QUALIFICATION PLAN SUMMARY

PCN #: MFOL-04FAZG527

Date:
April 16, 2026

Qualification of palladium coated copper with gold flash (CuPdAu) as an additional bond wire material 23K640T-I/ST, 23K256-I/ST, 23K640-I/ST, 23K256T-I/ST, 23A256T-I/ST, 23A640T-I/ST, 23K256T-E/ST, 23K640T-E/ST, 23K256-E/ST, 23K640-E/ST, 23A256-I/ST, 23A640-I/ST catalog part numbers (CPN) available in 8L TSSOP (4.4mm) package at MMT assembly site.

Package Qualification Plan

Purpose: Qualification of palladium coated copper with gold flash (CuPdAu) as an additional bond wire material 23K640T-I/ST, 23K256-I/ST, 23K640-I/ST, 23K256T-I/ST, 23A256T-I/ST, 23A640T-I/ST, 23K256T-E/ST, 23K640T-E/ST, 23K256-E/ST, 23K640-E/ST, 23A256-I/ST, 23A640-I/ST catalog part numbers (CPN) available in 8L TSSOP (4.4mm) package at MMT assembly site.

CCB No.: 8243

Misc.	Assembly site	MMT
	BD Number	BD-004371-01
	MP Code (MPC)	TK0017C5XD00
	Part Number (CPN)	23A640-I/ST
	MSL information	1
	Assembly Shipping Media (T/R, Tube/Tray)	Tube / T&R
	Base Quantity Multiple (BQM)	100 / 2500
	Reliability Site	MTAI
Lead-Frame	Paddle size	118 x 87 mils
	Material	C7025
	DAP Surface Prep	Ag spot
	Process	Stamped
	Lead-lock	No
	Part Number	10100821
	Lead Plating	Matte tin
	Strip Size	MMT standard
	Strip Density	MMT standard
Bond Wire	Material	CuPdAu
Die Attach	Part Number	QMI519
	Conductive	Yes
MC	Part Number	G600V
PKG	Package Type	TSSOP
	Pin/Ball Count	8
	PKG width/size	4.4 mm

Test Name	Conditions	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Qty of Lots	Total Units	Fail Accept Qty	Est. Dur. Days	Special Instruction
Wire Bond Pull - WBP	Mil. Std. 883-2011	5	0	1	5	0 fails after TC	5	30 bonds from a min. 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	1	5		5	30 bonds from a min. 5 devices.
Wire Sweep								Required for any reduction in wire bond thickness.
Physical Dimensions	Measure per JESD22 B100 and B108	10	0	3	30		5	

Test Name	Conditions	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Qty of Lots	Total Units	Fail Accept Qty	Est. Dur. Days	Special Instruction
External Visual	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	All	0	5	
HTSL (High Temp Storage Life)	JESD22-A103. +175 C for 504 hours or 150°C for 1008 hrs. Electrical test pre and post stress at +25C, 85C and 125C temp.	45	5	1	50	0	10	
Preconditioning - Required for surface mount devices **MSL 1 @ 260C**	JESD22-A113. +150°C Bake for 24 hours, moisture loading requirements per MSL level + 3X reflow at peak reflow temperature per Jedec-STD-020E for package type; Electrical test pre and post stress at +25°C.	231	15	3	738	0	15	Spares should be properly identified. 77 parts from each lot to be used for HAST, uHAST, Temp Cycle test.
HAST	JESD22-A110. +130°C/85% RH for 96 hours or 110°C/85%RH for 264 hours. Electrical test pre and post stress at +25C, 85C and 125C temp.	77	5	3	246	0	10	Spares should be properly identified. Use the parts which have gone through pre-conditioning.

Test Name	Conditions	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Qty of Lots	Total Units	Fail Accept Qty	Est. Dur. Days	Special Instruction
UHAST	'JESD22-A118. +130°C/85% RH for 96 hrs or +110°C/85% RH for 264 hrs. Electrical test pre and post stress at +25°C	77	5	3	246	0	10	Spares should be properly identified. Use the parts which have gone through pre-conditioning.
Temp Cycle	JESD22-A104. -65°C to +150°C for 500 cycles. Electrical test pre and post stress at 85C and 125C temp.; 3 gram force WBP, on 5 devices from 1 lot, test following Temp Cycle stress.	77	5	3	246	0	15	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.