



*(Green) LBGA Package RELIABILITY QUALIFICATION REPORT SUMMARY*

<b>Technology Description</b>	<b>Green (Lead and Halide Free) Low Profile Ball Grid Array, 121, 144 pin counts</b>
<b>Qualification Vehicle</b>	<b>144LBGA</b>

<b><u>eLQFP Package Information</u></b>	
<b>UL flammability class</b>	<b>UL 94 V-0 &amp; <math>\geq</math> 28%</b>
<b>Substrate Material</b>	<b>BT-CORE</b>
<b>Die Attach</b>	<b>Sumitomo CRM-1560 and Hysol QMI-536</b>
<b>Mold compound</b>	<b>Sumitomo EME-G760</b>
<b>Bond Wire</b>	<b>Gold</b>
<b>Solder Ball</b>	<b>Sn/Ag/Cu</b>

<b><u>Factory Locations</u></b>	
<b>Wafer Fabrications</b>	<b>UMCTW</b>
<b>Assembly</b>	<b>ASE, Chung Li</b>
<b>Final Test</b>	<b>ASE, Malaysia</b>

<b><u>Availability</u></b>	
<b>Samples:</b>	<b>Yes</b>
<b>Production:</b>	<b>Yes</b>



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<b>Green Package Qualification Stress Tests</b>	<b>#fails/#samples</b>
<b>Preconditioning Jedec Moisture Sensitivity Level 3 with IR reflow at 260 +/- 5°C</b>  (Prior to Temperature Cycle)	0/150
<b>Temperature Cycle (-65°C/+150°C)</b>	0/150 for 100 cycles
<b>Autoclave (100 %R.H./2 ATM, 121°C, 96 hrs)</b>	0/150
<b>Assembly Yield</b>	Equivalent to Standard Material set.
<b>Construction Analysis</b>	Complete / Pass

**Qualification Date: August 9, 2004**

**For information on Tin Whiskers, visit the Legerity Green web page at:**

<http://www.legerity.com/public.php?p=green>

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