



MICROCHIP

QUALIFICATION PLAN

PCN #: JAON-16TUGT945

Date
June 1, 2016

**Qualification of G600V molding compound for
products available in 8L SOIC Chip-On-Lead (COL)
package assembled at MTAI assembly site.**

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Purpose: Qualification of G600V molding compound for products available in 8L SOIC chip-on-lead (COL) package assembled at MTAI assembly site.

CCB No.: 2652

Misc.	Assembly site	MTAI
	BD Number	BDM-001096 rev.B
	MP Code (MPC)	TVAA14CYXD00
	Part Number (CPN)	23LC512-E/SN
Lead-Frame	Paddle size	116x178 mils
	Material	CDA194
	Surface	Bare Cu DAP
	Process	Etched
	Lead-lock	No
	Part Number	10100811
	Lead Plating	Matte Tin
Bond Wire	Material	Au
Die Attach	Part Number	8006NS
	Conductive	No
MC	Part Number	G600V
PKG	PKG Type	SOIC
	Pin/Ball Count	8
	PKG width/size	150 mils
Die	Die Thickness	8 mils
	Die Size	75.1 x 112.8 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 (1 lot to be tested at 125C)	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 or 110°C/85%RH for 264 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 or +110°C/85% RH for 264 hrs. Electrical test pre and post stress at +25°C. (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.
Temp Cycle	-65°C to +150°C for 500 cycles. Electrical test pre and post stress at hot temp 85C; 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.

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Affected Catalog Part Numbers (CPN)

PCN_JAON-16TUGT945
CATALOG_PART_NBR
23A1024-E/SN
23A1024-I/SN
23A1024T-E/SN
23A1024T-I/SN
23A512-E/SN
23A512-I/SN
23A512T-E/SN
23A512T-I/SN
23LC1024-E/SN
23LC1024-I/SN
23LC1024T-E/SN
23LC1024T-I/SN
23LC512-E/SN
23LC512-I/SN
23LC512T-E/SN
23LC512T-I/SN
23LCV1024-I/SN
23LCV1024T-I/SN
23LCV512-I/SN
23LCV512T-I/SN
24AA128-I/SN
24AA128T-I/SN
24AA512-I/SN
24AA512T-I/SN
24FC128-I/SN
24FC128T-I/SN
24FC512-I/SN
24FC512T-I/SN
24LC128-I/SN
24LC128T-I/SN
24LC256-I/SN
24LC256T-I/SN
24LC512-E/SN
24LC512-I/SN
24LC512T-E/SN
24LC512T-I/SN
25AA128-I/SN
25AA128T-I/SN
25AA256-I/SN
25AA256T-I/SN
25LC128-E/SN
25LC128-I/SN
25LC128T-E/SN

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Affected Catalog Part Numbers (CPN)

PCN_JAON-16TUGT945
CATALOG_PART_NBR
25LC128T-I/SN
25LC256-I/SN
25LC256T-I/SN