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 lower level parts, the declaration encompasses all lower level materials for which the manufacturer has engineering responsibility.										
1752-21.1	IPC Web Site for Information on IPC 1752 Standard Form Type				* Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Mater					ials and Mfg Information					
Supplier	r Information														
Company name* Company unique ID				ique ID	Unique ID Authority				Response Date*						
n Semico	onductor											2021-02-03			
Contact N	ame		Title - Conta	Title - Contact			Phone - Contact*					Email - Contact*			
Product-H	Env-Stewards		Product Envi	Product Enviro Compliance			NA				Product-Env-Stewards@onsemi.com				
uthorize	d Representative*	Title - Representative				Phone - Representative*				Email - Representative*					
Product-H	Env-Stewards	Product Enviro Compliance				NA				Product-Env-Stewards@onsemi.com					
	Requester Item Number Mfr Item		Number Mfr Item Name				Effective Date Version Manufacturing Site 2021-02-03		ing Site	W	eight*	UOM	Unit Type		
		2N3819 SS TO		SS T092 JFET NCH 30V					198.01 mg		Each				
<b>Ianufa</b>	cturing Proccess Informa	ntion												·	
	Terminal Plating / Grid Array Material		Terminal Base Alloy J-STD		STD-020 MSL	L Rating	Peak Proc		cess Body Temperature Ma		me at Peak	ak Temperature Nur		er of Reflow Cyc	eles
	PbSn		CU Alloy NA		A		0 C		30 secon		second	3			
omments															
or more i	information regarding materia	l composition	please refer to	page 3									·		

RoHS Material Composition Declaration			Declaration Type *	Detailed							
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 uppliers 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 near 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 * 5 - Item(s	s) is obsolete, no information is available		Supplier Acceptance	* 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											
Instructions: Complete all of the required	fields on all pages of this form. Select the "Ac	cented" on the Supplier Acceptance dron-down	n This will display the signature area Digital	ly sign the declaration (if required by the							
Instructions: Complete all of the required Requester) and click on Submit Form to ha	fields on all pages of this form. Select the "Acave the form returned to the Requester.	ccepted" on the Supplier Acceptance drop-down	n. This will display the signature area. Digital	ly sign 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	3.2	mg	Supplier	Silicon (Si)	7440-21-3		3.2	mg
Lead Frame	85.82	mg	Supplier	Silver (Ag)	7440-22-4		0.4291	mg
			Supplier	Copper (Cu)	7440-50-8		85.3909	mg
Mold Compound-Black	106.15	mg		Brominated epoxy resin	proprietary data		0.5307	mg
			Supplier	Phenolic Resin	Proprietary Data		8.8105	mg
			В	Antimony Trioxide (Sb2O3)	1309-64-4		1.2738	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		77.9141	mg
			Supplier	Ortho Cresol Novolac Resin	29690-82-2		17.6209	mg
Plating	2.74	mg	A	Lead (Pb)	7439-92-1		0.548	mg
			Supplier	Tin (Sn)	7440-31-5		2.192	mg
Wire Bond - Au	0.1	mg	Supplier	Gold (Au)	7440-57-5		0.1	mg