



QUALIFICATION REPORT
RELIABILITY LABORATORY

PCN #: JAON-04DHCS000

Date:
May 1, 2016

**Qualification of palladium coated copper with gold flash
(CuPdAu) bond wire in selected products of the 0.18 and
0.16um GF wafer technologies available in 36L VQFN
package at ANAC assembly site**

Distribution: **CORPORATE QA/RE**
 CORPORATE PACKAGING
 SUPPLIER ENGINEERING



OBJECTIVE

Qualification of palladium coated copper with gold flash (CuPdAu) bond wire in selected products of the 0.18 and 0.16um GF wafer technologies available in 36L VQFN package at ANAC assembly site

QUAL ID	QAR2016-001
BD #	BDM-001020A
PART #	TG3061RPXB2C (USB2241)
CCB #	2512

PRODUCT INFORMATION

PACKAGE TYPE	PUNCH QFN
PACKAGE LEAD COUNT	36 (6x6X0.85mm)
TERMINAL PITCH	0.50 mm
PACKAGE CODE	RPX
DIE SIZE	3.126x3.08mm
WAFER PROCESS	0.18um
FAB	CST - Fab 6 (GF)
CIRCUIT UNDER PAD	YES

Material used in the Assembly:

LEADFRAME MATERIAL

C194 (Double Ring / Etched)

LEADFRAME SURFACE

No Treatment

DIE ATTACH EPOXY TYPE

8290

WIRE TYPE

CuPdAu

DOWNBOND

YES

MOLDING COMPOUND TYPE

G700

LEAD FINISH PROCESS

ELECTROPLATING

LEAD FINISH COMPOSITION

Matte-Sn

MARKING

LASER

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS	Result	Remarks
Moisture/Reflow Sensitivity Classification Test (At MSL Level 3)	30 °C/ 60%RH	IPC/	240	0/240	Pass	LOT 1
	Moisture Soak 192 hrs.	JEDEC	240	0/240	Pass	LOT 2
	(IPC/JEDEC J-STD-020D)	J-STD-020D	240	0/240	Pass	LOT 3
<u>Precondition Prior Perform Reliability Tests</u> (At MSL Level 3)	Electrical Test :+25°C and +85°C	JESD22-A113	240 (0) Lot 1	240	PASS	Good Devices
	SAT			240		
	Bake 125°C, 24 hrs			240		
	30°C/60%RH Moisture Soak 192hrs			240		
	3x Convection-Reflow 265°C max			240		
	SAT			240		
	Electrical Test :+25°C and +85°C			240		
<u>Precondition Prior Perform Reliability Tests</u> (At MSL Level 3)	Electrical Test :+25°C and +85°C	JESD22-A113	240 (0) Lot 2	240	PASS	Good Devices
	SAT			240		
	Bake 125°C, 24 hrs			240		
	30°C/60%RH Moisture Soak 192hrs			240		
	3x Convection-Reflow 265°C max			240		
	SAT			240		
	Electrical Test :+25°C and +85°C			240		
					PASS	

<u>Precondition</u> <u>Prior Perform</u> <u>Reliability Tests</u> (At MSL Level 3)	Electrical Test :+25°C and +85°C	JESD22-A113	240 (0) Lot 2	240	PASS	Good Devices
	SAT			240		
	Bake 125°C, 24 hrs			240		
	30°C/60%RH Moisture Soak 192hrs			240		
	3x Convection-Reflow 265°C max			240		
	SAT			240		
	Electrical Test :+25°C and +85°C			240	PASS	

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
Temp Cycle	Stress Condition: -65°C to +150°C, 1000 Cycles Electrical Test: + 25°C, + 85°C	JESD22-A104	231 (0)	231 0/231	 Pass	Parts had been pre-conditioned at 260°C 77 units / lot
uHAST	Stress Condition: +130°C/85%RH, 96hrs, 192hrs. Electrical Test: + 25°C, + 85°C	JESD22-A110	231 (0)	231 0/231	 Pass	Parts had been pre-conditioned at 260°C 77 units / lot
High Temperature Storage Life	Stress Condition: Bake +150°C, 1008hrs Electrical Test : + 25°C, + 85°C	JESD22-A103	231 (0)	231 0/231	 Pass	Parts had no Pre-Condition 77 units / lot

JAON-04DHCS000 - CCB 2512 Final Notice: Qualification of CuPdAu bond wire in selected products of the 0.18 and 0.16um GF wafer technologies available in 36L VQFN package at ANAC assembly site.

Affected Catalog Part Numbers (CPN)

PCN_ JAON-04DHCS000
CATALOG_PART_NBR
USB2240-AEZG-05
USB2240-AEZG-06
USB2240-AEZG-06-TR
USB2240I-AEZG-06
USB2241-AEZG-06
USB2241I-AEZG-06
USB2244-AEZG-06
USB2244-AEZG-06-CA1
USB2244-AEZG-06-TR
USB2244I-AEZG-06
USB2244I-AEZG-06-TR
USB2514-AEZG-TR
USB2514I-AEZG-TR
USX2061-AEZG