



Revision: 1.1
Date: 5-Mar-05

Statement of Materials, Construction

LEAD-FREE -- 38L-QFN -- 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	Ag Plated Cu	0.03834	Cu	7440-50-8	0.03729	38.1944	97.24
				Fe	7439-89-6	0.00090	0.9206	2.34
				Zn	7440-66-6	0.00005	0.0470	0.12
				P	7723-14-0	0.00001	0.0118	0.03
				Silver (plating)	7440-22-4	0.00010	0.1047	0.27
2	Die	Silicon Chip	0.00208	Si	7440-21-3	0.00208	2.1298	99.50
3	Die Attach Material	Conductive Epoxy	0.00019	Silver	7440-22-4	0.00014	0.1482	75
				Epoxy Resin	Proprietary	0.00003	0.0296	15
				Amine	Proprietary	0.00001	0.0065	3.3
				Gamma Butyrolactone	96480	0.00001	0.0065	3.3
				Metal Oxide	Proprietary	0.00001	0.0065	3.3
4	Wire	Gold	0.00009	Au	7440-57-5	0.00009	0.0939	99.99
5	Lead Finish	Tin	0.00152	Sn	7440-31-5	0.00152	1.5561	100
6	Encapsulation	Epoxy Resin	0.05539	Silica Fused	60676-86-0	0.04985	51.0699	90
				Epoxy Resin	Proprietary	0.00277	2.8372	5
				Phenol Resin	Proprietary	0.00194	1.9861	3.5
				Carbon Black	1333-86-4	0.00028	0.2837	0.5
				Brominated Epoxy Resin	40039-93-8	0.00001	0.55	0.5
				Antimony trioxide	1309-64-4	0.00001	0.50	0.5
Total Package weight			0.09762					

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