



PK746 (v1.1) June 29, 2018

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
Silicon Die					0.013300	1.043%
	Silicon	7440-21-3	100.00	Main material	0.013300	
Die Attach Material					0.002254	0.177%
	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	
Copper Wire					0.000833	0.065%
	Cu	7440-50-8	98.25	Main material	0.000818	
	Pd	7440-05-3	1.75	Dopant	0.000015	
Mold Compound					1.107145	86.835%
	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	
External Plating					0.013400	1.051%
	Tin (Sn)	7440-31-5	100.00	Main material	0.013400	
Lead Frame					0.132068	10.358%
	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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Component	Substance Description	CAS# or Description	% of Component	Use in Product	Component Weight/ Substance Weight (in grams)	Component % of Total
Lead Frame Tape					0.006000	0.471%
	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	79922-55-7	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
6/29/18	1.1	Updated Bismaleimide CAS#

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