



Semiconductor Device Type: H5A VDFN 6 3.2x2.5x0.9mm NiPdAu						Package Homogeneous Materials				
Basic Substance	CAS Number	"Contained in" Sub-Component	% Total Weight	mg/part	ppm	1.00	(mg) Total	Die 1 & 2	% of Total Weight	5.21
Silicon	7440-21-3	Die 1 & 2	5.21	1.00	52092		Silicon	7440-21-3	100.00	
Copper	7440-50-8	Leadframe	29.04	5.58	290415		Total 100.00			
Ferrous	7439-89-6	Leadframe	0.70	0.13	7000					
Zinc	7440-66-6	Leadframe	0.04	0.01	372	5.72	(mg) Total	Leadframe	% of Total Weight	29.80
Phosphorus	7723-14-0	Leadframe	0.02	0.00	245		Copper	7440-50-8	97.44	
Nickel	7440-02-0	Lead Finish Plating	0.39	0.07	3866		Ferrous	7439-89-6	2.35	
Palladium	7440-05-3	Lead Finish Plating	0.01	0.00	148		Zinc	7440-66-6	0.12	
Gold	7440-57-5	Lead Finish Plating	0.01	0.00	89		Phosphorus	7723-14-0	0.08	
Silica	7631-86-9	Die Attach Material 1	0.57	0.11	5730		Total 100.00			
Acrylic Copolymer	58152-79-7	Die Attach Material 1	0.17	0.03	1719					
Formaldehyde, Polymer With 2-(Chloromethyl)oxirane and Phenol	9003-36-5	Die Attach Material 1	0.16	0.03	1604	0.08	(mg) Total	Lead Finish Plating	% of Total Weight	0.41
Bisphenol A-formaldehyde copolymer	25085-75-0	Die Attach Material 1	0.16	0.03	1604		Nickel	7440-02-0	94.22	
o-Cresol-epichlorohydrin-formaldehyde copolymer	29690-82-2	Die Attach Material 1	0.08	0.02	802		Palladium	7440-05-3	3.61	
Silver	7440-22-4	Die Attach Material 2	1.88	0.36	18753		Gold	7440-57-5	2.17	
Epoxy Resin	Proprietary	Die Attach Material 2	0.06	0.01	625		Total 100.00			
Cashew, nutshell liq. Polymer with epichlorohydrin	68413-24-1	Die Attach Material 2	0.06	0.01	625					
Toluene	108-88-3	Die Attach Material 2	0.06	0.01	625	0.22	(mg) Total	Die Attach Material 1	% of Total Weight	1.15
2-Heptyl-3,4-bis(9-isocyanatononyl)-1-pentylcyclohexane	68239-06-5	Die Attach Material 2	0.01	0.00	104		Silica	7631-86-9	50.00	
1,1'-(methylenedi-p-phenylene)bismaleimide	13676-54-5	Die Attach Material 2	0.01	0.00	104		Acrylic Copolymer	58152-79-7	15.00	
Gold	7440-57-5	Bond Wire	0.43	0.08	4308		Formaldehyde, Polymer With 2-(Chloromethyl)oxirane and Phenol	9003-36-5	14.00	
Epoxy Resin	Trade secret	Mold Compound	3.03	0.58	30344		Bisphenol A-formaldehyde copolymer	25085-75-0	14.00	
Phenol Resin	Trade secret	Mold Compound	1.64	0.31	16386		o-Cresol-epichlorohydrin-formaldehyde copolymer	29690-82-2	7.00	
Vitreous Silica	60676-86-0	Mold Compound	52.80	10.14	527981		Total 100.00			
Silica	7631-86-9	Mold Compound	3.03	0.58	30344					
Carbon Black	1333-86-4	Mold Compound	0.18	0.03	1821	0.40	(mg) Total	Die Attach Material 2	% of Total Weight	2.08
JCR6109	Trade Secret	Die Coating	0.23	0.04	2292		Silver	7440-22-4	90.00	
TOTALS: 19.20 mg Total Mass			100.00	19.20	1,000,000		Epoxy Resin	Proprietary	3.00	
							Cashew, nutshell liq. Polymer with epichlorohydrin	68413-24-1	3.00	
							Toluene	108-88-3	3.00	
							2-Heptyl-3,4-bis(9-isocyanatononyl)-1-pentylcyclohexane	68239-06-5	0.50	
							1,1'-(methylenedi-p-phenylene)bismaleimide	13676-54-5	0.50	
							Total 100.00			
						0.08	(mg) Total	Bond Wire	% of Total Weight	0.43
							Gold	7440-57-5	100.00	
							Total 100.00			
						11.65	(mg) Total	Mold Compound	% of Total Weight	60.69
							Epoxy Resin	Trade secret	5.00	
							Phenol Resin	Trade secret	2.70	
							Vitreous Silica	60676-86-0	87.00	
							Silica	7631-86-9	5.00	
							Carbon Black	1333-86-4	0.30	
							Total 100.00			
						0.04	(mg) Total	Die Coating	% of Total Weight	0.23
							JCR6109	Trade Secret	100.00	
						19.20	Total		100.00	100.00

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