

**RELIABILITY MONITOR REPORT
FOR**

CSP Package

Dallas Semiconductor

**4401 South Beltwood Parkway
Dallas, TX 75244-3292**

**This Report was prepared by
Dallas Semiconductor Reliability Engineering**

Summary:

The data in the tables that follow was generated as the result of an on-going Package Reliability Monitor. The assemblies covered by this package monitor are:

The calculated failure rate for this assembly is:

FAILURE RATE: MTTF (YRS): 28201 FITS: 4.0

The parameters used to calculate this failure rate are as follows:

Cf: 60% Ea: 0.7 B: 0 Tu: 25 °C Vu: 5.5 Volts

The reliability data follows. At the start of this data is a description of the assembly vehicle used to generate this reliability data. The next section is the detailed reliability data for each stress. The reliability data section includes the latest data available. This report covers data between 7/1/2005 and 6/30/2006.

Assembly Information:

Package Type: CSP RDL (Solder Bump) 3x3 Ay x 0.71 mm DNP
 Flammability: UL 94-V0
 Moisture Sensitivity
 (JEDEC J-STD20A) Level 1
 Date Code Range: 0528 to 0530

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP REVERSE BIAS	0530	DS2431	125C, 5.25 VOLTS	1000 HRS	80	0	
HIGH TEMP REVERSE BIAS	0530	DS2431	125C, 5.25 VOLTS	1000 HRS	80	0	
HIGH TEMP REVERSE BIAS	0530	DS2431	125C, 5.25 VOLTS	1000 HRS	80	0	
Total:						0	

PRECONDITIONING LEVEL 1

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	0528	DS2431	125C	24 HRS	154		
MOISTURE SOAK			85 C/85% R.H.	168 HRS	154		
CONVECTION REFLOW			235C +/-0C	3 PASS	154	0	
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	0528	DS2431	150C	1000 HRS	77	0	
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
TEMP CYCLE, SLOW	0528	DS2431	-40C TO +125C	1000 CYS	77	0	
TEMP CYCLE, SLOW	0530	DS2431	-40C TO +125C	2000 CYS	80	0	

TEMP CYCLE	0530	DS2431	-40C TO +125C	2000 CYS	80	0
TEMP CYCLE, SLOW			-40C TO +125C	4000 CYS	80	0
TEMP CYCLE, SLOW	0530	DS2431	-40C TO +125C	4000 CYS	80	0
Total:					0	0

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
BIASED MOISTURE	0530	DS2431	85/85, 5.5 VOLTS	1000 HRS	80	0	
BIASED MOISTURE	0530	DS2431	85/85, 5.5 VOLTS	1000 HRS	80	0	
BIASED MOISTURE	0530	DS2431	85/85, 5.5 VOLTS	1000 HRS	80	0	
Total:					0	0	

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
AUTOCLAVE	0528	DS2431	121C, 2 ATM STEAM, UNBIASED	168 HRS	77	0	
Total:					0	0	

FAILURE RATE: MTTF (YRS): 28201 FITS: 4.0