

RELIABILITY MONITOR REPORT
FOR

TSSOP Package

Dallas Semiconductor

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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)	14	TSSOP	ATK (Amkor, K)	16 TSSOP
ATK (Amkor, K)	20	TSSOP	ATP (Amkor, PI)	14 TSSOP
ATP (Amkor, PI)	16	TSSOP	ATP (Amkor, PI)	20 TSSOP
ATP (Amkor, PI)	24	TSSOP	ATP (Amkor, PI)	28 TSSOP
ATP (Amkor, PI)	8	TSSOP	ATP (Amkor, PI)	16 TSSOP & Bump Resistor
ATP (Amkor, PI)	8	TSSOP & Bump Resistor	ATP (Amkor, PI)	8 TSSOP & Bump Resistor (Pb-Free)
ATP (Amkor, PI)	14	TSSOP (Pb-Free)	ATP (Amkor, PI)	16 TSSOP (Pb-Free)
ATP (Amkor, PI)	20	TSSOP (Pb-Free)	ATP (Amkor, PI)	24 TSSOP (Pb-Free)
ATP (Amkor, PI)	28	TSSOP (Pb-Free)	ATP (Amkor, PI)	8 TSSOP (Pb-Free)
Carsem	14	TSSOP	Carsem	16 TSSOP
Carsem	20	TSSOP	Carsem	24 TSSOP
Carsem	28	TSSOP	Carsem	8 TSSOP
Carsem	14	TSSOP & Bump Resistor	Carsem	16 TSSOP & Bump Resistor
Carsem	20	TSSOP & Bump Resistor	Carsem	8 TSSOP & Bump Resistor
Carsem	16	TSSOP & Bump Resistor (Pb-Free)	Carsem	14 TSSOP (Pb-Free)
Carsem	16	TSSOP (Pb-Free)	Carsem	20 TSSOP (Pb-Free)
Carsem	24	TSSOP (Pb-Free)	Carsem	28 TSSOP (Pb-Free)
NSEB	14	TSSOP	NSEB	16 TSSOP
NSEB	20	TSSOP	NSEB	16 TSSOP & Bump Resistor
NSEB	16	TSSOP & Bump Resistor (Pb-Free)	NSEB	14 TSSOP (Pb-Free)
NSEB	16	TSSOP (Pb-Free)	NSEB	20 TSSOP (Pb-Free)
NSEB	28	TSSOP (Pb-Free)	OSEP	14 TSSOP
OSEP	16	TSSOP	OSEP	20 TSSOP
OSEP	24	TSSOP	OSEP	28 TSSOP
OSEP	14	TSSOP (Pb-Free)	OSEP	16 TSSOP (Pb-Free)
OSEP	20	TSSOP (Pb-Free)	OSEP	24 TSSOP (Pb-Free)
OSEP	28	TSSOP (Pb-Free)		

The calculated failure rate for this assembly is:

FAILURE RATE: MTTF (YRS): 16469 FITS: 6.9

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: TSSOP 173
 Flammability: UL 94-V0
 Moisture Sensitivity
 (JEDEC J-STD20A) Level 1
 Date Code Range: 0508 to 0549

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	0508	DS2782	125C, 5.5 VOLTS	1000 HRS	77	0	

HIGH TEMP OP LIFE	0509	DS1861	125C, 5.5 VOLTS	1000 HRS	45	2	30042301
HIGH TEMP OP LIFE	0515	DS2755	125C, 5.5 VOLTS	1000 HRS	45	0	
HIGH TEMP OP LIFE	0519	DS1856	125C, 5.5 VOLTS	1000 HRS	77	0	
HIGH TEMP OP LIFE	0523	DS1859	125C, 5.5 VOLTS	1000 HRS	77	0	
HIGH TEMP OP LIFE	0536	DS2781	125C, 5.5 VOLTS	1000 HRS	77	0	
HIGH TEMP OP LIFE	0549	DS1855	125C, 5.5 VOLTS	1000 HRS	77	0	

Total: **2**

FAILURE RATE:

MTTF (YRS): 16469

FITS: 6.9