



Revision: 1.0
Date: 4-Mar-05

Statement of Materials, Construction

LEAD-FREE -- 44L MQFP 14x14 -- 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	0.16700	Cu	7440-50-8	0.157565	21.19	94.350
				Fe	7439-89-6	0.000334	0.04	0.200
				Zn	7440-32-6	0.001670	0.22	1.000
				Pb	7439-92-1	0.000084	0.01	0.050
				Ni	7440-02-0	0.005344	0.72	3.200
				Mn	7439-96-5	0.000167	0.02	0.100
				Si	7440-21-3	0.001211	0.16	0.725
		Ag	7439-95-4	0.000334	0.04	0.200		
2	Die	Silicon Chip	0.004700	Si	7440-21-3	0.004677	3.95	99.5
3	Die Attach Material	Conductive Epoxy	0.00150	Epoxy Resin	Proprietary	0.000225	0.40	15.000
				Ag	7440-22-4	0.0011925	2.05	79.500
				Aromatic Amine	Proprietary	0.0000825	0.15	5.500
4	Wire	Gold	0.00220	Au	7440-57-5	0.003670	0.37	99.99
5	Lead Finish	Alloy	0.00240	Sn	7440-31-5	0.0608	5.58	100%
6	Encapsulation	Epoxy Resin	0.28600	Fused Silica	60676-86-0	0.2431	54.73	85.000
				Epoxy Cresol Novalac	29690-82-2	0.024310	5.54	8.500
				Phenol Novalac	9003-35-4	0.0143	3.22	5.000
				Antimony Trioxide	1309-64-4	0.00572	1.29	2.000
Total Package weight			0.46380					

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 Lin	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