

<b>PCN Number:</b>	20140926001	<b>PCN Date:</b>	09/29/2014
<b>Title:</b>	Qualification of DFAB as an Additional Fab Site Option for TLC5928PWPxx devices		
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Phone:</b>	+1(214)480-6037
		<b>Dept:</b>	Quality Services
<b>*Proposed 1<sup>st</sup> Ship Date:</b>	12/29/2014	<b>Estimated Sample Availability:</b>	Date Provided at Sample request
<b>Change Type:</b>			
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Assembly Process
<input type="checkbox"/>	Design	<input type="checkbox"/>	Electrical Specification
<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Packing/Shipping/Labeling
<input type="checkbox"/>	Wafer Bump Site	<input type="checkbox"/>	Wafer Bump Material
<input checked="" type="checkbox"/>	Wafer Fab Site	<input type="checkbox"/>	Wafer Fab Materials
		<input type="checkbox"/>	Part number change
<b>PCN Details</b>			
<b>Description of Change:</b>			
This change notification is to announce the qualification of DFAB as an additional fab site option for TLC5928PWPxx devices. These devices are listed in "Product Affected" section.			
<b>Current Fabs</b>		<b>New (Qualified) Fab</b>	
Site, process, wafer dia.		<b>Site, process, wafer dia.</b>	
CFAB, LBC4, 150mm		<b>DFAB, LBC4, 200mm</b>	
The LBC4 process is mature and has been successfully running in production since 2001. Qualification details are provided in the Qual Data Section.			
<b>Process/Site Qualification</b>		<b>Qualification Date</b>	
LBC4 Process/DFAB		2/23/2001	
<b>Reason for Change:</b>			
Continuity of Supply.			
<b>Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):</b>			
None			

**Changes to product identification resulting from this PCN:**

**Current**

Chip Site	Chip site code (20L)	Chip country code (21L)
CFAB	CU3	CHN
HU-BIP-4	HOU	USA

**New**

<b>Chip Site</b>	<b>Chip site code (20L)</b>	<b>Chip country code (21L)</b>
<b>DL-LIN</b>	<b>DLN</b>	<b>USA</b>

Sample product shipping label (not actual product label)

 <p>MADE IN: Malaysia ZDC: 29</p> <table border="1"> <tr> <td>MSL 2 / 260C / 1 YEAR</td> <td>SEAL DT</td> </tr> <tr> <td>MSL 1 / 235C / UNLIM</td> <td>03/29/04</td> </tr> </table> <p>OPT: 39 ITEM: 39 LBL: 5A (L)T0:1750</p>	MSL 2 / 260C / 1 YEAR	SEAL DT	MSL 1 / 235C / UNLIM	03/29/04		<p>(1P) SN74LS07NSR (Q) 2000 (D) 0336 (31T) LOT: 3959047MLA (4W) TKY (1T) 7523483SI2 (P) (2P) REV: 0033317 (20L) CSO: SHP (21L) CCO: USA (22L) ASO: MLA (20L) AGO: MYS</p>
MSL 2 / 260C / 1 YEAR	SEAL DT					
MSL 1 / 235C / UNLIM	03/29/04					

**Product Affected:**

TLC5928PWP	TLC5928PWPR	TLC5928PWPRG4
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**LBC4 Process Qualification**

**Qualification Data: (Approved: 2001)**

This qualification has been developed for the validation of this change. The qualification data will validate that the proposed change meets the applicable released technical specifications.

**Qual Vehicle: SN104969VFP**

Wafer Fab Site:	DFAB	Wafer Fab Process:	LBC4
Wafer Fab Process:	LBC4	Wafer Diameter:	200mm

**Qualification:**  Plan  **Test Results**

Reliability Test	Conditions	Sample Size/Fails		
		Lot#1	Lot#2	Lot#3
**Life Test	155C (240hrs)	116/0	116/0	116/0
**Biased HAST	130C/85%RH (96 Hrs)	77/0	77/0	77/0
**Autoclave 121C	121C, (96 Hrs)	77/0	77/0	77/0
**Thermal Shock	-65/+150C (500 Cycles)	77/0	77/0	77/0
ESD HBM	2000V	3/0	-	-
ESD CDM	1500V	3/0	-	-
Electrical Characterization	-	Pass	Pass	Pass
Latch-up	(per JESD78)	6/0	6/0	6/0
Manufacturability (Wafer Fab)	Per site spec	Approved	-	-
Manufacturability (Assembly)	(per mfg. Site specification)	Approved	-	-
X-Ray	Top View Only	5/0	5/0	5/0
Visual/Mechanical		Pass	Pass	Pass
**High Temp. Storage Bake	170C (420 Hrs)	45/0	45/0	45/0
**Preconditioning: Level 2-260C				

<b>Qual Vehicle: TPS54671/ TPS79733</b>				
Wafer Fab Site:	DFAB	Wafer Fab Process:	LBC4	
Wafer Fab Process:	LBC4	Wafer Diameter:	200mm	
<b>Qualification:</b> <input type="checkbox"/> <b>Plan</b> <input checked="" type="checkbox"/> <b>Test Results</b>				
Reliability Test	Conditions	Sample Size/Fails		
		Lot#1	Lot#2	Lot#3
**Life Test	155C (240hrs)	116/0	116/0	116/0
**Thermal Shock	-65/+150C (500 Cycles)	77/0	77/0	-
ESD HBM	2000V	3/0	3/0	3/0
ESD CDM	1000V	3/0	3/0	3/0
Electrical Characterization	-	Pass	Pass	Pass
Bond Strength		76/0	76/0	76/0
Die Shear		5/0	5/0	5/0
Latch-up	(per JESD78)	5/0	5/0	5/0
Manufacturability (Wafer Fab)	Per site spec	Approved	-	-
Manufacturability (Assembly)	(per mfg. Site specification)	Approved	-	-
Wafer Level Reliability		Approved	-	-
<b>**Preconditioning: Level 1-235C</b>				

For questions regarding this notice, e-mails can be sent to the regional contacts shown below or your local Field Sales Representative.

<b>Location</b>	<b>E-Mail</b>
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>
Japan	<a href="mailto:PCNJapanContact@list.ti.com">PCNJapanContact@list.ti.com</a>