



QUALIFICATION REPORT SUMMARY

RELIABILITY LABORATORY

PCN #: MFOL-01PBHG065

Date:
January 8, 2026

Qualification of ASSH as an additional assembly site for 25LC160DT-I/ST, 25AA160DT-E/ST, 25LC160DT-E/ST, 25LC160D-E/ST, 25AA160DT-I/ST, 25AA160D-I/ST, 25LC160D-I/ST, 25AA160D-E/ST, 25AA080DT-I/ST, 25LC080DT-E/ST, 25LC080DT-I/ST, 25AA080D-I/ST, 25LC080D-I/ST, 25LC080D-E/ST, 25AA160C-I/ST, 25LC160CT-E/ST, 25AA160CT-I/ST, 25LC160C-I/ST, 25LC160C-E/ST, 25LC160CT-I/ST, 25LC080CT-E/ST, 25LC080C-E/ST, 25LC080CT-I/ST, 25AA080C-I/ST, 25LC080C-I/ST, and 25AA080CT-I/ST catalog part numbers (CPN) available in 8L TSSOP (4.4mm) package. This is a Q006 Grade 1 qualification and will qualify by similarity (QBS).



MICROCHIP

PACKAGE QUALIFICATION REPORT

Purpose	Qualification of ASSH as an additional assembly site for 25LC160DT-I/ST, 25AA160DT-E/ST, 25LC160DT-E/ST, 25LC160D-E/ST, 25AA160DT-I/ST, 25AA160D-I/ST, 25LC160D-I/ST, 25AA160D-E/ST, 25AA080DT-I/ST, 25LC080DT-E/ST, 25LC080DT-I/ST, 25AA080D-I/ST, 25LC080D-I/ST, 25LC080D-E/ST, 25AA160C-I/ST, 25LC160CT-E/ST, 25AA160CT-I/ST, 25LC160C-I/ST, 25LC160C-E/ST, 25LC160CT-I/ST, 25LC080CT-E/ST, 25LC080C-E/ST, 25LC080CT-I/ST, 25AA080C-I/ST, 25LC080C-I/ST, and 25AA080CT-I/ST catalog part numbers (CPN) available in 8L TSSOP (4.4mm) package. This is a Q006 Grade 1 qualification and will qualify by similarity (QBS).
CN	ES345370
QUAL ID	R2000526 Rev. C
MP CODE	3583079CXC03
Part No.	AT24C256C-XHL-B
Bonding No.	W35830ayu
CCB No.	4198 and 8136
<u>Package</u>	
Type	8L TSSOP
Package size	4.4 mm
<u>Lead Frame</u>	
Paddle size	2.21 x 3.2 mm
Material	C7025
Surface	Ru-PPF
Process	Stamped
Lead Lock	Yes
Part Number	LI-WMA400008-05-00
Treatment	Roughened
<u>Material</u>	
Epoxy	EN-4900GC
Wire	CuPdAu wire
Mold Compound	G700LY
Plating Composition	Ru-PPF



MICROCHIP PACKAGE QUALIFICATION REPORT

Manufacturing Information:

Assembly Lot No.	Wafer Lot No.	Date Code
ASSH184000082.000	MCSO518384144.000	1752USC
ASSH204400040.000	MCSO520177622.000	20057CC
ASSH204700076.000	MCSO520167575.000	2008CDJ

Result ☒ Pass ☐ Fail ☐ _____

8L TSSOP assembled by ASSH 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
Moisture/Reflow Sensitivity Classification Test (At MSL Level 1)	85°C/ 85%RH Moisture Soak 168 hrs. System: TABAI ESPEC Model PR-3SPH 3x Convection-Reflow 265°C max System: Vitronics Soltec MR1243 (IPC/JEDEC J-STD-020E)	IPC/JEDEC J-STD-020E	135	0/135	Pass	
<u>Precondition Prior Performance Reliability Tests</u> (At MSL Level 1)	Electrical Test: +25°C, 85°C and 125°C System: NEXTEST_PT Bake 150°C, 24 hrs System: CHINEE 85°C/85%RH Moisture Soak 168 hrs. System: TABAI ESPEC Model PR-3SPH 3x Convection-Reflow 265°C max System: Vitronics Soltec MR1243 Electrical Test: +25°C, 85°C and 125°C System: NEXTEST_PT	JESD22-A113	693(0)	693 693 693 0/693	 Pass	Good Devices

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
Temp Cycle	Stress Condition: -65°C to +150°C, 500 Cycles System: TABAI ESPEC TSA-70H	JESD22-A104		231		Parts had been pre-conditioned at 260°C
	Electrical Test: +85°C and 125°C System: NEXTEST_PT		231(0)	0/231	Pass	
	Bond Strength: Wire Pull (>4.00 grams) Bond Shear (>18.00 grams)		45 (0)	0/45	Pass	
	Stress Condition: -65°C to +150°C, 1000 Cycles System: TABAI ESPEC TSA-70H					
	Electrical Test: +85°C and 125°C System: NEXTEST_PT		231(0)	0/231	Pass	
	Bond Strength: Wire Pull (>4.00 grams) Bond Shear (>18.00 grams)		45 (0)	0/45	Pass	

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
HAST	Stress Condition: +130°C/85%RH, 96 hrs. Bias Volt: 5.5 Volts System: HAST 6000X	JESD22-A110		231		Parts had been pre-conditioned at 260°C
	Electrical Test: +25°C, 85°C and 125°C System: NEXTEST_PT		231(0)	0/231	Pass	77 units / lot
	Bond Strength: Wire Pull (>4.00 rams) Bond Shear (>18.00 grams)		45 (0)	0/45	Pass	
	Stress Condition: +130°C/85%RH, 192 hrs. Bias Volt: 5.5 Volts System: HAST 6000X					
	Electrical Test: +25°C, 85°C and 125°C System: NEXTEST_PT		231(0)	0/231	Pass	
	Bond Strength: Wire Pull (>4.00 grams) Bond Shear (>18.00 grams)		45 (0)	0/45	Pass	

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
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
	Stress Condition: +130°C/85%RH, 192 hrs. System: HAST 6000X			231		
	Electrical Test: +25°C System: NEXTEST_PT		231(0)	0/231	Pass	
High Temperature Storage Life	Stress Condition: Bake 175°C, 500 hrs System: TPS DC-166-F-ST350	JESD22-A103		135		45 units / lot
	Electrical Test: +25°C, 85°C and 125°C System: NEXTEST_PT		135(0)	0/135	Pass	
	Stress Condition: Bake 175°C, 1000 hrs System: TPS DC-166-F-ST350			135		
	Electrical Test: +25°C, 85°C and 125°C System: NEXTEST_PT		135(0)	0/135	Pass	
Solderability Temp 215°C	Steam Aging: Temp 93°C,8Hrs System: SAS-3000 Solder Dipping: Solder Temp.215°C Solder material: SnPb Sn63, Pb37 System: ERSA RA 2200D Visual Inspection: External Visual Inspection	J-STD-002	22 (0)	22 22 0/22	Pass	
Solderability Temp 245°C	Steam Aging: Temp 93°C,8Hrs System: SAS-3000 Solder Dipping:Solder Temp.245°C Solder material:Pb Free Sn 95.5Ag3.9 Cu0.6 System: ERSA RA 2200D Visual Inspection: External Visual Inspection	J-STD-002	22 (0)	22 22 0/22	Pass	

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
Bond Strength Data Assembly	Wire Pull (> 8.00 grams)	Mil. Std. 883-2011	30 (0) Wires	0/30	Pass	
	Bond Shear (> 18.00 grams)	CDF-AEC- Q100-001	30 (0) bonds	0/30	Pass	