



Material Composition Declaration

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This document is a declaration of the substances within the manufacturer listed item. Note: if the item is an assembly with lower level parts, the declaration encompasses all lower level materials for which the manufacturer has engineering responsibility.

Adobe Reader version 7.0.5 is required to complete this declaration.

1752-2 1.1	IPC Web Site for Information on IPC-1752 Standard http://www.ipc.org/IPC-175x	Form Type * Distribute	Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Materials and Mfg Informat
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Supplier Information

Company Name * IDT Inc.	Company Unique ID	Unique ID Authority	Response Date * 2015-01-30	Response Document ID AR324				
Contact Name * CS Phek	Title - Contact Engineer	Phone - Contact * 604-613-2538	Email - Contact * csphek@idt.com	Duplicate Contact -> Authorized Representative				
Authorized Representative * CS Phek	Title - Representative Engineer	Phone - Representative * 604-613-2538	Email - Representative * csphek@idt.com	Supplier Comments or URL for Additional Information				
Requester Item Number	Mfr Item Number	Mfr Item Name	Effective Date	Version	Manufacturing Site	Weight *	UOM	Unit Type
		AR324	2015-01-30	0	ATT	2,967	mg	Each
Alternate Recommendation				Alternate Item Comments				

Manufacturing Process Information

Terminal Plating / Grid Array Material Tin/Silver/Copper (Sn/Ag/Cu)	Terminal Base Alloy Not Applicable	J-STD-020 MSL Rating 4	Peak Process Body Temperature 245 C	Max Time at Peak Temperature 30 seconds	Number of Reflow Cycles 3
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Comments

Save the fields in this form to a file

Export Data

Import fields from a file into this form

Import Data

Clear all of the fields on this form

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Lock the fields on this form to prevent changes

Lock Supplier Fields

RoHS Material Composition Declaration

Declaration Type *

Simplified

RoHS Directive
2002/95/EC

RoHS Definition: Quantity limit of 0.1% by mass (1000 PPM) in homogeneous material for: Lead (Pb), Mercury, Hexavalent Chromium, Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBDE) and quantity limit of 0.01% by mass (100 PPM) of homogeneous material for Cadmium

Supplier certifies that it gathered the information it provides in this form concerning RoHS restrictive substances using appropriate methods to ensure its accuracy and that such information is true and correct to the best of its knowledge and belief, as of the date that Supplier completes this form. Supplier acknowledges that Company will rely on this certification in determining the compliance of its products with European Union member state laws that implement the RoHS Directive. Company acknowledges that Supplier may have relied on information provided by others in completing this form, and that Supplier may not have independently verified such information. However, in situations where Supplier has not independently verified information provided by others, Supplier agrees that, at a minimum, its suppliers have provided certifications regarding their contributions to the part, and those certifications are at least as comprehensive as the certification in this paragraph. If the Company and the Supplier enter into a written agreement with respect to the identified part, the terms and conditions of that agreement, including any warranty rights and/or remedies provided as part of that agreement, will be the sole and exclusive source of the Supplier's liability and the Company's remedies for issues that arise regarding information the Supplier provides in this form.

RoHS Declaration *

4 - Item(s) does not contain RoHS restricted substances per the definition above except for selected exemptions

Supplier Acceptance *

Accepted

Exemptions: If the declared item does not contain RoHS restricted substances per the definition above except for defined RoHS exemptions, then select the corresponding response in the RoHS Declaration above and choose all applicable exemptions.

Exemption List Version

EL-2006/690/EC

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15. Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit Flip Chip packages.

Declaration Signature

Instructions: Complete all of the required fields on all pages of this form. Select the "Accepted" on the Supplier Acceptance drop-down. This will display the signature area. Digitally sign the declaration (if required by the Requester) and click on Submit Form to have the form returned to the Requester.

Supplier Digital Signature

Homogeneous Material Composition Declaration for Electronic Products

SubItem Instructions: The presence of any JIG Level A or B substances must be declared. [1] indicate the subpart in which the substance is located, [2] provide a description of the homogeneous material [3], enter the weight of the homogeneous material.

Substance Instructions: [A] select the Level (JIG A, JIG B, Requester or Supplier) [B] select the substance category (JIG or Requester) or enter a value (Supplier). [C] select the substance (JIG) or enter the substance and CAS (Other). [D] select a RoHS exemption, if applicable [E] enter the weight of the substance or the PPM concentration [F] Optionally enter the positive (+) and negative (-) tolerance in percent (Note: percent tolerance values are expected to cover a 3 sigma range of distribution unless otherwise noted).

Line Functions: +I Inserts a New Item /SubItem +M Inserts a new Material +C Inserts a new Substance Category +S Inserts a new Substance - Deletes the element line

	Item/SubItem Name		Homogeneous Material	Weight	Unit of Measure		Level	Substance Category		Substance	CAS	Exempt	Weight	Unit of Measure	Tolerance		PPM				
															-	+					
+I	-I	AR324	+M -M	Encapsulant	18.1	mg	+C -C	Supplier	Filler	+S -S	Silicon Dioxide	60676-86-0		11.13	mg	0.02	0.02	3,752			
										+C -C	Supplier	Binder	+S -S	1,6-Bis(2,3-epoxyprop	27610-48-6		1.81	mg			610
										+C -C	Supplier	Binder	+S -S	Bisphenol F type liquid	9003-36-5		1.81	mg			610
										+C -C	Supplier	Binder	+S -S	Bisphenol A type liquid	25068-38-6		0.9	mg			305
										+C -C	Supplier	Binder	+S -S	Amine type hardener	Trade Secre		1.36	mg			458
										+C -C	Supplier	Binder	+S -S	Additive	Trade Secre		0.9	mg			305
										+C -C	Supplier	Coloring	+S -S	Carbon Black	1333-86-4		0.18	mg			61
			+M -M	Heat Spreader	1,641.94	mg	+C -C	Supplier	Metal	+S -S	Copper	7440-50-8		1,609.1	mg					542,33	
										+C -C	Supplier	Plaitng	+S -S	Nickel (Use Internal On	7440-22-4		32.84	mg			11,068
			+M -M	Heat Spreader A	5.93	mg	+C -C	Supplier	Filler	+S -S	Dimethyl Siloxane	68083-19-2		2.67	mg					900	
										+C -C	Supplier	Binder	+S -S	Quartz	14808-60-7		2.67	mg			900
										+C -C	Supplier	Additive	+S -S	Dimethylvinylated Silica	68988-89-6		0.59	mg			200
			+M -M	Thermal Grease	6.53	mg	+C -C	Supplier	Filler	+S -S	Zinc	1314-13-2		2.28	mg					770	
										+C -C	Supplier	Binder	+S -S	Al	Trade Secre		2.94	mg			990
										+C -C	Supplier	Binder	+S -S	Siloxane	Trade Secre		1.31	mg			440
			+M -M	Substrate	902.86	mg	+C -C	Supplier	Core Filler	+S -S	Epoxy Resin	Trade Secre		180.2	mg					60,735	
										+C -C	Supplier	Core Binder	+S -S	Glass Cloth	65997-17-3		180.48	mg			60,830
										+C -C	Supplier	Core Binder	+S -S	Copper	7440-50-8		295.23	mg			99,506
										+C -C	Supplier	Solder Mask Filler	+S -S	Talc containing no asbe	14807-96-6		1.63	mg			548
										+C -C	Supplier	Solder Mask Binder	+S -S	Solvent Naphtha	64742-94-5		4.79	mg			1,613
										+C -C	Supplier	Solder Mask Binder	+S -S	Naphthalene	91-20-3		0.81	mg			274
										+C -C	Supplier	Solder Mask Binder	+S -S	Morpholine derivative	Trade Secre		1.63	mg			548
										+C -C	Supplier	Solder Mask Binder	+S -S	Silica Amorphous	7631-86-9		0.36	mg			122

	+C	-C	Supplier	Solder Mask Binder	+S	-S	Barium Sulfate	7727-43-7		14.72	mg			4,960					
	+C	-C	Supplier	Solder Mask Binder	+S	-S	Dipropylene glycol mon	34590-94-8		6.41	mg			2,161					
	+C	-C	Supplier	Solder Mask Binder	+S	-S	Epoxy Resin	Trade Secre		5.96	mg			2,008					
	+C	-C	Supplier	Solder Mask Binder	+S	-S	Epoxy Resin	85954-11-6		3.61	mg			1,217					
	+C	-C	Supplier	Plug Filler	+S	-S	Inorganic Filler	Trade Secre		0.18	mg			61					
	+C	-C	Supplier	Plug Binder	+S	-S	Bisphenol A Diglycidyl	1675-54-3		0.09	mg			30					
	+C	-C	Supplier	Plug Binder	+S	-S	Amino Glycidyl Ethers	110656-67-2		0.09	mg			30					
	+C	-C	Supplier	Plug Binder	+S	-S	Hardener of Epoxy Res	Trade Secre		0.01	mg			3					
	+C	-C	Supplier	Plug Binder	+S	-S	Defoamer	Trade Secre		0.001	mg			0					
	+C	-C	Supplier	Build Up Filler	+S	-S	Silica	7631-86-9		30.61	mg			10,316					
	+C	-C	Supplier	Build Up Binder	+S	-S	Coal Tar Naphtha	64742-94-5		2.08	mg			700					
	+C	-C	Supplier	Build Up Binder	+S	-S	Epoxy Resin, Polymer R	Trade Secre		171.45	mg			57,787					
	+C	-C	Supplier	Metal	+S	-S	Tin	7440-31-5		2.53	mg			852					
+M	-M		Solder Bump	6.53	mg	+C	-C	Supplier	Metal	+S	-S	Tin	7440-31-5		4.11	mg			1,386
						+C	-C	A	Lead/Lead Compound	+S	-S	Lead	7439-92-1		2.42	mg			814
+M	-M		Solder Ball	271.48	mg	+C	-C	Supplier	Metal	+S	-S	Tin	7440-31-5		261.98	mg			88,298
						+C	-C	Supplier	Metal	+S	-S	Silver	7440-22-4		8.14	mg			2,745
						+C	-C	Supplier	Metal	+S	-S	Copper	7440-50-8		1.36	mg			458
+M	-M		Silicon Chip	113.64	mg	+C	-C	Supplier	Silicon	+S	-S	Silicon	7440-21-3		113.64	mg			38,300