



Texas Instruments Incorporated  
 6412 Highway 75 South, MS 805  
 Sherman, Texas 75090

**Device Qualification Report**

**SN74AHCT244**

**Reason for Qualification**      Product Redesign

Group	Rel Job#	Die Lot Number	Assy Lot Number	Date/Lot Trace Code
A	95.ACL.03004	5044143	5060031	53A00RS
B	95.ACL.03005	5044143	5060031	53A00RS
C	95.ACL.03006	5044143	5060032	53A00TS
D	96.AHCT.01008	6348796	7024013	71A0ERS

**ATTRIBUTES**

**Device Specific Info**

	Group A	Group B	Group C	Group D
Device Name	74ACT240DW	74ACT240DW	74ACT240DW	74AHCT244DW
Fab Technology	CMOS	CMOS	CMOS	CMOS

<b><u>Qualification Results</u></b>	<b>Group A</b>	<b>Group B</b>	<b>Group C</b>	<b>Group D</b>
	<b>ACT240DW</b>	<b>ACT240DW</b>	<b>ACT240DW</b>	<b>AHCT244DW</b>
	<b>Act. SS/#Fails</b>	<b>Act.SS/#Fails</b>	<b>Act. SS/#Fails</b>	<b>Act. SS/#Fails</b>
*Operating Life Static Test (150°C 5.0V,1000 Hrs)	116/0	116/0	116/0	
*THB 85%/85RH (1000 hrs)	116/0	116/0	116/0	
*Autoclave 121°C (96 hrs )	76/0	76/0	76/0	
*Temperature Cycle Test (-65 to 150°C, 1000 Cycles)	116/0	116/0	116/0	
*Storage 150°C (1000 hrs)	45/0	45/0	45/0	
X-Ray	5/0	5/0	5/0	
Manufacturability	Pass	Pass	Pass	
Physical Dimensions	Pass	Pass	Pass	
Latch-Up	5/0	5/0	5/0	
ESD - MM (200V)				3/0
ESD - HBM (1000V)				3/0
ESD - CDM (2000V)				3/0

Notes:

\* Preconditioning sequence: Level 1

- a) Storage at 125°C for 24 hours, then
- b) 85°C/85 % relative humidity for 168 hours with no bias, then
- c) Board mount (DGG, PH, PM, PN, PZ and RC packages only), then
- d) 3 cycles of a 215° C IR solder reflow simulation and a 5 minute room temp delay, then
- e) Device clean-up with an isopropyl alcohol rinse, a de-ionized water rinse and one hour 25°C drying period.

Release Date: 03/03/97

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Reliability data shows characteristic failure mechanisms of the specific environmental stress as documented in the industry standards for each stress condition.

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