Device Material Content

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

Copper Bond Wire Version
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	3.61%	0.0234			Silicon chip	7440-21-3	Die size: 4.30 x 6.50 mm
Mold	74.68%	0.4854					Mold Compound Density between 1.87 and 2.17 grams/cc
			63.48%	0.4126	Silica Fused	60676-86-0	82 to 94% Silica Fused (LSC uses 86.8% in our calculation)
			4.48%	0.0291	Epoxy Resin	-	1.5 to 11% Epoxy Resin (LSC uses 8% in our calculation).
			3.73%	0.0243	Phenol Resin	-	3 to 6% Phenol Resin (LSC uses 4% in our calculation).
			0.30%	0.0019	Other (trade secret)	-	2% (max) Other (LSC uses 1% in our calculation)
			2.69%	0.0175	Carbon black	1333-86-4	0.2% (typical) Carbon black (LSC uses 0.2% in our calculation)
D/A Epoxy	0.44%	0.0028					
			0.35%	0.0023	Silver (Ag)	7440-22-4	Die attach epoxy Density: 3 grams/cc
			0.09%	0.0006	other	-	(silver content: 70-90%; LSC uses 80% in our calculation)
Wire	0.21%	0.0014			Copper (Cu)	7440-50-8	0.8 mil wire diameter; 1 wire for each package lead; wire length 3 mm
Lead Plating	1.83%	0.0119			Tin (Sn)	7440-31-5	Plating is 100% Sn; thickness is 0.015mm
Leadframe	19.23%	0.1250					Leadframe thickness is nominal (per Case Outline)
			18.50%	0.1203	Copper (Cu)	7440-50-8	Cu 96.2%
			0.577%	0.0038	Nickel (Ni)	7440-02-0	Ni 3.0%
			0.125%	0.00081	Silicon (Si)	7440-21-3	Si 0.65%
			0.029%	0.00019	Magnesium (Mg)	7439-95-4	Mg 0.15%
							Copper area is fixed at 50% package area

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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Br/Cl/Sb

lead-free

RoHS
2002/95/EC

rev. B