QUALIFICATION PLAN

PCN #: JAON-31OMTX002

Date:
Mar. 26, 2015

Qualification of palladium coated copper (PdCu) bond wire in selected products of the 200K wafer technology available in 28L SPDIP package at MMT assembly site. The 14L, 18L and 20L PDIP packages will qualify by similarity at MMT assembly site

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Purpose: Qualification of palladium coated copper (PdCu) bond wire in selected products of the 200K wafer technology available in 28L SPDIP package at MMT assembly site. The 14L, 18L and 20L PDIP packages will qualify by similarity at MMT assembly site

MP code: LEBE14M3XDXF

Part No.: PIC24FV16KA302-E/SP

BD No: BDM-000727 rev.A (Engineering BD)

CCB No.: 1569

Package:

Type 28L SPDIP

Width or Size 300 mils

Die thickness: 15 mils

Die size: 129.9 x 161.0 mils

Lead frame:

Paddle size: 180x240 mils

Material CDA194

Surface Ag Spot Plated

Process Stamped

Lead Lock Yes

Part Number 10102822

Treatment None

Wire:

Material PdCu

Die Attach Epoxy:

Part Number CRM-1064L

Conductive Yes

Mold Compound: GE800

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 Instructions
Wire Bond Pull - WBP	Mil. Std. 883-2011	5	0	1	5	0 fails after TC	5	30 bonds from a minimum of 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	1	5	0	5	30 bonds from a minimum of 5 devices.
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)	+175 C for 504 hours or 150°C for 1008 hrs. Electrical test pre and post stress at +25C and hot temp. (1 lot to be tested at 125C)	45	5	1	50	0	10	Must be in progress at time of package release to production, but completion is not required for release to production.
HAST	+130°C/85% RH for 96 hours. Electrical test pre and post stress at +25°C and hot temp. (1 lot to be tested at 125C)	77	5	3	246	0	10	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
Unbiased HAST	+130°C/85% RH for 96 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	-65°C to +150°C for 500 cycles. Electrical test pre and post stress at hot temp; 3 gram force WBP, on 5 devices from 1 lot, Test by following readpoint TC 500. (1 lot to be tested at 125C)	77	5	3	246	0	15	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.