ASSOCIATION CONNECTED ELECTRONICS INDUST	© Copyright 2005. IPO	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	formatio	n		
Supplier Info	rmation															
Company name*			Company unique ID			τ	Unique ID Authority					Response Date*				
nsemi													2023-06-08			
Contact Name			Title - Conta	Title - Contact			Phone - Contact*				Emai	Email - Contact*				
Product-Env-Ste	ewards	Product Enviro Compliance			]	NA				Prod	Product-Env-Stewards@onsemi.com					
uthorized Repr	esentative*	Title - Representative			F	Phone - Representative*				Emai	Email - Representative*					
Product-Env-Stewards			Product Enviro Compliance			]	NA				Prod	Product-Env-Stewards@onsemi.com				
Reque	ester Item Number						Effective Dat	e Version	rsion Manufacturing Site		lite	Weight* UON		UOM	Unit Type	
							2023-06-08 T		TH2		21.6199 mg		Each			
<b>Ianufacturin</b>	ng Proccess Informati	on												1	,	
Termin	l Plating / Grid Array Material		Terminal Base Alloy		J-STD-020 MS	SL Rating	Peak Process Body Temperature		e Max Time at Peak Temper		rature	ure Number of Reflow Cycles		eles		
Precio Sn)	Precious metal (e.g. Ag,Au, NiPdAu) (no Sn)		CU Alloy 1		1		260		С	30	sec	onds	3			
Comments			·			·				· ·						
evel 1 - maximur	n time at peak temperatur	e during so	ldering is 10-3	30 seconds						·						
or more informa	ation regarding material c	omposition	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 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 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 suppliers 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 has not orditions of that agreement, including any warranty rights and/or remedies 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 r											
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	1.055	mg	Supplier	Silicon (Si)	7440-21-3		1.055	mg
Die Attach	0.1359	mg	Supplier	Isobornyl Methacrylate	7534-94-3		0.0082	mg
			Supplier	Silver (Ag)	7440-22-4		0.1108	mg
			Supplier	Isobornyl Acrylate	5888-33-5		0.0082	mg
			Supplier	Misc.	Proprietary Data		0.0007	mg
			Supplier	Tricyclo[5.2.1.02,6]decanedimethanol Diacrylate (C18H24O4)	42594-17-2		0.0082	mg
Lead Frame	9.565	mg	Supplier	Zinc (Zn)	7440-66-6		0.0119	mg
			Supplier	Iron (Fe)	7439-89-6		0.2247	mg
			Supplier	Copper (Cu)	7440-50-8		9.3205	mg
			Supplier	Phosphorus (P)	7723-14-0		0.0079	mg
Mold Compound-Black	10.3333	mg	Supplier	Carbon Black (C)	1333-86-4		0.0517	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		9.0933	mg
			Supplier	Ortho-Cresol Novolac Resin	29690-82-2		0.6717	mg
			Supplier	Phenolic Resin (Novolac)	9003-35-4		0.5167	mg
Plating	0.1337	mg	Supplier	Silver (Ag)	7440-22-4		0.0021	mg
			Supplier	Palladium (Pd)	7440-05-3		0.0048	mg
			В	Nickel (Ni)	7440-02-0		0.1241	mg
			Supplier	Gold (Au)	7440-57-5		0.0027	mg
Wire Bond - Au	0.397	mg	Supplier	Gold (Au)	7440-57-5		0.397	mg