



Device Material Content

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Package: 208 PQFP with SnPb Plating
Total Device Weight 5.70 Grams

MSL: 3
Peak Reflow Temp: 225°C

August, 2008	% of Total Pkg. Wt.	Weight (g)	% of Total Pkg. Wt.	Weight (g)	Substance	CAS #	Notes / Assumptions:
Die	1.79%	0.102			Silicon chip	7440-21-3	Die size: 7.4 x 9.3 mm
Mold	89.33%	5.092	78.34%	4.465	Silica Fused	60676-86-0	Mold Compound Density varies between 1.7 and 2.3 grams/cc 75 to 95% Silica Fused (LSC uses 87.7% in our calculation) 4 to 10% Epoxy Resin (LSC uses 7% in our calculation). 2 to 8% Phenol Resin (LSC uses 5% in our calculation). 0.1 to 0.5% Carbon black (LSC uses 0.3% in our calculation)
			6.25%	0.356	Epoxy Resin	-	
			4.47%	0.255	Phenol Resin	-	
			0.27%	0.015	Carbon black	1333-86-4	
D/A Epoxy	0.12%	0.007	0.10%	0.006	Silver-filled Epoxy	7440-22-4	Die attach epoxy Density: 4 grams/cc (silver content: 70-90%; LSC uses 80% in our calculation)
			0.02%	0.001	Silver (Ag) other	-	
Wire	0.11%	0.006			Gold (Au)	7440-57-5	1.0 mil wire diameter; 1 wire for each package lead; wire length 3 mm
Lead Plating	0.56%	0.032	0.47%	0.027	Tin (Sn)	7440-31-5	Nominal: 85% Sn, 15% Pb Thickness is 0.015mm
			0.08%	0.005	Lead (Pb)	7439-92-1	
Leadframe	8.10%	0.462	7.79%	0.444	Copper (Cu)	7440-50-8	Leadframe thickness is nominal (per Case Outline) 96.2% Cu 3.0% Ni 0.65% Si 0.15% Mg
			0.24%	0.0138	Nickel (Ni)	7440-02-0	
			0.05%	0.003	Silicon (Si)	7440-21-3	
			0.01%	0.0007	Magnesium (Mg)	7439-95-4	

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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