

12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN#20180807001 Qualification of TIPI as a new Assembly and Test Site for Select LQFP Package Devices Change Notification / Sample Request

Date: August 30, 2018 **To:** PREMIER FARNELL PCN

Dear Customer:

This is an announcement of a change to a device that is currently offered by Texas Instruments. The details of this change are on the following pages.

We request you acknowledge receipt of this notification within **30** days of the date of this notice. Lack of acknowledgement of this notice within 30 days constitutes acceptance of the change. If you require samples or additional data to support your evaluation, please request within 30 days.

The proposed first ship date is indicated on page 3 of this notification, unless customer agreement has been reached on an earlier implementation of the change.

This notice does not change the end-of-life status of any product. Should product affected be on a previously issued product withdrawal/discontinuance notice, this notification does not extend the life of that product or change the life time buy offering/discontinuance plan.

For questions regarding this notice, contact your local Field Sales Representative or the PCN Manager (PCN www admin team@list.ti.com).

Sincerely,

PCN Team SC Business Services

20180807001 Attachment: 1

Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, these are the devices that you have purchased within the past twenty-four (24) months. The corresponding customer part number is also listed, if available.

DEVICE	CUSTOMER PART NUMBER
MSP430F1611IPM	null
MSP430F2418TPM	null
MSP430F1610IPM	null
MSP430F1611IPMR	null
MSP430F1612IPM	null
MSP430F2416TPM	null
MSP430F2417TPM	null
MSP430F2418TPMR	null
MSP430F2616TPM	null
MSP430F2617TPM	null
MSP430F2618TPM	null
MSP430F2618TPMR	null
MSP430F2619TPM	null
MSP430F4152IPMR	null
MSP430F2617TPMR	null
MSP430F2619TPMR	null

Technical details of this Product Change follow on the next page(s).

	CN Number: 20180807001 PCN Date: Aug 30, 2018					
Title: Qualification of TIPI as a new Assembly and Test Site for Select LQFP Package Devices						
Customer Contact: PCN Manager Dept: Quality Services						
Estimated Sample	Date provided at					
Proposed 1 st Ship Date: Nov 30, 2018 Availability: Sample request						
Change Type:						
Assembly Site Design Wafer	Bump Site					
Assembly Process Data Sheet Wafer	☐ Wafer Bump Material					
	☐ Wafer Bump Process					
Mechanical Specification	Fab Site					
Packing/Shipping/Labeling Test Process Wafer	Fab Materials					
	Fab Process					
PCN Details						
Description of Change:						
Texas Instruments is pleased to announce the qualification of TIPI as a new A	Assembly and Test					
Site for Select LQFP Package Devices. Assembly differences are as follows:						
Assembly Site	Assembly City					
TI Taiwan TAI TWN	Chung Ho					
TI Philippines PHI PHL	Baguio City					
Material differences:						
TI Taiwan TI Philippines (TIPI)						
Mount Compound 4042504 4211470						
Mold Compound 4205442 4222198						
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						
Anticipated impact on Material Declaration						
No Impact to the Material Declaration Material Declaration Material Declaration Material Declaration 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 from the TI Eco-Info website. There is no impact to the material meeting current regulatory compliance requirements with this PCN change.						
production release. Upon production release reports can be obtained from the <u>TI Eco-Info</u> no impact to the material meeting current re	egulatory					

Sample Product Shipping Label (not actual product label)					
Assembly Site					
TI Taiwan	Assembly Site O	rigin (22L) ASC): TAI		
TI Philippines (TIPI)	Assembly Site O): PHI		
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 (1P) \$N74L\$07N\$R (Q) 2000 (D) 0336 (31T) LOT: 3959047MLA (4W) TKY(1T) 7523483S12 (P) (2P) REV: (V) 0033317 (20L) CSO: SHE (21L) CCO: USA (22L) ASO: MLA (23L) ACO: MYS					
Product Affected:					
MSP430F1610IPM	MSP430F2416TPMR	MSP430F2616TPM	MSP430F2619TPMR		
MSP430F1610IPMR	MSP430F2417TPM	MSP430F2616TPMR	MSP430F4132IPM		
MSP430F1611IPM	MSP430F2417TPMR	MSP430F2617TPM	MSP430F4132IPMR		
MSP430F1611IPMR	MSP430F2418TPM	MSP430F2617TPMR	MSP430F4152IPM		
MSP430F1612IPM	MSP430F2418TPMR	MSP430F2618TPM	MSP430F4152IPMR		
MSP430F1612IPM MSP430F1612IPMR	MSP430F2418TPMR MSP430F2419TPM	MSP430F2618TPM MSP430F2618TPMR	MSP430F4152IPMR		

Qualification Report Qualification of TI-Philippines (TIPI) as Second Assembly Site for MSP430F161x, F26xx, and F41xx

Approval Date 01-Aug-2018

Product Attributes

Attributes	Qual Device: MSP430F2618TPM	QBS Package Reference: MSP430F149IPM	QBS Package Reference: MSP430F249TPM	QBS Package Reference: PCI2250PGF	QBS Package Reference: TL16CP554APM	QBS Package Reference: TMS320F2803XAPN
Assembly Site	TIPI	TIPI	TIPI	TIPI	TIPI	TIPI
Package Family	LQFP	LQFP	LQFP	LQFP	LQFP	LQFP
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	TSMC-WF3	TSMC-WFT	TSMC-WFT	TSMC-TA1	DL-LIN	DMOS5
Wafer Fab Process	0.35UM-TSMC	0.35UM-TSMC	0.35UM-TSMC	0.35UM- TSMC	50C21	18F05

⁻ QBS: Qual By Similarity

⁻ Qual Device MSP430F2618TPM is qualified at LEVEL3-260C

Qualification Results

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

Туре	Test Name / Condition	Duration	Qual Device: MSP430F2618TPM	QBS Package Reference: <u>MSP430F149IPM</u>	QBS Package Reference: <u>MSP430F249TPM</u>
AC	Autoclave 121C	96 Hours	1/77/0	-	3/231/0
HAST	Biased HAST, 130C/85%RH	96 Hours	-	1/77/0	-
HTSL	High Temp. Storage Bake, 150C	1000 Hours	-	-	-
TC	Temperature Cycle, - 65/150C	500 Cycles	1/77/0	-	3/231/0
THB	Biased Temperature and Humidity, 85C/85%RH	1000 Hours	-	-	-

Туре	Test Name / Condition	Duration	QBS Package Reference: <u>PCI2250PGF</u>	QBS Package Reference: TL16CP554APM	QBS Package Reference: TMS320F2803XAPN
AC	Autoclave 121C	96 Hours	3/231/0	3/231/0	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	-
HTSL	High Temp. Storage Bake, 150C	1000 Hours	3/231/0	3/231/0	-
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	3/231/0	-
THB	Biased Temperature and Humidity, 85C/85%RH	1000 Hours	-	-	3/231/0

Preconditioning was performed for Autoclave, THB/Biased HAST, Temperature Cycle, and HTSL.

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

THIS INFORMATION RELATING TO QUALITY AND RELIABILITY IS PROVIDED "AS IS." Product information detailed in this report may not accurately reflect TI's current product materials, processes and testing used in the construction of the TI products. Customers are solely responsible to conduct sufficient engineering and additional qualification testing to determine whether a device is suitable for use in their applications. Using TI products outside limits stated in TI's datasheet may void TI's warranty. See TI's Terms of Sale at "http://www.ti.com/lsds/ti/legal/termsofsale.page"

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