TEXAS INSTRUMENTS **12500 TI Boulevard, MS 8640, Dallas, Texas 75243**

PCN# 20140327000
Qualification of Carsem Suzhou (CSZ) as Additional Assembly and Test Site for select devices in QFN package
Change Notification / Sample Request

Date: 4/1/2014
To: MOUSER PCN

Dear 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.

We request you acknowledge receipt of this notification within **30** days of the date of this notice. Lack of acknowledgement of this notice within 30 days constitutes acceptance of the change. If you require samples or additional data to support your evaluation, please request within 30 days.

The changes discussed within this PCN will not take effect any earlier than **90** days from the date of this notification, unless customer agreement has been reached on an earlier implementation of the change. This notification period is per TI's standard process.

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 Manager (PCN_ww_admin_team@list.ti.com).

Sincerely,

PCN Team
SC Business Services
Phone: +1(214) 480-6037
Fax: +1(214) 480-6659

PCN 20140327000
Attachment: 1

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
BQ24079TRGTT	null
TLV62090RGTT	null
TLV62130RGTR	null
TLV62130RGTT	null
TPS2543RTET	null
TPS54418RTET	null
TPS61087DRCR	null
TPS61087DRCT	null
TPS61087DRCTG4	null
TPS62080ADSGT	null
TPS62130RGTR	null
TPS62130RGTT	null
TPS65261RHBT	null

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

PCN Number:	20140327000	**PCN Date:**	03/31/2014

Title:	Qualification of Carsem Suzhou (CSZ) as Additional Assembly and Test Site for select devices in QFN package

Customer Contact:	PCN Manager	**Phone:**	+1(214)480-6037	**Dept:**	Quality Services

***Proposed 1st Ship Date:**	07/01/2014	**Estimated Sample Availability:**	Date Provided at Sample request

Change Type:

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

PCN Details

Description of Change:

Qualification of Carsem Suzhou (CSZ) as Additional Assembly and Test Site for select devices in QFN package. Material differences are shown in the following table:

Group 1 Device: Additional A/T site

	NSE	MLA	TI Clark	CSZ
Mount Compound	PZ0031	4207768	4207768	435143

Group 2 Device: Additional A/T site with Cu Wire

	NSE	MLA	TI Clark	CSZ
Mount Compound	PZ0031	4207768	4207768	435143
Wire	Au	Au	Au	Cu

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

Reason for Change:

Continuity of supply.

1) To align with world technology trends and use wiring with enhanced mechanical and electrical properties
2) Maximize flexibility within our Assembly/Test production sites.
3) Cu is easier to obtain and stock

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

None

Changes to product identification resulting from this PCN:

Assembly Site		
UTAC Thailand	Assembly Site Origin (22L)	ASO: NSE
TI Malaysia	Assembly Site Origin (22L)	ASO: MLA
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)

TEXAS INSTRUMENTS
MADE IN: Malaysia
2DC:
2Q:
G4
MSL 2 /260C/1 YEAR
MSL 1 /235C/UNLIM
SEAL DT
03/29/04
OPT:
ITEM:
39
LBL: 5A (L)TO: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: NSE =J, TI-Malaysia = K , TI-Clark = I, Carsem Suzhou = F

Product Affected: Group 1 Devices – Additional A/T site

BQ24079TRGTR	TLV62090RGTT	TPS54418RTET	TPS62130RGTRF0
BQ24079TRGTT	TLV62130RGTR	TPS61087DRCR	TPS62130RGTT
FX028	TLV62130RGTT	TPS61087DRCRG4	TPS65261-1RHBR
HPA00835RTER	TPA6133A2RTJR	TPS61087DRCT	TPS65261-1RHBT
HPA022642RTJR	TPA6133A2RTJT	TPS61087DRCTG4	TPS65261RHBR
SN1304025RHBR	TPS2543RTER	TPS62130DRGTR	TPS65261RHBT
SN1304025RHBT	TPS2543RTET	TPS62130DRGTT	
TLV62090RGTR	TPS54418RTER	TPS62130RGTR	

Product Affected: Group 2 Devices – Additional A/T site with Cu Wire

TPS62080ADSGR	TPS62080ADSGT	TPS65632AGRTER

Qualification Data: Approved 12/14/2012

This qualification has been specifically developed for the validation of this change. The qualification data validates that the proposed change meets the applicable released technical specifications.

Qual Vehicle # 1: 2ELVC412CDRTJR (MSL2-260C)

Package Construction Details

Assembly Site:	CARSEM SUZHOU	Mold Compound:	SID#441086
# Pins-Designator, Family:	20-RTJ, WQFN	Mount Compound:	SID#435143
Lead frame (Finish, Base):	NiPdAu, Cu	Bond Wire:	1.0 Mil Dia., Cu

Qualification: ☐ Plan ☒ Test Results

Reliability Test	Conditions	Sample Size/Fail		
		Lot#1	Lot#2	Lot#3
**High Temp. Storage Bake	170C (420hrs)	77/0	77/0	77/0
**Autoclave 121C	121C, 2 atm (96 Hrs)	77/0	77/0	77/0
**T/C -65C/150C	-65C/+150C (500 Cyc)	77/0	77/0	77/0
Manufacturability	(per mfg. Site specification)	Pass	Pass	Pass
Moisture Sensitivity	(level 2 @ 260C peak +5/-0C)	12/0	-	-
Notes	**- Preconditioning sequence: Level 2-260C.			

Qual Vehicle # 2: ONET8501PBRGTR (MSL2-260C)

Package Construction Details

Assembly Site:	CARSEM SUZHOU	Mold Compound:	SID#441086
# Pins-Designator, Family:	16-RGT, VQFN	Mount Compound:	SID#435143
Lead frame (Finish, Base):	NiPdAu, Cu	Bond Wire:	1.0 Mil Dia., Cu

Qualification: ☐ Plan ☒ Test Results

Reliability Test	Conditions	Sample Size/Fail		
		Lot#1	Lot#2	Lot#3
**High Temp. Storage Bake	170C (420hrs)	77/0	77/0	77/0
**Autoclave 121C	121C, 2 atm (96 Hrs)	77/0	77/0	77/0
**T/C -65C/150C	-65C/+150C (500 Cyc)	77/0	77/0	77/0
Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass
Moisture Sensitivity	(level 2 @ 260C peak +5/-0C)	12/0	-	-
Notes	**- Preconditioning sequence: Level 2-260C.			

Qual Vehicle # 3: TPS51728RHAR (MSL3-260C)

Package Construction Details

Assembly Site:	CARSEM SUZHOU	Mold Compound:	SID#441086
# Pins-Designator, Family:	20-RTJ, VQFN	Mount Compound:	SID#435143
Lead frame (Finish, Base):	NiPdAu, Cu	Bond Wire:	1.0 Mil Dia., Cu

Qualification: ☐ Plan ☒ Test Results

Reliability Test	Conditions	Sample Size/Fail		
		Lot#1	Lot#2	Lot#3
**High Temp. Storage Bake	170C (420 Hrs)	77/0	77/0	77/0
**Autoclave 121C	121C, 2 atm (96 Hrs)	76/0	75/0	77/0
**T/C -65C/150C	-65C/+150C (500 Cyc)	77/0	77/0	77/0
Manufacturability	(per mfg. Site specification)	Pass	Pass	Pass
Moisture Sensitivity	(level 3 @ 260C peak +5/-0C)	12/0	-	-
Notes	**- Preconditioning sequence: Level 3-260C.			

Qual Vehicle # 4: TPS53211RGTR (MSL2-260C)

Package Construction Details

Assembly Site:	CARSEM SUZHOU	Mold Compound:	SID#441086
# Pins-Designator, Family:	16-RGT, VQFN	Mount Compound:	SID#435143
Lead frame (Finish, Base):	NiPdAu, Cu	Bond Wire:	1.0 Mil Dia., Cu

Qualification: ☐ **Plan** ☒ **Test Results**				
Reliability Test	Conditions	Sample Size/Fail		
		Lot#1	Lot#2	Lot#3
**Biased HAST	130C/85%RH (96hrs)	77/0	76/0	77/0
**High Temp. Storage Bake	170C (420hrs)	77/0	77/0	77/0
**Autoclave 121C	121C, 2 atm (96 Hrs)	77/0	77/0	77/0
**T/C -65C/150C	-65C/+150C (500 Cyc)	77/0	77/0	77/0
Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass
Moisture Sensitivity	(level 2 @ 260C peak +5/-0C)	12/0	-	-
Notes **- Preconditioning sequence: Level 2-260C.				

Qual Vehicle # 5: UCD9211RHAR (MSL3-260C)

Package Construction Details

Assembly Site:	CARSEM SUZHOU	Mold Compound:	SID#441086
# Pins-Designator, Family:	40-RHA, VQFN	Mount Compound:	SID#435143
Lead frame (Finish, Base):	NiPdAu, Cu	Bond Wire:	0.8 Mil Dia., Cu

Qualification: ☐ **Plan** ☒ **Test Results**				
Reliability Test	Conditions	Sample Size/Fail		
		Lot#1	Lot#2	Lot#3
**High Temp. Storage Bake	170C (420hrs)	77/0	77/0	77/0
**Autoclave 121C	121C, 2 atm (96 Hrs)	77/0	77/0	77/0
**T/C -65C/150C	-65C/+150C (500 Cyc)	77/0	77/0	77/0
Salt Atmosphere	24 hrs	22/0	22/0	22/0
Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass
Moisture Sensitivity	(level 3 @ 260C peak +5/-0C)	12/0	-	-
Notes **- Preconditioning sequence: Level 3-260C.				

For questions regarding tis notice, e-mails can be sent to the regional 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
Japan	PCNJapanContact@list.ti.com