



## Device Material Content

5555 NE Moore Ct.  
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**Package: 84 PLCC with Matte Sn Plating**  
**Total Device Weight 7.21 Grams**

August, 2008	% of Total Pkg. Wt.	Weight (g)	% of Total Pkg. Wt.	Weight (g)	Substance	CAS #	Notes / Assumptions:
<b>Die</b>	0.20%	0.014			Silicon chip	7440-21-3	Die size: 3.38 x 3.54 mm
<b>Mold</b>	85.92%	6.195	75.35%	5.433	Silica Fused	60676-86-0	Mold Compound Density between 1.8 and 2.0 grams/cc 75 to 95% Silica Fused (LSC uses 87.7% in our calculation) 2 to 8% Epoxy Resin (LSC uses 5% in our calculation). 3 to 8% Phenol Resin (LSC uses 5% in our calculation). 0 to 3% Epoxy Cresol Novolac (LSC uses 2% in our calculation). 0.1 to 0.5% Carbon black (LSC uses 0.3% in our calculation)
			4.30%	0.310	Epoxy Resin	-	
			4.30%	0.310	Phenol Resin	-	
			1.72%	0.124	Epoxy Cresol Novolac	9003-35-4	
			0.26%	0.019	Carbon black	1333-86-4	
<b>D/A Epoxy</b>	0.02%	0.0012	0.01%	0.0010	Silver (Ag)	7440-22-4	Die attach epoxy Density: 4 grams/cc Silver content: 60-100% (LSC uses 80% in our calculation)
			0.00%	0.0002	other	-	
<b>Wire</b>	0.05%	0.004			Gold (Au)	7440-57-5	1.0 mil wire diameter; 1 wire for each package lead; wire length 3 mm
<b>Lead Plating</b>	0.43%	0.031			Tin (Sn)	7440-31-5	Plating is 100% Sn; thickness is >10.2um
<b>Leadframe</b>	13.39%	0.965	13.185%	0.951	Copper (Cu)	7440-50-8	Leadframe thickness is nominal (per Case Outline) Cu (LSC uses 98.5% in our calculation) 0 to 2.35% Fe (LSC uses 1.25% in our calculation) 0 to 0.07% P (LSC uses 0.03% in our calculation) 0.12 to 0.15% Zn (LSC uses 0.14% in our calculation) 0 to 0.15% Zr (LSC uses 0.08% in our calculation)
			0.167%	0.0121	Iron (Fe)	7439-89-6	
			0.004%	0.0003	Phosphorus (P)	7723-14-0	
			0.019%	0.0014	Zinc (Zn)	7440-66-6	
			0.011%	0.0008	Zirconium (Zr)	7440-67-7	

**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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