

#### 12500 TI Boulevard, MS 8640, Dallas, Texas 75243

# PCN#20220322001.1

# Qualification of alternate Cu as an alternate bond wire for select devices Change Notification / Sample Request

Date: April 18, 2022

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.

Texas Instruments requires acknowledgement of 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 additional data is required, requests must be received within **30** days of this notification.

The changes discussed within this PCN will not take effect any earlier than the proposed first ship date 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 or to provide acknowledgement of this PCN, you may contact your local Field Sales Representative or the PCN Team (<a href="mailto:PCN www.admin\_team@list.ti.com">PCN www.admin\_team@list.ti.com</a>). For sample requests or sample related questions, contact your local Field Sales Representative.

Sincerely,

PCN Team SC Business Services

## 20220322001.1 Change Notification / Sample Request Attachments

### **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	<b>CUSTOMER PART NUMBER</b>
DP83848IVV/NOPB	null
DP83848IVVX/NOPB	null
DS15BR400TVS/NOPB	null
DS90LV004TVS/NOPB	null
DP83816AVNG/NOPB	null
DS15BR401TVSX/NOPB	null
DS90C124IVSX/NOPB	null
DS90C241IVSX/NOPB	null
DP83816AVNG-EX/NOPB	null
DS90C124IVS/NOPB	null
DS90C241IVS/NOPB	null
DS90C3201VS/NOPB	null
DS90C3202VS/NOPB	null
DS99R103TVS/NOPB	null
DS99R104TVS/NOPB	null

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

PCN Number: 20220322001.1 PCN Date:								
Title: Qualification of Cu as an alternate bond wire for select devices								
Customer Contact: PCN Manager Dept: Quality Services								
	Posed 1 <sup>st</sup> Ship Date: Jun 18 2022 Estimated Sample Availability: Sample requestions.		•					
Change Type:					_		•	
	Assembly Site Desi			☐ Wafer Bump Site			p Site	
Assembly Pro			Data Sh			Wafer Bump Material		
Assembly Ma			<b>=</b>	art number change Wafer Bump Process				
Mechanical S			Test Sit					
Packing/Ship	ping/Label	ing	Test Pro	ocess		Wafer Fab Materials Wafer Fab Process		
			DCA	l Dotoile	VV a	irer Fab	Process	
Description of (	Thomas:		PCN	I Details				
Description of C	mange:							
This PCN is to inf	orm of the	qualificat	tion of an	alternate bond	wire qualific	cation as	follows:	
Current Bond Diameter			eter	Additional Bond wire & diameter				
	Au, 1	.0 mils		Cu, 1.0 mils				
Reason for Cha	nge:							
Continuity of supply.  1) To align with world technology trends and use wiring with enhanced mechanical and electrical properties  2) Maximize flexibility within our Assembly/Test production sites.  3) Cu is easier to obtain and stock								
Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):								
None								
Impact on Environmental Ratings								
Checked boxes indicate the status of environmental ratings following implementation of this change. If below boxes are checked, there are no changes to the associated environmental ratings.								
RoHS		RE	ACH	Green	Status	I	EC 62474	
☑ No Change   ☑ No Change     ☑ No Change   ☑ No Change					Change			
Changes to product identification resulting from this PCN:								
None								

Product Affected:				
	1	<u> </u>	1	
ADC08B200CIVS/NOPB	DP83816AVNG-EX/NOPB	DS15BR401TVSX/NOPB	DS92LV3241TVSX/NOPB	
ADC08DL500CIVV/NOPB	DP83816AVNG/NOPB	DS90C124IVS/NOPB	DS99R101VS/NOPB	
ADC08DL502CIVV/NOPB	DP83848IEVV/NOPB	DS90C124IVSX/NOPB	DS99R102VS/NOPB	
ADC10DL065CIVS/NOPB	DP83848IEVVX/NOPB	DS90C124IVSX/S700237 3	DS99R103TVS/NOPB	
ADC12DL066CIVS/NOPB	DP83848IVV/NOPB	DS90C241IVS/NOPB	DS99R104TVS/NOPB	
ADC12DL080CIVS/NOPB	DP83848IVVX/NOPB	DS90C241IVSX/NOPB	DS99R105VS/NOPB	
CP3BT30VVAWQX/E7002123	DP83848IVVX/S7002477	DS90C241IVSX/S700237 4	DS99R106VS/NOPB	
CP3CN37VVAWQX/E7002124	DS15BR400TVS	DS90C3201VS/NOPB	SCAN90004TVS/E5002593	
CP3CN37VVAWQX/NOPB	DS15BR400TVS/NOPB	DS90C3202VS/NOPB	SCAN90004TVS/NOPB	
DP83640TVV	DS15BR400TVSX/NOPB	DS90LV004TVS	SCANSTA112VS	
DP83816AVNG	DS15BR401TVS/NOPB	DS90LV004TVS/NOPB		



TI Information Selective Disclosure

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

Туре	Test Name / Condition	Duration	Qual Device: ADC10DL065GYTZ	Qual Device: DP83816AVNJ8MY	Qual Device: DS90C241IVTSZ6
AC	Autoclave 121C	96 Hours	-	-	3/231/0
HTSL	High Temp Storage Bake 150C	1000 Hours	-	-	3/231/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	3/Pass	3/Pass	3/Pass
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	3/231/0	3/231/0
THB	Biased Temperature and Humidity, 85C/85%RH	1000 Hours	-	-	3/231/0
WBP	Bond Pull	Wires	3/90/0	3/90/0	3/90/0
WBS	Ball Bond Shear	Wires	3/90/0	3/90/0	3/90/0

- QBS: Qual By Similarity
   Qual Device ADC10DL065GYTZ is qualified at LEVEL3-260CG
- Qual Device DP83816AVNJ8MY is qualified at LEVEL3-260CG
   Qual Device DS90C241IVTSZ6 is qualified at LEVEL3-260CG

- Qual Device US90C241IV1 S2b is qualified at LEVEL3-260C3
   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 Tl's external Web site: http://www.ti.com/

#### Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

TI Qualification ID: 20191015-131891

For questions regarding this notice, e-mails can be sent to the 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
WW PCN Team	PCN www admin team@list.ti.com

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