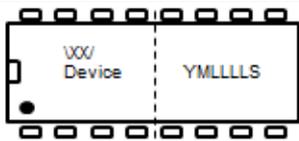
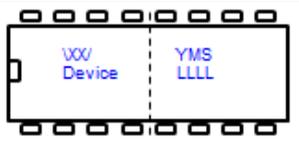
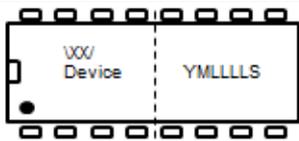
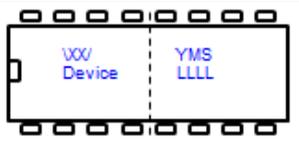
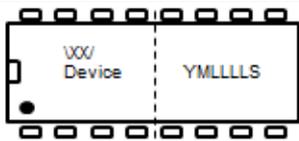
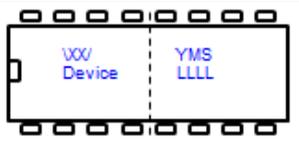


<b>PCN Number:</b>	20190418000.1		<b>PCN Date:</b>	Apr 25 2019																									
<b>Title:</b>	Qualify TI Mexico as an additional Assembly site for select PDIP devices																												
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Dept:</b>	Quality Services																										
<b>Proposed 1<sup>st</sup> Ship Date:</b>	July 25 2019	<b>Estimated Sample Availability:</b>	Date provided at sample request																										
<b>Change Type:</b>																													
<input checked="" type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design	<input type="checkbox"/>	Wafer Bump Site																								
<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Data Sheet	<input type="checkbox"/>	Wafer Bump Material																								
<input checked="" type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change	<input type="checkbox"/>	Wafer Bump Process																								
<input type="checkbox"/>	Mechanical Specification	<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Wafer Fab Site																								
<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process	<input type="checkbox"/>	Wafer Fab Materials																								
				<input type="checkbox"/>	Wafer Fab Process																								
<b>PCN Details</b>																													
<b>Description of Change:</b>																													
Texas Instruments is pleased to announce the qualification of TI Mexico as an alternate assembly site for select devices in the PDIP package. Construction difference between the current and proposed site is shown below:																													
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Additionally, a some of the TI Mexico devices will undergo a symbolization format change as follows:																													
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<b>Reason for Change:</b>																													
Continuity of Supply																													
<b>Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):</b>																													
None																													

**Anticipated impact on Material Declaration**

<input type="checkbox"/>	No Impact to the Material Declaration	<input checked="" type="checkbox"/>	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 at the site link below <a href="http://www.ti.com/quality/docs/materialcontentsearch.tsp">http://www.ti.com/quality/docs/materialcontentsearch.tsp</a>
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**Changes to product identification resulting from this PCN:**

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (21L)	Assembly City
Carsem	CRS	MYS	Jelapang
<b>TI Mexico</b>	<b>MEX</b>	<b>MEX</b>	<b>Aguascalientes</b>

Sample product shipping label (not actual product label)

**TEXAS INSTRUMENTS**  
 MADE IN: Malaysia  
 2DC: 20  
 MSL 2 /260C/1 YEAR SEAL DT  
 MSL 1 /235C/UNLIM 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

**Product Affected:**  
**Group 1 devices:**

ADS7812PB	INA122P	OPA2228PA	OPA277PA
DAC7611P	INA122PA	OPA2228P	OPA27GP
DAC7611PB	INA122PA	OPA2241PA	OPA37GP
DAC7611PB	INA128P	OPA2241PA	OPA37GP
INA103KP	INA128PA	OPA2251PA	OPA404KP
INA103KP	INA128P	OPA2251PA	OPA404KP
INA106KP	INA129P	OPA2277P	OPA4131PA
INA110KP	INA129PA	OPA2277PA	OPA4131PA
INA111AP	INA129P	OPA2277PA	OPA4131PJ
INA111AP	INA131AP	OPA227P	OPA4227PA
INA111BP	INA131BP	OPA227PA	OPA4227PA
INA114AP	INA131BP	OPA227PA	OPA4228PA
INA114AP	OPA2132P	OPA227P	OPA4228PA
INA114BP	OPA2132PA	OPA228P	OPA4241PA
INA114BP	OPA2132PA	OPA228PA	OPA4277PA
INA116PA	OPA2134PA	OPA228PA	PGA206PA
INA116PA	OPA2134PA	OPA241PA	UC3842N
INA117P	OPA2227P	OPA241PA	VFC110AP
INA117P	OPA2227PA	OPA277P	XTR106P
INA118P	OPA2228P	OPA277PA	XTR106PA

INA118PB	OPA2228PA		
<b>Group 2 devices:</b>			
PGA204AP	PGA205AP	RCV420JP	RCV420KP
PGA204BP	PGA205BP	RCV420JPG4	RCV420KPG4
PGA204BPG4			



TI Information  
Selective Disclosure

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

Type	Test Name / Condition	Duration	Qual Device: ADS7812PB	Qual Device: OPA2277P	Qual Device: OPA4277PA	QBS Package Reference: ADS831	QBS Package Reference: UCC37322P
AC	Autoclave 121C	96 Hours	3/231/0	3/231/0	1/77/0	-	-
FLAM	Flammability	UL 94V-0	-	-	-	1/5/0	3/15/0
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	3/231/0	-	-
HTOL	Life Test, 125C	1000 Hours	-	-	3/230/0	-	-
HTSL	High Temp Storage Bake 170C	420 Hours	3/231/0	3/231/0	1/77/0	-	-
LI	Lead Fatigue	Leads	3/66/0	3/66/0	1/24/0	-	-
LI	Lead Pull to Destruction	Leads	3/144/0	3/72/0	1/42/0	-	-
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass	-	-
PKG	Lead Finish Adhesion	Leads	3/45/0	2/30/0	1/15/0	-	-
PKG	Solder Heat	Leads	3/66/0	3/66/0	1/22/0	-	-
TC	Temperature Cycle, -40/125C	850 Cycles	2/154/0	-	-	-	-
TC	Temperature Cycle, -65/150C	500 Cycles	-	3/231/0	3/231/0	-	-

- QBS: Qual By Similarity
- Qual Devices ADS7812PB, OPA2277P, OPA4277PA are qualified as MSL Not Classified
- 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 contacts shown below or your local Field Sales Representative.

Location	E-Mail
USA	<a href="mailto:PCNAmericasContact@list.ti.com">PCNAmericasContact@list.ti.com</a>
Europe	<a href="mailto:PCNEuropeContact@list.ti.com">PCNEuropeContact@list.ti.com</a>
Asia Pacific	<a href="mailto:PCNAsiaContact@list.ti.com">PCNAsiaContact@list.ti.com</a>
WW PCN Team	<a href="mailto:PCN_ww_admin_team@list.ti.com">PCN_ww_admin_team@list.ti.com</a>