IPC ASSOCIATION CONNECT ELECTRONICS INDUSTR	© Copyright 2005. IP	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 low 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 Typ  http://www.ipc.org/IPC-175x  Form Typ  Distribute				Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Mater						Mfg In	formation	1	
Supplier Infor	mation														
Company name*			Company unique ID			τ	Unique ID Authority					Response Date*			
nsemi											2023-0	2023-06-08			
Contact Name		Title - Contact			I	Phone - Contact*				Email	Email - Contact*				
Product-Env-Stev	wards	Product Enviro Compliance				NA				Produ	Product-Env-Stewards@onsemi.com				
uthorized Repre	sentative*	Title - Representative			I	Phone - Representative*				Email	Email - Representative*				
Product-Env-Stewards			Product Enviro Compliance				NA				Produ	Product-Env-Stewards@onsemi.com			
Reques	ster Item Number						Effective Dat	e Version	n N	Manufacturing Site		Weight* UOM		UOM	Unit Type
							2023-06-08 TH2		12		80.79	80.792 mg		Each	
<b>Ianufacturing</b>	g Proccess Informati	on													,
Termina	Plating / Grid Array Material		Terminal Base Alloy		J-STD-020 MS	STD-020 MSL Rating		Peak Process Body Temperature		re Max Time at Peak Tempera		ature	Number	of Reflow Cyc	eles
Precious metal (e.g. Ag,Au, NiPdAu) (no Sn)			CU Alloy 3		3		260		С	30	seco	onds	3		
Comments															
TTENTION: MS	SL 3 Rated item requires	Bake and I	Ory Pack (after	electrical test)											
or more informa	tion regarding material c	omposition	please refer to	page 3											<u> </u>

RoHS Material Composition Declaration			Declaration Type *	Detail	ed
Directive 2015/863/EU amending RoHS Directive 2011/65/EU		ium (Cr6+), Polybrominated Biphenyls (PB)	erial for Cadmium and quantity limit of 0.1% b B), Polybrominated Diphenyl Ethers (PBDE), a		
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 tion 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 applicable exemptions.	contain RoHS restricted substances per t	he definition above except for defined Rol	IS exemptions, then select the corresponding	response in the R	oHS Declaration above and choose all
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	2.16	mg	Supplier	Silicon (Si)	7440-21-3		2.16	mg
Die Attach	1.144	mg	Supplier	Silver (Ag)	7440-22-4		0.8466	mg
			Supplier	Phenolic Resin-2	54208-63-8		0.2974	mg
Lead Frame	31.136	mg	Supplier	Zinc (Zn)	7440-66-6		0.0374	mg
			Supplier	Iron (Fe)	7439-89-6		0.7286	mg
			Supplier	Copper (Cu)	7440-50-8		30.3451	mg
			Supplier	Phosphorus (P)	7723-14-0		0.0249	mg
Mold Compound-Black	45.29	mg	Supplier	Ortho Cresol Novolac Resin	29690-82-2		2.83	mg
			Supplier	Carbon Black (C)	1333-86-4		0.09	mg
			Supplier	Silica (SiO2)	14464-46-1		39.42	mg
			Supplier	Phenolic Resin (Novolac)	9003-35-4		2.95	mg
Plating	0.435	mg	Supplier	Silver (Ag)	7440-22-4		0.0066	mg
			Supplier	Palladium (Pd)	7440-05-3		0.0154	mg
			В	Nickel (Ni)	7440-02-0		0.404	mg
			Supplier	Gold (Au)	7440-57-5		0.009	mg
Wire Bond - Au	0.627	mg	Supplier	Gold (Au)	7440-57-5		0.627	mg