



Device Material Content

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Package: 100 TQFP (1.4mm) with matte Sn Plating
Total Device Weight 0.65 Grams

Halogen Free
MSL: 3
Peak Reflow Temp: 260°C

November, 2010	% of Total Pkg. Wt.	Weight (g)	% of Total Pkg. Wt.	Weight (g)	Substance	CAS #	Notes / Assumptions:
Die	3.61%	0.023			Silicon chip	7440-21-3	Die size: 4.30 x 6.50 mm
Mold	74.44%	0.484	63.27%	0.411	Silica Fused	60676-86-0	Mold Compound Density between 1.7 and 2.1 grams/cc 75 to 95% (LSC uses 85% in our calculation)
			4.47%	0.029	Epoxy Resin	-	3 to 10% (LSC uses 6% in our calculation)
			3.72%	0.024	Phenol Resin	-	2 to 8% (LSC uses 5% in our calculation)
			0.30%	0.002	Carbon black	1333-86-4	0.1 to 0.5% (LSC uses 0.4% in our calculation)
			2.68%	0.017	Other (trade secret)	-	0 to 5% (LSC uses 3.6% in our calculation)
D/A Epoxy	0.44%	0.003	0.35%	0.002	Silver (Ag)	7440-22-4	Die attach epoxy Density: 4 grams/cc
			0.09%	0.001	other	-	(silver content: 70-90%; LSC uses 80% in our calculation)
Wire	0.45%	0.003			Gold (Au)	7440-57-5	0.8 to 1.0 mil diameter; 1 wire per package lead; wire length 3 mm
Lead Plating	1.83%	0.012			Tin (Sn)	7440-31-5	Plating is 100% Sn; thickness is 0.015mm
Leadframe	19.23%	0.125	18.50%	0.1203	Copper (Cu)	7440-50-8	Leadframe thickness is nominal (per Case Outline)
			0.577%	0.0038	Nickel (Ni)	7440-02-0	96.2% Cu
			0.125%	0.0008	Silicon (Si)	7440-21-3	3% Ni
			0.029%	0.00019	Magnesium (Mg)	7439-95-4	0.65% Si
							0.15% Mg

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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