IPC ASSOCIATION CONNECTED ELECTRONICS INDUST	© Copyright 2005, IPC	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 Distribute				Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Mater						s and Mfg	Informati	on	
Supplier Info	rmation														
Company name*			Company unique ID			τ	Unique ID Authority					Response Date*			
nsemi												2024-05-17			
Contact Name		Title - Contact			I	Phone - Contact*				1	Email - Contact*				
Product-Env-Ste	wards	Product Enviro Compliance				NA					Product-Env-Stewards@onsemi.com				
uthorized Repro	esentative*	Title - Representative			I	Phone - Representative*				]	Email - Representative*				
Product-Env-Ste	wards	Product Enviro Compliance				NA					Product-Env-Stewards@onsemi.com				
Reque	ester Item Number	Item Number Mfr Item Number ESD8551N2T5G					Effective Dat	e Version	n N	Manufacturing Site		We	ight*	UOM	Unit Type
						tion	2024-05-17 CN1			0.929 mg		mg	Each		
Ianufacturin	g Proccess Informatio	n												·	·
Termin	Plating / Grid Array Material		Terminal Base Alloy		J-STD-020 MS	SL Rating	Peak Pro	Peak Process Body Temperature		e Max Time	at Peak T	ak Temperature Nur		Number of Reflow Cycles	
Precious metal (e.g. Ag,Au, NiPdAu) (no Sn)		Au) (no	CU Alloy 1		1		260		С	30		seconds	3		
Comments										<u> </u>					
vel 1 - maximun	n time at peak temperature	during so	ldering is 10-3	0 seconds											
or more informa	ation regarding material co	mposition	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 informationprovided 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 enter into a written agreement with respect to the identified part, the terms and conditions of that agreement, including any 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 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	0.02	mg	Supplier	Silicon (Si)	7440-21-3		0.02	mg
Die Attach	0.008	mg	Supplier	Poly(Bisphenol A-co-epichlorohydrin) (C18H22O3)	25036-25-3		0.0001	mg
			Supplier	Formaldehyde, polymer with amiline	67784-74-1		0.0002	mg
			Supplier	Bisphenol A, epichlorohydrin polymer	68610-41-3		0.0004	mg
			Supplier	Silver (Ag)	7440-22-4		0.0073	mg
Lead Frame	0.41	mg	Supplier	Magnesium (Mg)	7439-95-4		0.0006	mg
			Supplier	Silicon (Si)	7440-21-3		0.0027	mg
			В	Nickel (Ni)	7440-02-0		0.0123	mg
			Supplier	Copper (Cu)	7440-50-8		0.3944	mg
Mold Compound-Black	0.34	mg	Supplier	Silica Amorphous (SiO2)	7631-86-9		0.0255	mg
			Supplier	Carbon Black (C)	1333-86-4		0.0017	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		0.2703	mg
			Supplier	EpoxyNovolaCresins (Cresolic)	64425-89-4		0.017	mg
			Supplier	Phenolic Resin (Novolac)	9003-35-4		0.0255	mg
Plating	0.146	mg	Supplier	Palladium (Pd)	7440-05-3		0.0111	mg
			В	Nickel (Ni)	7440-02-0		0.1329	mg
			Supplier	Gold (Au)	7440-57-5		0.002	mg
Wire Bond - Au	0.005	mg	Supplier	Gold (Au)	7440-57-5		0.005	mg