

RELIABILITY MONITOR REPORT
FOR

uSOP 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		
ATP (Amkor, PI)	10	uSOP	ATP (Amkor, PI)	8 uSOP
ATP (Amkor, PI)	10	uSOP (Pb-Free)	ATP (Amkor, PI)	8 uSOP (Pb-Free)
ATP (Amkor, PI)	8	uSOP (Pb-Free) Exposed Pad	ATP (Amkor, PI)	8 uSOP Exposed Pad
Carsem	10	uSOP	Carsem	8 uSOP
Carsem	10	uSOP (Pb-Free)	NSEB	10 uSOP
NSEB	8	uSOP	NSEB	10 uSOP (Pb-Free)
NSEB	8	uSOP (Pb-Free)	Unisem	10 uSOP
Unisem	8	uSOP	Unisem	10 uSOP (Pb-Free)
Unisem	8	uSOP (Pb-Free)	Unisem	8 uSOP (Pb-Free) Exposed Pad

The calculated failure rate for this assembly is:

FAILURE RATE: **MTTF (YRS): 18096** **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 04/01/2005 and 03/31/2006 .

Assembly Information:

Package Type: uSOP 118
Flammability: UL 94-V0
Moisture Sensitivity
(JEDEC J-STD20A) Level 1
Date Code Range: 0515 to 0515

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	0515	DS2745	125C, 5.5 VOLTS	1000 HRS	77	0	
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
TEMP CYCLE	0515	DS2745	-55C TO 125C	1000 CYS	77	0	
Total:						0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HAST	0515	DS2745	130C, 85%R.H.,5.5V	96 HRS	77	0	
Total:						0	

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
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AUTOCLAVE	0515	DS2745	121C, 2 ATM STEAM, UNBIASED	168	HRS	77	0
						Total:	0

Assembly Information:

Package Type: uSOP (Pb-Free) 118
 Flammability: UL 94-V0
 Moisture Sensitivity (JEDEC J-STD20A) Level 1
 Date Code Range: 0602 to 0602

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	0602	DS2705	125C, 5.5 V (PSA) & 0.0 V (PSB)	1000 HRS	77	0	
						Total:	0

FAILURE RATE: MTTF (YRS): 18096 FITS: 6.3