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 lower 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 http://www.ipc.org/IPC-175x	IPC Web Site for Information on IPC-1752 Standard Form Type			Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Materi				ials and Mfg Information			
Supplier Information											
Company name* Company unique ID			Unique ID Authority				Respo	Response Date*			
nsemi			2024-04-19								
ntact Name Title - Contact			Phone	Phone - Contact*				Email - Contact*			
Product-Env-Stewards Product Enviro Compliance			NA				Produ	Product-Env-Stewards@onsemi.com			
uthorized Representative*  Title - Representative			Phone - Representative*				Email	Email - Representative*			
Product-Env-Stewards	Product Enviro Compliance	Product Enviro Compliance		NA			Produ	Product-Env-Stewards@onsemi.com			
Requester Item Number Mfr Ite	Number Mfr Item Name		Effect	tive Date	Version	Manufacturing Si	e	Weight*	UOM	Unit Type	
AR023 A0-CF	4CSSC00SUK 2MP 1/3 CIS S	SO	2024-	04-19		TWU		82.3612	mg	Each	
Manufacturing Process Information		_									
Terminal Plating / Grid Array Material	Terminal Base Alloy	J-STD-020 MSL	Rating P	Peak Process Body Temperature		ature Max Time at	Peak Temper	ature Number	er of Reflow Cyc	eles	
SnAgCu	Cu CU Alloy 4		2	45	C	30	seco	onds 3			
Comments			·						·	·	
or more information regarding material composition	n nlesse refer to nage 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).									
cadmium, hexavalentchromium, polybromin contains a RoHS restricted substance inexce encompass all such components. Supplier cet as of the date that Supplier completes this Company acknowledges that Supplier may hindependently verified information provided certification in this paragraph. If the Compan	nated biphenyls and/or polybrominated diphess of an applicable quantity limit, please indriffes that it gathered the information it provom. Supplier acknowledges that Company wave relied on informationprovided by others of the supplier agrees that, at a minimusy and the Supplier enter into a written agree yesource of the Supplier's liability and the C	enyl ethers (each a "RoHS restricted substan licate below which, if any, RoHS exemption vides in this form using appropriate methods vill rely on this certification in determining the s in completing this form, and that Supplier um, itssuppliers have provided certifications ement with respect to the identified part, the tompany's remedies for issues that arise rega	s of the European Union member states) of the ce") in excess of the applicable quantity limit is you believe may apply. If the part is an assemb to ensure its accuracy and that such informatio e compliance of its products with European Ur may not have independently verified such infor regarding their contributions to the part, and the erms and conditions of that agreement, including information the Supplier provides in this	dentified above. If a ally with lower level in is true and correct at it in member state la mation. However, in ose certifications are ag any warranty righ	homogeneous material within the part components, the declaration shall to the best of its knowledge and belief, was that implement the RoHS Directive. In situations where Supplier has not the at least as comprehensive as the lats and/or remedies provided as part of				
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	19.54	mg	Supplier	Silicon (Si)	7440-21-3		19.54	mg
Glass Attach Epoxy	0.0012	mg	Supplier	Imidazole	288-32-4		0.0003	mg
			Supplier	Epoxy Phenol Novolak Resin	28064-14-4		0.0009	mg
Glass Lid /Cap	54.35	mg	Supplier	Glass	65977-17-3		54.35	mg
Insulating Layer	5.51	mg	Supplier	9-Phenylacridine	602-56-2		0.2755	mg
			Supplier	2-Propenoic acid	1245638-61-2		1.653	mg
			Supplier	Other Additive Agents	Proprietary Data		3.306	mg
			Supplier	Butylglycol Acetate	112-07-2		0.2755	mg
Passivation	1.22	mg		Epoxy resin	proprietary data		0.0183	mg
			Supplier	Coupling Agent	Proprietary Data		0.0244	mg
			Supplier	Modified SBR Rubber	Proprietary Data		0.0061	mg
			Supplier	Melamine Compound	Proprietary Data		0.0366	mg
			Supplier	Trispenol Compound	Proprietary Data		0.0366	mg
			Supplier	Photosensitizer	Proprietary Data		0.0976	mg
			Supplier	Hydroxystyrene Resin	Proprietary Data		0.2684	mg
			Supplier	Ethyl Lactate	97-64-3		0.732	mg
RDL	0.82	mg	В	Nickel (Ni)	7440-02-0		0.492	mg
			Supplier	Gold (Au)	7440-57-5		0.0082	mg
			Supplier	Copper (Cu)	7440-50-8		0.3198	mg
Solder Ball	0.92	mg	Supplier	Silver (Ag)	7440-22-4		0.0611	mg
			Supplier	Tin (Sn)	7440-31-5		0.8181	mg
			Supplier	Copper (Cu)	7440-50-8		0.0408	mg