



Device Material Content

5555 NE Moore Ct.
Hillsboro OR 97124
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Package: 20 PDIP with SnPb Plating
Total Device Weight 1.34 Grams

August, 2008	% of Total Pkg. Wt.	Weight (g)	% of Total Pkg. Wt.	Weight (g)	Substance	CAS #	Notes / Assumptions:
Die	0.70%	0.009			Silicon chip	7440-21-3	Die size: 3.0 x 2.7 x 0.50 mm.
Mold	69.93%	0.937	59.93%	0.803	Silica Fused	60676-86-0	Mold Compound Density between 1.7 and 1.9 grams/cc 75 to 95% Silica Fused (LSC uses 85.7% in our calculation) 2 to 8% Epoxy Resin (LSC uses 6% in our calculation) 2 to 8% Phenol Resin (LSC uses 6% in our calculation) 1 to 3% Cresol Novolac Epoxy (LSC uses 2% in our calculation). 0.1 to 0.5% Carbon black (LSC uses 0.3% in our calculation)
			4.20%	0.056	Epoxy Resin	-	
			4.20%	0.056	Phenol Resin	-	
			1.40%	0.019	Epoxy, Cresol Novolac	29690-82-2	
			0.21%	0.003	Carbon black	1333-86-4	
D/A Epoxy	0.06%	0.001	0.05%	0.0007	Silver-filled Epoxy	7440-22-4	Die attach epoxy Density: 4 grams/cc (silver content: 60-100%; LSC uses 80% in our calculation)
			0.01%	0.0002	Silver (Ag) other	-	
Wire	0.06%	0.001			Gold (Au)	7440-57-5	1.2 mil wire diameter; 1 wire for each package lead; wire length 3 mm
Lead Plating	2.20%	0.030	1.87%	0.025	Tin (Sn)	7440-31-5	Nominal: 85% Sn, 15% Pb Thickness is 0.015mm
			0.33%	0.004	Lead (Pb)	7439-92-1	
Leadframe	27.03%	0.362	26.35%	0.353	Copper (Cu)	7440-50-8	Leadframe thickness is nominal (per Case Outline). 97.46% Cu 2.35% Fe 0.12% Zn 0.07% P
			0.64%	0.009	Iron (Fe)	7439-89-6	
			0.03%	0.0004	Zinc (Zn)	7440-66-6	
			0.02%	0.0003	Phosphorus (P)	7723-14-0	

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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