Device Material Content

5555 NE Moore Ct.
Hillsboro OR 97124
custreq@lscc.com

Package: **208 PQFP** **with matte Sn Plating**

Total Device Weight **5.70** **Grams**

MSL: 3
Peak Reflow Temp: 245°C

August, 2008	% of Total Pkg. Wt.	Weight (g)	% of Total Pkg. Wt.	Weight (g)	Substance	CAS #	Notes / Assumptions:
Die	1.80%	0.103			Silicon chip	7440-21-3	Die size: 7.4 x 9.3 x 0.64 mm
Mold	89.35%	5.093					Mold Compound Density varies between 1.7 and 2.3 grams/cc
			78.36%	4.467	Silica Fused	60676-86-0	75 to 95% Silica Fused (LSC uses 87.7% in our calculation)
			6.25%	0.357	Epoxy Resin	129915-35-1	5 to 10% Epoxy Resin (LSC uses 7% in our calculation).
			4.47%	0.255	Phenol Resin	26834-02-6	3 to 8% Phenol Resin (LSC uses 5% in our calculation).
			0.27%	0.015	Carbon black	1333-86-4	0.1 to 0.5% Carbon black (LSC uses 0.3% in our calculation)
D/A Epoxy	0.12%	0.007					Die attach epoxy Density: 4 grams/cc
			0.10%	0.006	Silver (Ag)	7440-22-4	(silver content: 70-90%; LSC uses 80% in our calculation)
			0.02%	0.0014	other	-	
Wire	0.11%	0.006			Gold (Au)	7440-57-5	1.0 mil wire diameter; 1 wire for each package lead; wire length 3 mm
Lead Plating	0.52%	0.030			Tin (Sn)	7440-31-5	Plating is 100% Sn; thickness is 0.015mm
Leadframe	8.10%	0.462					Leadframe thickness is nominal (per Case Outline)
			7.790%	0.444	Copper (Cu)	7440-50-8	96.2% Cu
			0.243%	0.0138	Nickel (Ni)	7440-02-0	3.0% Ni
			0.053%	0.003	Silicon (Si)	7440-21-3	0.65% Si
			0.012%	0.0007	Magnesium (Mg)	7439-95-4	0.15% Mg
							Copper area is fixed at 55% 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.

www.latticesemi.com

Rev. C1