ASSOCIATION CONNEC	© 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 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 IPC-1752 Standard Form Typ http://www.ipc.org/IPC-175x Distribute									us Materia	ials and Mfg Information			
Supplier Info	rmation														
Company name*			Company unique ID			Ţ	Unique ID Authority					Response Date*			
nsemi												2023-06-08			
Contact Name		Title - Contact			I	Phone - Contact*					Email - Contact*				
Product-Env-Ste	ewards	Product Enviro Compliance				NA					Product-Env-Stewards@onsemi.com				
uthorized Repr	esentative*	Title - Representative			I	Phone - Representative*				Email - Representative*					
Product-Env-Stewards			Product Enviro Compliance				NA				Product-Env-Stewards@onsemi.com				
Reque	ester Item Number						Effective Dat	te Versio	Version Man		Ianufacturing Site		eight*	UOM	Unit Type
							2023-06-08 TH5		15		3	31.2 mg		Each	
Ianufacturin	ng Proccess Informat	ion													
Termir	nal Plating / Grid Array Mat	Plating / Grid Array Material		Terminal Base Alloy		SL Rating	Peak Process Body Temperatur		re Max Time at Peak Temper		Temperatu	ature Number of Reflow Cycles		eles	
Precious metal (e.g. Ag,Au, NiPdAu) (no Sn)			CU Alloy 1		1		260		С	30	seco		s <b>3</b>		
Comments															
vel 1 - maximuı	m time at peak temperatui	e during so	oldering is 10-3	0 seconds											
or more inform	ation regarding material c	omposition	please refer to	page 3											

RoHS Material Composition Declaration			Declaration Type *	Detail	led						
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, polybromir contains a RoHS restricted substance inexce encompass all such components. Supplier ce as of the date that Supplier completes this fo Company acknowledges that Supplier may l independently verified information provided certification in this paragraph. If the Compan	nated biphenyls and/or polybrominated dipless of an applicable quantity limit, please intifies that it gathered the information it prome. Supplier acknowledges that Company have relied on information provided by other by others, Supplier agrees that, at a mining and the Supplier enter into a written agree esource of the Supplier's liability and the	henyl ethers (each a "RoHS restricted substational substance below which, if any, RoHS exemption by desired in this form using appropriate method will rely on this certification in determining ters in completing this form, and that Supplies have provided certification between the will respect to the identified part, the Company's remedies for issues that arise respects to the identified part, the company's remedies for issues that arise respects to the identified part, the company's remedies for issues that arise respects to the identified part, the company's remedies for issues that arise respects to the identified part, the company's remedies for issues that arise respects to the identified part, the company's remedies for issues that arise respects to the identified part, the company's remedies for issues that arise respects to the identified part, the company's remedies for issues that arise respects the company is the company that the company tha	ws of the European Union member states) of the pnce") in excess of the applicable quantity limit iden you believe may apply. If the part is an assemble is to ensure its accuracy and that such information the compliance of its products with European Union may not have independently verified such informs regarding their contributions to the part, and tho terms and conditions of that agreement, including the provides in this formation information the Supplier provides in this formation.	entified above. If a y with lower level is true and correct on member state la nation. However, in se certifications are any warranty rigl	n homogeneous material within the part components, the declaration shall t to the best of its knowledge and belief, aws that implement the RoHS Directive. In situations where Supplier has not the at least as comprehensive as the this and/or remedies provided as part of						
RoHS Declaration * 1 - Item	(s) does not contain RoHS restricted substa	ances per the definition above	Supplier Ac	ceptance *	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											
Instructional Complete all of the required	fields on all neggs of this form. Calcut th		a duan dawn. This will display the signature on	a Digitally sign	the declaration (if recurined by the						
Instructions: Complete all of the required Requester) and click on Submit Form to			e drop-down. This will display the signature ar	ea. Digitally sign	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	0.66	mg	Supplier	Silicon (Si)	7440-21-3		0.66	mg
Die Attach	0.12	mg	Supplier	Silver (Ag)	7440-22-4		0.09	mg
			Supplier	Epoxy resins	129915-35-1		0.03	mg
Lead Frame	10.96		Supplier	Magnesium (Mg)	7439-95-4		0.0164	mg
			Supplier	Silicon (Si)	7440-21-3		0.0712	mg
			В	Nickel (Ni)	7440-02-0		0.3288	mg
			Supplier	Copper (Cu)	7440-50-8		10.5435	mg
Mold Compound-Black	19.21	mg		Epoxy resin	proprietary data		0.9605	mg
			Supplier	Phenolic Resin	Proprietary Data		0.9605	mg
			Supplier	Ortho Cresol Novolac Resin	29690-82-2		0.3842	mg
			Supplier	Carbon Black (C)	1333-86-4		0.096	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		16.8088	mg
Plating	0.12	mg	Supplier	Palladium (Pd)	7440-05-3		0.0075	mg
			В	Nickel (Ni)	7440-02-0		0.1113	mg
			Supplier	Gold (Au)	7440-57-5		0.0013	mg
Wire Bond - Au	0.13	mg	Supplier	Gold (Au)	7440-57-5		0.13	mg