Device Material Content

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

Package: **28 PDIP** **with Matte Sn Plating**
Total Device Weight **2.35** **Grams**

August, 2008	**% of Total Pkg. Wt.**	**Weight (g)**	**% of Total Pkg. Wt.**	**Weight (g)**	**Substance**	**CAS #**	**Notes / Assumptions:**
Die	0.44%	0.010			Silicon chip	7440-21-3	Die size: 3.3 x 2.7 x 0.50 mm
Mold	77.00%	1.810					Mold Compound Density between 2.0 and 2.2 grams/cc
			65.99%	1.551	Silica Fused	60676-86-0	75 to 95% Silica Fused (LSC uses 85.7% in our calculation)
			4.62%	0.109	Epoxy Resin	-	2 to 8% Epoxy Resin (LSC uses 6% in our calculation).
			4.62%	0.109	Phenol Resin	-	2 to 8% Phenol Resin (LSC uses 6% in our calculation)
			1.54%	0.036	Epoxy, Cresol Novolac	29690-82-2	1 to 3% Cresol Novolac Epoxy (LSC uses 2% in our calculation).
			0.23%	0.005	Carbon black	1333-86-4	0.1 to 0.5% Carbon black (LSC uses 0.3% in our calculation)
D/A Epoxy	0.04%	0.0009			Silver-filled epoxy		
			0.03%	0.0007	Silver (Ag)	7440-22-4	Die attach epoxy Density: 4 grams/cc
			0.01%	0.0002	other	-	(silver content: 60-100%; LSC uses 80% in our calculation)
Wire	0.03%	0.0008			Gold (Au)	7440-57-5	1.00 mil diameter; 1 wire per package lead; wire length 3 mm
Lead Plating	1.64%	0.038			Tin (Sn)	7440-31-5	Plating is 100% Sn; thickness is 0.015mm
Leadframe	20.85%	0.490					Leadframe thickness is nominal (per Case Outline)
			20.32%	0.477	Copper (Cu)	7440-50-8	97.46% Cu
			0.49%	0.012	Iron (Fe)	7439-89-6	2.35% Fe
			0.03%	0.0006	Zinc (Zn)	7440-66-6	0.12% Zn
			0.01%	0.0003	Phosphorus (P)	7723-14-0	0.07% P

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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