



Revision: 1.0
Date: 8-Jul-08

Statement of Materials, Construction

LEAD-FREE -- 128L LQFP -- 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 (with silver plating)	0.45670	Cu	7440-50-8	0.43843	37.51	96.00
				Mg	7439-95-4	0.00069	0.06	0.15
				Ni	7440-02-0	0.01370	1.17	3.00
				Si	7440-21-3	0.00297	0.25	0.65
				Silver Plating	7440-22-4	0.00091	0.08	0.20
2	Die	Silicon Chip	0.07120	Si	7440-21-3	0.07119	6.09	99.99
3	Die Attach Material	Conductive Epoxy	0.00830	Silver (Ag)	7440-22-4	0.00631	0.54	76.00
				Epoxy Resin	Proprietary	0.00046	0.04	5.50
				Diester Resin	Proprietary	0.00087	0.07	10.50
				Functionalized Urethane	Proprietary	0.00066	0.06	8.00
4	Wire	Gold	0.00430	Au	7440-57-5	0.00430	0.37	99.99
5	Lead Finish	Tin	0.01350	Sn	7440-31-5	0.01350	1.16	100
6	Encapsulation	Epoxy Resin	0.61480	Fused Silica	60676-86-0	0.50106	42.87	81.50
				Epoxy Resin	Proprietary	0.06148	5.26	10.00
				Phenol Resin	Proprietary	0.04918	4.21	8.00
				Carbon Black	1333-86-4	0.00307	0.26	0.50
Total Package Weight =			1.16880					

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