



PK746 (v1.0) May 29, 2015

# 100% Material Declaration Data Sheet Spartan®-6 Cu Wire TQG144 Package

**Average Weight: 1.275 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>0.013300</b>	<b>1.043%</b>
	Silicon	7440-21-3	100.00	Main material	0.013300	
<b>Die Attach Material</b>					<b>0.002254</b>	<b>0.177%</b>
	Silver	7440-22-4	73.00	Main material	0.001645	
	Epoxy resin	trade secret	7.50	Main material	0.000169	
	Anhydride	trade secret	7.50	Main material	0.000169	
	2,6-Diglycidyl phenyl allyl ether oligomer	trade secret	3.00	Main material	0.000068	
	Epoxy resin	trade secret	3.00	Main material	0.000068	
	Epoxy resin modifier	trade secret	3.00	Main material	0.000068	
	Anhydride	trade secret	3.00	Main material	0.000068	
<b>Copper Wire</b>					<b>0.000833</b>	<b>0.065%</b>
	Cu	7440-50-8	98.25	Main material	0.000818	
	Pd	7440-05-3	1.75	Dopant	0.000015	
<b>Mold Compound</b>					<b>1.107145</b>	<b>86.835%</b>
	Epoxy Resin	Trade Secret	10.00	Epoxy Resin	0.110715	
	Phenol Resin	Trade Secret	5.00	Phenol Resin	0.055357	
	Silica(Amorphous) A	60676-86-0	74.00	Silica(Amorphous) A	0.819287	
	Silica(Amorphous) B	7631-86-9	10.00	Silica(Amorphous) B	0.110715	
Carbon Black	1333-86-4	1.00	Carbon Black	0.011071		
<b>External Plating</b>					<b>0.013400</b>	<b>1.051%</b>
	Tin (Sn)	7440-31-5	100.00	Main material	0.013400	
<b>Lead Frame</b>					<b>0.132068</b>	<b>10.358%</b>
	Copper ( Cu )	7440-50-8	91.964	Main material	0.121456	
	Nickel ( Ni )	7440-02-0	3.088	Main material	0.004078	
	Silicon ( Si )	7440-21-3	1.158	Main material	0.001529	
	Magnesium ( Mg )	7439-95-4	0.290	Main material	0.000382	
	Silver (Ag)	7440-22-4	3.500	Main material	0.004622	

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Lead Frame Tape					<b>0.006000</b>	<b>0.471%</b>
	Polyimide	Trade secret	43.00		0.002580	
	Poly-ethylene-terephthalate	Trade secret	25.00		0.001500	
	NBR (Acrylonitrilebutadiene rubber)	Trade secret	12.00		0.000720	
	Bismaleimide	Trade secret	10.00		0.000600	
	Phenol resin	Trade secret	10.00		0.000600	

## Revision History

The following table shows the revision history for this document.

Date	Version	Description of Revisions
5/29/15	1.0	Initial Xilinx release

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