IPC ASSOCIATION ELECTRONIC	© Copyright 2005	Material Composition Declaration © Copyright 2005. IPC, Bannockburn, Illinois. All rights reserved under both international and Pan-American copyright conventions.			nder both le	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		IPC Web Site for Information on IPC-1752 Standard  Form Ty  http://www.ipc.org/IPC-175x  Distribu				Declaration Class * Class 6 - RoHS Yes/No. Homogeneous Mater				Materials	ials and Mfg Information				
Supplier	· Information				·										
ompany	name*	Company unique ID			U	Unique ID Authority				R	Response Date*				
nsemi											20	2024-04-29			
Contact N	ame	Title - Contact			P	Phone - Contact*				Eı	Email - Contact*				
Product-E	Env-Stewards		Product Enviro Compliance			ı	NA				P	Product-Env-Stewards@onsemi.com			
uthorize	d Representative*	Title - Representative			P	Phone - Representative*				Eı	Email - Representative*				
Product-E	Env-Stewards	Product Enviro Compliance			r	NA				P	Product-Env-Stewards@onsemi.com				
	Requester Item Number Mfr Iter		n Number Mfr Item Name				Effective Date Version Manu		Ianufacturing	ufacturing Site Weight*		UOM	Unit Type		
		NSS20500UW3T2G 20V PNP		20V PNP LOW V	PNP LOW VCE(SAT) XTR		2024-04-29		N	MY1		9.63	mg	Each	
Ianufa	cturing Proccess Inform	ation													
	Terminal Plating / Grid Array Material		Terminal Base Alloy J-STD-020		-STD-020 MSL I	Rating	Peak Process Body Temperatur		e Max Time a	at Peak Ter	mperature Nu	mber of Reflow Cy	cles		
Matte Tin (Sn) - annealed		CU Alloy 1			260 C 30			seconds 3							
omments															
vel 1 - m	aximum time at peak tempera	ture during so	ldering is 10-3	30 seconds											
or more i	information regarding materi	al 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).											
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 have provided as part of that agreement, will be the sole and exclusivesource of the Supplier's liability and the Company's remedies for issues that arise regarding information the Supplier provides in this form. In the absence of such written agreement, the warranty rights and/or remedies of Supplier's Standard Terms and Conditions of Sale applicable to such											
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	0.36	mg	Supplier	Silicon (Si)	7440-21-3		0.36	mg
Die Attach	0.14		Supplier	Silver (Ag)	7440-22-4		0.119	mg
			Supplier	Epoxy resins	129915-35-1		0.021	mg
Lead Frame	2.69		Supplier	Silver (Ag)	7440-22-4		0.0538	mg
			Supplier	Iron (Fe)	7439-89-6		0.0592	mg
			Supplier	Copper (Cu)	7440-50-8		2.577	mg
Mold Compound-Black	5.8	mg		Epoxy Phenol Resin	proprietary data		0.522	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		5.278	mg
Plating	0.57	mg	Supplier	Tin (Sn)	7440-31-5		0.57	mg
Wire Bond - Cu	0.07	mg	Supplier	Copper (Cu)	7440-50-8		0.07	mg