



MICROCHIP

QUALIFICATION PLAN

PCN #: JAON-15GNKR932

Date:
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Qualification of palladium coated copper with gold flash (CuPdAu) bond wire in selected products of the 200K wafer technology available in 8L MSOP package at MTAI assembly site.

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Purpose: _____ Qualification of palladium coated copper with gold flash (CuPdAu) bond wire in selected products of the 200K wafer technology available in 8L MSOP package at MTAI assembly site.

CCB No.: _____ 2595

Misc.	Assembly site	MTAI
	BD Number	BDM-001029 rev.A
	MP Code (MPC)	LECI14A3XB04
	Part Number (CPN)	PIC12F1501-E/MS
Lead-Frame	Paddle size	82x94 mils
	Material	CDA194
	Manufacturer	ASM
	Surface	Bare Cu DAP
	Treatment	Brown Oxide Treated
	Process	Stamped
	Lead-lock	No
	Lead Plating	Matte Tin
Bond Wire	Material	CuPdAu
Die Attach	Part Number	8390A
	Conductive	Yes
MC	Part Number	G600V
PKG	PKG Type	MSOP
	Pin/Ball Count	8
	PKG width/size	3x3 mm
Die	Die Thickness	8 mils
	Die Size	59.5 x 65.0 mils

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	3	24	0 fails after TC	5	30 bonds from a minimum of 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	3	24	0	5	30 bonds from a minimum of 5 devices.
Wire Sweep		5	0	3	15	0		Required for any reduction in wire bond thickness.
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 +25°C 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.
Preconditioning - Required for surface mount devices	+150°C Bake for 24 hours, moisture loading requirements per MSL level + 3X reflow at peak reflow temperature per Jedec-STD-020D for package type; Electrical test pre and post stress at +25°C. MSL1 @ 260°C	231	15	3	738	0	15	Spares should be properly identified. 77 parts from each lot to be used for HAST, Autoclave, Temp Cycle test.
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 following Temp Cycle stress. (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.

JAON-15GNKR932 - CCB 2595 Final Notice: Qualification of palladium coated copper with gold flash (CuPdAu) bond wire in selected products of the 200K wafer technology available in 8L MSOP package at MTAI site.

Affected Catalog Part Numbers (CPN)

PCN_JAON-15GNKR932
CATALOG_PART_NBR
MTCH102-I/MS
MTCH102T-I/MS
PIC12F1501-E/MS
PIC12F1501-E/MS031
PIC12F1501-I/MS
PIC12F1501T-E/MS
PIC12F1501T-E/MS036
PIC12F1501T-I/MS
PIC12F1571-E/MS
PIC12F1571-I/MS
PIC12F1571T-E/MS
PIC12F1571T-I/MS
PIC12F1572-E/MS
PIC12F1572-I/MS
PIC12F1572T-E/MS
PIC12F1572T-I/MS
PIC12LF1501-E/MS
PIC12LF1501-I/MS
PIC12LF1501T-E/MS
PIC12LF1501T-I/MS
PIC12LF1552-E/MS
PIC12LF1552-I/MS
PIC12LF1552T-I/MS
PIC12LF1571-E/MS
PIC12LF1571-I/MS
PIC12LF1571T-I/MS
PIC12LF1572-E/MS
PIC12LF1572-I/MS
PIC12LF1572T-I/MS
PIC12LF1572T-I/MS020
PIC12LF1572T-I/MS021
PIC12LF1572T-I/MS022
PIC12LF1572T-I/MS023
PIC12LF1572T-I/MS024