PCN Number: 201		2018	180809002.1		PCN	PCN Date:		Aug 13, 2018	
Title:	Transfer of se	elect C	C10 devices from ANAM-1 to DMOS5 Wafer Fab site						
Customer	Contact:		PCN	<u>l Manager</u>		Dept:			Quality Services
Proposed 1 <sup>st</sup> Ship Date:		:	1 1101/ 13 /1118		Estimated Sample Availability:		le	Date provided at sample request.	
Change Type:									
Assembly Site			Assembly Process				Ass	Assembly Materials	
Design	า		☐ Electrical Specification				Me	Mechanical Specification	
Test S	Site		Packing/Shipping/Labeling		]		Tes	Test Process	
			Wafer Bump Material				Wa	Wafer Bump Process	
			☐ Wafer Fab Materials				Wa	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 has been discontinued. Buffer inventory has been built to cover the notification period of this change notification.

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

## **Reason for Change:**

Discontinued Fab support from ANAM-1

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:

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

Sample product shipping label (not actual product label)

TEXAS
INSTRUMENTS

MADE IN: Malaysia
2Dc: 20:

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) 7523483812

(20L) CSO: SHD (21L) CCO:USA (22L) ASO: MLA (23L) ACO: MYS

## **Product Affected:**

TLK1501IRCP	TLK1501IRCPR	TLK2501IRCP	TLK2501IRCPR	
TLK1501IRCPG4	TLK1501IRCPRG4	TLK2501IRCPG4	TLK2501IRCPRG4	

## Qualification Report

# TLK1501IRCP C10 Offload from Dongbu to DMOS5 Approve Date 24-July-2018

#### **Product Attributes**

Attributes	Qual Device: TLK1501IRCP	QBS Process Reference: TLK2500IRCP	QBS Package Reference: TLK2201BIRCP
Wafer Fab Supplier	DMOS5	DMOS5	DMOS5
Wafer Process	25C10	25C10	25C10
Assembly Site	TAI	TAI	TAI
Package Family	HVQFP	HVQFP	HVQFP
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0

<sup>-</sup> QBS: Qual By Similarity

#### **Qualification Results**

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

Data Displayed as. Number of lots / Total sample size / Total falled					
Туре	Test Name / Condition	Duration	Qual Device: TLK1501IRCP	QBS Process Reference: TLK2500IRCP	QBS Package Reference: TLK2201BIRCP
AC	Autoclave 121C, 2atm	96 Hours	-	3/231/0	3/231/0
CDM	ESD - CDM	1000 V	1/3/0	-	-
ED	Electrical Characterization	Per Data Sheet Parameters	Pass	-	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	3/231/0	-
HBM	ESD - HBM	4000 V	1/3/0	-	-
HTOL	Life Test, 155C	240 Hours	-	3/231/0	-
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	3/135/0	3/135/0
LU	Latch-up	( Per JESD78 )	1/6/0	-	-
T/C	Temp Cycle -65C/150C	500 Cycles	-	-	3/231/0

<sup>-</sup> Preconditioning was performed for Auto dave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable

#### Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

<sup>-</sup> Qual Device TLK1501IRCP is qualified at LEVEL3-260C

<sup>-</sup> 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

<sup>-</sup> The following are equivalent HTSL options based on an activation energy of 0.7eV: 150C/1k Hours, and 170C/420 Hours

<sup>-</sup> 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/

## Qualification Report

## TLK2501IRCP C10 Offload from Dongbu to DMOS5 Approve Date 24-July-2018

#### **Product Attributes**

Attributes	Qual Device: TLK2501IRCP	QBS Process Reference: TLK2500IRCP	QBS Package Reference: TLK2201BIRCP
Wafer Fab Supplier	DMOS5	DMOS5	DMOS5
Wafer Process	25C10	25C10	25C10
Assembly Site	TAI	TAI	TAI
Package Family	HVQFP	HVQFP	HVQFP
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0

- QBS: Qual By Similarity
- Qual Device TLK2501IRCP 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: TLK2501IRCP	QBS Process Reference: TLK2500IRCP	QBS Package Reference: TLK2201BIRCP
AC	Autoclave 121C, 2atm	96 Hours	-	3/231/0	3/231/0
CDM	ESD - CDM	1000 V	1/3/0	-	-
ED	Electrical Characterization	Per Data Sheet Parameters	Pass	-	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	3/231/0	-
HBM	ESD - HBM	4000 V	1/3/0	-	-
HTOL	Life Test, 155C	240 Hours	-	3/231/0	-
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	3/135/0	3/135/0
LU	Latch-up	( Per JESD78 )	1/6/0	-	-
T/C	Temp Cycle -65C/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, 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: <a href="http://www.ti.com/">http://www.ti.com/</a>

## 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