PCN Number:	20180213001	**PCN Date:**	Feb 15 2018
Title:	Qualification of Carsem Suzhou as an additional Assembly and Test Site and for TPS65197BRUYR/T Devices		
Customer Contact:	PCN Manager	**Dept:**	Quality Services
Proposed 1st Ship Date:	May 15 2018	**Estimated Sample Availability:**	Provided upon Request

Change Type:

☒	Assembly Site	☐	Assembly Process	☒	Assembly Materials
☐	Design	☐	Electrical Specification	☐	Mechanical Specification
☒	Test Site	☐	Packing/Shipping/Labeling	☐	Test Process
☐	Wafer Bump Site	☐	Wafer Bump Material	☐	Wafer Bump Process
☐	Wafer Fab Site	☐	Wafer Fab Materials	☐	Wafer Fab Process
		☐	Part number change		

PCN Details

Description of Change:

Texas Instruments is pleased to announce the qualification of Carsem Suzhou as an additional Assembly and test site for the TPS65197BRUYR/T device. Construction differences are as follows:

What	TI Clark	CARZ
Mount Compound	4207768	**SID#435143**

Test coverage, insertions, conditions will remain consistent with current testing and verified with test MQ.

Reason for Change:

Continuity of Supply

Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative):

None

Anticipated impact on Material Declaration

☐	No Impact to the Material Declaration	☒	Material Declarations or Product Content reports are driven from production data and will be available following the production release. Upon production release the revised reports can be obtained from the TI ECO website.

Changes to product identification resulting from this PCN:

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (21L)	Assembly City
TI Clark	QAB	PHL	Angeles City, Pampanga
CARZ	**CSZ**	**CHN**	**Jiangsu**

Sample product shipping label (not actual product label)

Product Affected

TPS65197BRUYR	TPS65197BRUYT

TI Information
Selective Disclosure

Qualification Report

TPS65197BRUY (UMC-F8AB/LBC5) add Carsem Suzhou as 2nd A/T Site using 28pin RUY WQFN (0.4mm pitch)
Approve Date 10-Aug-2017

Product Attributes

Die Attributes	Qual Device: TPS65197BRUY	QBS Product Reference: TPS65197BRUY	QBS Product Reference: TPS65197RUY	QBS Process Reference: TAS5613PHD	QBS Package Reference: TLVDC3120IRHBR-DM5	QBS Package Reference: TPS650240RHBR-CU
Wafer Fab Supplier	UMC-8AB	UMC-8AB	UMC-8AB	UMC FAB8AB	DP1-DM5	FR-BIP-1
Wafer Process	LBC5X	LBC5	LBC5	LBC5X	1833C05.24LRD	3370A12X3
Assembly Site	CARSEM SUZHOU CARZ	CLARK	CLARK	TAI	CARSEM SUZHOU	CARSEM SUZHOU
Package Family	WQFN; 4 X 4MM	WQFN	TQFN	HTQFP	VQFN	VQFN
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	-

- QBS: Qual By Similarity
- Qual Device TPS65197BRUY is qualified at LEVEL2-260CG

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: TPS65197BRUY	QBS Product Reference: TPS65197BRUY	QBS Product Reference: TPS65197RUY	QBS Process Reference: TAS5613PHD	QBS Package Reference: TLVDC3120IRHBR-DM5	QBS Package Reference: TPS650240RHBR-CU
AC	Autoclave 121C	96 Hours	-	-	-	3/231/0	3/231/0	3/231/0
CDM	ESD - CDM	1500V	1/3/0	-	1/3/0	-	-	-
ED	Electrical Characterization	Per Datasheet Parameters	Pass	Pass	Pass	Pass	-	-
HAST	Biased HAST 130C/85%RH	96 Hours	-	-	-	3/231/0	-	-
HBM	ESD - HBM	4000V	1/3/0	-	-	-	-	-
HTOL	Life Test, 155C	240 Hours	-	-	-	3/231/0	-	-
HTSL	High Temp. Storage Bake, 150C	1000	-	-	-	-	3/231/0	-
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	-	-	3/231/0	-	3/231/0
LU	Latch-up	(per JESD78)	1/3/0	-	1/6/0	3/18/0	-	-
TC	Temperature Cycle, -65/150C	500 Cycles	-	-	1/77/0	3/231/0	3/231/0	3/231/0
TS	Thermal Shock -65/150C	500 Cycles	-	-	-	3/231/0	-	-

- 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 regional contacts shown below or your local Field Sales Representative.

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