



## Device Material Content

5555 NE Moore Ct.  
Hillsboro OR 97124  
(503) 268-8000

**Package: 32 QFN with SnPb Plating**  
**Total Device Weight 0.06 Grams**

February, 2004	% of Total Pkg. Wt.	Weight (g)	% of Total Pkg. Wt.	Weight (g)	Substance	CAS #	Notes / Assumptions:
<b>Die</b>	4.59%	0.003			Silicon	7440-21-3	Die size: 2.10 x 2.15 mm
<b>Mold</b>	46.02%	0.027	39.01%	0.0227	Silica Fused	60676-86-0	Mold Compound Density between 1.7 and 2.1 grams/cc
			3.45%	0.0020	Epoxy Resin	129915-35-1	75 to 95% Fused Silica (LSC uses 84.75% in our calculation)
			3.45%	0.0020	Phenol Resin	26834-02-6	5 to 10% Epoxy Resin (LSC uses 7.5% in our calculation)
			0.12%	0.00007	Carbon Black	1333-86-4	5 to 10% Phenol Resin (LSC uses 7.5% in our calculation)
							0.1 to 0.5% Carbon Black (LSC uses 0.25% in our calculation)
<b>D/A Epoxy</b>	0.79%	0.00046			Silver filled epoxy	7440-22-4	Die attach epoxy Density: 4 grams/cc
							(silver content: 60-100%)
<b>Wire</b>	0.81%	0.00047			Gold (Au)	7440-57-5	1.00 mil diameter; 1 wire per package lead; wire length 1.5 mm
<b>Lead Plating</b>	2.14%	0.0012	1.82%	0.0011	Tin (Sn)	7440-31-5	Plating is 85% Sn, 15% Pb; thickness is 0.015mm
			0.32%	0.0002	Lead (Pb)	7439-92-1	
<b>Leadframe</b>	45.65%	0.027	44.48%	0.026	Copper (Cu)	7440-50-8	Leadframe thickness is nominal (per Case Outline)
			1.10%	0.0006	Iron (Fe)	7439-89-6	96 to 99% Cu (LSC uses 97.45% in our calculation)
			0.05%	0.00003	Zinc (Zn)	7440-66-6	2 to 2.8% Fe (LSC uses 2.4% in our calculation)
			0.01%	0.00001	Phosphorus (P)	7723-14-0	0.08 to 0.16% Zn (LSC uses 0.12% in our calculation)
							0.01 to 0.05% P (LSC uses 0.03% in our calculation)

**Notes:**

The values listed above are nominal values based on studies of representatives of this particular package type, and are believed to be as accurate as possible.

Constituent substances and proportions in epoxy materials are before curing.

The information provided above is representative of the package as of the date listed, and is subject to change at any time.

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