QUALIFICATION PLAN SUMMARY

PCN #: DSNO-07AOWZ935

Date:

August 04, 2025

Qualification of CRM-1151GA as new die attach material for selected various device families available in 5L SOT-23 and 6L SOT-23 packages at MMT and MTAI assembly sites.

Purpose: **Qualification of CRM-1151GA as new die attach material for selected various device families available in 5L SOT-23 and 6L SOT-23 packages at MMT and MTAI assembly sites.**

CCB No.: **7739**

Misc.	Assembly site	MTAI/MMT
	BD Number	BD-003652-01
	MP Code (MPC)	DECA2YC8XVA1
	Part Number (CPN)	PIC10F222T-E/OTVAO
	MSL information	MSL1
	Assembly Shipping Media (T/R, Tube/Tray)	T/R
	Base Quantity Multiple (BQM)	3000
Lead-Frame	Paddle size	72 x 41, 66 x 48
	Material	CDA194
	DAP Surface Prep	Ag
	Treatment	Non-roughened
	Process	Stamped
	Lead-lock	No
	Part Number	10100602, 10100502
	Lead Plating	Matte Tin
Bond Wire	Material	Au
Die Attach	Part Number	CRM-1151GA
	Conductive	No
MC	Part Number	G600V
PKG	Package Type	SOT-23
	Pin/Ball Count	6
	PKG width/size	150 mil

Test Name	Conditions	Reliability Stress Read Point Grade 1: -40°C to +125°C (MCHP E Temp)	Pre & Post Reliability Stress Test Temperature Grade 1: -40°C to +125°C (MCHP E Temp)	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 min. 5 devices. Condition C or D. For Au wire diameter >=1mil, minimum pull strength after TC = 3 grams. For Au wire diameter <1mil, refer to Figure 2011-1 in MIL-STD-883 Method 2011 as a guideline for minimum pull strength. For Au wire diameter <1mil, wire bond pull shall be performed with the hook over the ball bond and not at mid-wire.
Wire Bond Shear - WBS	CDF-AEC-Q100-001			5	0	1	5	0	5	30 bonds from a min. 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)	JESD22-A103 +175°C	Grade 1: 500 hrs (+175°C)	Grade 1: +25°C, +125°C	45	5	1	50	0	21 - 83	Spares should be properly identified.
Preconditioning - Required for surface mount devices	J-STD-020 JESD22-A113 +150°C Bake for 24 hours, moisture loading requirements per MSL level + 3X reflow at peak reflow temperature per Jedec-STD-020E for package type. MSL-1 @260C°		Grade 1: +25°C, +125°C	231	15	3	738	0	15	Spares should be properly identified. 77 parts from each lot to be used for HAST, uHAST, Temp Cycle test.
HAST	JESD22-A101 or A110 +130°C/85% RH for 96 hrs	Grade 1: 96 hrs (+130°C/85% RH)	Grade 1: +25°C, +125°C .	77	5	3	246	0	10 - 14	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
UHAST	JESD22-A102, A118, or A101 +130°C/85% RH for 96 hrs	Grade 1: 96 hrs (+130°C/85% RH)	Grade 1: +25°C	77	5	3	246	0	10	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
Temp Cycle	JESD22-A104 -55ºC to +150ºC	Grade 1: 1000 cycles (-55ºC to +150ºC)	Grade 1: +25°C, +125°C	77	5	3	246	0	15 - 60	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.