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.										
1752-21.1	IPC Web Site for Information on IPC-1752 Standard  Form Type http://www.ipc.org/IPC-175x  Form Type Distribute				*	Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Mater					ials and Mf	ials and Mfg Information			
Supplier	r Information														
Company name* Company to				ny unique ID			Unique ID Authority					Response Date*			
nsemi												2024-05-02			
Contact N	lame	Title - Contact				Phone - Contact*					Email - Contact*				
Product-I	Env-Stewards	Product Enviro Compliance				NA				Product-Env-Stewards@onsemi.com					
uthorize	ed Representative*	Title - Representative			]	Phone - Representative*				Email - Representative*					
Product-I	Env-Stewards	Product Enviro Compliance				NA				Product-Env-Stewards@onsemi.com					
	Requester Item Number Mfr Item		Number Mfr Item Name				Effective Da	Date Version Manufacturing Site		aring Site	Weight*		UOM	Unit Type	
		AR0144CSSM28SUK 1MP 1/4 CIS SO A0-CPBR					2024-05-02	2024-05-02 TWU			4	1.6043	mg	Each	
//////////////////////////////////////	cturing Proccess Information	n													
	Terminal Plating / Grid Array Material Terminal Base Alloy			J-STD-020 MSL	Rating	ing Peak Process Body Temperature Max Time at			Γime at Peak	eak Temperature Number of Reflow Cycles					
	SnAgCu		CU Alloy 5		5		<b>260</b> C		30 seco		second	s <b>3</b>			
omments	3														
or more	information regarding material co	mposition <b>j</b>	please refer 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 is trought 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 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 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 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).

<b>Homogeneous Material</b>	Weight	Unit of Measure	Level	Substance	CAS	Exempt	Weight	Unit of Measure
Die	8.2684	mg	Supplier	Silicon (Si)	7440-21-3		8.2684	mg
Glass Attach Epoxy	0.9839	mg		Miscellaneous	trade secret		0.1279	mg
			Supplier	Epoxy Phenol Novolak Resin	28064-14-4		0.856	mg
Glass Lid /Cap	29.9939	mg	Supplier	Boron Trioxide (B2O3)	1303-86-2		2.9994	mg
			Supplier	Magnesium Monoxide (MgO)	1309-48-4		1.4997	mg
			Supplier	Barium Monoxide (BaO)	1304-28-5		1.4997	mg
			Supplier	Aluminum Trioxide (Al2O3)	1344-28-1		2.9994	mg
			Supplier	Calcium Monoxide (CaO)	1305-78-8		1.4997	mg
			Supplier	Silica Crystalline (SiO2)	14808-60-7		19.496	mg
Metal Shielding	0.0493	mg	Supplier	Copper (Cu)	7440-50-8		0.0002	mg
			Supplier	Aluminum (Al)	7429-90-5		0.0491	mg
RDL	0.0541	mg	В	Nickel (Ni)	7440-02-0		0.0335	mg
			Supplier	Gold (Au)	7440-57-5		0.0003	mg
			Supplier	Copper (Cu)	7440-50-8		0.0001	mg
			Supplier	Aluminum (Al)	7429-90-5		0.0202	mg
Solder Ball	2.2207	mg	Supplier	Silver (Ag)	7440-22-4		0.0666	mg
			Supplier	Tin (Sn)	7440-31-5		2.143	mg
			Supplier	Copper (Cu)	7440-50-8		0.0111	mg
Substrate and Solder Mask	0.034	mg	Supplier	Epoxy Phenol Novolak Resin	28064-14-4		0.0034	mg
			Supplier	9-Phenylacridine	602-56-2		0.0017	mg
			Supplier	2-Propenoic acid	1245638-61-2		0.0034	mg
			Supplier	3-Methoxy-1-butanol	2517-43-3		0.0085	mg
			Supplier	Bisphenol A_Epichlorohydrin Polymer	25068-38-6		0.0085	mg
			Supplier	1-Methoxy-2-propyl acetate (MPA)	108-65-6		0.0085	mg