IPC ASSOCIATION CONNECTING ELECTRONICS INDUSTRIES	Material Composition Declaration © Copyright 2005. IPC, Bannockburn, Illinois. All rights reserved under both international and Pan-American copyright conventions.			This document is a declaration of the substances within the manufacturer listed item. Note: if the item is an assembly with lowe level parts, the declaration encompasses all lower level materials for which the manufacturer has engineering responsibility.									
752-21.1				Form Type *	*	Declaration Class * Class 6 - RoHS Yes/No. Homogeneous Materials and Mfg Information							
upplier Inform	<u> </u>							,		<u>g</u>			
Company name*			Company unique ID			Unique ID Authority			Respons	Response Date*			
nsemi										2024-04-19			
ontact Name		Title - C	Title - Contact			Phone - Contact*			Email -	Email - Contact*			
Product-Env-Stewards			Product Enviro Compliance		1	NA			Produc	Product-Env-Stewards@onsemi.com			
Authorized Representative*			Title - Representative			Phone - Representative*			Email -	Email - Representative*			
Product-Env-Stewards			Product Enviro Compliance			NA			Produc	Product-Env-Stewards@onsemi.com			
Requeste	Requester Item Number Mfr		n Number Mfr Item Name			Effective Date	Version	on Manufacturing Site		Weight*	UOM	Unit Type	
		AR0132AT6M00X A0-DRBR	PE 1.2 MP 1/3 CIS			2024-04-19		MY5	-	200.0	mg	Each	
lanufacturing l	Proccess Information	1											
Terminal Plating / Grid Array Material Terminal Base Alloy J-STD-020 I			-STD-020 MSL	Rating	Peak Proce	ss Body Temp	erature Max Time at Pe	ak Temperat	ure Numb	er of Reflow Cyo	cles		
SnAgCu		CU Alloy	3	3		260	C	30	secon	ds 3			
omments													
TTENTION: MSL	3 Rated item requires Ba	nke and Dry Pack (after electrical test)										
or more informatio	on regarding material con	position please ref	er to page 3										

RoHS Material Composition Declaration			Declaration Type *	Detail	ed					
Directive 2015/863/EU amending RoHS Directive 2011/65/EU RoHS Definition: Quantity limit of 0.01% by mass (100 PPM) in homogeneous material for Cadmium and quantity limit of 0.1% by mass (1000 PPM) in homogeneous material for: Lead (Pb), Mercury (Hg), Hexavalent Chromium (Cr6+), Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBDE), and Bis(2-ethylhexyl) phthalate (DEHP), Benzyl-butyl phthalate (BBP), Dibutyl phthalate (DBP), Diisobutyl phthalate (DIBP).										
Please indicate whether any homogeneous material (as defined by the RoHS Directive, EU 2011/65/EU and implemented by the laws of the European Union member states) of the part identified on this form contains lead, mercury, cadmium, hexavalentchromium, 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 inexcess 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 informationprovided 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 has provided as part of that agreement, will be the sole and exclusivesource 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 applic										
RoHS Declaration * 1 - Item	(s) does not contain RoHS restricted substar	nces per the definition above	Supplier A	cceptance *	Accepted					
Exemption: 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-2011/534/EU									
Declaration Signature										
		e "Accepted" on the Supplier Acceptance	drop-down. This will display the signature a	rea. Digitally sign t	the declaration (if required by the					

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).

Homogeneous Material	Weight	Unit of Measure	Level	Substance	CAS	Exempt	Weight	Unit of Measure
Die	32.4	mg		Misc.	proprietary data		0.1231	mg
			Supplier	Silicon (Si)	7440-21-3		31.9561	mg
			Supplier	Aluminum (Al)	7429-90-5		0.3208	mg
Die Attach	2.8	mg	Supplier	Bisphenol A_Epichlorohydrin Polymer	25068-38-6		1.05	mg
			Supplier	Ethylene Glycol	107-21-1		0.028	mg
			Supplier	Sulfonium (Thiodi-4,1-phenylene)	89452-37-9		0.084	mg
			Supplier	Modified Silicon Dioxide (SiO2)	67762-90-7		0.588	mg
			Supplier	Formaldehyde Polymer	9003-36-5		1.05	mg
Imaging Lens	28.48	mg	Supplier	Titanium Dioxide (TiO2)	13463-67-7		1.4989	mg
			Supplier	Sodium Monoxide (Na2O)	1313-59-3		1.4989	mg
			Supplier	Zinc Monoxide (ZnO)	1314-13-2		1.4989	mg
			В	Antimony Trioxide (Sb2O3)	1309-64-4		0.1501	mg
			Supplier	Aluminum Trioxide (Al2O3)	1344-28-1		1.4989	mg
			Supplier	Potassium Monoxide (K2O)	12136-45-7		1.4989	mg
			Supplier	Silica Crystalline (SiO2)	14808-60-7		20.8354	mg
Lid Attach	1.46	mg	Supplier	2-phenoxy ethyl acrylate	48145-04-6		0.657	mg
			Supplier	Bisphenol A_Epichlorohydrin Polymer	25068-38-6		0.292	mg
			Supplier	Epoxy Prepolymer	Proprietary Data		0.1825	mg
			Supplier	Acrylate Oligomer	Proprietary Data		0.0073	mg
			Supplier	Curative	Proprietary Data		0.0292	mg
			Supplier	Formaldehyde Polymer	9003-36-5		0.292	mg
Mold Compound-Black	65.6	mg		Phenolic Resin	proprietary data		9.84	mg
			Supplier	Oxirane	39817-09-9		9.84	mg
			Supplier	1,4-Bis(2,3-epoxypropoxy)butane	2425-79-8		1.968	mg
			Supplier	Carbon Black (C)	1333-86-4		0.656	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		41.984	mg
			Supplier	Silica Crystalline (SiO2)	14808-60-7		1.312	mg
Solder Ball	29.5	-	Supplier	Silver (Ag)	7440-22-4		0.885	mg
			Supplier	Tin (Sn)	7440-31-5		28.4675	mg
			Supplier	Copper (Cu)	7440-50-8		0.1475	mg
Substrate and Solder Mask	39.48	mg	Supplier	Bis(3-ethyl-5-methyl-4-maleimidophenyl)methane	105391-33-1		0.4422	mg

			Supplier	Fiber Glass (SiO2)	65997-17-3	5.1166	mg
			Supplier	Zinc (Zn)	7440-66-6	0.0592	mg
			Supplier	Inorganic Filler of Solder Mask_Talc (Mg3Si4O10(OH)2)	14807-96-6	0.9199	mg
			Supplier	Cyanic acid (1-methylethylidene)di-4,1- phenylene ester homopolymer	25722-66-1	0.4422	mg
			Supplier	Silica Amorphous (SiO2)	7631-86-9	0.229	mg
			Supplier	Chromium (Cr)	7440-47-3	0.0039	mg
			Supplier	Acetophenone Derivative	Proprietary Data	1.3779	mg
			Supplier	Carbon Black (C)	1333-86-4	0.229	mg
			Supplier	2,4-Diethyl-9H-thioxanthen-9-one (DETX)	82799-44-8	0.229	mg
			Supplier	Aluminum Hydroxide (Al(OH)3)	21645-51-2	4.7376	mg
			В	Nickel (Ni)	7440-02-0	0.5567	mg
			Supplier	Gold (Au)	7440-57-5	0.0197	mg
			Supplier	Solvent Naphtha (Solvent oil)	64742-94-5	2.7597	mg
			Supplier	Formaldehyde Polymer	9003-36-5	0.4422	mg
			Supplier	Copper (Cu)	7440-50-8	14.7892	mg
			Supplier	Barium Sulfate (BaSO4)	7727-43-7	7.1261	mg
Wire Bond - Au	0.28	mg	Supplier	Gold (Au)	7440-57-5	0.28	mg