12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20181011001.1
Transfer of select CS200 devices from GFAB to MAINEFAB Wafer Fab site
Change Notification / Sample Request

Date: October 12, 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

20181011001.1
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
DS26LV31W-QML	null
DS26LV32AW-QML	null

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

PCN Number:	20181011001.1	PCN Date:	Oct 12, 2018
Title:	Transfer of select CS200 devices from GFAB to MAINEFAB Wafer Fab site		
Customer Contact:	PCN Manager	Dept:	Quality Services
Proposed 1st Ship Date:	Jan 12, 2019	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 CS200 devices from GFAB to the MAINEFAB Wafer Fab site for the selected devices listed in the "Product Affected" section.

Current				New			
Chip Site	**Process**	**Wafer Diameter**	**Interlayer Dielectric**	**Chip Site**	**Process**	**Wafer Diameter**	**Interlayer Dielectric**
GFAB6	CS200	150mm	TEOS Base ILD TEOS SOG/ SOG etchback	MAINEFAB*	CS200	200mm	TEOS CMP
Chip Site	**Process**	**Wafer Diameter**	**Contact Plug**	**Chip Site**	**Process**	**Wafer Diameter**	**Contact Plug**
GFAB6	CS200	150mm	Part of metallization	MAINEFAB*	CS200	200mm	W plug

*Interlayer Dielectric (ILD) and Contact plug processes will be upgraded to MaineFab's standardized Chemical-Mechanical Planarization (CMP) ILD and Tungsten (W) Contact plug processes.

Qual details are provided in the Qual Data Section.

Reason for Change:

Greenock, Scotland (GFAB) Wafer Fab site closure

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
MAINEFAB	**CUA**	**USA**	**South Portland**

Sample product shipping label (not actual product label)

Product Affected:

DS26C31ME/883	DS26C32A MD8	DS26C32AMW/883	DS26LV32-MD8
DS26C31MJ/883	DS26C32AME/883	DS26C32AMWG/883	DS26LV32AW-QML
DS26C31MW/883	DS26C32AMJ/883	DS26LV31W-QML	

Qualification Report

New Process Qualification in MFAB on CS200 - Herm_MIL Class Q products

Approve Date 05-Oct-2018

Product Attributes

Attributes	Qual Device: DS26C32AMJ/883 TL	QBS Process Reference: ADC10664CIWM/NOPB QL
Assembly Site	MMT/TIEMA	AP1
Package Family	CDIP	SOIC
Flammability Rating	-	-
Wafer Fab Supplier	MFAB	MFAB
Wafer Process	CS200	CS200

- QBS: Qual By Similarity

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: DS26C32AMJ/883 TL	QBS Process Reference: ADC10664CIWM/NOPB QL
-	Ax Electrical Test	-	Pass	-
-	B2 Bond Strength	Wires	Pass	-
-	B3 Solderability, 245C	--	1/208/0	-
-	D2 Lead Integrity	Leads	1/45/0	-
-	D3 Sequence	---	1/15/0	-
AC	Autoclave 121C	96 Hours	-	3/231/0
ED	Electrical Characterization	Per Datasheet Parameters	1/30/0	-
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	2500 V	1/3/0	3/9/0
CDM	ESD - CDM	1500 V	1/3/0	-
HTOL	C1 Life Test, 150C	184 Hours	1/45/0	-
HTOL	C1 Life Test, 150C	736 Hours	1/45/0	-
HTOL	Life Test, 125C	1000 Hours	-	3/231/0
HTSL	High Temp. Storage Bake, 150C	1000 Hours	-	3/231/0
LU	Latch-up	(per JESD78)	2/12/0	3/18/0
TC	Temperature Cycle, -65/150C	500 Cycles	-	3/231/0

- 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