



Revision: 1.0
Date: 11-Mar-05

Statement of Materials, Construction

Lead-free -- 64L-MQFP -- TABLE OF MATERIAL DECLARATION								
No.	Component Name	Material Name	Component Weight (grams)	Materials Analysis (Element/Compound)	CAS Number	Material Mass (grams)	Material Weight % (of Total Pkg.)	Material Weight % (of Component)
1	Leadframe	Copper alloy	0.22892	Cu	7440-50-8	0.215986	22.311	94.35
				Fe	7439-89-6	0.000458	0.047	0.20
				Zn	7440-32-6	0.002289	0.236	1.00
				Pb	7439-92-1	0.000114	0.012	0.05
				Ni	7440-02-0	0.007325	0.757	3.20
				Mn	7439-96-5	0.000229	0.024	0.10
				Si	7440-21-3	0.001660	0.171	0.725
				Ag (spot plating)	7440-22-4	0.000458	0.047	0.200
2	Die	Silicon Chip	0.01983	Si	7440-21-3	0.019731	2.038	99.5
				Mg	7439-95-4	0.000401	0.041	0.175
3	Die Attach Material	Conductive epoxy	0.01600	Epoxy Resin	Proprietary	0.0024	0.248	15
				Ag	7440-22-4	0.012720	1.314	79.5
				Aromatic Amine	Proprietary	0.000880	0.091	5.5
4	Wire	Gold	0.0133	Au	7440-57-5	0.013299	1.374	99.99
5	Lead Finish	Alloy	0.0144	Sn	7440-31-5	0.0144	1.488	100
6	Encapsulation	Epoxy Resin	0.6756	Fused Silica	60676-86-0	0.57426	59.321	85
				Epoxy Cresol Novalac	29690-82-2	0.054048	5.583	8
				Phenol Novalac	9003-35-4	0.03378	3.489	5
				Antimony Trioxide	1309-64-4	0.013512	1.396	2
Total Package weight			0.96805					

Note: Composition derived from MSDS and material C of C from Vendors;
Component Weight based on assembly of generic parts.

Conclusion:

The analysis table above shows that this package meets the following RoHS requirements for EACH PACKAGE COMPONENT (mold compound, lead frame, etc.)

	Maximum Allowable Limit (ppm)	Maximum Allowable Limit (wt %)
Lead*	1000 ppm	0.10%
Mercury	1000 ppm	0.10%
Cadmium	100 ppm	0.01%
Hexavalent Chromium	1000 ppm	0.10%
Polybrominated Biphenyls (PBB)	1000 ppm	0.10%
Polybrominated Biphenylethers (PBDE)	1000 ppm	0.10%

* Lead is allowed up to 4% as an alloying agent in copper-based alloys