



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20241218007.1

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

Date: December 19, 2024

To: MOUSER 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 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 Change Management team.

For sample requests or sample related questions, contact your local Field Sales Representative.

Sincerely,

Change Management Team
SC Business Services

20241218007.1
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, you have recently purchased these devices. The corresponding customer part number is also listed, if available.

DEVICE	CUSTOMER PART NUMBER
UCD3138128PFC	NULL
UCD3138128APFCR	NULL
UCD3138128PFCR	595-UCD3138128PFCR
AMC1200BDUBR	AMC1200BDUBR
AMC1200BDUB	AMC1200BDUB
UCD3138A64PFC	NULL
AMC1100DUB	AMC1100DUB
AMC1200SDUB	AMC1200SDUB
AMC1200SDUBR	AMC1200SDUBR
AMC1100DUBR	AMC1100DUBR

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

PCN Number:	20241218007.1			PCN Date:	December 19, 2024								
Title:	Add Cu as Alternative Wire Base Metal for Selected Device(s)												
Customer Contact:	Change Management team		Dept:	Quality Services									
Proposed 1st Ship Date:	March 19, 2025		Estimated Sample Availability:	January 18, 2025									
*Sample requests received after January 18, 2025 will not be supported.													
Change Type:													
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design	<input type="checkbox"/>	Wafer Bump Material								
<input checked="" type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Data Sheet	<input type="checkbox"/>	Wafer Bump Process								
<input checked="" type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change	<input type="checkbox"/>	Wafer Fab Site								
<input type="checkbox"/>	Mechanical Specification	<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Wafer Fab Material								
<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process	<input type="checkbox"/>	Wafer Fab Process								
PCN Details													
Description of Change:													
<p>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:</p> <table border="1"> <thead> <tr> <th>Material</th> <th>Current</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>Wire diam/type</td> <td>0.96mil Au</td> <td>0.8mil Cu</td> </tr> </tbody> </table>						Material	Current	Proposed	Wire diam/type	0.96mil Au	0.8mil Cu		
Material	Current	Proposed											
Wire diam/type	0.96mil Au	0.8mil Cu											
Reason for Change:													
<p>Continuity of supply.</p> <ol style="list-style-type: none"> 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:													
<p>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.</p> <table border="1"> <thead> <tr> <th>RoHS</th> <th>REACH</th> <th>Green Status</th> <th>IEC 62474</th> </tr> </thead> <tbody> <tr> <td><input checked="" type="checkbox"/> No Change</td> <td><input checked="" type="checkbox"/> No Change</td> <td><input checked="" type="checkbox"/> No Change</td> <td><input checked="" type="checkbox"/> No Change</td> </tr> </tbody> </table>						RoHS	REACH	Green Status	IEC 62474	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change
RoHS	REACH	Green Status	IEC 62474										
<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change										
Changes to product identification resulting from this PCN:													
None													
Product Affected:													
AMC1100DUB	AMC1200BDUBR	UCD3138128APFC	UCD3138128PFCR										
AMC1100DUBR	AMC1200SDUB	UCD3138128APFCR	UCD3138A64PFC										
AMC1200BDUB	AMC1200SDUBR	UCD3138128PFC	UCD3138A64PFCR										

Qualification Report

Approve Date 18-October-2024

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: UCD3138128APFCR	Qual Device: UCD3138128APFCR	QBS Process Reference: CC2541S	QBS Package Reference: TMD5351PAG	QBS Process, Product Reference: UCD3138128APFC
HAST	A2	Biased HAST	130C/85%RH	96 Hours	1/77/0	-	-	3/231/0	-
UHAST	A3	Autoclave	121C/15psig	96 Hours	-	-	-	3/231/0	-
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	3/231/0	-	-	-	-
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	3/231/0	-	-	3/231/0	-
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	3/231/0	-	-	3/231/0	-
HTOL	B1	Life Test	125C	1000 Hours	-	-	-	-	1/77/0
HTOL	B1	Life Test	125C	408 Hours	-	-	3/231/0	-	-
ELFR	B2	Early Life Failure Rate	125C	24 Hours	-	-	3/2399/0	-	-
ESD	E2	ESD CDM	-	250 Volts	1/3/0	-	-	-	1/3/0
ESD	E2	ESD HBM	-	1000 Volts	1/3/0	-	-	-	1/3/0
LU	E4	Latch-Up	Per JESD78	-	-	-	-	-	1/3/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	-	-	-	1/30/0

QBS: Qual By Similarity, also known as Generic Data

Qual Device UCD3138128APFCR is qualified at MSL3 260C

Qual Device UCD3138128APFCR is qualified at MSL3 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/>

Qualification Report

Approve Date 20-September-2024

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: AMC1200STDUBRQ1	QBS Reference: ISO1050DUBR	QBS Reference: AMC1305M25QDWQ1
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	3/231/0
UHAST	A3	Autoclave	121C/15psig	96 Hours	3/231/0	3/231/0	3/231/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	3/231/0	3/231/0	3/231/0
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	3/231/0	3/135/0
WBS	C1	Ball Shear	76 balls, 3 units min	Wires	-	3/228/0	-

WBP	C2	Bond Pull	76 Wires, 3 units min	Wires	-	3/228/0	-
ESD	E2	ESD CDM	-	250 Volts	-	1/3/0	-
ESD	E2	ESD HBM	-	1000 Volts	-	1/3/0	-
LU	E4	Latch-Up	Per JESD78	-	-	1/3/0	-
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	-	1/30/0	-
CHAR	E5	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	-	-	3/90/0
FTY	E6	Final Test Yield	-	-	3/3/0	-	20/20/0

QBS: Qual By Similarity, also known as Generic Data

Qual Device AMC1200STDUBRQ1 is qualified at MSL3 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

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