Device Material Content

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Package: 84 QFN with matte Sn Plating
Total Device Weight 0.110 Grams

Halogen-Free
MSL: 1
Peak Reflow Temp: 260°C

August, 2012	% of Total Pkg. Wt.	Weight (g)	% of Total Pkg. Wt.	Weight (g)	Substance	CAS #	Notes / Assumptions:
Die	1.08%	0.0012			Silicon chip	7440-21-3	Die size: 58 x 55 mils
Mold	45.69%	0.0526					Mold Compound: G770HJ
			41.44%	0.04558	Silica (fused)	60676-86-0	85 to 95% Fused silica filler (LSC uses 90.7% in our calculation)
			1.37%	0.00151	Epoxy Resin A	Trade Secret	1 to 5% Epoxy resin A (LSC uses 3% in our calculation)
			0.69%	0.00075	Epoxy Resin B	Trade Secret	0.5 to 2.5% Epoxy resin B (LSC uses 1.5% in our calculation)
			1.37%	0.00151	Phenol Resin	Trade Secret	1 to 5% Phenol resin (LSC uses 3% in our calculation)
			0.69%	0.00075	Metal Hydroxide	Trade Secret	0.5 to 2.5% Metal Hydroxide (LSC uses 1.5% in our calculation)
			0.14%	0.00015	Carbon Black	1333-86-4	0.1 to 0.5% Carbon Black (LSC uses 0.3% in our calculation)
D/A Tape	0.05%	0.00006					TAPE FH-900T-25_HR9004
			0.008%	0.00001	Epoxy Resin	Trade Secret	10 to 20% (LSC uses 15% in our calculation)
			0.008%	0.00001	Phenol Resin	Trade Secret	10 to 20% (LSC uses 15% in our calculation)
			0.000%	0.00000	SiO2 Filler	Trade Secret	1 to 10% (LSC uses 2.75% in our calculation)
			0.035%	0.00004	(Meta)Acrylic Copolymer	Trade Secret	65 to 75% (LSC uses 67.25% in our calculation)
Wire	0.68%	0.00074					EX1 0.8MIL Pd COATED Cu
			0.659%	0.00072	Copper (Cu)	7440-50-8	97.30%
			0.018%	0.00002	Palladium (Pd)	7440-05-3	2.70%
Plating	4.50%	0.00495			Tin (Sn)	7440-31-5	100% Matte Sn
Leadframe	48.00%	0.0528					C7025
			45.90%	0.05049	Copper (Cu)	7440-50-8	
			1.536%	0.00169	Nickel	7440-02-0	2.2 to 4.2%
			0.348%	0.00038	Silicon	7440-21-3	0.25 to 1.2%
			0.084%	0.00009	Magnesium	7439-95-4	0.05 to 0.30%
			0.091%	0.00010	Silver	7440-22-4	<0.2%
			0.043%	0.00005	Conducting salts	Trade Secret	<0.1%

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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Rev. A