

RELIABILITY MONITOR REPORT  
FOR

**BGA Module 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)	256	MCMBGA	ATP (Amkor, PI)	300 MCMBGA
Dallas	256	BGA Module w/RRBattery	Dallas	168 BGA Module, 1 Side
Dallas	168	BGA Module, 2 Sided, Frame	Fastech	168 BGA Module, 1 Side
SCS (Stats Chippac S	256	MCMBGA	SCS (Stats Chippac S	300 MCMBGA

The calculated failure rate for this assembly is:

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 .

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**Assembly Information:**

Package Type:                    BGA Module 1063  
Flammability:                    UL 94-V0  
Moisture Sensitivity  
(JEDEC J-STD20A)                Level 3  
Date Code Range:                0549    to    0549

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**TEMPERATURE HUMIDITY BIAS**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
BIASED MOISTURE (BATTERY)	0549	DS2030W	60C/90% R.H., BATTERY BIAS	1000 HRS	97	0	
				<b>Total:</b>		<b>0</b>	