

100% Material Declaration Data Sheet for Spartan-3AN TQG144 Cu Wire Package

Average Weight: 1.294 g

Component	Substance Description	CAS Number or Description	Percentage of Component	Use in Product	Component Weight/ Substance Weight (grams)	Component Percent of Total
Silicon Die 1					0.003870	0.299%
	Silicon	7440-21-3	100.00		0.003870	
Silicon Die 2					0.001158	0.090%
	Silicon	7440-21-3	100.00		0.001158	
Die Attach					0.000960	0.074%
	Solid Epoxy Resin	NA	12.50		0.000120	
	Phenol Resin	NA	12.50		0.000120	
	Amorphous Silica	7631-86-9	35.00		0.000336	
	Synthetic Rubber	NA	40.00		0.000384	
Mold Compound					1.114842	86.155%
	Epoxy Resin	Trade Secret	10.00		0.111484	
	Phenol Resin	Trade Secret	5.00		0.055742	
	Silica(Amorphous) A	60676-86-0	74.00		0.824983	
	Silica(Amorphous) B	7631-86-9	10.00		0.111484	
	Carbon Black	1333-86-4	1.00		0.011148	
Copper Wire					0.001247	0.096%
	Copper	7440-50-8	98.25		0.001225	
	Palladium	7440-05-3	1.75		0.000022	
Gold Wire					0.000135	0.010%
	Gold	7440-57-5	99.05		0.000134	
	Palladium	7440-05-3	0.95		0.000001	
	Calcium	7440-70-2	0.00		0.000000	
Lead Frame Tape					0.006000	0.464%
	Polyimide	Trade secret	43.00		0.002580	
	Poly-ethylene-terephthalate	25038-59-9	38.00		0.002280	
	NBR	9003-18-3	7.00		0.000420	
	Bismaleimide	79922-55-7	6.00		0.000360	
	Phenol resin	28453-20-5	6.00		0.000360	

100% Material Declaration Data Sheet for 7 Series CSG325 Package

Component	Substance Description	CAS Number or Description	Percentage of Component	Use in Product	Component Weight/ Substance Weight (grams)	Component Percent of Total
Lead Frame					0.152383	11.776%
	Copper	7440-50-8	94.40		0.143850	
	Silver	7440-22-4	1.50		0.002286	
	Magnesium	7439-95-4	0.18		0.000267	
	Silicon	7440-21-3	0.73		0.001105	
	Nickel	7440-02-0	3.20		0.004876	
Film					0.000006	0.000%
	Solid Epoxy Resin	NA	12.50		0.000001	
	Phenol Resin	NA	12.50		0.000001	
	Amorphous Silica	7631-86-9	35.00		0.000002	
	Synthetic Rubber	NA	40.00		0.000002	
Solder Plating					0.013400	1.036%
	Tin	7440-31-5	100.00		0.013400	

Revision History

The following table shows the revision history for this document.

Date	Version	Description of Revisions
08/22/2014	1.0	Xilinx Initial Release

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