



# 100% Material Declaration Data Sheet SFG363

PK099 (v1.2) September 28, 2006

Material Declaration Data Sheet

**Average Weight: 1.4769280 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>0.082390</b>	<b>5.578%</b>
	Silicon	7440-21-3	100.00		0.082390	
<b>Solder Bump</b>					<b>0.113006</b>	<b>7.651%</b>
	Tin	7440-31-5	63.00		0.07122654	
	Lead	7439-92-1	37.00		0.04183146	
<b>Underfill</b>					<b>0.023000</b>	<b>1.557%</b>
	Silica	60676-86-0	70.00		0.01610000	
	Epoxy Resin A	9003-36-5	20.00		0.00460000	
	Epoxy Resin B	25068-38-6	3.00		0.00069000	
	Hardener	19900-65-3	7.00		0.00161000	
<b>Substrate</b>					<b>0.230000</b>	<b>15.573%</b>
	Cu	7440-50-8	47.52	metal layer	0.10929600	
	Ni	7440-02-0	0.52	metal layer	0.00119600	
	Au	7440-57-5	0.11	metal layer	0.00025300	
	Glass fiber	NA	10.35		0.02380500	
	Halogen fire retardant	NA	5.30		0.01219000	
	BT (core)	NA	27.50		0.06325000	
	Solder mask	NA	8.70		0.02001000	
<b>Heat spreader</b>					<b>0.800000</b>	<b>54.166%</b>
	Copper	7440-50-8	99.90		0.79920000	
	Chromium	7440-47-3	0.10		0.00080000	
<b>Heat Spreader Adhesive</b>					<b>0.053000</b>	<b>3.589%</b>
	Organopolysiloxane mixture	NA	100.00		0.053000	
<b>Solder Balls</b>					<b>0.17548</b>	<b>11.881%</b>
	Tin	7440-31-5	95.50		0.167583	
	Silver	7440-22-4	4.00		0.007019	
	Copper	7440-50-8	0.50		0.000877	

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## Revision History

The following table shows the revision history for this document.

Date	Revision	Revision
3/09/06	1.0	Initial release.
6/01/06	1.1	100% Material Declaration.
9/28/06	1.2	Updated component descriptions.