PCN Number:	20140408002A	**PCN Date:**	09/25/2014
Title:	Qualification of TI Malaysia as Additional Assembly/Test Site for Select Devices		

Customer Contact:	PCN Manager	**Phone:**	+1(214)480-6037	**Dept:**	Quality Services
Proposed 1st Ship Date:	07/15/2014	**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:

Revision A is to make correction on the following:

1) Remove devices in the Product Affected Section with a ~~strikethrough~~ and highlighted in yellow. This were inadvertently added and not affected by this change.

Qualification of TI Malaysia as Additional Assembly/Test Site for Select Devices. Material differences are as follows:

- **Group 1 – Devices that will have Mold Compound change only**

	MEX	MLA
Mold Compound	4205694, 4211880	4209640

- **Group 2 – No material differences**

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		
TI Mexico	Assembly Site Origin (22L)	ASO: MEX
TI Taiwan	Assembly Site Origin (22L)	ASO: TAI
TI Malaysia	Assembly Site Origin (22L)	ASO: MLA

Sample product shipping label (not actual product label)

TEXAS INSTRUMENTS
MADE IN: Malaysia
2DC: 2Q:
MSL 2 /260C/1 YEAR | SEAL DT
MSL 1 /235C/UNLIM | 03/29/04
OPT:
ITEM: 39
LBL: 5A (L)T0:1750
G4
(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-Mexico = M, TI-Taiwan = T, TI-Malaysia = K

Product Affected: Group 1			
SN1106046D	TPS5402DR	TPS5403DR	TPS5405DR
SN1106046DR			

Product Affected: Group 2			
~~HPA00836PWPR~~	~~TPA3020D2PWPR~~	~~TPA3111D1PWPR~~	~~TPA3113D2PWP~~
~~HPA00928PWPR~~	~~TPA3110D2PWP~~	~~TPA3112D1PWP~~	~~TPA3113D2PWPR~~
~~HPA01070PWPR~~	~~TPA3110D2PWPR~~	~~TPA3112D1PWPR~~	
~~HPA01071PWPR~~	~~TPA3110LD2PWPR~~	~~TPA3112SD1PWP~~	
~~TPA3020D2PWP~~	~~TPA3111D1PWP~~	~~TPA3112SD1PWPR~~	

Group 1 : Qualification Data

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 : TPS5405D (MSL1-260C)

Package Construction Details

Assembly Site:	MLA	Mold Compound:	4209640
# Pins-Designator, Family:	8-D, SOIC	Mount Compound:	4042500
Lead Finish, Base	NiPdAu, Cu	Bond Wire:	0.96 Mil Dia. Cu

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

Reliability Test	Conditions	Sample Size / Fail		
		Lot 1	Lot 2	Lot3
Electrical Characterization	-	30/0	-	-
Manufacturability Qualification (MQ)		Pass	-	-
**High Temp Storage Bake	170C (420 hrs)	77/0	77/0	77/0
**Temp Cycle	-65C/150C (500 Cycles)	77/0	77/0	77/0
Moisture Sensitivity	L1-260C	12/0	12/0	12/0

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

Group 2 : Qualification Data

Qual Vehicle 1 : SN89062PWP (MSL2-260C)

Package Construction Details

Assembly Site:	MLA	Mold Compound:	4205443
# Pins-Designator, Family:	24-PWP, HTSSOP	Mount Compound:	4208458
Lead Finish, Base	NiPdAu, Cu	Bond Wire:	1.30 Mil Dia. Cu

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

Reliability Test	Conditions	Sample Size / Fail		
		Lot 1	Lot 2	Lot3
**Life test	125C (1000 hrs)	77/0	-	-
**Biased HAST	130C/85%RH (96 hrs)	77/0	77/0	77/0
**Autoclave	121C, 2atm (96 hrs)	77/0	77/0	77/0
**High Temp Storage Bake	150C (1000 hrs)	77/0	77/0	77/0
**Temp Cycle	-65C/150C (500 Cycles)	77/0	77/0	77/0
**Thermal Shock	-65C/150C (500 Cycles)	77/0	77/0	77/0
Manufacturability Qualification (MQ)		Pass	-	-
Moisture Sensitivity	L2-260C	12/0	12/0	12/0

**- Preconditioning sequence: Level 2-260C.

Qual Vehicle 2 : SN84001PWP (MSL2-260C)			
Package Construction Details			
Assembly Site:	MLA	Mold Compound:	4205443
# Pins-Designator, Family:	28-PWP, HTSSOP	Mount Compound:	4208458
Lead Finish, Base	NiPdAu, Cu	Bond Wire:	0.96 Mil Dia. Cu

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

Reliability Test	Conditions	Sample Size / Fail
**Life test	125C (1000 hrs)	77/0
**Biased Temp and Humidity	85C/85%RH (1000 hrs)	77/0
**Autoclave	121C, 2atm (96 hrs)	77/0
**High Temp Storage Bake	170C (420 hrs)	77/0
**Temp Cycle	-65C/150C (500 Cycles)	77/0
Manufacturability Qualification (MQ)		Pass
**- Preconditioning sequence: Level 2-260C.		

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