

RELIABILITY MONITOR REPORT
FOR

PLCC 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:

ASSY SITE	PINS	PACKAGE		
ATK (Amkor, K)	32	PLCC	ATK (Amkor, K)	68 PLCC
ATP (Amkor, PI)	28	PLCC	ATP (Amkor, PI)	32 PLCC
ATP (Amkor, PI)	44	PLCC	ATP (Amkor, PI)	52 PLCC
ATP (Amkor, PI)	68	PLCC	ATP (Amkor, PI)	28 PLCC (Pb-Free)
ATP (Amkor, PI)	44	PLCC (Pb-Free)	OSEP	28 PLCC
OSEP	44	PLCC	OSEP	52 PLCC
OSEP	44	PLCC (Pb-Free)		

The calculated failure rate for this assembly is:

FAILURE RATE: **MTTF (YRS): 9048** **FITS: 12.6**

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 04/01/2005 and 03/31/2006 .

Assembly Information:

Package Type: PLCC 652
Flammability: UL 94-V0
Moisture Sensitivity
(JEDEC J-STD20A) Level 3
Date Code Range: 0509 to 0509

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	0509	DS80C320	125C, 5.5 VOLTS	1000 HRS	77	0	
				Total:		0	

PRECONDITIONING LEVEL 3

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
ULTRASOUND	0509	DS80C320	J-STD-020		6	0	
STORAGE LIFE	0509	DS80C320	125C	24 HRS	241		
MOISTURE SOAK			30C/60% R.H.	192 HRS	241		
CONVECTION REFLOW			220C +5/-0C	3 PASS	241	0	
PRECONDITION U/S	0509	DS80C320	J-STD-020		4	0	
				Total:		0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	0509	DS80C320	150C	1000 HRS	50	0	
				Total:		0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
TEMP CYCLE	0509	DS80C320	-55C TO 125C	1000 CYS	50	0	
				Total:		0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HAST	0509	DS80C320	130C, 85%R.H.,5.5V	96 HRS	59	0	
				Total:		0	

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