

<b>PCN Number:</b>	20210427002.1B	<b>PCN Date:</b>	June 07, 2021																				
<b>Title:</b>	Qualify TI Malaysia as an additional Assembly site for Select Devices																						
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Dept:</b>	Quality Services																				
<b>Change Type:</b>																							
<input checked="" type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design																				
<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Data Sheet																				
<input checked="" type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change																				
<input type="checkbox"/>	Mechanical Specification	<input type="checkbox"/>	Test Site																				
<input checked="" type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process																				
		<input type="checkbox"/>	Wafer Bump Site																				
		<input type="checkbox"/>	Wafer Bump Material																				
		<input type="checkbox"/>	Wafer Bump Process																				
		<input type="checkbox"/>	Wafer Fab Site																				
		<input type="checkbox"/>	Wafer Fab Materials																				
		<input type="checkbox"/>	Wafer Fab Process																				
<b>PCN Details</b>																							
<b>Description of Change:</b>																							
<p><b>Revision B</b> is to remove select devices in the Product Affected Section (in bold characters with strikethrough) and highlighted in yellow. These devices were inadvertently added and not affected by this change.</p> <p>Texas Instruments is pleased to announce the qualification of TI Malaysia as an Additional Assembly site for the list of devices shown below. Current assembly site and Material differences are as follows:</p>																							
<table border="1"> <thead> <tr> <th></th> <th><b>TIEM</b></th> <th><b>AP1</b></th> <th><b>MLA</b></th> </tr> </thead> <tbody> <tr> <td>Mount Compound</td> <td>8075531</td> <td>SID#101375281</td> <td><b>4147858</b></td> </tr> <tr> <td>Mold Compound</td> <td>8096859</td> <td>SID#101323397</td> <td><b>4211880</b></td> </tr> <tr> <td>Lead Finish</td> <td>Matte Sn</td> <td>Matte Sn</td> <td>NiPdAu</td> </tr> <tr> <td>##Bond wire, diameter</td> <td>Au, 1.3 mils</td> <td>Au, 1.3 mils</td> <td><b>Cu, 1.3 mils</b></td> </tr> </tbody> </table>					<b>TIEM</b>	<b>AP1</b>	<b>MLA</b>	Mount Compound	8075531	SID#101375281	<b>4147858</b>	Mold Compound	8096859	SID#101323397	<b>4211880</b>	Lead Finish	Matte Sn	Matte Sn	NiPdAu	##Bond wire, diameter	Au, 1.3 mils	Au, 1.3 mils	<b>Cu, 1.3 mils</b>
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## - Applies to only the LM2674M-5.0/NOPB																							
NOTE: Devices are currently built at either TIEM or AP1 or both																							
Upon expiry of this PCN TI will combine lead free solutions in a single <b><u>standard part number</u></b> , for this device. For example; <b><u>LM2901M/NOPB</u></b> – can ship with both Matte Sn and NiPdAu.																							
Example:																							
<ul style="list-style-type: none"> <li>- Customer order for 7500 units of LM2901M/NOPB with 2500 units SPQ (Standard Pack Quantity per Reel).</li> <li>- TI can satisfy the above order in one of the following ways. <ul style="list-style-type: none"> <li>I. 3 Reels of NiPdAu finish.</li> <li>II. 3 Reels of Matte Sn finish</li> <li>III. 2 Reels of Matte Sn and 1 reel of NiPdAu finish.</li> <li>IV. 2 Reels of NiPdAu and 1 reel of Matte Sn finish.</li> </ul> </li> </ul>																							
<b>Reason for Change:</b>																							
Continuity of Supply																							
<b>Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):</b>																							
None																							
<b>Anticipated impact on Material Declaration</b>																							
<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 (23L)	Assembly City
TIEM	CU6	MYS	Melaka
AP1	AKR	PHL	Cupang, Muntinlupa City
<b>TI Malaysia</b>	<b>MLA</b>	<b>MYS</b>	<b>Kuala Lumpur</b>

Sample product shipping label (not actual product label)

**G3: Matte Sn**  
**G4: NiPdAu**

**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:**

LM2674M-12/NOPB	LM2675MX-ADJ/J7002911	<b>LM5101AMX/NOPB</b>	LMV844MAX/NOPB
LM2674M-3.3/NOPB	LM2675MX-ADJ/NOPB	LM5101AMX/S7003027	LP2951ACM-3.0/NOPB
LM2674M-5.0/NOPB	LM2901M/NOPB	LM5101BMA/NOPB	LP2951ACM-3.3/NOPB
LM2674M-ADJ/NOPB	LM2901MX/NOPB	LM5101BMAX/NOPB	LP2951ACM/NOPB
LM2674MX-12/NOPB	LM2902M/NOPB	LM5101CMA/NOPB	LP2951ACMX-3.0/NOPB
LM2674MX-3.3/NOPB	LM2902MX/E7002681	LM5101CMAX/NOPB	LP2951ACMX-3.3/NOPB
LM2674MX-5.0/NOPB	LM2902MX/NAK2	LM5101M/NOPB	LP2951ACMX/NOPB
LM2674MX-ADJ/NOPB	LM2902MX/NOPB	LM5101MX/NOPB	LP2951CM-3.0/NOPB
LM2675M-12/NOPB	LM324AM/NOPB	LM5109AMA/NOPB	LP2951CM-3.3/NOPB
LM2675M-3.3/NOPB	LM324AMX/NOPB	LM5109AMAX/NOPB	LP2951CM/NOPB
LM2675M-5.0/NOPB	LM324M/NOPB	LM5109BMA/NOPB	LP2951CMX-3.0/NOPB
LM2675M-ADJ/NOPB	LM324MX/NOPB	LM5109BMAX/NOPB	LP2951CMX-3.3/NOPB
LM2675MX-12/NOPB	LM339AM/NOPB	LM5109MA/NOPB	LP2951CMX/E7002608
LM2675MX-3.3/E7002948	LM339AMX/NOPB	LM5109MAX/NOPB	LP2951CMX/J7000697
LM2675MX-3.3/NAK2	LM339M/NOPB	LMV324M/NOPB	LP2951CMX/NAK2
LM2675MX-3.3/NOPB	LM339MX/NOPB	LMV324MX/NOPB	LP2951CMX/NOPB
LM2675MX-5.0/NOPB	<b>LM5101AM/NOPB</b>	LMV844MA/NOPB	



## Qualification Report

Approve Date 16-Feb-2021

### Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: LM2675MXADH NC	Qual Device: LM5101AMXSF0 S4	Qual Device: LMV844MAX/NO PB	QBS Package Reference: CD4081BM96	QBS Package Reference: LM393DR ROUGH LDF	QBS Package Reference: LP2951ACMX-3.3/S2	QBS Package Reference: TCA9548ADR RLE
AC	Autoclave 121C	96 Hours	3/231/0	-	3/231/0	3/228/0	3/231/0	1/77/0	3/231/0
ED	Auto Electrical Distributions	Cpk>1.67 Room, hot, and cold test	-	-	-	-	-	1/30/0	-
ED	Electrical Characterization, side by side	-	1/30/0	1/30/0	1/30/0	-	-	-	-
FLAM	Flammability (UL 94V-0)	-	-	-	-	-	-	-	3/15/0
HAST	Biased HAST, 130C/85%RH	192 Hours (for info)	-	-	-	-	-	3/231/0	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	-	-	-	3/231/0	-
HTOL	Life Test, 125C	1000 Hours	-	-	-	-	-	1/77/0	-
HTSL	High Temp Storage Bake 170C	420 Hours	-	-	-	-	3/231/0	-	3/231/0
LI	Lead Fatigue	Leads	-	-	-	3/66/0	3/66/0	-	-
LI	Lead Pull	Leads	-	-	-	3/126/0	3/72/0	-	-
PD	Physical Dimensions	(per mechanical drawing)	-	-	-	3/15/0	3/90/0	1/30/0	-
SD	Solderability	Pb Free	-	-	-	3/66/0	-	-	3/66/0
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	-	3/231/0	3/231/0	3/231/0	1/77/0	3/231/0
VM	Visual / Mechanical	-	3/984/0	3/984/0	3/984/0	3/984/0	3/984/0	3/984/0	3/984/0
WBP	Bond Pull	Wires	3/228/0	3/228/0	3/228/0	3/228/0	3/228/0	3/90/0	3/228/0
WBS	Ball Bond Shear	Wires	3/228/0	3/228/0	3/228/0	3/228/0	3/228/0	3/90/0	3/228/0

- QBS: Qual By Similarity
  - Qual Devices LM2675MXADHNC, LM5101AMXSF0S4 and LMV844MAX/NOPB are qualified at LEVEL1-2600
  - 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

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