IPC ASSOCIATION ELECTRONIC	© Copyr	Material Composition Declaration © Copyright 2005. IPC, Bannockburn, Illinois. All rights reserved under both international and Pan-American copyright conventions.				nder both	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					Form Type Distribute						eous Materia	rials and Mfg Information				
Supplie	r Information															
Company name*				Company unique ID			Ţ	Unique ID Authority					Response Date*			
nsemi													2024-05-15			
Contact Name				Title - Contact			1	Phone - Contact*				Email - Contact*				
Product-l	Env-Stewards		P	Product Enviro Compliance				NA					Product-Env-Stewards@onsemi.com			
Authorized Representative*				Title - Representative			1	Phone - Representative*				Email - Representative*				
Product-Env-Stewards				Product Enviro Compliance				NA				Product-Env-Stewards@onsemi.com				
	Requester Item Num			m Number Mfr Item Name				Effective Date Version		ersion	Manufacturing Site		1	Weight*	UOM	Unit Type
				SS SOT23 GP XSTR NPN 80V			2024-05-15		(CN1		8	3.02	mg	Each	
Ianufa	acturing Proccess														·	
			Terr	Terminal Base Alloy J-ST		-STD-020 MSI	_ Rating			Body Temperature Max Time at Peak		Temperature Number of		er of Reflow Cyc	eles	
Matte Tin (Sn) - annealed			CU	Alloy	1			260		C	30		secon	ds 3		
omments	-															
<u>vel 1 - m</u>	naximum time at peal	k temperature du	ring solde	ering is 10-3	0 seconds											
or more	information regardir	ng material comp	osition ple	ease 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 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 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 provided as part of that agreement, will be the sole and exclusivesource of the 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 0.05		mg	Supplier	Silicon (Si)	7440-21-3		0.05	mg
Lead Frame	2.92		В	Nickel (Ni)	7440-02-0		1.06	mg
			Supplier	Iron (Fe)	7439-89-6		1.4658	mg
			Supplier	Copper (Cu)	7440-50-8		0.3942	mg
Mold Compound-Black	4.9	mg	Supplier	Ortho Cresol Novolac Resin	29690-82-2		0.49	mg
			Supplier	Carbon Black (C)	1333-86-4		0.0245	mg
			Supplier	Aluminum Hydroxide (Al(OH)3)	21645-51-2		0.7105	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		3.185	mg
			Supplier	Phenolic Resin (Novolac)	9003-35-4		0.49	mg
Plating	0.14	mg	Supplier	Tin (Sn)	7440-31-5		0.14	mg
Wire Bond	0.01	mg	Supplier	Palladium (Pd)	7440-05-3		0.0001	mg
			Supplier	Copper (Cu)	7440-50-8		0.0099	mg