IPC  ASSOCIATION CONNECTING ELECTRONICS INDUSTRIES	Material Composition Declaration © Copyright 2005. IPC, Bannockburn, Illinois. All rights reserved under both international and Pan-American copyright conventions.				der both leve	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 Type http://www.ipc.org/IPC-175x  Form Type Distribute				Form Type * Distribute		Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Materia					als and Mfg Information			
upplier Inform	ation														
Company name*			Company unique ID			Į	Unique ID Authority				Respo	Response Date*			
nsemi											2024-0	2024-05-03			
Contact Name		Title - Contact			P	Phone - Contact*				Email	Email - Contact*				
Product-Env-Stewa	rds	Product Enviro Compliance			1	NA				Produ	Product-Env-Stewards@onsemi.com				
uthorized Represen	ntative*	Title - Representative			P	Phone - Representative*			Email	Email - Representative*					
Product-Env-Stewards			Product Enviro Compliance			1	NA				Produ	Product-Env-Stewards@onsemi.com			
Requeste	er Item Number Mfr Item		m Number Mfr Item Name				Effective Da	ive Date   Version   Manufacturing Site			Weight*	UOM	Unit Type		
		driver with			SOR OPEN; Single phase sensor method (open loop		2024-05-03			РНМ		80.01	mg	Each	
Ianufacturing	Proccess Information	n													
Terminal Plating / Grid Array Material To			Terminal Base Alloy J-STD-020 MSL		STD-020 MSL Ra	ating	Peak Process Body Temperature Max Time at Pea			ak Tempei	k Temperature Number of Reflow Cycles				
contains Bi			CU Alloy 3				260 C 30			sec	seconds 3				
omments															
TTENTION: MSL	3 Rated item requires Ba	ake and D	ry Pack (after	r electrical test)											
or more informatio	on regarding material con	nposition <b>j</b>	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).										
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 shall apply the information the Supplier provides in this form. In the absence of such written agreement, the 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 substa	ances per the definition above	Supplier Ac	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										
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).

Homogeneous Material	Weight	Unit of Measure	Level	Substance	CAS	Exempt	Weight	Unit of Measure
Die	2.88	mg	Supplier	Silicon (Si)	7440-21-3		2.8693	mg
			Supplier	Polyimide	Proprietary Data		0.0107	mg
Die Attach Solder	0.6	mg	Supplier	C4-11 DICARBOXYLIC ACIDS	68937-72-4		0.021	mg
			Supplier	Polyalkylene glycol monobutyl ether	9038-95-3		0.021	mg
			Supplier	Rosin	65997-05-9		0.03	mg
			Supplier	Silver (Ag)	7440-22-4		0.015	mg
			Supplier	Tin (Sn)	7440-31-5		0.51	mg
			Supplier	Copper (Cu)	7440-50-8		0.003	mg
Lead Frame	6.56	mg	Supplier	Silver (Ag)	7440-22-4		0.1312	mg
			Supplier	Zinc (Zn)	7440-66-6		0.0079	mg
			Supplier	Iron (Fe)	7439-89-6		0.1542	mg
			Supplier	Copper (Cu)	7440-50-8		6.2648	mg
			Supplier	Phosphorus (P)	7723-14-0		0.002	mg
Mold Compound-Black	68.46	mg	Supplier	Ortho Cresol Novolac Resin	29690-82-2		5.4768	mg
			Supplier	Epoxy Phenol Resin	Proprietary Data		1.9169	mg
			Supplier	Carbon Black (C)	1333-86-4		0.6846	mg
			Supplier	Aluminum Hydroxide (Al(OH)3)	21645-51-2		2.0538	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		54.768	mg
			Supplier	Phenolic Resin (Novolac)	9003-35-4		3.423	mg
			Supplier	Silica Crystalline (SiO2)	14808-60-7		0.1369	mg
Plating	1.13	mg	В	Bismuth (Bi)	7440-69-9		0.0068	mg
-		-	Supplier	Tin (Sn)	7440-31-5		1.1232	mg
Wire Bond - Au	0.38	mg	Supplier	Gold (Au)	7440-57-5		0.38	mg