



MICROCHIP

QUALIFICATION REPORT SUMMARY
RELIABILITY LABORATORY

PCN#: CAAN-17NSLQ806

Date:
May 4, 2026

Qualification of palladium coated copper with gold flash (CuPdAu) as a new bond wire material for RE46C100S8F and RE46C100S8TF catalog part numbers (CPN) available in 8L SOIC (.150in) package assembled at MMT site.



MICROCHIP Package Qualification Report

Purpose: Qualification of palladium coated copper with gold flash (CuPdAu) as a new bond wire material for RE46C100S8F and RE46C100S8TF catalog part numbers (CPN) available in 8L SOIC (.150in) package assembled at MMT site.

CCB No.: 8077

Misc.	Assembly site	MMT
	BD Number	BD-004161 rev 01
	MP Code (MPC)	VNAA17C2XA00
	Part Number (CPN)	RE46C100S8F
	Assembly Shipping Media (T/R, Tube/Tray)	Tube
	Base Quantity Multiple (BQM)	100
Lead-Frame	Paddle size	90x90 mils
	Material	A194
	DAP Surface Prep	Selective Ag Plating
	Treatment	BOT
	Process	Etched
	Lead-lock	Yes
	Part Number	10100857
	Lead Plating	Matte Tin
	Strip Size	239.6x70mm
Strip Density	320 pads/strip	
Bond Wire	Material	CuPdAu
Die Attach	Part Number	QMI519
	Conductive	Yes
MC	Part Number	G600V
PKG	PKG Type	SOIC
	Pin/Ball Count	8
	PKG width/size	150 mils



MICROCHIP

Package Qualification Report

Manufacturing Information

Assembly Lot No.	Package
MMT-264800051.000	8L SOIC
MMT-264801191.000	8L SOIC
MMT-264801255.000	8L SOIC

Conclusion: Passed Failed Others: _____

Qualification of CuPdAu wire in 8L SOIC 150 mils (C2X) package at MTAI site is qualified for MSL1 at 260°C as per JEDEC J-STD-020 standard and is passed in accordance to Specified JEDEC and Mil Standards



MICROCHIP

Package Qualification Report

Moisture Soak Precondition Prior to Stresses

Test Method	JESD22-A113, JEDEC J-STD-020		
Test Condition	MSL1: 150°C 24 hours Bake, 168 hours Moisture Soak at 85°C/85%RH, 3x Reflow at 260°C		
Required Sample Size	231 units each lot / 3 lots;		
Lot ID	R2600333-1 MMT-264800051.000	R2600333-2 MMT-264801191.000	R2600333-3 MMT-264801255.000
Electrical Results (Fail / Pass)	0/231	0/231	0/231
Electrical Test Tester: ETS300	25°C and 85°C		
Result	Passed		



MICROCHIP

Package Qualification Report

High Temp Storage

Test Method	JESD22-A103		
Test Condition	175°C / 504 hours		
Required Sample Size	45 units / 3 lot;		
Lot ID	R2600333-1 MMT-264800051.000	R2600333-2 MMT-264801191.000	R2600333-3 MMT-264801255.000
Electrical Results (Fail / Pass)	0/45	0/45	0/45
Electrical Test Tester: ETS300	25°C and 85°C		
Result	Passed		

Temperature Cycling

Test Method	JESD22-A104		
Test Condition	-65°C / +150°C Air to Air / 500 Cycles		
Required Sample Size	77 units each lot / 3 lots;		
Lot ID	R2600333-1 MMT-264800051.000	R2600333-2 MMT-264801191.000	R2600333-3 MMT-264801255.000
Electrical Results (Fail / Pass)	0/77	0/77	0/77
WBP (Fail / Pass)	0/5	N/A	N/A
Electrical Test Tester: ETS300	25°C and 85°C		
Result	Passed		



MICROCHIP

Package Qualification Report

Biased HAST

Test Method	JESD22-A110		
Test Condition	+130°C / 85%RH / 96 hours / Bias Voltage: 16.0V		
Required Sample Size	77 units each lot / 3 lots;		
Lot ID	R2600333-1 MMT-264800051.000	R2600333-2 MMT-264801191.000	R2600333-3 MMT-264801255.000
Electrical Results (Fail / Pass)	0/77	0/77	0/77
Electrical Test Tester: ETS300	25°C and 85°C		
Result	Passed		

Unbiased HAST

Test Method	JESD22-A118		
Test Condition	+130°C / 85%RH / 96 hours		
Required Sample Size	77 units each lot / 3 lots;		
Lot ID	R2600333-1 MMT-264800051.000	R2600333-2 MMT-264801191.000	R2600333-3 MMT-264801255.000
Electrical Results (Fail / Pass)	0/77	0/77	0/77
Electrical Test Tester: ETS300	25°C and 85°C		
Result	Passed		

Solderability

Test Method	J-STD-002 / JESD22B-102
Test Condition / Criteria	Pb-free 8 hours Steam age. Dip at 245°C, 100% leads >95% lead coverage
Required Sample Size	22 units / 1 lot
Visual Result (Fail / Pass)	0/22
Result	Passed

Physical Dimension

Test Method	JESD22 B100 and B108
Test Criteria	Within package diagram dimension
Required Sample Size	10 units each lot / 3 lots
Result (Fail / Pass)	0/30
Result	Passed

Wire Pull

Test Method	Mil. Std. 883-2011
Test Criteria	Bond Strength Data Assembly
Required Sample Size	5 units / 1 lot
Result (Fail / Pass)	0/5
Result	Passed

Bond Shear

Test Method	CDF-AEC-Q100-001
Test Criteria	Bond Strength Data Assembly
Required Sample Size	5 units / 1 lot
Result (Fail / Pass)	0/5
Result	Passed