12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20230125001.1A
Add Cu as Alternative Wire Base Metal for Selected Device(s)
Change Notification / Sample Request

Date: February 28, 2023
To: TOKYO ELECTRON DEVICE (DSTR) PCN

Dear Customer:

The purpose of this **revision A** is to remove devices that are included on PCN20230125001.2.

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 samples or additional data are 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 (PCN_ww_admin_team@list.ti.com). For sample requests or sample related questions, contact your local Field Sales Representative.

Sincerely,

PCN Team
SC Business Services

20230125001.1A
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
INA114AP	null
INA2137PA	null
MPY634KP	null
TPS2014D	null
UC2854BN	null
UC3854BN	null
UCC284DP-5	null
VFC32KP	null
XTR110KP	null
INA117P	null
OPA4277PA	null
TLC555QDRNS	TLC555QDRNS
INA111AP	null
INA240A3D	null
TLV6002IDR	null
UC3825N	null
UC2825AN	null
VFC110AP	null
UC2825N	null
OPA2134PA	null
UC2710N	null
SE555P	null
INA105KP	null
UC2525AN	null
UC3708N	null
UC3524AN	null
INA240A1DR	null
INA114BP	null
PGA202KP	null
UC3525AN	null
INA101HP	null
TPS40200GDR	null
TLV2313IDR	null

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

PCN Number:	20230125001.1A	**PCN Date:**	February 28, 2023
Title:	Add Cu as Alternative Wire Base Metal for Selected Device(s)		
Customer Contact:	PCN Manager	**Dept:**	Quality Services
Proposed 1st Ship Date:	May 25, 2023	**Sample requests accepted until:**	Mar. 26, 2023*

*Sample requests received after (Mar. 26, 2023) will not be supported.

Change Type:

☐	Assembly Site	☐	Design	☐	Wafer Bump Site
☒	Assembly Process	☐	Data Sheet	☐	Wafer Bump Material
☒	Assembly Materials	☐	Part number change	☐	Wafer Bump Process
☐	Mechanical Specification	☐	Test Site	☐	Wafer Fab Site
☐	Packing/Shipping/Labeling	☐	Test Process	☐	Wafer Fab Materials
				☐	Wafer Fab Process

PCN Details

Description of Change:

Revision A is to remove select device in the Product Affected Section (in **bold** character with ~~strikethrough.~~ These devices are included on PCN20230125001.2.

Texas Instruments is pleased to announce the qualification of new assembly material set to add Cu as an additional bond wire option for devices listed in "Product affected" section below. Devices will remain in current assembly facility and piece part changes as follows:

Material	Current	Proposed
Wire type	0.96mil, 1.15mil, 1.30mil, 2.0 mil Au	0.96mil, 1.30mil, 2.0 mil Cu

Reason for Change:

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 Fit, Form, 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	REACH	Green Status	IEC 62474
☒ No Change	☒ No Change	☒ No Change	☒ No Change

Changes to product identification resulting from this PCN:

None.

Product Affected:

AM26LS31CN-NG	MPY634KP	TL064CN-NG	UC3823N
BQ2004EPN	NE5532P-NG	TL072CP-NG	UC3824N
BQ2004HPN	NE555P-NG	~~**TL074IDR-NG**~~	UC3825AN
BQ2004PN	OPA2134PA	TL075IDR	UC3825BN
CD14538BE-NG	OPA2241PA	TL082ACP-NG	UC3825N
CD4001BE-NG	OPA2244PA	TL082BCP-NG	UC3852N
CD4002BE-NG	OPA2251PA	TL084ACN-NG	UC3853N
CD40106BE-NG	OPA2337PA	TL084IDR-NG	UC3854AN
CD4011BE-NG	OPA241PA	TLC339MN	UC3854BN
CD4013BE-NG	OPA2705PA	TLC372MP	UC3854N
CD40174BE-NG	OPA27GP	TLC372QDRG4	UC3856N
CD4023BE-NG	OPA340PA	TLC555QDRNS	UC3861N
CD40257BE-NG	OPA344PA	TLC556MDR	UC3867N
CD4025BE-NG	OPA347PA	TLV2313IDR	UC3901N
CD4043BE-NG	OPA37GP	TLV2432AQD	UC3902N
CD4044BE-NG	OPA404KP	TLV2432AQDG4	UC3906N
CD4046BE-NG	OPA4131PA	TLV2432AQDRG4	UC3907N
CD4049UBE-NG	OPA4131PJ	TLV2432QD	UC80851N
CD4051BE-NG	OPA4227PA	TLV2772QD	UC81185N
CD4053BE-NG	OPA4228PA	TLV4316IDR	UC81186N
CD4068BE-NG	OPA4277PA	TLV6002IDR	UC81500AN
CD4072BE-NG	OPA4316ID	~~**TPS2012D**~~	UC81501AN
CD4073BE-NG	OPA4316IDR	~~**TPS2012DR**~~	UC81502AN
CD4077BE-NG	OPA703PA	~~**TPS2014D**~~	UC81521P
CD4078BE-NG	OPA705PA	~~**TPS2014DR**~~	UC81522P
CD4081BE-NG	PGA202KP	~~**TPS2015D**~~	UCC25701N
CD4082BE-NG	PGA203KP	~~**TPS2015DR**~~	UCC27282D
CD4093BE-NG	PGA206PA	~~**TPS2030P**~~	UCC27282DR
CD4098BE-NG	PGA2310PA	TPS40200GDR	UCC27288D
CD4502BE-NG	RC4580IDR-NF	TPS40200HDR	UCC27288DR
CD4532BE-NG	SE555P	TPS54331GDR	UCC27289D
CD74AC00E-NG	SN1011013D	UC2524AN	UCC27289DR
CD74AC02E-NG	SN1011013DR	UC2525AN	UCC2810N
CD74AC04E-NG	SN1102050DR	UC2525BN	UCC2817AN
CD74AC157E-NG	SN1605019DR	UC2527AN	UCC2817N
CD74AC163E-NG	SN2903DR	UC2705N	UCC2818AN
CD74AC74E-NG	SN65HVD265D	UC2706N	UCC2818N
CD74ACT32E-NG	SN65HVD265DR	UC2707N	UCC281DP-5
CD74HC132E-NG	SN65HVD266D	UC2708N	UCC281DP-ADJ
CD74HC14E-NG	SN65HVD266DR	UC2709N	UCC284DP-12
CD74HC4051E-NG	SN65HVD267D	UC2710N	UCC284DP-5
CD74HC73E-NG	SN65HVD267DR	UC28025N	UCC284DP-ADJ
CD74HC74E-NG	SN7406N-NG	UC2823N	UCC284DPTR-5
CD74HCT14E-NG	SN74ACT00N-NG	UC2824N	UCC284DPTR-ADJ
DAC714P	SN74ACT08N-NG	UC2825AN	UCC29950D
DAC716PK	SN74ACT32N-NG	UC2825BN	UCC29950DR
INA101HP	SN74F112N-NG	UC2825N	UCC35701N
INA103KP	SN74HC00N-NG	UC2846N	UCC3806N

INA105KP	SN74HC02N-NG	UC2852N	UCC3810N	
INA106KP	SN74HC04N-NG	UC2854AN	UCC3817AN	
INA111AP	SN74HC08N-NG	UC2854BN	UCC3817N	
INA111BP	SN74HC10N-P2	UC2854N	UCC3818AN	
INA114AP	SN74HC125N-NG	UC2856N	UCC3818N	
INA114BP	SN74HC132N-NG	UC2901N	UCC381DP-3	
INA117P	SN74HC139N-NG	UC2902N	UCC381DP-5	
INA2134PA	SN74HC14N-NG	UC2906N	UCC381DP-ADJ	
INA2137PA	SN74HC32N-NG	UC2907N	UCC381DPTR-5	
INA240A1D	SN74HC368N-NG	UC3524AN	UCC381DPTR-ADJ	
INA240A1DR	SN74HC4066N-NG	UC3525AN	UCC384DP-12	
INA240A2D	SN74HC590AN-NG	UC3525BN	UCC384DP-5	
INA240A2DR	SN74HC595N-NG	UC3527AN	UCC384DP-ADJ	
INA240A3D	SN74HC74N-NG	UC3610N	UCC384DPTR-12	
INA240A3DR	SN74LS00N-NG	UC3611N	UCC384DPTR-5	
INA240A4D	SN74LS08N-NG	UC3705N	UCC384DPTR-ADJ	
INA240A4DR	SN74LS14N-NG	UC3706N	ULN2003AN-NG	
LM2903DR-NG	SN74LS161AN-NG	UC3708N	ULN2004AN-NG	
~~**LM293P-NG**~~	SN74LS32N-NG	UC3709N	VFC110AP	
LM311P-NG	SN74LS595N-NG	UC3710N	VFC32KP	
LM339N-NG	SN74LS74AN-NG	UC3717AN	XTR101AP	
LM393P-NG	SN75176BP-NG	UC3770AN	XTR110KP	
LP1763DR	SN75452BP-P	UC3770BN		
LT1014CN-NG	~~**TL054IDR-NG**~~	UC3823AN		

Qualification Report

Approve Date 17-Oct-2011

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: CD4053BM96	Qual Device: LM358DR	Qual Device: TL494IDR	Qual Device: ULN2003ADR
AC	Autoclave 121C	96 Hours	1/77/0	1/77/0	3/231/0	3/231/0
ED	Electrical Characterization, side by side	Per Datasheet Parameters	Pass	Pass	Pass	Pass
FLAM	Flammability (IEC 695-2-2)	--	-	-	3/15/0	-
FLAM	Flammability (UL 94V-0)	--	-	-	3/15/0	-
FLAM	Flammability (UL-1694)	--	-	-	3/15/0	-
HAST	Biased HAST, 130C/85%RH	96 Hours	1/77/0	1/77/0	3/229/0	1/77/0
HTOL	Life Test, 150C	300 Hours	1/77/0	1/77/0	3/231/0	1/77/0
HTSL	High Temp Storage Bake 170C	600 Hours	1/77/0	1/77/0	3/231/0	3/231/0
LI	Lead Pull	Leads	1/22/0	1/22/0	3/66/0	3/66/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass	Pass
MSL	Moisture Sensitivity, JEDEC	Level 1-260C	-	3/36/0	3/36/0	3/36/0
TC	Temperature Cycle, -65/150C	500 Cycles	1/77/0	3/231/0	3/231/0	3/231/0

Type	Test Name / Condition	Duration	Qual Device: CD4053BM96	Qual Device: LM358DR	Qual Device: TL494IDR	Qual Device: ULN2003ADR
TS	Thermal Shock -65/150C	500 Cycles	1/77/0	3/231/0	3/231/0	3/231/0
VM	Visual / Mechanical	(per mfg. Site specification)	Pass	Pass	Pass	Pass
WBP	Bond Strength	Wires	1/76/0	1/76/0	3/228/0	1/76/0
XRAY	X-ray	(top side only)	1/5/0	1/5/0	3/15/0	3/15/0

- QBS: Qual By Similarity
- Qual Device CD4053BM96, LM358DR, TL494IDR, ULN2003ADR are qualified at LEVEL1-260C
- 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

Qualification Report

Approve Date 30-Aug-2013

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: ADS1131IDR	Qual Device: RC4558DR	Qual Device: SN65MLVD207DR	Qual Device: SN74AHC138DR	Qual Device: UCC28061DR
AC	Autoclave 121C	96 Hours	3/231/0	3/231/0	3/231/0	3/231/0	3/227/0
HTSL	High Temp Storage Bake 170C	420 Hours	3/231/0	3/231/0	3/231/0	3/231/0	3/231/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass	Pass	Pass
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	3/231/0	3/231/0	3/231/0	3/227/0

- QBS: Qual By Similarity
- Qual Device ADS1131IDR is qualified at LEVEL2-260C
- Qual Device RC4558DR, SN65MLVD207DR, SN74AHC138DR, UCC28061DR are qualified at LEVEL1-260C
- 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 your local Field Sales Representative.

Location	E-Mail
WW PCN Team	PCN_ww_admin_team@list.ti.com

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