Contact Name  Title - Contact  Product-Env-Stewards  Authorized Representative*  Product-Env-Stewards  Product Enviro Compliance  Title - Representative  Phone - Contact*  Phone - Contact*  Product-Env-Stewards@onsemi.com  Phone - Representative*  Phone - Representative*  Phone - Representative*  Product-Env-Stewards@onsemi.com  Product-Env-Stewards@onsemi.com  Requester Item Number  Mfr Item Number  Mfr Item Name  Effective Date Version  Manufacturing Site  Weight*  UOM  Un	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	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.								
Company name   Com	752-21.1											als and Mfg	Informati	on	
Semilar   Freduct Name   Freduct Enviro Compliance   Freduct Enviro En	upplier Informa	ation								,		<u> </u>			
Title - Contact Name	Company name*			Company unique ID			U	Unique ID Authority				Response Date*			
Product Env-Stewards Authorized Representative* Title - Representative Product Enviro Compliance NA Product Enviro Compliance NA Product Enviro Compliance NA Product Envi-Stewards @ onsemi.com Product Enviro Compliance NA Product Envi-Stewards @ onsemi.com Product Enviro Compliance NA Product Envi-Stewards @ onsemi.com NA Naufacturing Site NA NA Naufacturing Site N	nsemi											2024-05-19			
Authorized Representative*  Product Env-Stewards Product Enviro Compliance Requester Item Number Mfr Item Number Mfr Item Number Mfr Item Name Effective Date Version Manufacturing Site Weight* UOM Un NDS352AP 30V SSOT-3 PCH 2024-05-19 MY1 10.57 mg Eac  Manufacturing Proccess Information  Terminal Plating / Grid Array Material Terminal Base Alloy Terminal Plating / Grid Array	Contact Name			Title - Contact			P	Phone - Contact*				Email - Contact*			
Product-Env-Stewards Requester Item Number Mfr Item Number Mfr Item Name Effective Date Version Manufacturing Site Weight* UOM Un NDS352AP 30V SSOT-3 PCH 2024-05-19 MY1 10.57 mg Eac Manufacturing Proccess Information  Terminal Plating / Grid Array Material Terminal Base Alloy J-STD-020 MSL Rating Matte Tin (Sn) - annealed CU Alloy 1 260 C 30 Seconds 3 Comments	Product-Env-Stewar	ds		Product Enviro Compliance			1	NA				Product-Env-Stewards@onsemi.com			
Requester Item Number	uthorized Represen	tative*		Title - Representative			P	Phone - Representative*			Email - Representative*				
Moderate Process Information  Terminal Plating / Grid Array Material Terminal Base Alloy J-STD-020 MSL Rating Peak Process Body Temperature Max Time at Peak Temperature Number of Reflow Cycles Matte Tin (Sn) - annealed CU Alloy 1 260 C 30 seconds 3	Product-Env-Stewards			Product Enviro Compliance			1	NA				Product-Env-Stewards@onsemi.com			
Manufacturing Proccess Information  Terminal Plating / Grid Array Material Terminal Base Alloy J-STD-020 MSL Rating Peak Process Body Temperature Max Time at Peak Temperature Number of Reflow Cycles  Matte Tin (Sn) - annealed CU Alloy 1 260 C 30 seconds 3	Requester	Requester Item Number Mfr Ite		em Number Mfr Item Name				Effective Date	Version	M	Ianufacturing Site	W	eight*	UOM	Unit Type
Terminal Plating / Grid Array Material Terminal Base Alloy J-STD-020 MSL Rating Peak Process Body Temperature Max Time at Peak Temperature Number of Reflow Cycles  Matte Tin (Sn) - annealed CU Alloy 1 260 C 30 seconds 3			NDS352A	AP	30V SSOT-3 PCH			2024-05-19		M	IY1	10	.57	mg	Each
Matte Tin (Sn) - annealed CU Alloy 1 260 C 30 seconds 3				arminal Reso	Alloy	O20 MSI	Dating	Dank Droop	ass Rody To	mparatura	May Time at Dook	Tamparatur	a Numb	ar of Patlow Cya	lac
Comments					Alloy J-S	31D-020 MSL	Kating		ss Body Te	•				ei oi Keilow Cyc	108
	•	(Sii) - aimealeu		U Anoy	1			400		<u> </u>	30	seconds			
ver 1 - maximum unie at peak temperature uuring soutering is 10-30 seconds		no at neels temperature	during sole	doring is 10.2	0 seconds										
or more information regarding material composition 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 at it in 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	0.766	mg	Supplier	Silicon (Si)	7440-21-3		0.766	mg
Lead Frame	3.699	mg	Supplier	Silver (Ag)	7440-22-4		0.015	mg
			Supplier	Zinc (Zn)	7440-66-6		0.005	mg
			Supplier	Iron (Fe)	7439-89-6		0.088	mg
			Supplier	Copper (Cu)	7440-50-8		3.59	mg
			Supplier	Phosphorus (P)	7723-14-0		0.001	mg
Mold Compound-Black	5.697	mg	Supplier	Ortho Cresol Novolac Resin	29690-82-2		1.65	mg
			Supplier	Carbon Black (C)	1333-86-4		0.057	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		3.99	mg
Plating	0.332	mg	Supplier	Tin (Sn)	7440-31-5		0.332	mg
Wire Bond - Au	0.076	mg	Supplier	Gold (Au)	7440-57-5		0.076	mg