IPC ASSOCIATION CONNELECTRONICS INDU	Material Comp © Copyright 2005. Il international and Par	© Copyright 2005. IPC, Bannockburn, Illinois. All rights reserved under both				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	IPC Web Site for Information on IPC-1752 Standard Form Type http://www.ipc.org/IPC-175x Distribute				*	Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Materi					als and Mfg Information			
upplier Inf														
Company name* Company unique ID						Ţ	Unique ID Authority Response Date*							
nsemi										2024-04	2024-04-28			
Contact Name		Title - Contact			I	Phone - Contact*				Email - Contact*				
Product-Env-S	Stewards		Product Enviro Compliance				NA				Product-Env-Stewards@onsemi.com			
Authorized Representative* Titl				tle - Representative			Phone - Representative*			Email - Representative*				
Product-Env-Stewards Product Enviro Compliance						NA Product-Env-Stewards@onsemi.com					m			
Req	quester Item Number	Mfr Item	Number	Mfr Item Name			Effective Date	Versio	n	Manufacturing Site		Weight*	UOM	Unit Type
		AR01354 A0-DRB		1MP 1/3 CIS SO			2024-04-28			MY5		198.94	mg	Each
Ianufactur	ring Proccess Information	tion												
Terminal Plating / Grid Array Material Terminal Base Alloy J-S'			J-STD-020 MSI	L Rating	Peak Proc	ess Body	Temperatu	re Max Time at Peak	Tempera	ture Numb	per of Reflow Cyc	les		
SnA	gCu	C	CU Alloy	3	3		260		С	30	secon	nds 3		
omments	·			·						·			·	
TTENTION:	MSL 3 Rated item require	s Bake and D	ry Pack (after	electrical test)										
or more infori	mation regarding material	composition	please refer to	page 3										

RoHS Material Composition Declaration			Declaration Type *	Detail	led
Directive 2015/863/EU amending RoHS Directive 2011/65/EU		nium (Cr6+), Polybrominated Biphenyls (Pl	aterial for Cadmium and quantity limit of 0.1% by BB), Polybrominated Diphenyl Ethers (PBDE), an		
cadmium, hexavalentchromium, polybromir contains a RoHS restricted substance inexce encompass all such components. Supplier ce as of the date that Supplier completes this fo Company acknowledges that Supplier may l independently verified information provided certification in this paragraph. If the Compan	nated biphenyls and/or polybrominated dipless of an applicable quantity limit, please intifies that it gathered the information it prome. Supplier acknowledges that Company have relied on information provided by other by others, Supplier agrees that, at a mining and the Supplier enter into a written agree esource of the Supplier's liability and the	henyl ethers (each a "RoHS restricted substational substance below which, if any, RoHS exemption by desired in this form using appropriate method will rely on this certification in determining ters in completing this form, and that Supplies have provided certification between the will respect to the identified part, the Company's remedies for issues that arise respects to the identified part, the company's remedies for issues that arise respects to the identified part, the company's remedies for issues that arise respects to the identified part, the company's remedies for issues that arise respects to the identified part, the company's remedies for issues that arise respects to the identified part, the company's remedies for issues that arise respects to the identified part, the company's remedies for issues that arise respects to the identified part, the company's remedies for issues that arise respects the company is the company that the company tha	ws of the European Union member states) of the pnce") in excess of the applicable quantity limit iden you believe may apply. If the part is an assemble is to ensure its accuracy and that such information the compliance of its products with European Union may not have independently verified such informs regarding their contributions to the part, and tho terms and conditions of that agreement, including the provides in this formation information the Supplier provides in this formation.	entified above. If a y with lower level is true and correct on member state la nation. However, in se certifications are any warranty rigl	n homogeneous material within the part components, the declaration shall t to the best of its knowledge and belief, aws that implement the RoHS Directive. In situations where Supplier has not e at least as comprehensive as the hts and/or remedies provided as part of
RoHS Declaration * 1 - Item	(s) does not contain RoHS restricted substa	ances per the definition above	Supplier Ac	ceptance *	Accepted
Exemption: If the declared item does not applicable exemptions.	contain RoHS restricted substances per	the definition above except for defined Ro	oHS exemptions, then select the corresponding	response in the R	oHS Declaration above and choose all
Exemption List Version	EL-2011/534/EU				
Declaration Signature					
Instructional Complete all of the required	fields on all neggs of this form. Calcut th		a duan dawn. This will display the signature on	a Digitally sign	the declaration (if recruired by the
Instructions: Complete all of the required Requester) and click on Submit Form to			e drop-down. This will display the signature ar	ea. Digitally sign	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	46.746	mg		Misc.	proprietary data		0.1776	mg
			Supplier	Silicon (Si)	7440-21-3		46.1056	mg
			Supplier	Aluminum (Al)	7429-90-5		0.4628	mg
Die Attach	2.852	mg		Bismaleimide Monomer	proprietary data		1.098	mg
			Supplier	POLY(ETHYLENE GLYCOL) PHENYL ETHER ACRYLATE	56641-05-5		0.0143	mg
			Supplier	2,2-Bis(4-hydroxyphenyl)propane- epichlorohydrin copolymer acrylate	55818-57-0		0.2852	mg
			Supplier	Bis(4-tert-butylcyclohexyl) peroxydicarbonate	15520-11-3		0.0143	mg
			Supplier	2,2-dimethyl-1,3-propanediyl dimethacrylate	1985-51-9		0.2852	mg
			Supplier	2-phenoxy ethyl acrylate	48145-04-6		0.2852	mg
			Supplier	Bisphenol A_Epichlorohydrin Polymer	25068-38-6		0.0143	mg
			Supplier	Other Additive Agents	Proprietary Data		0.5704	mg
			Supplier	Formaldehyde Polymer	9003-36-5		0.2852	mg
Imaging Lens	29.239	mg	Supplier	Titanium Dioxide (TiO2)	13463-67-7		1.5388	mg
			Supplier	Sodium Monoxide (Na2O)	1313-59-3		1.5388	mg
			Supplier	Zinc Monoxide (ZnO)	1314-13-2		1.5388	mg
			В	Antimony Trioxide (Sb2O3)	1309-64-4		0.1541	mg
			Supplier	Aluminum Trioxide (Al2O3)	1344-28-1		1.5388	mg
			Supplier	Potassium Monoxide (K2O)	12136-45-7		1.5388	mg
			Supplier	Silica Crystalline (SiO2)	14808-60-7		21.3907	mg
Lid Attach	1.459	mg	Supplier	2,2-Bis(glycidyloxyphenyl)propane polymer	25085-99-8		0.3647	mg
			Supplier	3,4-EPOXYCYCLOHEXYLMETHYL	2386-87-0		1.0578	mg
			Supplier	Misc.	Proprietary Data		0.0365	mg
Mold Compound	43.49	mg	Supplier	Triphenylphosphine	603-35-0		0.2175	mg
-			Supplier	Trimethoxysilylpropanethiol	4420-74-0		0.2175	mg
			Supplier	Oxirane	39817-09-9		8.698	mg
			Supplier	Silica Amorphous (SiO2)	7631-86-9		8.698	mg
			Supplier	Misc.	Proprietary Data		2.1745	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		21.3101	mg

			Supplier	Silica Crystalline (SiO2)	14808-60-7	2.1745	mg
Solder Ball	35.868	mg	Supplier	Silver (Ag)	7440-22-4	1.076	mg
			Supplier	Tin (Sn)	7440-31-5	34.6126	mg
			Supplier	Copper (Cu)	7440-50-8	0.1793	mg
Solder Mask	4.22	mg		Epoxy resin	proprietary data	0.5064	mg
			Supplier	Acrylate	Proprietary Data	1.612	mg
			Supplier	Talc	14807-96-6	0.1139	mg
			Supplier	Miscellaneous	Trade Secret	0.1561	mg
			Supplier	Barium Sulfate (BaSO4)	7727-43-7	1.8315	mg
Substrate Copper Foil	3.09	mg	Supplier	Copper (Cu)	7440-50-8	3.09	mg
Substrate - Core Material	16.24	mg		Epoxy resin	proprietary data	3.5192	mg
			Supplier	Fiber Glass (SiO2)	65997-17-3	12.7208	mg
Substrate Plating-Au	0.29	mg	Supplier	Gold (Au)	7440-57-5	0.29	mg
Substrate Plating-Cu	14.49	mg	Supplier	Copper (Cu)	7440-50-8	14.49	mg
Substrate Plating-Ni	0.67	mg	В	Nickel (Ni)	7440-02-0	0.67	mg
Wire Bond - Au	0.286	mg	Supplier	Gold (Au)	7440-57-5	0.286	mg