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.

IPC-1752-1 v1.02 **1752-1**	IPC Web Site for Information on IPC-1752 Standard **http://www.ipc.org/IPC-175x**	**Form Type *** **Request/Reply**	**Declaration Class *** **Class 3 - RoHS Yes/No, JIG Format Substances**

Requester Information

Lock Requester Fields

Company Name *	Company Unique ID	Unique ID Authority	**Request Date ***	Request Document ID	Respond By Date
Contact Name *	Contact Title	**Contact Phone ***	**Contact Email ***	Requester Comments or URL for Additional Information	
My supplier ID	The File Type and Destination fields control how the form is submitted by the supplier. Consult your IT staff for configuration.		File Type	Destination - URL or Email Address	

Item Number *	Item Name	**Mfr Item Number ***	Mfr Item Name	Mfr Item Version	Manufacturing Site
		FC-BGA10 (HF)			

Supplier Information

Company Name *	Company Unique ID	Unique ID Authority	**Response Date ***	Response Document ID	
Intel Corporation	047897855	Dun and Bradstreet	**2011-02-28**	**0000000000003192**	
Contact Name *	Title - Contact	**Phone - Contact ***	**Email - Contact ***		
Nica Hoshijo	**Intel Product Ecology**	**1-800-628-8686**	**rohs@intel.com**		
Authorized Representative *	Title - Representative	**Phone - Representative ***	**Email - Representative** *	Supplier Comments or URL for Additional Information	
Intel Product Ecology	**Intel Product Ecology**	**1-800-628-8686**	**rohs@intel.com**	http://qdms.intel.com	

Requester Item Number	Mfr Item Number	Mfr Item Name	Effective Date	Version	Manufacturing Site	Weight	UOM	Unit Type
	FC-BGA10 (HF)					**3.45**	**g**	**Each**
Alternate Recommendation	**See attachments (Menu>View**			Alternate Item Comments				

Manufacturing Information section intentionally omitted.

*** Required Field**

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Save the fields in this form to a file | Export Data | Import fields from a file into this form | Import Data | Locked

RoHS Material Composition Declaration

Declaration Type * **Detailed**

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

Please indicate whether any homogeneous material (as defined by the RoHS Directive, EU 2002/95/EC and implemented by the laws of the European Union member states) of the part identified on this form contains lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls and/or polybrominated diphenyl ethers (each a "RoHS restricted substance") in excess of the applicable quantity limit identified above. If a homogeneous material within the part contains a RoHS restricted substance in excess of an applicable quantity limit, please indicate below which, if any, RoHS exemption you believe may apply. If the part is an assembly with lower level components, the declaration shall encompass all such components. Supplier certifies that it gathered the information it provides in this form 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. In the absence of such written agreement, the warranty rights and/or remedies of Supplier's Standard Terms and Conditions of Sale applicable to such part shall apply.

RoHS Declaration *	1 - Item(s) does not contain RoHS restricted substances per the definition above	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 checkboxes will appear below. Check all applicable exemptions.

1. Mercury in compact fluorescent lamps not exceeding 5 mg per lamp.

2a. Mercury in straight fluorescent lamps for general purposes not exceeding 10 mg. in halophosphate lamps

2b. Mercury in straight fluorescent lamps for general purposes not exceeding 5 mg. in triphosphate lamps with a normal lifetime

2c. Mercury in straight fluorescent lamps for general purposes not exceeding 8 mg. in triphosphate lamps with long lifetime

3. Mercury in straight fluorescent lamps for special purposes.

4. Mercury in other lamps not specifically mentioned in this list.

5. Lead in glass of cathode ray tubes, electronic components and fluorescent tubes.

6a. Lead as an alloying element in steel containing up to 0.35% lead by weight.

6b. Lead as an alloying element in aluminum containing up to 0.4% lead by weight.

6c. Lead as an alloying element in copper containing up to 4% lead by weight.

7a. Lead in high melting temperature type solders (i.e. lead based solder alloys containing 85% by weight or more lead).

7b. Lead in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signalling, transmission as well as network management for telecommunications.

7c. Lead in electronic ceramic parts (e.g. piezoelectronic devices).

8. Cadmium and its compounds in electrical contacts and cadmium plating except for applications banned under Directive 91/338/EEC amending Directive 76/769/EEC relating to restrictions on the marketing and use of certain dangerous substances and preparations piezoelectronic devices).

9. Hexavalent chromium as an anti-corrosion of the carbon steel cooling system in absorption refrigerators

10a. Deca BDE in polymeric applications

10b. Lead in lead/bronze bearing shells and bushes

11. Lead used in compliant pin connector systems.

12. Lead as a coating material for a thermal conduction module c-ring.

13a. Lead in optical and filter glass.

13b. Cadmium in optical and filter glass.

14. Lead in solders consisting of more than two elements for the connection between the pins and the package of microprocessors with a lead content of more than 80% and less than 85% by weight .

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	Intel Product Ecology	Digitally signed by Intel Product Ecology DN: cn=Intel Product Ecology, o, ou=Intel Corporation, email=rohs@intel.com, c=US Date: 2011.03.01 09:39:39 -07'00'	

*** Required Field**

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Joint Industry Guide (JIG) Material Composition Declaration for Electronic Products

Instructions: Declare whether the item substances exceed the threshold levels shown in the table and report accordingly. Where threshold levels include the words "intentionally added", substances must be declared if they are added intentionally, regardless of threshold level. For each RoHS substance, identified with dual asterisks (**), report the worst case PPM at the homogeneous material level and optionally the total weight of the substance in the item. For all remaining (non-RoHS) JIG A & B substances, and any additional substances, report the total weight and optionally the PPM at the part level for each item.

JIG A autofill - No | JIG B autofill - No | All autofill - No

JIG	Category Name	Threshold Level	Above Threshold Level?	If yes, enter total weight and worse case PPM			Description of Use
Level	**As defined in the Joint Industry Guide**	**Intentionally added or PPM**	**Yes/No**	**Weight**	**UoM**	**PPM**	
A	Asbestos	Intentionally Added	**No**		**mg**		
A	Certain Azo colorants	Intentionally Added	**No**		**mg**		
A	Cadmium/Cadmium Compounds **	75 PPM	**No**		**mg**		
A	Hexavalent Chromium/Hexavalent Chromium Compounds **	1000 PPM	**No**		**mg**		
A	Lead/Lead Compounds **	1000 PPM	**No**		**mg**		
A	Lead/Lead Compounds - PVC Cables and Wires Only **	300 PPM	**No**		**mg**		
A	Mercury/Mercury Compounds **	1000 PPM	**No**		**mg**		
A	Ozone Depleting Substances - Class I (CFCs, HBFCs, etc.)	Intentionally Added	**No**		**mg**		
A	Ozone Depleting Substances - Class II (HCFCs)	1000 PPM	**No**		**mg**		
A	Polybrominated Biphenyls (PBBs) **	1000 PPM	**No**		**mg**		
A	Polybrominated Diphenylethers (PBDEs) **	1000 PPM	**No**		**mg**		
A	Polychlorinated Biphenyls (PCBs)	Intentionally Added	**No**		**mg**		
A	Polychlorinated Naphthalenes (> 3 chlorine atoms)	Intentionally Added	**No**		**mg**		
A	Radioactive Substances	Intentionally Added	**No**		**mg**		
A	Certain Shortchain Chlorinated Paraffins	Intentionally Added	**No**		**mg**		
A	Tributyl Tin (TBT) and Triphenyl Tin (TPT)	Intentionally Added	**No**		**mg**		
A	Tributyl Tin Oxide (TBTO)	Intentionally Added	**No**		**mg**		
B	Antimony/Antimony Compounds	1000 PPM	**No**		**mg**		
B	Arsenic/Arsenic Compounds	1000 PPM	**No**		**mg**		
B	Beryllium/Beryllium Compounds	1000 PPM	**No**		**mg**		
B	Bismuth/Bismuth Compounds	1000 PPM	**No**		**mg**		
B	Brominated Flame Retardants (other than PBBs or PBDEs)	1000 PPM	**No**		**mg**		
B	Nickel (external applications only)	1000 PPM	**Yes**	**29.6**	**mg**	**8,580**	**Substrate Plating**
B	Certain Phthalates	1000 PPM	**No**		**mg**		
B	Selenium/Selenium Compounds	1000 PPM	**No**		**mg**		
B	Polyvinyl Chloride (PVC)	1000 PPM	**No**		**mg**		

*** Required Field**

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OTHER Material Composition Declaration

Requester Instructions: The requester can optionally include additional substances that must be declared for the item on this form. This is in addtion to JIG Level A and JIG Level B substances. The requester should enter additional substances as well as the threshold levels that specify the substance at the item level.

Supplier Instructions: Explicitly declare whether the item exceed the threshold level by selecting Yes or No. If the maximum concentration of any substance exceeds the threshold levels defined by the requester, then the substance content must be reported in total weight and/or worst case PPM, along with a description of material use.

JIG	Category Name	Threshold Level
Other	As defined by the Requester	Defined by the Requester
+ -		

Add Other Material Composition to JIG Tab

*** Required Field**

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