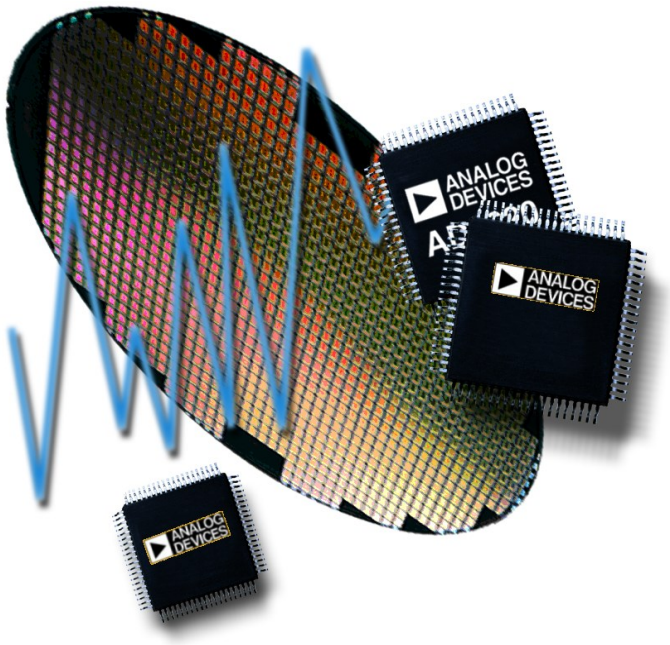

Reliability Report

Report Title: Bond Wire Change from Gold to Copper Wire Automotive Grade 0 Qualification for LTC Products at UTAC

Report Number: 23722

Revision: A

Date: 5 March 2025

Summary

This report documents the interim status of the reliability qualification requirements of Automotive Grade 0 Bond Wire change from Gold to Copper wire for LTC products at UTAC for LFCSP/SO/TSSOP package family.

The products listed below were selected to cover the bond wire change for this project:

The LT3755 in a 16- MINI_SO_EP package DC/DC is a controller designed to operate as a constant-current source for driving high current LEDs.

The LT8603 in a 40-LFCSP package is a highly flexible, quad output regulator combining two high input voltage capable monolithic step-down switching regulators, one low input voltage capable monolithic step-down regulator, and a boost controller to satisfy a wide range of applications while occupying minimal board space.

The LT1914 in a 16-MINI_SO_EP package is a compact, high efficiency, high speed synchronous monolithic step-down switching regulator that consumes only 1.7µA of non-switching quiescent current. The LT1914 can deliver 3A of continuous current. The LT1914 is available with an adjustable output or a fixed 3.3V output.

The LT3752 in a 16-MINI_SO_EP package is a current mode PWM controller optimized for an active clamp forward converter topology. A DC/DC housekeeping controller is included for improved efficiency and performance. The LT3752 allows operation up to 100V input and the LT3752-1 is optimized for applications with input voltages greater than 100V.

The LTC7000 in a 16-MINI_SO_EP package is a fast high side N-channel MOSFET gate driver that operates from input voltages up to 135V. It contains an internal charge pump that fully enhances an external N-channel MOSFET switch, allowing it to remain on indefinitely.

AECQ100 Qualification Test Methods and Summary

AEC Test Group	AEC Stress Test Name	Abbreviation	AEC Test#	Reference
Group A ACCELERATED ENVIRONMENT STRESS TESTS	Preconditioning	PC	A1	Table 4.1, Table 4.2, and Table 4.3
	Temperature Humidity Bias or Biased-HAST	THB or HAST	A2	
	Autoclave or Unbiased HAST or Temperature Humidity (without Bias)	AC, UHST, or TH	A3	
	Temperature Cycle	TC	A4	
	Power Temperature Cycling	PTC	A5	
	High Temperature Storage Life	HTSL	A6	
Group B ACCELERATED LIFETIME SIMULATION TESTS	High Temperature Operating Life	HTOL	B1	Table 2.1 and 2.2
	Early Life Failure Rate	ELFR	B2	
	NVM Endurance, Data Retention, and Operational Life	EDR	B3	
Group C PACKAGE ASSEMBLY INTEGRITY TESTS	Wire Bond Shear	WBS	C1	Tests C3-6 are qualified and controlled with inline monitors and may be viewed on-site at Analog Devices.
	Wire Bond Pull Strength	WBP	C2	
	Solderability	SD	C3	
	Physical Dimensions	PD	C4	
	Solder Ball Shear	SBS	C5	
	Lead Integrity	LI	C6	
Group D DIE FABRICATION RELIABILITY TESTS	Electromigration	EM	D1	Die Fabrication Reliability data may be viewed on-site at Analog Devices.
	Time Dependent Dielectric Breakdown	TDDB	D2	
	Hot Carrier Injection	HCI	D3	
	Negative Bias Temperature Instability	BTI	D4	
	Stress Migration	SM	D5	
Group E ELECTRICAL VERIFICATION TESTS	Pre- and Post-Stress Electrical Test	TEST	E1	n/a
	Electrostatic Discharge Human Body Model	HBM	E2	
	Electrostatic Discharge Charged Device Model	CDM	E3	
	Latch-Up	LU	E4	
	Electrical Distributions	ED	E5	• For Tests E5, E6 and E7, ADI New Product Yield Analysis Testing Guidelines meet AEC Q100 requirements. • Results for Tests E7-E11 are available as applicable on a case by case basis. • Test E12 results may be viewed on-site at Analog Devices
	Fault Grading	FG	E6	
	Characterization	CHAR	E7	
	Electromagnetic Compatibility	EMC	E9	
	Short Circuit Characterization	SC	E10	
	Soft Error Rate	SER	E11	
	Lead (Pb) Free	LF	E12	
Group F DEFECT SCREENING TESTS	Process Average Test	PAT	F1	ADI New Product Yield Analysis Testing Guidelines meet AECQ100 Requirements.
	Statistical Bin/Yield Analysis	SBA	F2	
Group G CAVITY PACKAGE INTEGRITY TESTS	Mechanical Shock	MS	G1	< Applicable only for Cavity-Packages>
	Variable Frequency Vibration	VFV	G2	
	Constant Acceleration	CA	G3	
	Gross/Fine Leak	GFL	G4	
	Package Drop	DROP	G5	
	Lid Torque	LT	G6	
	Die Shear	DS	G7	
	Internal Water Vapor	IWV	G8	

Die/Fab Product Characteristics

Table 1.1: Die/Fab Product Characteristics- <2.5um^2 Bipolar

Product Characteristics	Product(s) to be qualified
Generic/Root Part #	LT3755
Die Id	L3755+2 A
Die Size (mm)	1.52 x 1.19
Wafer Fabrication Site	I_WILM1B06
Wafer Fabrication Process	<2.5um^2 Bipolar
Die Substrate	Si
Metallization / # Layers	AlSi(1.0%)Cu(0.5%)/2
Polyimide	Yes
Passivation	doped-oxide/OxyNitride

Table 1.2: Die/Fab Product Characteristics- 0.35um BCDMOS

Product Characteristics	Product(s) to be qualified	
Generic/Root Part #	LT8603	LT1914
Die Id	8603	8609-1
Die Size (mm)	2.57 x 2.92	1.20 x 1.86
Wafer Fabrication Site	Vanguard	Vanguard
Wafer Fabrication Process	0.35um BCDMOS	0.35um DMOS
Die Substrate	Si	Si
Metallization / # Layers	AlCu(0.5%)/2	AlCu(0.5%)/0
Polyimide	No	No
Passivation	doped-oxide/SiN	SiN

Table 1.3: Die/Fab Product Characteristics- BiCMOS

Product Characteristics	Product(s) to be qualified	
Generic/Root Part #	LT3752	LTC7000
Die Id	6L3752-2XV-F 06	6L7000BXV-F 06
Die Size (mm)	1.98 x 2.57	1.78 x 1.57
Wafer Fabrication Site	ADI-Camas	ADI-Camas
Wafer Fabrication Process	BiCMOS	BiCMOS
Die Substrate	Si	Si
Metallization / # Layers	AlCu0.5%/3	AlCu0.5%/3
Polyimide	No	No
Passivation	undoped-oxide/SiN	doped-oxide/SiN

Die/Fab Test Results

Table 2.1: Die/Fab Test Results - 0.35um BCDMOS at Vanguard-Taiwan

Test Name	AEC #	Spec	Conditions	Generic/Root Part #	Lot #	Fail/SS	eTest Temp
High Temperature Operating Life (HTOL)	B1	JESD22-A108	Ta=150°C, Biased, 1,000 Hours	LT8603	Z41045.1	0/77	RHC
					Z41456.1	0/77	RHC
					Z42289.1	0/77	RHC
Early Life Failure Rate (ELFR)	B2	AEC-Q100-008	Ta=150C, 48 Hours	LT8603	Z42300.1	0/800	RH
					Z43136.1	0/800	RH
					Z43883.1	0/800	RH

Table 2.2: Die/Fab Test Results - BiCMOS at ADI-Camas, WA

Test Name	AEC #	Spec	Conditions	Generic/Root Part #	Lot #	Fail/SS	eTest Temp
High Temperature Operating Life (HTOL)	B1	JESD22-A108	Ta=150°C, Biased, 1,000 Hours	LTC7000	Z45229.1	0/77	RHC
					Z45296.1	0/77	RHC
					Z45352.1	0/77	RHC
Early Life Failure Rate (ELFR)	B2	AEC-Q100-008	Ta=150C, 48 Hours	LTC7000	Z45229.1	0/800	RH
					Z45296.1	0/800	RH
					Z45352.1	0/800	RH

Package/Assembly Product Characteristics

Table 3.1: Package/Assembly Product Characteristics - 16-MINI_SO_EP at UTAC (UT3)

Product Characteristics	Product(s) to be qualified		
Generic/Root Part #	LT1914	LT3755	LTC7000
Package	16-MINI_SO_EP	16-MINI_SO_EP	16-MINI_SO_EP
Body Size (mm)	4.04 x 3.00 x 0.86	4.04 x 3.00 x 0.86	3.00 x 4.04 x 0.86
Assembly Location	UTAC (UT3)	UTAC (UT3)	UTAC (UT3)
MSL/Peak Reflow Temperature(°C)	1/260°C	1/260°C	1/260°C
Mold Compound	Sumitomo E670C	Sumitomo E670C	Sumitomo E670C
Die Attach/Underfill/TIM	Ablestik 8200T Conductive	Ablestik 8200T Conductive	Ablestik 8200T Conductive
Leadframe Material	Copper	Copper	Copper
Lead Finish	100Sn	100Sn	100Sn
Wire Bond Material/Diameter (mils)	PdCuAu 4N / 1.00	PdCuAu 4N / 1.00	PdCuAu 4N / 1.00

Table 3.2: Package/Assembly Product Characteristics - 38-TSSOP_4.4_EP at UTAC (UT3)

Product Characteristics	Product(s) to be qualified
Generic/Root Part #	LT3752
Package	38-TSSOP_4.4_EP
Body Size (mm)	6.40 x 9.80 x 1.20
Assembly Location	UTAC (UT3)
MSL/Peak Reflow Temperature(°C)	1/260°C
Mold Compound	Sumitomo G605L
Die Attach/Underfill/TIM	Atrox 558-2C31 electrically conductive and thermally high conductive
Leadframe Material	Copper
Lead Finish	100Sn
Wire Bond Material/Diameter (mils)	PdCuAu 4N / 1.00

Table 3.3: Package/Assembly Product Characteristics - 40-LFCSP at UTAC (UT2)

Product Characteristics	Product(s) to be qualified
Generic/Root Part #	LT8603
Package	40-LFCSP
Body Size (mm)	6.00 x 6.00 x 0.75
Assembly Location	UTAC (UT2)
MSL/Peak Reflow Temperature(°C)	1/260°C
Mold Compound	Sumitomo G700LTD
Die Attach/Underfill/TIM	Ablestik 8600 conductive
Leadframe Material	Copper
Lead Finish	100Sn
Wire Bond Material/Diameter (mils)	PdCuAu 4N / 1.30

Package/Assembly Test Results

Table 4.1: Package/Assembly Test Results - LFCSP at UTAC (UT2)

Test Name	AEC #	Spec	Conditions	Generic/Root Part #	Lot #	Fail/SS	eTest Temp
High Temperature Storage Life (HTSL)	A6	JESD22-A103	150°C, 2,000 Hours	LT8603	Q22711.1.HT1	0/45	RH
					Q22711.2.HT2	0/45	RH
					Q22711.3.HT3	0/45	RH
Solder Heat Resistance (SHR)	A1	J-STD-020	MSL-1	LT8603	Q23400.1.SH1	0/11	R
					Q23400.2.SH2	0/11	R
					Q23400.3.SH3	0/11	R
			MSL-3		Q22711.1.SH1	0/11	R
					Q22711.2.SH2	0/11	R
					Q22711.4.SH4	0/11	R
Temperature Cycling (TC)[1]	A4	JESD22-A104	-55°C/+150°C, 1500 Cycles	LT8603	Q23400.1.TC1	0/77	RH
					Q23400.2.TC2	0/77	RH
					Q23400.3.TC3	0/77	RH
Unbiased HAST (UHST)[1]	A3	JESD22-A118	130C 85%RH 33.3 psia, 96 Hours	LT8603	Q23400.1.UH1	0/77	R
					Q23400.2.UH2	0/77	R
					Q23400.3.UH3	0/77	R
Highly Accelerated Temperature and Humidity Stress Test (HAST)[1]	A2	JESD22-A110	130°C 85%RH 33.3 psia, Biased, 96 Hours	LT8603	Q23400.1.HA1	0/77	RH
					Q23400.2.HA2	0/77	RH
					Q23400.3.HA3	0/77	RH

[1] These samples were subjected to preconditioning at MSL 1 with 3x reflow peak temp of 260°C prior to the start of the stress test.

Table 4.2: Package/Assembly Test Results - MINI_SO_EP at UTAC (UT3)

Test Name	AEC #	Spec	Conditions	Generic/Root Part #	Lot #	Fail/SS	eTest Temp
High Temperature Storage Life (HTSL)	A6	JESD22-A103	150°C, 2,000 Hours	LT1914	Q22700.1.HT1	0/45	RH
					Q22700.2.HT2	0/45	RH
					Q22700.3.HT3	0/45	RH
				LT3755	Q22701.1.HT1	0/45	RH
					Q22701.2.HT2	0/45	RH
					Q22701.3.HT3	0/45	RH
				LTC7000	Q22702.1.HT1	0/45	RH
					Q22702.2.HT2	0/45	RH
					Q22702.3.HT3	0/45	RH
Solder Heat Resistance (SHR)	A1	J-STD-020	MSL-1	LT1914	Q22700.1.SH1	0/11	R
					Q22700.2.SH2	0/11	R
					Q22700.3.SH3	0/11	R
				LT3755	Q22701.1.SH1	0/11	R
					Q22701.2.SH2	0/11	R
					Q22701.3.SH3	0/11	R
				LTC7000	Q22702.1.SH1	0/11	R
					Q22702.2.SH2	0/11	R
					Q22702.3.SH3	0/11	R
Temperature Cycling (TC)[1]	A4	JESD22-A104	-55°C/+150°C, 1500 Cycles	LT1914	Q22700.1.TC1	0/77	RH
					Q22700.2.TC2	0/77	RH
					Q22700.3.TC3	0/77	RH
				LT3755	Q22701.1.TC1	0/77	RH
					Q22701.2.TC2	0/77	RH
					Q22701.3.TC3	0/77	RH
				LTC7000	Q22702.1.TC1	0/77	RH
					Q22702.2.TC2	0/77	RH
					Q22702.3.TC3	0/77	RH

Test Name	AEC #	Spec	Conditions	Generic/Root Part#	Lot #	Fail/SS	eTest Temp
Unbiased HAST (UHST)[1]	A3	JESD22-A118	130C 85%RH 33.3 psia, 96 Hours	LTC7000	Q22702.1.UH1	0/77	R
					Q22702.2.UH2	0/77	R
					Q22702.3.UH3	0/77	R
				LT1914	Q22700.3.UH3	0/77	R
					Q22700.1.UH1	0/77	R
				LT3755	Q22701.1.UH1	0/77	R
					Q22701.2.UH2	0/77	R
				LT1914	Q22700.2.UH2	0/74[2]	R
Highly Accelerated Temperature and Humidity Stress Test (HAST)[1]	A2	JESD22-A110	130°C 85%RH 33.3 psia, Biased, 96 Hours	LT1914	Q22700.1.HA1	0/77	RH
					Q22700.2.HA2	0/77	RH
					Q22700.3.HA3	0/77	RH
				LT3755	Q22701.1.HA1	0/77	RH
					Q22701.2.HA2	0/77	RH
					Q22701.3.HA3	0/77	RH
				LTC7000	Q22702.1.HA1	0/77	RH
					Q22702.2.HA2	0/77	RH
					Q22703.3.HA3	0/77	RH

[1] These samples were subjected to preconditioning at MSL 1 with 3x reflow peak temp of 260°C prior to the start of the stress test.
[2] Sample size reduced due to missing/damaged unit

Table 4.3: Package/Assembly Test Results - TSSOP_4.4_EP at UTAC (UT3)

Test Name	AEC #	Spec	Conditions	Generic/Root Part #	Lot #	Fail/SS	eTest Temp
High Temperature Storage Life (HTSL)	A6	JESD22-A103	150°C, 2,000 Hours	LT3752	Q22705.1.HT1	0/45	RH
					Q22705.2.HT2	0/45	RH
					Q22705.3.HT3	0/45	RH
Solder Heat Resistance (SHR)	A1	J-STD-020	MSL-1	LT3752	Q22705.1.SH1	0/11	R
					Q22705.2.SH2	0/11	R
					Q22705.3.SH3	0/11	R
Temperature Cycling (TC)[1]	A4	JESD22-A104	-55°C/+150°C, 1500 Cycles	LT3752	Q22705.1.TC1	0/77	RH
					Q22705.2.TC2	0/77	RH
					Q22705.3.TC3	0/77	RH
Unbiased HAST (UHST)[1]	A3	JESD22-A118	130C 85%RH 33.3 psia, 96 Hours	LT3752	Q22705.1.UH1	0/77	R
					Q22705.2.UH2	0/77	R
					Q22705.3.UH3	0/77	R
Highly Accelerated Temperature and Humidity Stress Test (HAST)[1]	A2	JESD22-A110	130°C 85%RH 33.3 psia, Biased, 96 Hours	LT3752	Q22705.1.HA1	0/77	RH
					Q22705.2.HA2	0/77	RH
					Q22705.3.HA3	0/77	RH

[1] These samples were subjected to preconditioning at MSL 1 with 3x reflow peak temp of 260°C prior to the start of the stress test.

ESD and Latch-Up Test Results

Approvals

Reliability Engineer: Cyrus De Leon

Appendix

AEC-Q006 – Qualification Requirements for Products using Cu Wire Interconnections

Step	Stress / Tests / Qualification Step	TC (-65°C to 150°C) JESD22-A104	THB (85°C/85%RH) JESD22-A101	HTSL (150°C) JESD22-A103
1	Initial Sampling (T0)[1]	Sample size as required		
2	CSAM @ T0	Sample size as required		
3	Preconditioning to MSLx	3x77	3x77	--
4	CSAM after PC	3x16	3x16	--
5	ATE Test[1]	3x77	3x77	1x45
6	Stress 1x	3x77	3x77	1x45
7	ATE Test[1]	3x77	3x77	1x45
8	CSAM post-1x stress	3x16	3x16	--
9a	Ball + Stitch/Wedge Pull	3x3	3x3	--
9b	Ball Shear	3x3	3x3	--
10	Cross-section	3x1	3x1	1x1
11	Stress 2x	3x70	3x70	3x44
12	ATE Test[1]	3x70	3x70	3x44
13	CSAM post-2x Stress	3x16	3x16	--
14a	Ball + Stitch/Wedge Pull	3x3	3x3	--
14b	Ball Shear	3x3	3x3	--
15	Cross-section	3x1	3x1	3x1

[1] These samples were tested at the ATE in Ambient and Hot temperature.

AEC-Q006 - 16-MINI_SO_EP at UTAC (UT3) Package/Assembly Test Results

1. **Summary of the Cu Wire generic data for LT1914 (QPM#22700)**

Rel Lot Number										
AEC#	**Test**	**TC**	**HAST/THB**	**HTS**	**TC**	**HAST/THB**	**HTS**	**TC**	**HAST/THB**	**HTS**
1	Initial Sampling (T0)[1]	0/77	0/77	0/45	0/77	0/77	0/77	0/77	0/77	0/45
2	CSAM @T0	0/16	0/16	N/A	0/16	0/16	N/A	0/16	0/16	N/A
3	Preconditioning to MSLx	0/77	0/77	N/A	0/77	0/77	N/A	0/77	0/77	N/A
4	CSAM after PC	0/16	0/16	N/A	0/16	0/16	N/A	0/16	0/16	N/A
5	ATE Test[1]	0/77	0/77	0/45	0/77	0/77	0/77	0/77	0/77	0/45
6	Stress 1x	0/77	0/77	0/45	0/77	0/77	0/77	0/77	0/77	0/45
7	ATE Test[1]	0/77	0/77	0/45	0/77	0/77	0/77	0/77	0/77	0/45
8	CSAM post-1x stress	0/16	0/16	N/A	0/16	0/16	N/A	0/16	0/16	N/A
9a	Ball + Stitch/Wedge Pull	0/5	0/5	N/A	0/5	0/5	N/A	0/5	0/5	N/A
9b	Ball Shear	0/5	0/5	N/A	0/5	0/5	N/A	0/5	0/5	N/A
10	Cross-section	0/1	0/1	N/A	0/1	0/1	N/A	0/1	0/1	N/A

2. Summary of the Cu Wire generic data for LT3755 (QPM#22701)

Rel Lot Number										
AEC#	**Test**	**TC**	**HAST/THB**	**HTS**	**TC**	**HAST/THB**	**HTS**	**TC**	**HAST/THB**	**HTS**
1	Initial Sampling (T0)[1]	0/77	0/77	0/45	0/77	0/77	0/77	0/77	0/77	0/45
2	CSAM @T0	0/16	0/16	N/A	0/16	0/16	N/A	0/16	0/16	N/A
3	Preconditioning to MSLx	0/77	0/77	N/A	0/77	0/77	N/A	0/77	0/77	N/A
4	CSAM after PC	0/16	0/16	N/A	0/16	0/16	N/A	0/16	0/16	N/A
5	ATE Test[1]	0/77	0/77	0/45	0/77	0/77	0/77	0/77	0/77	0/45
6	Stress 1x	0/77	0/77	0/45	0/77	0/77	0/77	0/77	0/77	0/45
7	ATE Test[1]	0/77	0/77	0/45	0/77	0/77	0/77	0/77	0/77	0/45
8	CSAM post-1x stress	0/16	0/16	N/A	0/16	0/16	N/A	0/16	0/16	N/A
9a	Ball + Stitch/Wedge Pull	0/5	0/5	N/A	0/5	0/5	N/A	0/5	0/5	N/A
9b	Ball Shear	0/5	0/5	N/A	0/5	0/5	N/A	0/5	0/5	N/A
10	Cross-section	0/1	0/1	N/A	0/1	0/1	N/A	0/1	0/1	N/A

3. Summary of the Cu Wire generic data for LTC7000 (QPM#22702)

Rel Lot Number										
AEC#	**Test**	**TC**	**HAST/THB**	**HTS**	**TC**	**HAST/THB**	**HTS**	**TC**	**HAST/THB**	**HTS**
1	Initial Sampling (T0)[1]	0/77	0/77	0/45	0/77	0/77	0/77	0/77	0/77	0/45
2	CSAM @T0	0/16	0/16	N/A	0/16	0/16	N/A	0/16	0/16	N/A
3	Preconditioning to MSLx	0/77	0/77	N/A	0/77	0/77	N/A	0/77	0/77	N/A
4	CSAM after PC	0/16	0/16	N/A	0/16	0/16	N/A	0/16	0/16	N/A
5	ATE Test[1]	0/77	0/77	0/45	0/77	0/77	0/77	0/77	0/77	0/45
6	Stress 1x	0/77	0/77	0/45	0/77	0/77	0/77	0/77	0/77	0/45
7	ATE Test[1]	0/77	0/77	0/45	0/77	0/77	0/77	0/77	0/77	0/45
8	CSAM post-1x stress	0/16	0/16	N/A	0/16	0/16	N/A	0/16	0/16	N/A
9a	Ball + Stitch/Wedge Pull	0/5	0/5	N/A	0/5	0/5	N/A	0/5	0/5	N/A
9b	Ball Shear	0/5	0/5	N/A	0/5	0/5	N/A	0/5	0/5	N/A
10	Cross-section	0/1	0/1	N/A	0/1	0/1	N/A	0/1	0/1	N/A

4. Summary of the Cu Wire generic data for LT3752 (QPM#22705)

Rel Lot Number										
AEC#	**Test**	**TC**	**HAST/THB**	**HTS**	**TC**	**HAST/THB**	**HTS**	**TC**	**HAST/THB**	**HTS**
1	Initial Sampling (T0)[1]	0/77	0/77	0/45	0/77	0/77	0/77	0/77	0/77	0/45
2	CSAM @T0	0/16	0/16	N/A	0/16	0/16	N/A	0/16	0/16	N/A
3	Preconditioning to MSLx	0/77	0/77	N/A	0/77	0/77	N/A	0/77	0/77	N/A
4	CSAM after PC	0/16	0/16	N/A	0/16	0/16	N/A	0/16	0/16	N/A
5	ATE Test[1]	0/77	0/77	0/45	0/77	0/77	0/77	0/77	0/77	0/45
6	Stress 1x	0/77	0/77	0/45	0/77	0/77	0/77	0/77	0/77	0/45
7	ATE Test[1]	0/77	0/77	0/45	0/77	0/77	0/77	0/77	0/77	0/45
8	CSAM post-1x stress	0/16	0/16	N/A	0/16	0/16	N/A	0/16	0/16	N/A
9a	Ball + Stitch/Wedge Pull	0/5	0/5	N/A	0/5	0/5	N/A	0/5	0/5	N/A
9b	Ball Shear	0/5	0/5	N/A	0/5	0/5	N/A	0/5	0/5	N/A
10	Cross-section	0/1	0/1	N/A	0/1	0/1	N/A	0/1	0/1	N/A

5. Summary of the Cu Wire generic data for LT8603 (QPM#22711)

Rel Lot Number										
AEC#	**Test**	**TC**	**HAST/THB**	**HTS**	**TC**	**HAST/THB**	**HTS**	**TC**	**HAST/THB**	**HTS**
1	Initial Sampling (T0)[1]	0/77	0/77	0/45	0/77	0/77	0/77	0/77	0/77	0/45
2	CSAM @T0	0/16	0/16	N/A	0/16	0/16	N/A	0/16	0/16	N/A
3	Preconditioning to MSLx	0/77	0/77	N/A	0/77	0/77	N/A	0/77	0/77	N/A
4	CSAM after PC	0/16	0/16	N/A	0/16	0/16	N/A	0/16	0/16	N/A
5	ATE Test[1]	0/77	0/77	0/45	0/77	0/77	0/77	0/77	0/77	0/45
6	Stress 1x	0/77	0/77	0/45	0/77	0/77	0/77	0/77	0/77	0/45
7	ATE Test[1]	0/77	0/77	0/45	0/77	0/77	0/77	0/77	0/77	0/45
8	CSAM post-1x stress	0/16	0/16	N/A	0/16	0/16	N/A	0/16	0/16	N/A
9a	Ball + Stitch/Wedge Pull	0/5	0/5	N/A	0/5	0/5	N/A	0/5	0/5	N/A
9b	Ball Shear	0/5	0/5	N/A	0/5	0/5	N/A	0/5	0/5	N/A
10	Cross-section	0/1	0/1	N/A	0/1	0/1	N/A	0/1	0/1	N/A