

RELIABILITY MONITOR REPORT
FOR

LQFP 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 specific assemblies included in this package monitor are:

ASSY SITE	PINS	PACKAGE		
ATK (Amkor, K)	100	LQFP	ATK (Amkor, K)	144 LQFP Exposed Pad (Pb-Free)
SCS (StatsChipPac Si	48	LQFP	SCS (StatsChipPac Si	128 LQFP (Pb-Free)

The calculated failure rate for this assembly is:

FAILURE RATE: MTTF (YRS): 33959 FITS: 3.4

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

Cf: 60% Ea: 0.7 Tu: 25 °C

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 and

Assembly Information:

Package Type: LQFP
Flammability: UL 94-V0
Date Code Range: 0644 to 0724

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	0644	DS2154	125C, 5.25 VOLTS	1000 HRS	77	0	
HIGH TEMP OP LIFE	0724	DS8007	125C, 6.0 VOLTS	1000 HRS	45	0	
			125C, 6.0 VOLTS	1000 HRS	45	0	
				Total:		0	

Assembly Information:

Package Type: LQFP (Pb-Free)
Flammability: UL 94-V0
Date Code Range: 0632 to 0710

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	0632	DS26303	125C, 3.5 VOLTS	1000 HRS	45	0	
HIGH TEMP OP LIFE	0710	DS21448	125C, 3.5 VOLTS	1000 HRS	77	0	
				Total:		0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	0710	DS21448	150C	1000 HRS	77	0	
				Total:		0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
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TEMP CYCLE	0710	DS21448	-55C TO 125C	1000	CYS	77	0
					Total:		0

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
BIASED MOISTURE	0710	DS21448	85/85, 3.5 VOLTS	1000	HRS	45	0
					Total:		0

FAILURE RATE: MTTF (YRS): 33959 FITS: 3.4