12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN#20200527000.1
Add Cu as Alternative Wire Base Metal for Selected Device(s)
Change Notification / Sample Request

Date: May 28, 2020
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 Team (PCN_ww_admin_team@list.ti.com). For sample requests or sample related questions, contact your field sales representative.

Sincerely,

PCN Team
SC Business Services

20200527000
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
LM71CIMF/NOPB	null
LMT87DCKR	null
LMT89DCKT	null
LM61CIM3/NOPB	null
LM86CIMM/NOPB	null
LM89CIMMX/NOPB	null
LM62CIM3/NOPB	null
LM95071CIMF/NOPB	null
LM95245CIMM/NOPB	null
LM60BIM3/NOPB	null
LM95235DIMM/NOPB	null
LMT86DCKT	null
LM95221CIMM/NOPB	null
LM60CIM3X/NOPB	null
LMT84DCKR	null
LM89CIMM/NOPB	null
LM94022BIMG/NOPB	null
LM60CIM3/NOPB	null
LM26CIM5-RPA/NOPB	null
LM45BIM3/NOPB	null
LM95235CIMM/NOPB	null
LMT87DCKT	null
LM62BIM3/NOPB	null
LM94021BIMG/NOPB	null
LM45CIM3/NOPB	null
LM26CIM5-NPA/NOPB	null
LM61BIM3/NOPB	null
LMT89DCKR	null
LM26CIM5-TPA/NOPB	null
LM26CIM5-VPA/NOPB	null
LM26CIM5X-SPA/NOPB	null
LM26CIM5X-VPA/NOPB	null
LM26CIM5X-XPA/NOPB	null

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

PCN Number:	20200527000.1	**PCN Date:**	May 28, 2020
Title:	Add Cu as Alternative Wire Base Metal for Selected Device(s)		
Customer Contact:	PCN Manager	**Dept:**	Quality Services
Proposed 1st Ship Date:	Aug 28, 2020	**Estimated Sample Availability:**	Date provided at sample request

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:

Texas Instruments is pleased to announce the qualification of Cu as an additional bond wire option for selected devices listed in "Product affected" section below. Devices will remain in current assembly facilities and there will be no other piece part changes:

Pkg Family	Current Wire	Additional Wire
SOT-23, SOT-SC70, VSSOP	Au, 0.9/1.0mil	Cu, 0.96 mil

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 Form, Fit, Function, Quality or Reliability (positive / negative):

None

Anticipated impact on Material Declaration

☐	No Impact to the Material Declaration	☒	Material Declarations or Product Content reports are driven from production data and will be available following the production release. Upon production release the revised reports can be obtained at the site link below http://www.ti.com/quality/docs/materialcontentsearch.tsp

Changes to product identification resulting from this PCN:

None

Product Affected:

LM26CIM5-BPB/NOPB	LM26CIM5X-ZHA/NOPB	LM71CIMF/NOPB	LM95235DIMM/NOPB
LM26CIM5-DPB/NOPB	LM27CIM5-1HJ/NOPB	LM71CIMFX/NOPB	LM95235DIMMX/NOPB
LM26CIM5-HHD/NOPB	LM27CIM5-2HJ/NOPB	LM86CIMM/NOPB	LM95235EIMM/NOPB
LM26CIM5-NPA/NOPB	LM27CIM5-ZHJ/NOPB	LM86CIMMX/NOPB	LM95241CIMM-1/NOPB
LM26CIM5-PHA/NOPB	LM27CIM5X-1HJ/NOPB	LM89-1CIMM/NOPB	LM95241CIMM-2/NOPB
LM26CIM5-RPA/NOPB	LM27CIM5X-2HJ/NOPB	LM89-1CIMMX/NOPB	LM95241CIMM/NOPB
LM26CIM5-SHA/NOPB	LM45BIM3	LM89-1DIMM/NOPB	LM95241CIMMX/NOPB
LM26CIM5-SPA/NOPB	LM45BIM3/NOPB	LM89-1DIMMX/NOPB	LM95245CIMM
LM26CIM5-TPA/NOPB	LM45BIM3X/NOPB	LM89CIMM/NOPB	LM95245CIMM-1/NOPB
LM26CIM5-VHA/NOPB	LM45CIM3/NOPB	LM89CIMMX/NOPB	LM95245CIMM/NOPB
LM26CIM5-VPA/NOPB	LM45CIM3X	LM90CIMM/NOPB	LM95245CIMMX-1/NOPB
LM26CIM5-XHA/NOPB	LM45CIM3X/NOPB	LM90CIMMX/NOPB	LM95245CIMMX/NOPB
LM26CIM5-XPA/NOPB	LM60BIM3	LM94021BIMG/NOPB	LM99-1CIMM/NOPB
LM26CIM5-YHA/NOPB	LM60BIM3/NOPB	LM94021BIMGX/NOPB	LM99CIMM/J7002180
LM26CIM5-YPA/NOPB	LM60BIM3X	LM94022BIMG	LM99CIMM/NOPB
LM26CIM5-YPE/NOPB	LM60BIM3X/NOPB	LM94022BIMG/NOPB	LM99CIMMX/NOPB
LM26CIM5-ZHA	LM60CIM3	LM94022BIMGX/NOPB	LMT84DCKR
LM26CIM5-ZHA/NOPB	LM60CIM3/NOPB	LM95010CIMM/NOPB	LMT84DCKT
LM26CIM5X-DPB/NOPB	LM60CIM3X	LM95071CIMF	LMT85DCKR
LM26CIM5X-HHD/NOPB	LM60CIM3X/NOPB	LM95071CIMF/NOPB	LMT85DCKT
LM26CIM5X-NPA/NOPB	LM61BIM3	LM95071CIMFX	LMT86DCKR
LM26CIM5X-PHA/NOPB	LM61BIM3/NOPB	LM95071CIMFX/NOPB	LMT86DCKT
LM26CIM5X-SPA/NOPB	LM61BIM3X/NOPB	LM95221CIMM/NOPB	LMT87DCKR
LM26CIM5X-TPA/NOPB	LM61CIM3	LM95221CIMMX/NOPB	LMT87DCKT
LM26CIM5X-VHA/NOPB	LM61CIM3/NOPB	LM95231BIMM-1/NOPB	LMT88DCKR
LM26CIM5X-VPA/NOPB	LM61CIM3X/NOPB	LM95231CIMM-1/NOPB	LMT88DCKT
LM26CIM5X-XHA/NOPB	LM62BIM3/NOPB	LM95231CIMM-2/NOPB	LMT89DCKR
LM26CIM5X-XPA/NOPB	LM62BIM3X/NOPB	LM95231CIMM/NOPB	LMT89DCKT
LM26CIM5X-YHA/NOPB	LM62CIM3/NOPB	LM95231CIMMX/NOPB	LMT90DBZR
LM26CIM5X-YPA/NOPB	LM62CIM3X/NOPB	LM95235CIMM/NOPB	LMT90DBZT
LM26CIM5X-YPE/NOPB	LM71CIMF	LM95235CIMMX/NOPB	

Qualification Data

Approved on 08/17/2015

Qualification of 0.96 mils Cu wires on SOT-SC70 Package

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: LMV7275MG/NOPB	Supporting QBS: LM4041AIM3-1.2 (TL)	Supporting QBS: LM4041AIM3-1.2 (TL)
HAST	Biased HAST, 130C/85%RH	96 Hours	-	3/231/0	3/231/0
AC	Autoclave 121C	96 Hours	-	3/231/0	-
TC	Temperature Cycle, -65/150C	500 Cycles	1/77/0	-	-
TC	Temperature Cycle, -65/150C	1000 Cycles	-	3/231/0	-
HTSL	High Temp Storage Bake 150C	500 Hours	1/77/0	2/154/0	1/77/0
HTSL	High Temp Storage Bake 150C	1000 Hours	1/77/0	2/154/0	1/79/0
MQ	Manufacturability (Assembly)	---	1/pass	1/pass	1/pass

- QBS: Qual By Similarity
- Qual Device LMV7275MG/NOPB is 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 Data

Qualification of 0.96 mils Cu wires on SOT23 Packages

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: LM4041AIM3-1.2	Qual Device: LP3985IM5X-5.0	Qual Device: LMC7101AIM5NOPB	Qual Device: LM431CCM3NOPB
PC	PreCon Level 1	Level 1-260C	3/693/0	3/462/0	3/693/0	3/462/0
HAST	Biased HAST, 130C/85%RH	96/hrs. @130C	3/231/0	-	3/231/0	-
AC	Autoclave 121C	96HRS	3/231/0	3/231/0	3/231/0	3/231/0
TC	Temperature Cycle, -65/150C	TMCL500X	3/231/0	3/231/0	3/231/0	3/231/0
HTSL	High Temp Storage Bake 150C	1000 hrs. @150C	1/77/0	-	1/77/0	1/77/0

MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass	Pass
DPA	Destructive Physical Analysis Post 500 Temp Cycle	x-section and de process to examine assembly robustness, Check for stich bond and bond pad integrity	3/15/0	3/15/0	3/15/0	3/15/0
YLD	FTY and Bin Summary	Compare against baseline	Pass	Pass	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

Qualification Data

Qualification of 0.96 mils Cu wires VSSOP Packages

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: LMV852MMX	Qual Device: LMC6482IMM
PC	PreCon Level 1	Level 1-260C	3/462/0	3/462/0
HAST	Biased HAST, 130C/85%RH	96/hrs. @130C	-	-
AC	Autoclave 121C	96HRS	3/231/0	3/231/0
TC	Temperature Cycle, -65/150C	TMCL500X	3/231/0	3/231/0
HTSL	High Temp Storage Bake 150C	1000 hrs. @150C	-	-
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass
DPA	Destructive Physical Analysis Post 500 Temp Cycle	x-section and de process to examine assembly robustness, Check for stich bond and bond pad integrity	3/15/0	3/15/0
YLD	FTY and Bin Summary	Compare against baseline	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 your local Field Sales Representative.

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