QUALIFICATION REPORT SUMMARY

PCN #: BLAS-09GOSU780

Date:
February 19, 2026

Qualification of ASSH as an additional assembly site and qualification of palladium coated copper with gold flash (CuPdAu) as a new wire material, AMK-EP27 as a new die attach material and AMK-MC27 as a new mold compound material at ANAP assembly site for AT25080B-XHL-B, AT25080B-XHL-T, AT25160B-XHL-T and AT25160B-XHL-B catalog part numbers (CPN) available in 8L TSSOP (4.4mm) package will qualify by similarity (QBS).

MICROCHIP

PACKAGE QUALIFICATION REPORT

Purpose	Qualification of ASSH as an additional assembly site and qualification of palladium coated copper with gold flash (CuPdAu) as a new wire material, AMK-EP27 as a new die attach material and AMK-MC27 as a new mold compound material at ANAP assembly site for AT25080B-XHL-B, AT25080B-XHL-T, AT25160B-XHL-T and AT25160B-XHL-B catalog part numbers (CPN) available in 8L TSSOP (4.4mm) package 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, 8129 and 8129.001
Package	
Type	8L TSSOP
Package size	4.4 mm
Lead Frame	
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
Material	
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 [X] 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	
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)	693		Good Devices
	Bake 150°C, 24 hrs System: CHINEE			693		
	85°C/85%RH Moisture Soak 168 hrs. System: TABAI ESPEC Model PR-3SPH			693		
	3x Convection-Reflow 265°C max			693		
	System: Vitronics Soltec MR1243					
	Electrical Test: +25°C, 85°C and 125°C System: NEXTEST_PT			0/693	Pass	

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			231		
	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 grams) Bond Shear (>18.00 grams)		45 (0)	0/45	Pass	Wire pull & bond shear after HAST
			3(0) Wires	0/3	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) 66 (0)	0/231 0 /66	Pass	
	Bond Strength: Wire Pull (>4.00 grams) Bond Shear (>18.00 grams)		45 (0)	0/45	Pass	Wire pull & bond shear after HAST

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	

PACKAGE QUALIFICATION REPORT

Purpose	Qualification of ASSH as an additional assembly site and qualification of palladium coated copper with gold flash (CuPdAu) as a new wire material, AMK-EP27 as a new die attach material and AMK-MC27 as a new mold compound material at ANAP assembly site for AT25080B-XHL-B, AT25080B-XHL-T, AT25160B-XHL-T and AT25160B-XHL-B catalog part numbers (CPN) available in 8L TSSOP (4.4mm) package will qualify by similarity (QBS).
CN	E000202146
QUAL ID	R2400365 Rev. A
MP CODE	365S6Y9CXC00
Part No.	25CS640T-E/ST
Bonding No.	BD-001423 Rev. 02
CCB No.	6401, 8129 and 8129.001
Package	
Type	8L TSSOP
Package size	4.4 mm
Lead Frame	
Paddle size	98 x 87 mils
Material	C7025
Surface	TPPF
Process	Stamped
Lead Lock	Yes
Part Number	101419997
Treatment	Roughened
Material	
Epoxy	AMK-EP27
Wire	CuPdAu wire
Mold Compound	AMK-MC27
Plating Composition	NiPdAu

MICROCHIP

PACKAGE QUALIFICATION REPORT

Manufacturing Information

Assembly Lot No.	Wafer Lot No.	Date Code
ANAP243000045.000	MCSO520415094.220	2343GSD
ANAP243000046.000	MCSO520415094.220	2343GSP
ANAP243100001.000	MCSO520415094.220	2344GSU

Result [X] Pass [ ] Fail [ ] ____________________

8L TSSOP (4.4 mm) assembled by ANAP 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	
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)	693		Good Devices
	Bake 150°C, 24 hrs System: CHINEE			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			0/693	Pass	

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 (>20.00 grams)		45 (0)	0/45	Pass	
	Stress Condition: -65°C to +150°C, 1000 Cycles System: TABAI ESPEC TSA-70H			231		
	Electrical Test: +85°C and 125°C System: NEXTEST_PT		231(0)	0/231	Pass	
	Bond Strength: Wire Pull (>4.00 grams) Bond Shear (>20.00 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 grams) Bond Shear (>20.00 grams)		45 (0)	0/45	Pass	
	Stress Condition: +130°C/85%RH, 192 hrs. **Bias Volt:** 5.5 Volts System: HAST 6000X			231		
	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 (>20.00 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
High Temperature Storage Life	**Stress Condition:** Bake 175°C, 500 hrs System: TPS Bake Oven	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 Bake Oven			135		
	Electrical Test :+25°C, 85°C and 125°C System: NEXTEST_PT		135(0)	0/135	Pass	
Solderability Temp 245°C	**Steam Aging:** Temp 93°C,1Hrs 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
Physical Dimensions	Physical Dimension, 10 units / lot from 3 lot	JESD22-B100/B108	30(0) Units	0/30	Pass	
Bond Strength Data Assembly	Wire Pull (> 4.00 grams)	Mil.Std. 883-2011	30 (0) Wires	0/30	Pass	
	Bond Shear (>20.00 grams)	CDF-AEC-Q100-001	30 (0) bonds	0/30	Pass	