

RELIABILITY MONITOR REPORT  
FOR

**TSOP 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)	28	TSOP	ATK (Amkor, K)	32 TSOP
ATP (Amkor, PI)	28	TSOP	ATP (Amkor, PI)	32 TSOP
NSEB	28	TSOP	NSEB	32 TSOP

The calculated failure rate for this assembly is:

**FAILURE RATE:**                      **MTTF (YRS): 17987**                      **FITS: 6.3**

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 7/1/03 and 6/30/04 .

---

**Assembly Information:**

Package Type:                      TSOP 8 mm  
Flammability:                      UL 94-V0  
Moisture Sensitivity  
(JEDEC J-STD20A)                      Level 3  
Date Code Range:                      0324      to      0324

---

**OPERATING LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	0324	DS1743	125C, 5.5 VOLTS	988 HRS	77	0	
HIGH TEMP OP LIFE	0324	DS1553	125C, 5.5 VOLTS	1000 HRS	77	0	
				<b>Total:</b>		<b>0</b>	

**FAILURE RATE:**                      **MTTF (YRS): 17987**                      **FITS: 6.3**