12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN#20200605000.1
Qualification of Cu as an alternate bond wire for Select Devices

Change Notification / Sample Request

Date: June 12, 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

20200605000.1
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
DRV401AIRGWR	null

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

PCN Number:	20200605000.1	**PCN Date:**	June 12, 2020
Title:	Qualification of Cu as an alternate bond wire for select devices		
Customer Contact:	PCN Manager	**Dept:**	Quality Services
Proposed 1st Ship Date:	Sept. 10, 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:

This PCN is to inform of an alternative bond wire qualification for the devices in the product affected section as follows:

Device Group	Current Bond wire, Diameter	Additional Bond wire, diameter
RGW	**Au, 0.96 mils**	**Cu, 1.0 mils**
DRZ	**Au, 0.80 mils**	**Cu, 0.8 mils**

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 from the TI ECO website.

Changes to product identification resulting from this PCN:

None

Product Affected:

BQ27411DRZR-G1D	DRV401AIRGWT	SN27411DRZR-B1	SN27411DRZT-B1
DRV401AIRGWR			

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

Type	Test Name / Condition	Duration	Qual Device: DRV401AIRGWR	Qual Device: SN27411DRZR-B1	QBS Package Reference: MUX36D04IRUM	QBS Package Reference: MUX36S08IRUM	QBS Package Reference: TPS25740BRGE
AC	Autoclave 121C	96 Hours	3/231/0	3/231/0	1/77/0	2/154/0	-
CDM	ESD - CDM	1000 V	-	-	1/3/0	1/3/0	1/3/0
ED	Electrical Characterization	Per Datasheet Parameters	-	-	Pass	Pass	PASS
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	1/77/0	2/154/0	3/231/0
HBM	ESD - HBM	4000 V	-	-	1/3/0	1/3/0	1/3/0
HTOL	Life Test, 125C	1000 Hours	-	-	-	-	1/77/0
HTSL	High Temp Storage Bake 170C	420 Hours	-	-	1/77/0	2/154/0	3/231/0
LU	Latch-up	(Per JESD78)	-	-	1/6/0	1/6/0	1/6/0
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	3/231/0	1/77/0	2/154/0	3/231/0
UHAST	Unbiased HAST 130C/85%RH	96 Hours	-	-	-	-	3/231/0
WBP	Bond Pull	Wires	3/228/0	3/228/0	1/76/0	2/152/0	-
WBS	Ball Bond Shear	Wires	3/228/0	3/228/0	1/76/0	2/152/0	-

- 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, 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 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_ww_admin_team@list.ti.com

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