



QUALIFICATION PLAN

PCN #: JAON-15VCCB774

**Date:
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Qualification of palladium coated copper with gold flash (CuPdAu) bond wire in selected products of the 120K wafer technology available in 8L MSOP package at MTAI assembly site.

Distribution

Surasit P.
A. Navarro
Wichai K.
Chaweng W.
Chalermpon P.
Atthapong W.

Greg P.
Vassilis D.
Fernando C.
Gerry O.
Arnel M.
Sombat K.

Microchip Technology (Thailand) Co., Ltd.
14 Moo 1 T. Wangtakien A. Muangchacherngsao,
Chacherngsao, Thailand, 24000
Tel. (6638) 857119-45, 857311-19 ext. 1231
Fax (6638) 857149-50

Purpose: Qualification of palladium coated copper with gold flash (CuPdAu) bond wire in selected products of the 120K wafer technology available in 8L MSOP package at MTAI assembly site.

CCB No.: 2593

Misc.	Assembly site	MTAI
	BD Number	BDM-001069 rev.A
	MP Code (MPC)	A7BV8YA3XA00
	Part Number (CPN)	MCP6282T-E/MS
Lead-Frame	Paddle size	68x94 mils
	Material	CDA194
	Surface	Bare Cu DAP
	Treatment	Brown Oxide Treated
	Process	Stamped
	Lead-lock	No
	Part Number	TBD
	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	43.5 x 58.0 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 85°C.	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 85°C.	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 85°C; 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.

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Affected Catalog Part Numbers (CPN)

PCN_JAON-15VCCB774
CATALOG_PART_NBR
MCP1650R-E/MS
MCP1650RT-E/MS
MCP1650S-E/MS
MCP1650ST-E/MS
MCP1651R-E/MS
MCP1651RT-E/MS
MCP1651S-E/MS
MCP1651ST-E/MS
MCP1652R-E/MS
MCP1652RT-E/MS
MCP1652S-E/MS
MCP1652ST-E/MS
MCP3001-I/MS
MCP3002-I/MS
MCP3201-CI/MS
MCP3201T-CI/MS
MCP3202-CI/MS
MCP3202T-CI/MS
MCP3301-BI/MS
MCP3301-CI/MS
MCP3301T-BI/MS
MCP3301T-CI/MS
MCP6002-E/MS
MCP6002-I/MS
MCP6002T-E/MS
MCP6002T-E/MSHAZ
MCP6002T-I/MS
MCP6021-E/MS
MCP6021T-E/MS
MCP6031-E/MS
MCP6031T-E/MS
MCP6032-E/MS
MCP6032T-E/MS
MCP6033-E/MS
MCP6033T-E/MS
MCP6041-E/MS
MCP6041-I/MS
MCP6041T-E/MS
MCP6041T-I/MS
MCP6042-E/MS
MCP6042-I/MS
MCP6042T-E/MS
MCP6042T-I/MS

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PCN_JAON-15VCCB774
CATALOG_PART_NBR
MCP6043-E/MS
MCP6043-I/MS
MCP6043T-E/MS
MCP6043T-I/MS
MCP6141-E/MS
MCP6141-I/MS
MCP6141T-E/MS
MCP6141T-I/MS
MCP6142-E/MS
MCP6142-I/MS
MCP6142T-E/MS
MCP6142T-I/MS
MCP6143-E/MS
MCP6143-I/MS
MCP6143T-E/MS
MCP6143T-I/MS
MCP616-I/MS
MCP616T-I/MS
MCP617-I/MS
MCP617T-I/MS
MCP618-I/MS
MCP618T-I/MS
MCP6231-E/MS
MCP6231T-E/MS
MCP6232-E/MS
MCP6232T-E/MS
MCP6241-E/MS
MCP6241T-E/MS
MCP6242-E/MS
MCP6242T-E/MS
MCP6271-E/MS
MCP6271T-E/MS
MCP6272-E/MS
MCP6272T-E/MS
MCP6273-E/MS
MCP6273T-E/MS
MCP6275-E/MS
MCP6275T-E/MS
MCP6281-E/MS
MCP6281T-E/MS
MCP6282-E/MS
MCP6282T-E/MS
MCP6283-E/MS

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PCN_JAON-15VCCB774
CATALOG_PART_NBR
MCP6283T-E/MS
MCP6285-E/MS
MCP6285T-E/MS
MCP6291-E/MS
MCP6291T-E/MS
MCP6292-E/MS
MCP6292-E/MSAAA
MCP6292T-E/MS
MCP6292T-E/MSAAA
MCP6293-E/MS
MCP6293T-E/MS
MCP6295-E/MS
MCP6295T-E/MS
MCP6442-E/MS
MCP6442T-E/MS
MCP6541-E/MS
MCP6541-I/MS
MCP6541T-E/MS
MCP6541T-I/MS
MCP6542-E/MS
MCP6542-I/MS
MCP6542T-E/MS
MCP6542T-I/MS
MCP6543-E/MS
MCP6543-I/MS
MCP6543T-E/MS
MCP6543T-I/MS
MCP6546-E/MS
MCP6546-I/MS
MCP6546T-E/MS
MCP6546T-I/MS
MCP6547-E/MS
MCP6547-I/MS
MCP6547T-E/MS
MCP6547T-I/MS
MCP6548-E/MS
MCP6548-I/MS
MCP6548T-E/MS
MCP6548T-I/MS
MCP6G01-E/MS
MCP6G01T-E/MS
MCP6G02-E/MS
MCP6G02T-E/MS

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PCN_JAON-15VCCB774
CATALOG_PART_NBR
MCP6G03-E/MS
MCP6G03T-E/MS
MCP6L02T-E/MS
MCP6L1T-E/MS
MCP6L2T-E/MS
MCP6L71T-E/MS
MCP6L72T-E/MS
MCP6L91T-E/MS
MCP6L92T-E/MS
MCP6L92T-E/MSHHH
MCP6S21-I/MS
MCP6S21T-I/MS
MCP6S22-I/MS
MCP6S22T-I/MS
MCP6S91-E/MS
MCP6S91T-E/MS
MCP6S92-E/MS
MCP6S92T-E/MS