



POWER PC™ MCP CONSTRUCTION  
 WED3C750A8M-200-BX • WED3C7558M-300-BX  
 Quality and Reliability Report

## POWER PC™ MULTI-CHIP PACKAGE CONSTRUCTION

### HIGH RELIABILITY FLIP CHIP ATTACH

- C4 Assembly on PowerPC™ Processors and SSRAM die
- JEDEC Level 2 underfill
- Die Thickness
- Processor - 0.029 Inches
- SSRAM - 0.019 Inches

### INTERPOSER MATERIAL

- Multilayer Ceramic, Al<sub>2</sub>O<sub>3</sub>
- 21 X 25 mm CBGA

### BALLS

- Solder Sn46/Pb46/Bi8
- Diameter = 0.835mm (0.032 ) Typical
- 255 Balls in 16 x 16 array (minus one for optical placement), 21mm x 21mm array.
- 1.27 mm pitch

### 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

- Shipped in JEDEC standard trays and anti-static shielded bags

## QUALIFICATION INFORMATION

| Qual for 255 PBGA Product |                  |             |                                       |                 |         |
|---------------------------|------------------|-------------|---------------------------------------|-----------------|---------|
| Qual Test                 | # of Pieces      | Duration    | Reference Standards                   | Temp. Range     | Results |
| Preconditioning           | All Test Samples |             | EIA/JESD22 Method A113                |                 | Pass    |
| 755 Bias Life Test        | 15 pcs           | 184 hrs.    | EIA/JESD22 Method A108                | 150°C           | Pass    |
| 750 Bias Life Test        | 15 pcs           | 184 hrs.    |                                       | 150°C           | Pass    |
| Temperature Cycle         | 15 pcs           | 1000 cycles | EIA/JESD22 Method A104<br>Condition C | -65°C to +150°C | Pass    |
| 85/85 Bias                | 15 pcs           | 1000 hrs.   | EIA/JESD22 Method 101                 |                 | Pass    |

( Per Reliability Reports  
 200A0004-4  
 200A0004-5  
 200A0004-10 )

\*PowerPC™ is a trademark of International Business Machines Corporation