12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20121203003
Qualification of ASE Shanghai as Additional Assembly and Test Site for PCA9515BDGKR device
Change Notification / Sample Request

Date: 12/5/2012
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

20121203003
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
PCA9515BDGKR	null

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

PCN Number:	20121203003	**PCN Date:**	12/05/2012
Title:	Qualification of ASE Shanghai as Additional Assembly and Test Site for PCA9515BDGKR device		
Customer Contact:	PCN Manager	**Phone:** +1(214)480-6037	**Dept:** Quality Services
***Proposed 1st Ship Date:**	03/05/2013	**Estimated Sample Availability:**	Date Provided at Sample 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

PCN Details

Description of Change:

Qualification of ASE Shanghai as Additional Assembly and Test Site for PCA9515BDGKR device. Material differences are shown in the following table:

Material	NS2	ASESH
Mount Compound	PZ0013	EY1000063
Mold Compound	CZ0094	EN2000515

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

Reason for Change:

Continuity of supply.

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

None

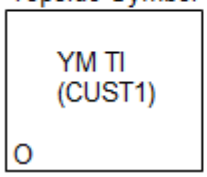
Changes to product identification resulting from this PCN:

Assembly Site		
UTAC 2 Thailand	Assembly Site Origin (22L)	ASO: NS2
ASE Shanghai	Assembly Site Origin (22L)	ASO: ASH

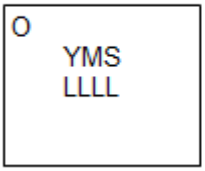
Sample product shipping label (not actual product label)

Device Marking

Topside Symbol



Backside Symbol



TI = TI LETTERS
YM = YEAR MONTH DATE CODE
LLLL = ASSEMBLY LOT CODE
S = ASSEMBLY SITE CODE
O = PIN 1 INDICATOR

ASSEMBLY SITE CODES: NS2 =B, ASE Shanghai = A

Product Affected:

PCA9515BDGKR

Qualification Data: Approved 04/08/2010

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: PGA308AIDGS (MSL 1-260C)

Package Construction Details

Assembly Site:	ASE Shanghai	Mold Compound:	EN2000515
# Pins-Designator, Family:	10-DGS, VSSOP	Mount Compound:	EY1000063
Lead frame (Finish, Base):	NiPdAu-Ag, Cu	Bond Wire:	1.0 Mil Dia., Au

Qualification: ☐ **Plan** ☒ **Test Results**

Reliability Test	Conditions	Sample Size/Fail		
		Lot#1	Lot#2	Lot#3
**Life test	150C (300 Hrs)	77/0	77/0	77/0
**High Temp. Storage Bake	170C (420hrs)	77/0	77/0	77/0
**Biased HAST	130C/85%RH (96Hrs)	77/0	77/0	77/0
**Autoclave 121C	121C, 15psi (96 Hrs)	77/0	77/0	77/0
**T/C -65C/150C	-65C/+150C (500 Cyc)	77/0	77/0	77/0
**Thermal Shock	-65C/+150C (500 Cyc)	77/0	77/0	77/0
Solderability	Steam age, 8 hrs	22/0	22/0	22/0
Lead Finish Adhesion	15 leads, min. 3 units	15/0	15/0	15/0
Physical Dimensions	(per mechanical drawing)	5/0	5/0	5/0
Flammability	Method A - UL94-0	5/0	5/0	5/0
Flammability	Method B - IEC 695-2-2	5/0	5/0	5/0
Flammability	Method C - UL 1694	5/0	5/0	5/0
Salt Atmosphere	24 Hrs	22/0	22/0	22/0
Manufacturability (Assembly)	(per mfg. Site specification)	PASS	PASS	PASS
X-ray	(top side only)	5/0	5/0	5/0
Moisture Sensitivity	(level 1 @ 260C peak +5/-0C)	12/0	12/0	12/0

Notes **- Preconditioning sequence: Level 1-260C.

Qual Vehicle # 2: THS4304DGK (MSL1-260C)					
Package Construction Details					
Assembly Site:	ASE Shanghai		Mold Compound:	EN2000515	
# Pins-Designator, Family:	8-DGK, VSSOP		Mount Compound:	EY1000063	
Lead frame (Finish, Base):	NiPdAu-Ag, Cu		Bond Wire:	1.0 Mil Dia., Au	
Qualification: ☐ **Plan** ☒ **Test Results**					
Reliability Test	Conditions	Sample Size/Fail			
		Lot#1	Lot#2	Lot#3	
**Life test	155C (240 Hrs)	77/0	77/0	77/0	
**High Temp. Storage Bake	170C (420hrs)	77/0	77/0	77/0	
**Biased HAST	130C/85%RH (96Hrs)	77/0	77/0	77/0	
**Autoclave 121C	121C, 15psi (96 Hrs)	77/0	77/0	77/0	
**T/C -65C/150C	-65C/+150C (500 Cyc)	77/0	77/0	77/0	
**Thermal Shock	-65C/+150C (500 Cyc)	77/0	77/0	77/0	
Solderability	Steam age, 8 hrs	22/0	22/0	22/0	
Lead Fatigue	22 leads, min. 3 units	22/0	22/0	22/0	
Lead Pull	22 leads, min. 3 units	22/0	22/0	22/0	
Lead Finish Adhesion	15 leads, min. 3 units	15/0	15/0	15/0	
Physical Dimensions	(per mechanical drawing)	5/0	5/0	5/0	
Salt Atmosphere	24 Hrs	22/0	22/0	22/0	
Manufacturability (Assembly)	(per mfg. Site specification)	PASS	PASS	PASS	
X-ray	(top side only)	5/0	5/0	5/0	
Moisture Sensitivity	(level 1 @ 260C peak +5/-0C)	12/0	12/0	12/0	
Notes **- Preconditioning sequence: Level 1-260C.					

Qual Vehicle # 3: TLV2545IDGK (MSL1-260C)					
Package Construction Details					
Assembly Site:	ASE Shanghai		Mold Compound:	EN2000515	
# Pins-Designator, Family:	8-DGK, VSSOP		Mount Compound:	EY1000063	
Lead frame (Finish, Base):	NiPdAu-Ag, Cu		Bond Wire:	1.0 Mil Dia., Au	
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, 15psi (96 Hrs)	77/0	77/0	77/0	
**T/C -65C/150C	-65C/+150C (500 Cyc)	77/0	77/0	77/0	
**Thermal Shock	-65C/+150C (500 Cyc)	77/0	77/0	77/0	
Solderability	Steam age, 8 hrs	22/0	22/0	22/0	
Lead Fatigue	22 leads, min. 3 units	22/0	22/0	22/0	
Lead Pull	22 leads, min. 3 units	22/0	22/0	22/0	
Lead Finish Adhesion	15 leads, min. 3 units	15/0	15/0	15/0	
Salt Atmosphere	24 Hrs	22/0	22/0	22/0	
Manufacturability (Assembly)	(per mfg. Site specification)	PASS	PASS	PASS	
X-ray	(top side only)	5/0	5/0	5/0	
Moisture Sensitivity	(level 1 @ 260C peak +5/-0C)	12/0	12/0	12/0	
Notes **- Preconditioning sequence: Level 1-260C.					

Qual Vehicle # 4: TPS62040DGQ (MSL1-260C)			
Package Construction Details			
Assembly Site:	ASE Shanghai	Mold Compound:	EN2000515
# Pins-Designator, Family:	10-DGQ, VSSOP	Mount Compound:	EY1000063
Lead frame (Finish, Base):	NiPdAu-Ag, Cu	Bond Wire:	1.0 Mil Dia., Au

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
**Biased HAST	130C/85%RH (96Hrs)	77/0	77/0	77/0
**Autoclave 121C	121C, 15psi (96 Hrs)	77/0	77/0	77/0
**T/C -65C/150C	-65C/+150C (500 Cyc)	77/0	77/0	77/0
**Thermal Shock	-65C/+150C (500 Cyc)	77/0	77/0	77/0
Solderability	Steam age, 8 hrs	22/0	22/0	22/0
Lead Fatigue	22 leads, min. 3 units	22/0	22/0	22/0
Lead Pull	22 leads, min. 3 units	22/0	22/0	22/0
Lead Finish Adhesion	15 leads, min. 3 units	15/0	15/0	15/0
Physical Dimensions	(per mechanical drawing)	5/0	5/0	5/0
Flammability	Method A - UL94-0	5/0	5/0	5/0
Flammability	Method B - IEC 695-2-2	5/0	5/0	5/0
Flammability	Method C - UL 1694	5/0	5/0	5/0
Salt Atmosphere	24 Hrs	22/0	22/0	22/0
Manufacturability (Assembly)	(per mfg. Site specification)	PASS	PASS	PASS
X-ray	(top side only)	5/0	5/0	5/0
Moisture Sensitivity	(level 1 @ 260C peak +5/-0C)	12/0	12/0	12/0

Notes **- Preconditioning sequence: Level 1-260C.

Qual Vehicle # 5: VCA822IDGS (MSL2-260C)			
Package Construction Details			
Assembly Site:	ASE Shanghai	Mold Compound:	EN2000515
# Pins-Designator, Family:	10-DGS, VSSOP	Mount Compound:	EY1000063
Lead frame (Finish, Base):	NiPdAu-Ag, Cu	Bond Wire:	1.0 Mil Dia., Au

Qualification: ☐ **Plan** ☒ **Test Results**

Reliability Test	Conditions	Sample Size/Fail		
		Lot#1	Lot#2	Lot#3
**Life test	155C (240 Hrs)	77/0	77/0	77/0
**High Temp. Storage Bake	170C (420hrs)	77/0	77/0	77/0
**Biased HAST	130C/85%RH (96Hrs)	77/0	77/0	77/0
**Autoclave 121C	121C, 15psi (96 Hrs)	77/0	77/0	77/0
**T/C -65C/150C	-65C/+150C (500 Cyc)	77/0	77/0	77/0
**Thermal Shock	-65C/+150C (500 Cyc)	77/0	77/0	77/0
Solderability	Steam age, 8 hrs	22/0	22/0	22/0
Lead Fatigue	22 leads, min. 3 units	22/0	22/0	22/0
Lead Pull	22 leads, min. 3 units	22/0	22/0	22/0
Lead Finish Adhesion	15 leads, min. 3 units	15/0	15/0	15/0
Salt Atmosphere	24 Hrs	22/0	22/0	22/0
Manufacturability (Assembly)	(per mfg. Site specification)	PASS	PASS	PASS
X-ray	(top side only)	5/0	5/0	5/0
Moisture Sensitivity	(level 1 @ 260C peak +5/-0C)	12/0	12/0	12/0
Notes **- Preconditioning sequence: Level 2-260C.				

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