

**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	OSEP	28 PLCC
OSEP	44	PLCC	OSEP	52 PLCC

The calculated failure rate for this assembly is:

**FAILURE RATE:**                      **MTTF (YRS): 21225**                      **FITS: 5.4**

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 10/1/03 and 9/30/04 .

**Assembly Information:**

Package Type:                      PLCC 650 mil  
 Flammability:                      UL 94-V0  
 Moisture Sensitivity  
 (JEDEC J-STD20A)                      Level 3  
 Date Code Range:                      0339                      to                      0405

**OPERATING LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	0339	DS89C450	125C, 5.5 VOLTS	1000 HRS	77	0	
HIGH TEMP OP LIFE	0347	DS87C520	125C, 5.5 VOLTS	12 HRS	1000	0	
HIGH TEMP OP LIFE	0347	DS87C520	125C, 5.5 VOLTS	988 HRS	76	0	
HIGH TEMP OP LIFE	0347	DS87C520	125C, 5.5 VOLTS	12 HRS	517	0	
HIGH TEMP OP LIFE	0405	DS80C320	125C, 5.5 VOLTS	1000 HRS	77	0	
<b>Total:</b>						<b>0</b>	

**STORAGE LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	0347	DS87C520	150C	1000 HRS	76	0	
<b>Total:</b>						<b>0</b>	

**FAILURE RATE:**                      **MTTF (YRS): 21225**                      **FITS: 5.4**