(Green) T/eTQFP Package RELIABILITY QUALIFICATION REPORT SUMMARY

Technology Description	**Green (Lead and Halide Free) Thin Quad Flat Pack, Gull-wing lead shape, 44, 64, 80 and 128 pin counts**
Qualification Vehicle	**44TQFP** **128TQFP**

TQFP Package Information	
UL flammability class **Lead Frame Material** **Die Attach** **Mold compound** **Bond Wire** **Lead Finish**	**UL 94 V-0 & ≥ 28%** **Copper** **Sumitomo CRM 1076DS** **Hitachi CEL 9220HFA** **Gold** **Matte Tin (Sn)**

Factory Locations	
Wafer Fabrications	**CSM** **UMCTW** **SONY** **AMD**
Assembly	**ASE, Malaysia**
Final Test	**ASE, Malaysia**

Availability	
Samples: **Production:**	**Yes** **Yes**

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Green Package Qualification Stress Tests	#fails/#samples
Preconditioning Jedec Moisture Sensitivity Level 3 with IR reflow at 260 +/- 5°C (Prior to Temperature Cycle and Temperature Humidity Bias)	**0/360**
THB (85 °C / 85%RH)	**0/90 for 168 hrs** **0/90 for 500 hrs**
Temperature Cycle (-65°C/+150°C, 500 cycles)	**0/254**
Autoclave (100 %R.H./2 ATM, 121°C, 96 hrs)	**0/235**
Solderability	**0/20**
Assembly Yield	**Equivalent to Standard Material set.**
Construction Analysis	**Complete / Pass**

Qualification Date: July 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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