

RELIABILITY MONITOR REPORT
FOR

BGA Module 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 | 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 .

Assembly Information:

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

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 | |
| Total: | | | | | | 0 | |