



Device Material Content

5555 NE Moore Ct.
Hillsboro OR 97124
custreg@lsc.com

Package: 44 TQFP (1.4mm) with matte Sn Plating
Total Device Weight 0.34 Grams

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

August, 2012	% of Total Pkg. Wt.	Weight (g)	% of Total Pkg. Wt.	Weight (g)	Substance	CAS #	Notes / Assumptions
Die	1.55%	0.0053			Silicon chip	7440-21-3	Die size: 2.1 x 3.0 mm
Mold	77.04%	0.2619	65.49%	0.2227	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) 3 to 10% (LSC uses 6% in our calculation) 2 to 8% (LSC uses 5% in our calculation) 0.1 to 0.5% (LSC uses 0.4% in our calculation) 0 to 5% (LSC uses 3.6% in our calculation)
			4.62%	0.0157	Epoxy Resin	-	
			3.85%	0.0131	Phenol Resin	-	
			0.31%	0.0010	Carbon black	1333-86-4	
			2.77%	0.0094	Other (trade secret)	-	
D/A Epoxy	0.19%	0.0006	0.151%	0.0005	Silver (Ag)	7440-22-4	(silver content: 70-90%; LSC uses 80% in our calculation) Die attach epoxy Density: 4 grams/cc
			0.038%	0.0001	Esters & resins	-	
Wire	0.38%	0.0013			Gold (Au)	7440-57-5	0.8 to 1.0 mil diameter; 1 wire per package lead; wire length 3 mm
Leadframe Plating	2.08%	0.0071			Tin (Sn)	7440-31-5	Plating is 100% Sn; thickness is 0.015mm
Leadframe	18.76%	0.0638	18.05%	0.0614	Copper (Cu)	7440-50-8	C7025 96.2% Cu 3% Ni 0.65% Si 0.15% Mg
			0.56%	0.0019	Nickel (Ni)	7440-02-0	
			0.122%	0.00041	Silicon (Si)	7440-21-3	
			0.03%	0.00010	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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