IPC ASSOCIATION ELECTRONIE	© Copyright 2005	Material Composition Declaration © Copyright 2005. IPC, Bannockburn, Illinois. All rights reserved under both international and Pan-American copyright conventions.			nder both Is	This document is a declaration of the substances within the manufacturer listed item. Note: if the item is an assembly with lowe level parts, the declaration encompasses all lower level materials for which the manufacturer has engineering responsibility.									
752-21.1					Form Type * Distribute	Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Mater					s Material	ials and Mfg Information			
Supplie	r Information														
Company name* Compan				ompany unique ID			Unique ID Authority					Response Date*			
nsemi												2024-09-20			
Contact N	lame		Title - Contact			P	Phone - Contact*					Email - Contact*			
Product-	Env-Stewards		Product Enviro Compliance			1	NA					Product-Env-Stewards@onsemi.com			
uthorize	ed Representative*	Title - Representative			P	Phone - Representative*				]	Email - Representative*				
Product-	Env-Stewards	Product Enviro Compliance			1	NA					Product-Env-Stewards@onsemi.com				
	Requester Item Number Mfr Item		n Number Mfr Item Name				Effective Date	tive Date   Version   Manufacturing Sit		g Site	W	eight*	UOM	Unit Type	
		SZMMSZ3V9T1G ZEN		ZEN SOD123 REC	ZEN SOD123 REG 0.5W 3.9V		2024-09-20 CN1		N1		11	.67	mg	Each	
Ianufa	ecturing Process Inform						Ī., .					·			
	8		,		-STD-020 MSL 1	Rating		ess Body 7	ss Body Temperature   Max Time at Peak		at Peak T	1		per of Reflow Cyc	eles
	Matte Tin (Sn) - annealed		CU Alloy	1			260		C	30		second	s <b>3</b>		
omments															
	naximum time at peak tempera														
or more	information regarding materi	al composition	please refer t	o 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).

<b>Homogeneous Material</b>	Weight	Unit of Measure	Level	Substance	CAS	Exempt	Weight	Unit of Measure
Die	0.88	mg	Supplier	Silicon (Si)	7440-21-3		0.88	mg
Lead Frame	3.19	mg	В	Nickel (Ni)	7440-02-0		1.158	mg
			Supplier	Iron (Fe)	7439-89-6		1.6014	mg
			Supplier	Copper (Cu)	7440-50-8		0.4306	mg
Mold Compound-Black	6.51	mg	Supplier	Ortho Cresol Novolac Resin	29690-82-2		0.651	mg
			Supplier	Carbon Black (C)	1333-86-4		0.0325	mg
			Supplier	Aluminum Hydroxide (Al(OH)3)	21645-51-2		0.9439	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		4.2315	mg
			Supplier	Phenolic Resin (Novolac)	9003-35-4		0.651	mg
Plating	0.8	mg	Supplier	Tin (Sn)	7440-31-5		0.8	mg
Wire Bond	0.29	mg	Supplier	Palladium (Pd)	7440-05-3		0.0038	mg
			Supplier	Copper (Cu)	7440-50-8		0.2862	mg