



256MB DDR SDRAM PGBA MCP Construction  
W332M64V-XBX • W332M72V-XBX • W3E32M64S-XBX  
Quality and Reliability Report

## 256MB SDRAM AND DDR PBGA MULTI-CHIP PACKAGE CONSTRUCTION

### ORGANIZATIONS

- 32M x 64 SDRAM
- 32M x 72 SDRAM
- 32M x 64 DDR SDRAM
- 32M x 72 DDR SDRAM

### ENCAPSULANT

- Thickness around die = 0.015 to 0.020 typical
- The encapsulant is not injection molded to control wire sweep effects
- T<sub>G</sub> = 150°C
- Moisture sensitivity is to JEDEC level 3

### INTERPOSER MATERIAL

- CTE = 12-13 ppm / °C
- Water absorbtion = 0.13%

### BALLS

- Eutectic solder Sn63/Pb37
- Diameter = 0.762mm (0.030) Nominal

### TEST

- Burn-In - 100%-48 hours at 125°C
- Final Electrical Test - 100% at maximum and minimum ambient temperatures

#### Temperature Ranges Available:

- 55°C to +125°C
- 40°C to +85°C
- 0°C to +70°C

### SHIPPING

- Final bake out
- Shipped in JEDEC standard trays and anti-static shielded dry pack bags
- Humidity indicator cards are included
- Desiccant used in dry packs

### Qualification Information

Qual for 219 PBGA Product

Qual Test	# of Pieces	Duration	Reference Standards	Temp. Range	Results
Preconditioning	All Test Samples		EIA/JESD22 Method A113 (level 3)		Passed
Bias Life Test	15	1000 hrs.	EIA/JESD22 Method A108	125°C	15 Passed
Temperature Cycle	15	1000 cycles	EIA/JESD22 Method A104 Condition C	-65°C to +150°C	15 Passed
85/85 Bias	15	1000 hrs.	EIA/JESD22 Method 101	85°C	15 Passed

( Per Reliability Report  
200 A 0004-X )