IPC ASSOCIATION CONNECTION ELECTRONICS INDUSTRIE	© Copyright 2005. IPC,	Material Composition Declaration © Copyright 2005. IPC, Bannockburn, Illinois. All rights reserved under both international and Pan-American copyright conventions.			der both lev	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 Distribute				Form Type * Distribute		Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Materi					als and Mfg Information			
upplier Inforn	nation														
Company name*			Company unique ID			τ	Unique ID Authority				Res	Response Date*			
nsemi											202	2024-05-02			
ontact Name		Title - Contact			P	Phone - Contact*				Em	Email - Contact*				
Product-Env-Stew	ards	Product Enviro Compliance			1	NA				Pro	Product-Env-Stewards@onsemi.com				
uthorized Repres	entative*	Title - Representative			P	Phone - Representative*				Em	Email - Representative*				
Product-Env-Stewards			Product Enviro Compliance			1	NA				Pro	Product-Env-Stewards@onsemi.com			
Request	uester Item Number Mfr Item		n Number Mfr Item Name				Effective Da	te Ver	rsion	Manufacturing Site		Weight*	UOM	Unit Type	
				PH DRV SENSOR NA ; Single phase driver with hall sensor method (no speed control)			2024-05-02			РНМ		250.0	mg	Each	
<b>Ianufacturing</b>	Process Information	n													
Terminal Plating / Grid Array Material T			Terminal Base Alloy J-STD-020 MSL R		ating	Peak Process Body Temperature Max Time at Pea			Peak Temp	k Temperature Number of Reflow Cycles					
contains Bi			CU Alloy 3				260 C 30			s	seconds 3				
omments															
TTENTION: MS	L 3 Rated item requires B	ake and D	ry Pack (after	r electrical test)											
or more informati	ion regarding material con	nposition	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).											
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 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	2.5	mg	Supplier	Silicon (Si)	7440-21-3		2.4907	mg
			Supplier	Polyimide	Proprietary Data		0.0093	mg
Die Attach	0.2	mg	Supplier	Silver (Ag)	7440-22-4		0.153	mg
			Supplier	Epoxy resins	129915-35-1		0.047	mg
Lead Frame	78.05	mg	Supplier	Zinc (Zn)	7440-66-6		0.1561	mg
			Supplier	Iron (Fe)	7439-89-6		2.0293	mg
			Supplier	Copper (Cu)	7440-50-8		75.7475	mg
			Supplier	Phosphorus (P)	7723-14-0		0.1171	mg
Mold Compound-Black	167.26	mg		Brominated epoxy resin	proprietary data		3.5125	mg
			В	Antimony Trioxide (Sb2O3)	1309-64-4		1.6726	mg
			Supplier	Carbon Black (C)	1333-86-4		0.5352	mg
			Supplier	Ortho-Cresol Novolac Resin	29690-82-2		40.3097	mg
			Supplier	Silica Crystalline (SiO2)	14808-60-7		121.23	mg
Plating	1.56	mg	В	Bismuth (Bi)	7440-69-9		0.0094	mg
			Supplier	Tin (Sn)	7440-31-5		1.5506	mg
Wire Bond - Au	0.43	mg	Supplier	Gold (Au)	7440-57-5		0.43	mg