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.									
	IPC Web Site for Information on IPC 1752 Standard Form Type				*	* Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Materia					als and Mfg Information			
Supplier Information														
Company name* Company un			nique ID			Unique ID Authority					Response Date*			
nsemi											2024-04-24			
Contact Name Title - Contact					Phone - Contact*						Email - Contact*			
Product-Env-Stewards	Product Envi	et Enviro Compliance			NA				Product-Env-Stewards@onsemi.com					
Authorized Representative*  Title - Representative			entative	Phone			one - Representative*			Email - Representative*				
Product-Env-Stewards	Product Enviro Compliance				NA				Product-Env-Stewards@onsemi.com					
Requester Item Number	Mfr Item Nu		Number Mfr Item Name			Effective Dat	e Vers	ion	Manufacturing Site		We	ight*	UOM	Unit Type
	AR01440 A0-CPBI	R0144CSSM20SUK 1MP 1/4 CIS SO 0-CPBR				2024-04-24			TWU		41.0	5043	mg	Each
Manufacturing Proccess Informati	on													
Terminal Plating / Grid Array Mat	erial T	erminal Base A	-STD-020 MS	L Rating	Peak Process Body Temperature Max Tin		ne at Peak	Temperature	Numb	er of Reflow Cyc	cles			
SnAgCu	gCu CU Alloy		4			245		C	30		seconds	3		
omments														
or more information regarding material c	omposition 1	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 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 knowledges 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 paragraph. If the Company and the 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 have 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											
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