



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

**Qualification Report for PCN# 20121015004
Qualification of TI Malaysia as Additional Assembly and Test Site for select
Devices on the SSOP package
Information Only**

Date:

Dear Customer:

Texas Instruments is pleased to announce the completion of qualification testing for the product change described in PCN# 20121015004. The details of the qualification results are included in the following pages and are being forwarded to you in response to your inquiry about this PCN.

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



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

Qualification Report For # 20121015004
Qualification of TI Malaysia as Additional Assembly and Test Site for select
Devices on the SSOP package

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 1: PCM1803ADBR (MSL 1-260C)

Package Construction Details

Assembly Site:	TI-MLA	Mold Compound:	4211880
# Pins-Designator, Family:	20-DB, SSOP	Mount Compound:	4042500
Leadframe (Finish, Base):	NiPdAu, Cu	Bond Wire Diameter:	0.96 Mil, Au

Qualification: ☐ Plan ☒ Test Results

Reliability Test	Conditions	Sample Size / Fail
Moisture Sensitivity	(level 1 @ 260C peak +5/-0C)	12/0
Ball Bond Shear	76 wires, min 3 devices	76/0
Bond Pull	76 wires, min 3 devices	76/0
Manufacturability	(per mfg. Site specification)	Pass

Reference Qualifications:

Qualification Data: Approved 10/18/2012

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: SN65LVCP22DR (MSL 1-260C)

Package Construction Details

Assembly Site:	TI-TAI	Mold Compound:	4211880
# Pins-Designator, Family:	10-DQC, WSON	Mount Compound:	4042500
Leadframe (Finish, Base):	NiPdAu, Cu	Bond Wire Diameter:	0.96 Mil, 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, 2 ATM (240 hrs)	77/0	77/0	77/0
**T/C -65C/150C	-65C/+150C (1000 Cyc)	77/0	77/0	77/0
Manufacturability (Assembly MQ)	(per mfg. Site specification)	PASS	PASS	PASS

Notes: ** - Preconditioning Sequence: L1-260C

Qual Vehicle 2: SN75976A1DL (MSL 2-260C)

Package Construction Details

Assembly Site:	TI-MLA	Mold Compound:	4211880
# Pins-Designator, Family:	56-DL, SSOP	Mount Compound:	4042500

Leadframe (Finish, Base):	NiPdAu, Cu	Bond Wire Diameter:	0.96 Mil, Au		
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)	77/0	77/0	77/0	
**T/C -65C/150C	-65C/+150C (500 Cyc)	77/0	77/0	77/0	
Moisture Sensitivity	(level 2 @ 260C peak +5/-0C)	12/0	-	-	
Manufacturability	(per mfg. Site specification)	PASS	PASS	PASS	
Notes: ** - Preconditioning Sequence: L2-260C					
Qual Vehicle 3: TL1454ACDBR (MSL1-260C)					
Package Construction Details					
Assembly Site:	TI-MLA	Mold Compound:	4211880		
# Pins-Designator, Family:	16-DB, SSOP	Mount Compound:	4042500		
Leadframe (Finish, Base):	NiPdAu, Cu	Bond Wire:	0.8 Mil, 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	73/0	
**Autoclave 121C	121C, 2 ATM (96 hrs)	77/0	77/0	77/0	
**T/C -65C/150C	-65C/+150C (2000 Cyc)	77/0	77/0	77/0	
Moisture Sensitivity	(level 1 @ 260C peak +5/-0C)	12/0	12/0	12/0	
Manufacturability (Assembly MQ)	(per mfg. Site specification)	PASS	PASS	PASS	
Notes: ** - Preconditioning Sequence: L1-260C					
Qual Vehicle 4: TLC320AD77CDBR (MSL 1-260C)					
Package Construction Details					
Assembly Site:	TI-MLA	Mold Compound:	4211880		
# Pins-Designator, Family:	28-DB, SOIC	Mount Compound:	4042500		
Leadframe (Finish, Base):	NiPdAu, Cu	Bond Wire:	1.20 Mil Dia., Au		
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)	77/0	77/0	77/0	
**T/C -65C/150C	-65C/+150C (1000 Cyc)	77/0	77/0	77/0	
Moisture Sensitivity	(level 1 @ 260C peak +5/-0C)	12/0	-	-	
Manufacturability	(per mfg. Site specification)	PASS	PASS	PASS	
Notes: ** - Preconditioning Sequence: L1-260C					
Qual Vehicle 5: TPA4860DR (MSL 1-260C)					
Package Construction Details					
Assembly Site:	TI-TAI	Mold Compound:	4211880		
# Pins-Designator, Family:	16-D, SOIC	Mount Compound:	4042500		
Leadframe (Finish, Base):	NiPdAu, Cu	Bond Wire:	1.15 Mil Dia., Au		
Qualification: ☐ Plan ☒ Test Results					
Reliability Test	Conditions	Sample Size / Fail			
		Lot 1	Lot 2	Lot 3	
**Autoclave 121C	121C, 2 ATM (96 hrs)	77/0			
**T/C -65C/150C	-65C/+150C (500 Cyc)	77/0			
Moisture Sensitivity	(level 1 @ 260C peak +5/-0C)	12/0			
Manufacturability	(per mfg. Site specification)	PASS			

Notes: ** - Preconditioning Sequence: L1-260C
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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