



# 100% Material Declaration Data Sheet FGG680

PK112 (v1.2) September 22, 2006

Material Declaration Data Sheet

**Average Weight: 9.648 g**

Component	Substance Description	CAS# or Description	% of Component	Use in Product	Component Weight/ Substance Weight (in grams)	Component % of Total
<b>Silicon Die</b>					<b>0.3524</b>	<b>3.65%</b>
	Silicon	7440-21-3	100.00		0.1421	
<b>Die Attach Material</b>					0.027	0.28%
	Silver	7440-22-4	75.00		0.020	
	Resin	Trade Secret	25.00		0.007	
<b>Mold Compound</b>					<b>0.4135</b>	<b>4.29%</b>
	Epoxy Resins	Trade Secret	26.00		0.106	
	SiO2	60676-86-0	74.00	Filler	0.306	
<b>Laminate</b>					<b>0.7366</b>	<b>7.63%</b>
	Laminate	Trade Secret	60.95		0.449	
	Solder Mask	Trade Secret	21.44		0.158	
	Copper	7440-50-8	15.47	Metal Layer	0.114	
	Nickel	7440-02-0	1.62	Metal Layer	0.012	
	Gold	7440-57-5	0.53	Metal Layer	0.004	
<b>Heat Sink</b>					<b>6.4063</b>	<b>66.40%</b>
	Copper	7440-50-8	97.50		6.246	
	Iron	7439-89-6	2.35		0.151	
	Phosphorus	7723-14-0	0.003		0.0002	
	Zinc	7440-66-6	0.12		0.008	
<b>Heat Snk Plating</b>					<b>0.2920</b>	<b>3.03%</b>
	Nickel	7440-05-0	100.00		0.2920	
<b>Dam</b>		Henkel FP4451			<b>0.0130</b>	<b>0.13%</b>
	Epoxy Resin	Trade Secret	100.00		0.0.130	
<b>Bond Wire</b>					<b>0.0214</b>	<b>0.22%</b>
	Gold	7440-57-5	100.00		0.0214	
<b>Solder Balls</b>					<b>1.386</b>	<b>14.36%</b>
	Tin	7440-31-5	95.50		1.32363	
	Silver	7440-22-4	4.00		0.05544	
	Copper	7440-50-8	0.50		0.00693	

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## Revision History

The following table shows the revision history for this document.

Date	Revision	Revision
3/27/06	1.0	Initial release.
5/15/06	1.1	100% Material Declaration.
9/22/06	1.2	Update component descriptions.