



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20171115000
Qualification of Carsem Suzhou (CSZ) as additional
Assembly Site for Select Devices
Change Notification / Sample Request

Date: November 17, 2017

To: TOKYO ELECTRON DEVICE (DSTR) 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 proposed first ship date is indicated on page 3 of this notification, unless customer agreement has been reached on an earlier implementation of the change.

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

20171115000
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
CC2500RGPR	null
CC2510F32RHHR	null
CC1200RHBR	null
CC1200RHBT	null
CC110LRGPR	null
CC1121RHBR	null
CC1110F32RHHR	null
CC1120RHBR	null

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

PCN Number:	20171115000			PCN Date:	Nov. 17, 2017																
Title:	Qualification of Carsem Suzhou (CSZ) as additional Assembly Site for Select Devices																				
Customer Contact:	PCN Manager		Dept:	Quality Services																	
Proposed 1st Ship Date:	Feb 17, 2018		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 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>TI Malaysia</td> <td>MLA</td> <td>MYS</td> <td>Kuala Lumpur</td> </tr> <tr> <td>Carsem Suzhou</td> <td>CSZ</td> <td>CHN</td> <td>Jiangsu</td> </tr> </tbody> </table>						Assembly Site	Assembly Site Origin	Assembly Country Code	Assembly Site City	TI Clark	QAB	PHL	Angeles City, Pampanga	TI Malaysia	MLA	MYS	Kuala Lumpur	Carsem Suzhou	CSZ	CHN	Jiangsu
Assembly Site	Assembly Site Origin	Assembly Country Code	Assembly Site City																		
TI Clark	QAB	PHL	Angeles City, Pampanga																		
TI Malaysia	MLA	MYS	Kuala Lumpur																		
Carsem Suzhou	CSZ	CHN	Jiangsu																		
Material Differences:																					
	TI Clark	TI Malaysia	Carsem Suzhou																		
Mount compound	4207123	4205846	443156																		
Lead finish	NiPdAu	NiPdAu	NiPdAuAg																		
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 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-Info website . There is no impact to the material meeting current regulatory compliance requirements with this PCN change.																		
Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):																					
None																					
Changes to product identification resulting from this PCN:																					

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

Sample product shipping label (not actual product label)



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

Product Affected:

CC1020LRSSR	CC1110F8RHHT	CC1200RHBR	CC2544RHBT
CC1020RSSR	CC1120RHBR	CC1200RHBT	CC430F6125IRGCR
CC1020RSST	CC1120RHBT	CC1201RHBR	CC430F6126IRGCR
CC1020WRSSR	CC1121RHBR	CC1201RHBT	CC430F6126IRGCT
CC1021RSSR	CC1121RHBT	CC1260RGZR	CC430F6127IRGCR
CC1021RSST	CC1125ARHBR	CC1260RGZT	CC430F6127IRGCT
CC1101RGP	CC1125RHBR	CC2500RGP	CC430F6135IRGCR
CC1101RGPR	CC1125RHBT	CC2500RGPR	CC430F6135IRGCT
CC1101RGPT	CC113LRGPR	CC2510F16RHHR	CC430F6137IRGCR
CC110LRGPR	CC113LRGPT	CC2510F16RHHT	CC430F6137IRGCT
CC110LRGPT	CC1150RGVR	CC2510F32RHHR	CC430F6143IRGCR
CC1110F16RHHR	CC1150RGVT	CC2510F32RHHT	CC430F6145IRGCR
CC1110F16RHHT	CC115LRGPR	CC2510F8RHHR	CC430F6147IRGCR
CC1110F32RHHR	CC115LRGPT	CC2510F8RHHT	CC430F6147IRGCT
CC1110F32RHHT	CC1175RHBR	CC2544RHB	SES2510F32RHHR
CC1110F8RHHR	CC1175RHBT	CC2544RHBR	TLMW401RHBR

Qualification Report

CMCU QFN Offload to Carsem Suzhou (CSZ)

Qualification Test: On-going

Product Attributes

Attributes	Qual Device: <u>CC1020RSSR</u>	Qual Device: <u>CC110LRGPR</u>	Qual Device: <u>CC1110F16RHHR</u>	Qual Device: <u>CC1120RHBR</u>	Qual Device: <u>CC1260RGZR</u>	Qual Device: <u>CC430F6137IRGCR</u>
Assembly Site	CARSEM	CARSEM	CARSEM	CARSEM	CARSEM	CARSEM
Package Family	QFN 7 x 7 mm	QFN 4 x 4 mm	QFN 6 x 6 mm	QFN 5 x 5 mm	QFN 7 x 7 mm	QFN 9 x 9 mm
Wafer Fab Supplier	AMS	TSMC	TSMC	TSMC	TSMC	TSMC
Technology	0.35um	0.18um	0.18um-Flash	0.18um	0.18um	0.18um-Flash

- QBS: Qual By Similarity

- All Qual devices are qualified at Level3-260C.

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: <u>CC1020RSSR</u>	Qual Device: <u>CC110LRGPR</u>	Qual Device: <u>CC1110F16RHHR</u>
HTSL	High Temp Storage Bake 150C	168 hours	3/230/0	-	-
HTSL	High Temp Storage Bake 150C	1000 hours	Target date: 12/15/17	-	-
TC	Temperature Cycle, -55/125C	700 cycles	3/231/0	1/77/0	1/77/0
THB	Biased Temperature and Humidity, 85C/85%RH	600 hours	3/78/0	-	-
THB	Biased Temperature and Humidity, 85C/85%RH	1000 hours	Target date: 12/15/17	-	-
AC	Autoclave 121C	96 hours	Target date: 12/15/17	1/77/0	1/77/0
UHASt	Unbiased HAST 110C/85%RH	264 hours	3/231/0	1/77/0	1/77/0

Type	Test Name / Condition	Duration	Qual Device: <u>CC1120RHBR</u>	Qual Device: <u>CC1260RGZR</u>	Qual Device: <u>CC430F6137IRGCR</u>
HTSL	High Temp Storage Bake 150C	168 hours	-	-	3/231/0
HTSL	High Temp Storage Bake 150C	1000 hours	-	-	Target date: 12/15/17
TC	Temperature Cycle, -55/125C	700 cycles	1/77/0	3/231/0	-
TC	Temperature Cycle, -65/150C	500 cycles	-	-	3/231/0
BHASt	Biased HAST 110C/85%RH	264 hours	-	-	Target date: 12/15/17
AC	Autoclave 121C	96 hours	1/77/0	3/231/0	3/231/0
UHASt	Unbiased HAST 110C/85%RH	264 hours	1/77/0	3/231/0	3/231/0

Type	Test Name / Condition	Duration	Qual Device: <u>CC1120RHBR</u>	Qual Device: <u>CC1260RGZR</u>	Qual Device: <u>CC430F6137IRGCR</u>
CDM	ESD – CDM	+/-500V	1/3/0	-	1/3/0
HBM	ESD – HBM	+/-2000V	1/3/0	-	1/3/0

- 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.

Location	E-Mail
USA	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
Japan	PCNJapanContact@list.ti.com