


<b>PCN Number:</b>	20170317000	<b>PCN Date:</b>	March 22, 2017												
<b>Title:</b>	Qualification of Carsem Suzhou (CSZ) as additional Assembly and Test Site for Select Devices														
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Dept:</b>	Quality Services												
<b>Proposed 1<sup>st</sup> Ship Date:</b>	June 22, 2017	<b>Estimated Sample Availability:</b>	Date Provided at Sample request												
<b>Change Type:</b>															
<input checked="" type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design												
<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Data Sheet												
<input checked="" type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change												
<input type="checkbox"/>	Mechanical Specification	<input checked="" type="checkbox"/>	Test Site												
<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process												
		<input type="checkbox"/>	Wafer Bump Site												
		<input type="checkbox"/>	Wafer Bump Material												
		<input type="checkbox"/>	Wafer Bump Process												
		<input type="checkbox"/>	Wafer Fab Site												
		<input type="checkbox"/>	Wafer Fab Materials												
		<input type="checkbox"/>	Wafer Fab Process												
<b>PCN Details</b>															
<b>Description of Change:</b>															
Texas Instruments Incorporated is announcing the qualification Carsem Suzhou (CSZ) as Additional Assembly and Test Site for select devices listed in the "Product Affected" Section. Current assembly sites and Material differences are as follows.															
<table border="1"> <thead> <tr> <th>Assembly Site</th> <th>Assembly Site Origin</th> <th>Assembly Country Code</th> <th>Assembly Site City</th> </tr> </thead> <tbody> <tr> <td>TI Clark</td> <td>QAB</td> <td>PHL</td> <td>Angeles City, Pampanga</td> </tr> <tr> <td><a href="#">Carsem Suzhou</a></td> <td><a href="#">CSZ</a></td> <td><a href="#">CHN</a></td> <td><a href="#">Jiangsu</a></td> </tr> </tbody> </table>				Assembly Site	Assembly Site Origin	Assembly Country Code	Assembly Site City	TI Clark	QAB	PHL	Angeles City, Pampanga	<a href="#">Carsem Suzhou</a>	<a href="#">CSZ</a>	<a href="#">CHN</a>	<a href="#">Jiangsu</a>
Assembly Site	Assembly Site Origin	Assembly Country Code	Assembly Site City												
TI Clark	QAB	PHL	Angeles City, Pampanga												
<a href="#">Carsem Suzhou</a>	<a href="#">CSZ</a>	<a href="#">CHN</a>	<a href="#">Jiangsu</a>												
<b>Material Differences:</b>															
<table border="1"> <thead> <tr> <th></th> <th>TI Clark</th> <th>Carsem Suzhou</th> </tr> </thead> <tbody> <tr> <td>Mount compound</td> <td>4207768</td> <td>435143</td> </tr> </tbody> </table>					TI Clark	Carsem Suzhou	Mount compound	4207768	435143						
	TI Clark	Carsem Suzhou													
Mount compound	4207768	435143													
Test coverage, insertions, conditions will remain consistent with current testing and verified with test MQ.															
<b>Reason for Change:</b>															
Continuity of Supply															
<b>Anticipated impact on Material Declaration</b>															
<input type="checkbox"/>	No Impact to the Material Declaration	<input checked="" type="checkbox"/>	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 <a href="#">TI ECO website</a> .												
<b>Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):</b>															
None															
<b>Changes to product identification resulting from this PCN:</b>															

Assembly Site		
TI Clark Philippines	Assembly Site Origin (22L)	ASO: QAB
Carsem Suzhou	Assembly Site Origin (22L)	ASO: CSZ


Sample product shipping label (not actual product label)




MADE IN: Malaysia  
2DC: 2d:

MSL 2 /260C/1 YEAR	SEAL DT
MSL 1 /235C/UNLIM	03/29/04

OPT:  
ITEM: 39  
LBL: 5A (L)T0:1750





(1P) SN74LS07NSR  
(Q) 2000 (D) 0336  
(31T) LOT: 3959047MLA  
(4W) TKY (1T) 7523483SI2  
(P)  
(2P) REV: (V) 0033317  
(20L) CSO: SHE (21L) CCO:USA  
(22L) ASO: MLA (23L) ACO: MYS

ASSEMBLY SITE CODES: TI-Clark = I, Carsem Suzhou = F

<b>Product Affected:</b>	
TLV62095RGTR	TLV62095RGTT

## Qualification Report

### Qualifying CARZ as 2nd Source for TLV62095RGTR

Approve Date 03-Mar-2017

#### Product Attributes

Attributes	Qual Device: TLV62095RGTR	QBS Product Reference: TLV62090RGTR	QBS Process Reference: TCA6416PW	QBS Package Reference: SH6966ACC0RGCRG4_AU_WIRE
Assembly Site	CARZ	CLARK-AT	MLA	CLARK-AT
Package Family	QFN 3 X 3 (MM)	QFN	TSSOP	QFN
Flammability Rating	-	UL 94 V-0	UL 94 V 0	UL 94 V-0
Wafer Fab Supplier	FFAB, RFAB	FFAB	FFAB	MIHO8
Wafer Process	LBC7	LBC7	LBC7	LBC7

Attributes	QBS Package Reference: SH6966ACC0RGCRG4_CU_WIRE	QBS Package Reference: TPS62090RGT	QBS Package Reference: TPS62130RGT
Assembly Site	CLARK-AT	CLARK	TI-CLARK
Package Family	QFN	QFN	QFN
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	MIHO8	RFAB	MIHO8
Wafer Process	LBC7	LBC7	LBC7

- QBS: Qual By Similarity
- Qual Device TLV62095RGTR is qualified at LEVEL2-260CG
- Device TLV62095RGTR contains multiple dies

## Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: TLV62095RGTR	QBS Product Reference: TLV62090RGTR	QBS Process Reference: TCA6416PW	QBS Package Reference: SH6966ACC0RGCR G4_AU_WIRE
AC	Autoclave 121C	96 Hours	-	-	3/231/0	1/77/0
ED	Electrical Characterization	Per Datasheet Parameters	-	Pass	Pass	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	3/231/0	1/77/0
HBM	ESD - HBM	2500 V	-	1/3/0	1/3/0	-
CDM	ESD - CDM	1000 V	-	1/3/0	-	-
HTOL	Life Test, 125C	1000 Hours	-	-	-	1/77/0
HTOL	Life Test, 150C	300 Hours	-	-	3/231/0	-
HTSL	High Temp. Storage Bake, 150C	1000 Hours	-	-	3/231/0	-
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	-	-	1/77/0
LU	Latch-up	(per JESD78)	-	1/6/0	1/9/0	-
PD	Physical Dimensions	--	-	-	-	1/5/0
SD	Solderability	8 Hours Steam Age	-	-	-	1/22/0
TC	Temperature Cycle, -65/150C	500 Cycles	-	-	3/231/0	1/77/0
TS	Thermal Shock, -65/150C	500 Cycles	-	-	-	1/77/0
WBP	Bond Pull	Wires	-	-	-	1/76/0
WBS	Bond Shear	Wires	-	-	-	1/76/0

Type	Test Name / Condition	Duration	QBS Package Reference: SH6966ACC0RGCRG4_ CU_WIRE	QBS Package Reference: TPS62090RGT	QBS Package Reference: TPS62130RGT
AC	Autoclave 121C	96 Hours	3/231/0	-	1/77/0
ED	Electrical Characterization	Per Datasheet Parameters	-	Pass	Pass
HAST	Biased HAST, 130C/85%RH	96 Hours	3/231/0	-	-
HBM	ESD - HBM	2500 V	-	1/3/0	-
CDM	ESD - CDM	1000 V	-	1/3/0	-
HTOL	Life Test, 125C	1000 Hours	3/231/0	-	-
HTOL	Life Test, 150C	300 Hours	-	1/77/0	1/77/0
HTSL	High Temp. Storage Bake, 150C	1000 Hours	-	-	-
HTSL	High Temp. Storage Bake, 170C	420 Hours	3/231/0	-	-
LU	Latch-up	(per JESD78)	-	1/6/0	1/6/0
PD	Physical Dimensions	--	3/15/0	-	-
SD	Solderability	8 Hours Steam Age	3/66/0	-	-
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	1/77/0	1/77/0
TS	Thermal Shock, -65/150C	500 Cycles	3/231/0	-	-
WBP	Bond Pull	Wires	3/228/0	-	-
WBS	Bond Shear	Wires	3/228/0	-	-

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

<b>Location</b>	<b>E-Mail</b>
USA	<a href="mailto:PCNAmericasContact@list.ti.com">PCNAmericasContact@list.ti.com</a>
Europe	<a href="mailto:PCNEuropeContact@list.ti.com">PCNEuropeContact@list.ti.com</a>
Asia Pacific	<a href="mailto:PCNAsiaContact@list.ti.com">PCNAsiaContact@list.ti.com</a>
Japan	<a href="mailto:PCNJapanContact@list.ti.com">PCNJapanContact@list.ti.com</a>