



PBGA MCP Construction WEDPN16 Quality and Reliability Report

PBGA MULTI-CHIP PACKAGE CONSTRUCTION

ENCAPSULANT

- Thickness around die = 0.015 to 0.020 typical
- The encapsulant is not injection molded to control wire sweep effects
- $T_G = 150^\circ\text{C}$
- Moisture sensitivity is to JEDEC level 3

INTERPOSER MATERIAL

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

BALLS

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

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		Pass
16M x 72 Bias Life Test	15	1000 hrs.	EIA/JESD22 Method A108	125°C	15 Pass
Temperature Cycle	15	1000 cycles	EIA/JESD22 Method A104 Condition C	-65°C to +150°C	15 Pass
85/85 Bias	15	1000 hrs.	EIA/JESD22 Method 101	85°C	15 Pass