



**Statement of Materials, Construction**

**Revision:** 1.1  
**Date:** 5-Mar-05

LEAD-FREE -- 32L-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	0.03312	Cu	7440-50-8	0.03220	52.34	97.213
				Fe	7439-89-6	0.00078	1.27	2.35
				P	7723-14-0	0.00003	0.04	0.0825
				Pb	7439-92-1	0.00001	0.02	0.03
				Silver (plating)	7440-22-4	0.00007	0.11	0.2
				Zn	7440-66-6	0.00004	0.07	0.125
2	Die	Silicon Chip	0.00201	Si	7440-21-3	0.00200	3.25	99.5
3	Die attach	Conductive Epoxy	0.00082	Proprietary Acrylates	Proprietary	0.00008	0.13	10.0
				Silver	7440-22-4	0.00066	1.07	80.0
				Proprietary Bismaleimide	Proprietary	0.00003	0.05	4.0
				Methacrylate Ester	Proprietary	0.00003	0.05	4.0
				Proprietary Polymer	Proprietary	0.00002	0.03	2.0
4	Wire	Gold	0.00072	Au	7440-57-5	0.0007199	1.17	99.99
5	Lead Finish	Tin	0.00036	Sn	7440-31-5	0.0003600	0.59	100
6	Encapsulation	Epoxy Resin	0.02449	Fused Silica ( 75-95)	60676-86-0	0.02155	35.03	88
				Epoxy resin (4-10)	Proprietary	0.00171	2.79	7
				Phenol resin (1-6)	Proprietary	0.00086	1.39	3.5
				Carbon Black (0.1-0.5)	1333-86-4	0.00012	0.20	0.5
				Brominated Epoxy Resin (0.1-1.0)	40039-93-8	0.00012	0.20	0.50
				Antimony trioxide (0.1-0.9)	1309-64-4	0.00012	0.20	0.5
Total Package weight			0.06152					

**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