Qualification Summary:

AEC TEST GROUP	STRESS TEST	AEC TEST #	TEST CONDITIONS *1	REFERENCE TEST METHOD	SAMPLE SIZE PER LOT	NUMBER OF LOTS	RESULTS	REMARKS
Group A ACCELERATED ENVIRONMENT STRESS TESTS	Preconditioning (PC)	A1	Per MSL	J-STD-020 JESD22-A113	77	3	Pass	Per MSL classification
	Temperature Humidity Bias (THB) or Biased HAST (HAST)	A2	85°C/85%RH, 1000 hrs or 130°C/85%RH, 96 hrs	JESD22-A101 or JESD22-A110	77	3	Pass	
	Autoclave (AC) or Unbiased HAST (UHAST) or Temperature Humidity Without Bias (TH)	A3	121°C/100%RH, 96 hrs or 130°C/85%RH, 96 hrs or 85°C/85%RH, 1000 hrs	JESD22-A102 or JESD22-A118 or JESD22-A101	77	3	Pass	
	Temperature Cycling (TC)	A4	Per AEC Temp Grade	JESD22-A104	77	3	Pass	
	High Temperature Storage Life (HTSL)	A6	Per AEC Temp Grade	JESD22-A103	45	1	Pass	
Group B ACCELERATED LIFETIME SIMULATION TESTS	High Temperature Operating Life (HTOL)	B1	Per AEC Temp Grade	JESD22-A108	77	3	Pass	
	Early Life Failure Rate (ELFR)	B2	Per AEC Temp Grade	AECQ100-008	800	3	Pass	
Group C PACKAGE ASSEMBLY INTEGRITY TESTS	Wire Bond Shear (WBS)	C1	-	AECQ100-001	30 bonds from minimum of 5 devices		Pass	As applicable
	Wire Bond Pull (WBP)	C2	-	MIL-STD883 Method 2011			Pass	As applicable
	Solderability (SD)	C3	-	J-STD-002	15	1	Pass	
	Physical Dimensions (PD)	C4	-	JESD22-B100 and B108	10	3	Pass	
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	-	-	-	-	-	
	Bias Temperature Instability (BTI)	D4	-	-	-	-	-	
	Stress Migration (SM)	D5	-	-	-	-	-	
Group E ELECTRICAL VERIFICATION TESTS	ESD HBM (Human Body Model)	E2	-	AECQ100-002	3	1	See Data Sheet/ Contact Us	
	ESD CDM (Charged Device Model)	E3	-	AECQ100-011	3	1	See Data Sheet/ Contact Us	
	Latch-Up (LU)	E4	-	AECQ100-004	3	1	Pass	
	Electrical Distribution (ED)	E5	-	AECQ100-009	30	3	Pass	

1. *Or equivalent JEDEC conditions*

For FIT/ MTTF estimates, visit FIT/ MTTF

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