12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20161027001
Transfer of select C10 devices from ANAM-1 to DMOS5 Wafer Fab site
Change Notification / Sample Request

Date: November 02, 2016
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 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_ww_admin_team@list.ti.com).

Sincerely,

PCN Team
SC Business Services

20161027001
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
CDCV304PW	null
CDCV304PWR	null
CDCV304PWG4	null

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

PCN Number:	20161027001	**PCN Date:**	Nov. 2, 2016
Title:	Transfer of select C10 devices from ANAM-1 to DMOS5 Wafer Fab site		
Customer Contact:	PCN Manager	**Dept:**	Quality Services
Proposed 1st Ship Date:	Feb. 2, 2017	**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 devices from ANAM-1 to the DMOS5 Wafer Fab site. Fab support from ANAM-1 is being discontinued for the products listed in the product affected section of this document. Production at ANAM-1 will stop on February 28, 2017. Customers are advised to place their orders immediately to ensure fulfillment. Any orders placed after this date will be supported with DMOS5 material.

Current (Discontinued)			New (Transfer to Location)		
Current Fab Site	**Process**	**Wafer Diameter**	**New Fab Site**	**Process**	**Wafer Diameter**
ANAM-1	C10	200mm	DMOS5	C10	200mm

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:

Current:

Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
ANAM-1	ANM	KOR	Bucheon-si

New:

Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
DP1DM5	**DM5**	**USA**	**Dallas**

Sample product shipping label (not actual product label)

Product Affected:

CDCV304PW	CDCV304PWG4	CDCV304PWR	CDCV304PWRG4

Qualification Report

CDCV304: Qualification of alternative FAB (DMOS5)

Approve Date 04-Dec-2015

Product Attributes

Attributes	Qual Device: CDCV304	QBS Product Reference CDCV304	QBS Process Reference: SN74AVC16T245DGGR	QBS Package Reference: CDCVF2505PW	QBS Package Reference: LMV324IPWR	QBS Package Reference: RC4558PWR	QBS Package Reference: SN0508073PW
Wafer Fab Supplier	DMOS5	DMOS5	CFAB	ANAM-1	FFAB	SFAB	MLA
Wafer Process	33C10	33C10	33C10	33C10	BCB	JI-SLM	LBC4X
Assembly Site	MLA	MLA	MLA	MLA	ASE SHANGHAI	MLA (TIM)	MLA
Package Family	TSSOP	TSSOP	TSSOP	TSSOP	TSSOP	TSSOP	TSSOP

- QBS: Qual By Similarity
- Qual Device CDCV304 is qualified at LEVEL1-260C

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: CDCV304	QBS Product Reference CDCV304	QBS Process Reference: SN74AVC16T245DGGR	QBS Package Reference: CDCVF2505PW	QBS Package Reference: LMV324IPWR	QBS Package Reference: RC4558PWR	QBS Package Reference: SN0508073PW
AC	Autoclave 121C	96 Hours	-	1/77/0	3/231/0	3/231/0	-	1/77/0	3/231/0
ED	Electrical Characterization	Per Datasheet Parameters	Pass	Pass	Pass	-	Pass	Pass	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	3/231/0	3/231/0	-	2/154/0	1/77/0	-
HAST	Biased HAST, 130C/85%RH	192 Hours					2/154/0		
HBM	ESD - HBM	2500 V	1/3/0	1/3/0	3/9/0	-	-	-	-
CDM	ESD - CDM	1000 V	1/3/0	1/3/0	3/9/0	-	-	-	-
HTSL	High Temp. StorageBake, 150C	1000 Hours	-		-	-	-	-	-
HTSL	High Temp. StorageBake, 170C	420 Hours	-		3/231/0	3/231/0	1/77/0	-	3/231/0
HTOL	High Temp Operating Life , 150C	300 Hours			3/231/0	-	-	-	-
LU	Latch-up	(per JESD78)	1/6/0		3/18/0	-	-	-	-
TC	Temperature Cycle, -55/125C	700 Cycles	-		-	-	-	-	3/231/0
TC	Temperature Cycle, -65/150C	500 Cycles	-	3/231/0	3/231/0	3/231/0	-	1/77/0	3/231/0
TS	Thermal Shock, -65/150C	500 Cycles	-		-	3/231/0	-	-	3/231/0
UHAST	Unbiased HAST, 130C/85%RH	96 Hours	-		-	-	1/77/0	-	-
WBP	Bond Strength	Wires	-		3/228/0	-	2/154/0	1/76/0	-
MQ	Manufacturability	(per mfg. Site specification)	Pass	Pass					

- 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