12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20140709001
Elimination of Tungsten at Metal One on select devices in the CS80 process
Change Notification / Sample Request

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 changes discussed within this PCN will not take effect any earlier than **90** days from the date of this notification, unless customer agreement has been reached on an earlier implementation of the change. This notification period is per TI's standard process.

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_ww_admin_team@list.ti.com).

Sincerely,

PCN Team
SC Business Services
Phone: +1(214) 480-6037
Fax: +1(214) 480-6659

PCN# 20140709001
Attachment: 1

Products Affected:

According to our records, there are the affected device(s) that you have purchased within the past twenty-four (24) months. Technical details of this Product Change follow on the next page(s).

PCN Number:	20140709001	**PCN Date:**	7/17/2014
Title:	Replacing Tungsten at Metal One with standard aluminum metallization architecture on select devices in the CS80 Fab process at Maine Fab		
Customer Contact:	PCN Manager	**Phone:** +1(214)480-6037	**Dept:** Quality Services
***Proposed 1st Ship Date:**	10/17/2014	**Estimated Sample Availability:**	Date Provided at Sample request

Change Type:

☐	Assembly Site	☐	Assembly Process	☐	Assembly Materials
☐	Design	☐	Electrical Specification	☐	Mechanical Specification
☐	Test Site	☐	Packing/Shipping/Labeling	☐	Test Process
☐	Wafer Bump Site	☐	Wafer Bump Material	☐	Wafer Bump Process
☐	Wafer Fab Site	☐	Wafer Fab Materials	☒	Wafer Fab Process
		☐	Part number change		

PCN Details

Description of Change:

This change notification is to announce the replacement of Tungsten at Metal one with standard aluminum metallization architecture on select devices in the CS80 Fab process at Maine Fab.

Current

Chip Site	Fab Process	Wafer Diameter	Metal One Composition
MAINEFAB	CS80	200mm	TiW/W

New

Chip Site	**Fab Process**	**Wafer Diameter**	**Metal One Composition**
MAINEFAB	**CS80**	**200mm**	**TiN/AL**

Reason for Change:

Continuity of supply.

Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):

None

Changes to product identification resulting from this PCN:

None

Product Affected:

DS36C200M/NOPB	LMS33460MG	LMV342MMX/J7002640	LMV602MAX/NOPB
DS36C200MX/NOPB	LMS33460MG/NOPB	LMV342MMX/MESN	LMV602MM/NOPB
DS90C031TM	LMV2011MA/NOPB	LMV342MMX/NOPB	LMV602MMX/NOPB
DS90C031TM/NOPB	LMV2011MAX	LMV342MMX/S5001099	LMV716MM/NOPB
DS90C031TMX/NOPB	LMV2011MAX/NOPB	LMV342MMX/S7002484	LMV716MMX/NOPB
DS90C032TM	LMV2011MF	LMV342MMX/S7002574	LMV7219M5
DS90C032TM/NAK2	LMV2011MF/NOPB	LMV358M	LMV7219M5/NOPB
DS90C032TM/NOPB	LMV2011MFX/NOPB	LMV358M/NOPB	LMV7219M5X
DS90C032TMX	LMV331M5	LMV358MM	LMV7219M5X/NOPB
DS90C032TMX/NOPB	LMV331M5/MESN	LMV358MM/DRSN	LMV7219M5X/S5000707
DS90C401M	LMV331M5/NOPB	LMV358MM/NOPB	LMV7219M5X/S7002242
DS90C401M/NOPB	LMV331M5X	LMV358MMX/E7002183	LMV7219M7
DS90C401MX	LMV331M5X/NOPB	LMV358MMX/NOPB	LMV7219M7/NOPB
DS90C401MX/NOPB	LMV331M7	LMV358MMX/S7002186	LMV7219M7X
DS90C402M	LMV331M7/NOPB	LMV358MMX/SL110547	LMV7219M7X/NOPB
DS90C402M/NOPB	LMV331M7X	LMV358MX	LMV7275MF

DS90C402MX	LMV331M7X/NOPB	LMV358MX/DRSN	LMV7275MF/NOPB
DS90C402MX/NOPB	LMV339M	LMV358MX/E7002867	LMV7275MFX/NOPB
EMB1462MM/NOPB	LMV339M/NOPB	LMV358MX/MESN	LMV7275MGX/EMSN
EMB1462MME/NOPB	LMV339MT	LMV358MX/NOPB	LMV7291MG
EMB1462MMX/NOPB	LMV339MT/NOPB	LMV393M	LMV7291MG/67
LM8364BALMF20	LMV339MTX	LMV393M/NOPB	LMV7291MG/NOPB
LM8364BALMF20/NOPB	LMV339MTX/NOPB	LMV393MM	LMV7291MGX/NOPB
LM8364BALMFX20/NOPB	LMV339MX/NOPB	LMV393MM/NOPB	LMV762MA
LM8365BALMF27	LMV341MG/NOPB	LMV393MMX	LMV762MA/NOPB
LM8365BALMF27/NOPB	LMV341MGX/NOPB	LMV393MMX/E7001611	LMV762MAX
LM8365BALMFX27/NOPB	LMV342MA/NOPB	LMV393MMX/ELLI971	LMV762MAX/NOPB
LM8365BALMFX45/NOPB	LMV342MAX	LMV393MMX/NOPB	LMV762MM
LMP2011MA/NOPB	LMV342MAX/E7001823	LMV393MX	LMV762MM/NOPB
LMP2011MAX/NOPB	LMV342MAX/E7002870	LMV393MX/NOPB	LMV762MMX
LMP2011MF	LMV342MAX/J7002023	LMV393MX/S5000873	LMV762MMX/NOPB
LMP2011MF/NOPB	LMV342MAX/NOPB	LMV601MG/NOPB	SM73303MM/NOPB
LMP2011MFX/NOPB	LMV342MAX/S7002483	LMV601MGX/NOPB	SM73303MME/NOPB
LMP2014MT/NOPB	LMV342MM/NOPB	LMV602MA/NOPB	SM73303MMX/NOPB
LMP2014MTX/NOPB			

Qualification Data: (Approved: 5/21/2014)

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.

Qualification Device 1: DS90C401M (MSL LEVEL1-260C)

Wafer Fab Site:	MAINE FAB	Wafer Fab Process:	CS80
Wafer Diameter:	200mm		

Qualification: ☐ **Plan** ☒ **Test Results**

Reliability Test	Conditions	Sample Size / Fail Lot#1	Lot#2	Lot#3
Electrical Characterization	Per Datasheet spec	Pass	-	-
ESD HBM	1000V	3/0	3/0	3/0
ESD CDM	250V	3/0	3/0	3/0
Latchup	(per JESD78)	6/0	6/0	-

**Preconditioning: MSL1@260C

Qualification Device 2: LMV772QMM (MSL LEVEL1-260C)

Wafer Fab Site:	MAINE FAB	Wafer Fab Process:	CS80
Wafer Diameter:	200mm		

Qualification: ☐ **Plan** ☒ **Test Results**

Reliability Test	Conditions	Sample Size / Fail Lot#1	Lot#2	Lot#3
Electrical Characterization	Per Datasheet spec	Pass	-	-
ESD HBM	1000V	3/0	3/0	3/0
ESD CDM	250V	3/0	3/0	3/0
Latchup	(per JESD78)	6/0	6/0	-

**Preconditioning: MSL1@260C

Qualification Device 3: LMV932M (MSL LEVEL1-260C)			
Wafer Fab Site:	MAINE FAB	Wafer Fab Process:	CS80
Wafer Diameter:	200mm		

Qualification: ☐ **Plan** ☒ **Test Results**

Reliability Test	Conditions	Sample Size / Fail		
		Lot#1	Lot#2	Lot#3
Electrical Characterization	Per Datasheet spec	Pass	-	-
ESD HBM	1000V	3/0	3/0	3/0
ESD CDM	250V	3/0	3/0	3/0
Latchup	(per JESD78)	6/0	6/0	-
**Life Test	150C (500 Hrs)	80/0	80/0	-
**Preconditioning: MSL1@260C				

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