TEXAS INSTRUMENTS **12500 TI Boulevard, MS 8640, Dallas, Texas 75243**

PCN# 20180816000.1
Transfer of select SLM-CCR devices from GFAB to FFAB Wafer Fab site
Change Notification / Sample Request

Date: August 20, 2018
To: TOKYO ELECTRON DEVICE (DSTR) 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 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).

PCN Team
SC Business Services

20180816000.1
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
LM35CZ/NOPB	null
LM35DM/NOPB	null
LM35DH	null
LM35DH/NOPB	null
LM35DT/NOPB	null
LM35DZ/NOPB	null
LM35AH/NOPB	null
LM35CAZ/NOPB	null
LM35CH/NOPB	null
LM35DMX/NOPB	null

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

PCN Number:	20180816000.1	**PCN Date:**	Aug 20, 2018
Title:	Transfer of select SLM-CCR devices from GFAB to FFAB Wafer Fab site		
Customer Contact:	PCN Manager	**Dept:**	Quality Services
Proposed 1st Ship Date:	Nov 20, 2018	**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 transfer of select SLM-CCR devices from GFAB to the FFAB (FR-BIP-1) Wafer Fab site for the selected devices listed in the "Product Affected" section.

Current Fab Site			New Fab Site		
Current Fab Site	**Process**	**Wafer Diameter**	**New Fab Site**	**Process**	**Wafer Diameter**
GFAB6	SLM-CCR	150 mm	FFAB	SLM-CCR	200 mm

Qual details are provided in the Qual Data Section.

Reason for Change:

Greenock, Scotland (GFAB) Wafer Fab site closure. ISO/IATF recertification will not be pursued.

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

None

Changes to product identification resulting from this PCN:

Current:

Current Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
GFAB6	GF6	GBR	Greenock

New Fab Site:

New Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
FR-BIP-1	**TID**	**DEU**	**Freising**

Sample product shipping label (not actual product label)

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)TO:1750
G4
(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:

LM34AH	LM34DM/NOPB	LM35CAZ/NOPB	LM35DMX
LM34AH/NOPB	LM34DMX/NOPB	LM35CH	LM35DMX/NOPB
LM34CAH	LM34DZ/LFT7	LM35CH/NOPB	LM35DT
LM34CAH/NOPB	LM34DZ/NOPB	LM35CZ/LFT1	LM35DT/NOPB
LM34CAZ/NOPB	LM35AH	LM35CZ/NOPB	LM35DZ/LFT1

LM34CZ/NOPB	LM35AH/NOPB	LM35DH	LM35DZ/LFT4
LM34DH	LM35CAH	LM35DH/NOPB	LM35DZ/NOPB
LM34DH/NOPB	LM35CAH/NOPB	LM35DM	LM35H
LM34DM	LM35CAZ/LFT4	LM35DM/NOPB	LM35H/NOPB

Qualification Report
FFAB SLM-CCR Technology Qualification
Approve Date 09-Aug-2018

Product Attributes

Attributes	Qual Device: LM35CZ/NOPB	QBS Process Reference: LM2576HVT-5.0/NOPB
Assembly Site	JCET CHUZHOU	TIEM-AT
Package Family	TO-92-N1	TO-220
Flammability Rating	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	FFAB	FFAB
Wafer Process	SLM-CCR	SLM

- QBS: Qual By Similarity

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

Type	Test Name / Condition	Duration	Qual Device: LM35CZ/NOPB	QBS Process Reference: LM2576HVT-5.0/NOPB
AC	Autoclave, 121C	96 Hours	3/231/0	3/231/0
ED	Electrical Characterization	Per Datasheet Parameters	3/90/0	3/90/0
ELFR	Early Life Failure Rate, 125C	48 Hours	-	3/2400/0
HAST	Biased HAST, 130C/85%RH	96 Hours	-	3/231/0
HBM	ESD - HBM	2000 V	1/3/0	-
HBM	ESD - HBM	2500 V	-	3/9/0
CDM	ESD - CDM	1000 V	1/3/0	-
CDM	ESD - CDM	750 V	-	3/9/0
HTOL	Life Test, 125C	1000 Hours	3/231/0	3/231/0
HTSL	High Temp. Storage Bake, 150C	1000 Hours	-	3/231/0
LU	Latch-up	(per JESD78)	1/6/0	3/18/0
SD	Solderability	Pb Free	-	1/15/0
SD	Solderability	Pb	-	1/15/0
TC	Temperature Cycle, -55/150C	1000 Cycles	-	3/231/0
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	3/231/0
WBP	Bond Pull	Wires	-	1/30/0
WBS	Ball Bond Shear	Wires	-	1/30/0

- 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

For questions regarding this notice, e-mails can be sent to the regional contacts shown below, or you can contact 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