Electrical Characterization	Per Datasheet Parameters	Pass	Pass	Pass	Pass
ELFR	Early Life Failure Rate, 85C	48 Hours	-	-	-	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	3/231/0	-
HAST	Biased HAST, 110C/85%RH	264 Hours	-	-	-	3/231/0
HBM	ESD - HBM	2000 V	1/3/0	-	3/9/0	1/3/0
HBM	ESD - HBM Relay Based (Mk2) Disposition	Split A1/1000V	-	-	-	-
CDM	ESD - CDM	1500 V	1/3/0	1/3/0	3/9/0	1/3/0
HTOL	Life Test, 125C	1000 Hours	1/77/0	-	-	1/77/0
HTOL	Life Test, 135C	635 Hours	-	-	3/231/0	-
HTOL	Life Test, 70C	1000 Hours	-	-	-	-
HTOL	Life Test, 70C	1052 Hours	-	-	-	-
HTOL	Life Test, 70C	452 Hours	-	-	-	-
HTSL	High Temp. Storage Bake, 150C	1000 Hours	-	-	-	-
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	-	3/231/0	1/50/0
LU	Latch-up	(per JESD78)	1/12/0	1/6/0	3/18/0	1/6/0
SD	Solderability	Pb Free	-	-	-	3/15/0
TC	Temperature Cycle, -65/150C	500 Cycles	-	=	3/231/0	3/231/0
UHAST	Unbiased HAST, 130C/85%RH	96 Hours	-	-	-	2/231/0
WBP	Bond Strength	Wires	-	-	-	3/108/0
WBS	Ball Bond Shear	Wires	-	-	-	3/108/0

- Qual Devices qualified at LEVEL2-260CG: BQ25710RSN
- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable
- The following are equivalent HTOL options based on an activation energy of 0.7eV: 125C/1k Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours The following are equivalent HTSL options based on an activation energy of 0.7eV: 150C/1k Hours, and 170C/420 Hours The following are equivalent Temp Cycle options per JESD47: -55C/125C/700 Cycles and -65C/150C/500 Cycles
- Quality and Environmental data is available at TI's external Web site: http://www.ti.com/ Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

For questions regarding this notice, e-mails can be sent to the contacts shown below or your local Field Sales Representative.

Location	E-Mail
USA	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
WW PCN Team	PCN_ww_admin_team@list.ti.com

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