



MICROCHIP

QUALIFICATION REPORT SUMMARY
RELIABILITY LABORATORY

PCN#: ALAN-05LIKW552

Date:
March 9, 2026

Qualification of MMT as an additional assembly site for selected 23LC1024, 23A1024, 23LC512, 23A512, 23LCV1024, and 23LCV512 device families available in 8L TSSOP (4.4mm) package. This is Q100 grade 1 qualification.



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PACKAGE QUALIFICATION REPORT

Purpose	Qualification of MMT as an additional assembly site for selected 23LC1024, 23A1024, 23LC512, 23A512, 23LCV1024, and 23LCV512 device families available in 8L TSSOP (4.4mm) package. This is Q100 grade 1 qualification.
CN	E000296279
QUAL ID	R2600073 Rev. B
Bonding No.	BD-002080 Rev. 02
MP CODE	TVAA14C5XB00
Part No.	23LC1024-E/ST
CCB No.	6798
<u>Lead Frame</u>	
Paddle size	118 x 87 mils
Material	C7025
Surface	Bare Cu
Treatment	BOT
Process	Stamped
Lead lock	No
Part number	10100848
Plating composition	Matte tin
<u>Bond Wire</u>	
Wire	Au wire
<u>Die Attach Material</u>	
Epoxy	8006NS
<u>Mold Compound</u>	
Mold compound	G600V
<u>Package</u>	
Type	8L TSSOP
Package size	4.4 mm



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PACKAGE QUALIFICATION REPORT

Manufacturing Information

Assembly Lot No.	Wafer Lot No.	Date Code
MMT-264101370.000	U08F924375991.400	2602PSV
MMT-264101570.000	U08F924375991.400	2602UYV
MMT-264101571.000	U08F924375991.400	2602V17

Result

☒ Pass ☐ Fail ☐ _____

8L TSSOP (4.4 mm) assembled by MMT pass reliability test per QCI-39000. This package was qualified the Moisture/Reflow Sensitivity Classification Level 1 at 260°C reflow temperature per IPC/JEDEC J-STD-020E standard.

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS	Result	Remarks
Precondition Prior Perform Reliability Tests (At MSL Level 1)	Electrical Test: +25°C, 85°C and 125°C System: NEXTEST_PT	JESD22- A113	693(0)	0/693	Pass	Good Devices
	Bake 150°C, 24 hrs. System: CHINEE	JIP/ IPC/JEDEC J-STD-020E		693		
	85°C/85%RH Moisture Soak 168 hrs. System: TABAI ESPEC Model PR-3SPH			693		
	3x Convection-Reflow 265°C max System: Vitronics Soltec MR1243			693		
	Electrical Test: +25°C, 85°C and 125°C System: NEXTEST_PT		693(0)	0/693	Pass	

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
Temp Cycle	Stress Condition: -55°C to +150°C, 1000 Cycles System: TABAI ESPEC TSA-70H	JESD22-A104		231		Parts had been pre-conditioned at 260°C
	Electrical Test: +25°C, 85°C and 125°C System: NEXTEST_P		231(0)	0/231	Pass	77 units / lot
	Bond Strength: Wire Pull (>2.50 grams)		15(0)	0/15	Pass	
UNBIASED-HAST	Stress Condition: +130°C/85%RH, 96 hrs. System: HAST 6000X	JESD22-A118		231		Parts had been pre-conditioned at 260°C
	Electrical Test: +25°C System: NEXTEST_PT		231(0)	0/231	Pass	77 units / lot
HAST	Stress Condition: +130°C/85%RH, 96 hrs. Bias Volt: 5.5 Volts System: HAST 6000X Electrical Test: +25°C, 85°C and 125°C System: NEXTEST_PT	JESD22-A110	231(0)	0/231	Pass	Parts had been pre-conditioned at 260°C 77 units / lot

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
High Temperature Storage Life	Stress Condition: Bake 175°C, 500 hrs. System: TPS Bake Oven Electrical Test: +25°C, 85°C and 125°C System: NEXTEST_PT	JESD22-A103	45(0)	45 0/45	Pass	45 units
Solderability Temp 245°C	Steam Aging: Temp 93°C, 8Hrs System: SAS-3000 Solder Dipping: Solder Temp. 245°C Solder material: Pb Free Sn 95.5Ag3.9Cu0.6 System: ERSA RA 2200D Visual Inspection: External Visual Inspection	J-STD-002	22(0)	22 0/22	Pass	
Physical Dimensions	Physical Dimension 10 units / 1 lot	JESD22-B100/B108	30(0) Units	0/30	Pass	
Bond Strength Data Assembly	Wire Pull (>2.50 grams) Bond Shear (>15.00 grams)	Mil. Std. 883-2011 CDF-AEC-Q100-001	30(0) Wires 30(0) Bonds	0/30 0/30	Pass Pass	