IPC ASSOCIATION CONNECTINE ELECTRONICS INDUSTRIE	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.									
752-21.1		IPC Web Site for Information on IPC-1752 Standard Form Type http://www.ipc.org/IPC-175x Distribute				e *	* Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Materi					fg Informatio	on	
upplier Inform														
Company name*			Company unique ID			τ	Unique ID Authority				Response Date*			
onsemi										2024-05-19				
Contact Name		Title - Contact			1	Phone - Contact*				Email - Contact*				
Product-Env-Stewa	ards	Product Enviro Compliance				NA				Product-Env-Stewards@onsemi.com				
authorized Represe	ntative*	Title - Representative			1	Phone - Representative*				Email - Representative*				
Product-Env-Stewa	ırds	Product Enviro Compliance				NA				Product-Env-Stewards@onsemi.com				
Requeste	Requester Item Number Mfr		Item Number Mfr Item Name				Effective Date	e Versio	on :	Manufacturing Site		Weight*	UOM	Unit Type
		FDS3590	DS3590 FET 80V 39.0 mOhm SO8		hm SO8		2024-05-19			CNJ		90.75107	mg	Each
Ianufacturing	Process Informati	ion									·			
Terminal Plating / Grid Array Material Te			Terminal Base Alloy J-STD-020 MS		SL Rating	Peak Process Body Temper		Temperatu			ure Numbe	er of Reflow Cyc	eles	
Matte Tin (Sn) - annealed CU Alloy			CU Alloy	1			260		C	30	secon	ds 3		
omments														
vel 1 - maximum t	ime at peak temperatui	re during sol	dering is 10-3	30 seconds										
or more informati	on regarding material c	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 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 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 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	7.1	mg	Supplier	Silicon (Si)	7440-21-3		7.1	mg
Die Attach	0.74	mg	Supplier	Silver (Ag)	7440-22-4		0.6327	mg
			Supplier	Ortho Cresol Novolac Resin	29690-82-2		0.1073	mg
Lead Frame	34.4046		Supplier	Silver (Ag)	7440-22-4		1.7204	mg
			Supplier	Zinc (Zn)	7440-66-6		0.0413	mg
			Supplier	Iron (Fe)	7439-89-6		0.8086	mg
			Supplier	Copper (Cu)	7440-50-8		31.8068	mg
			Supplier	Phosphorus (P)	7723-14-0		0.0275	mg
Mold Compound-Black	46.48		Supplier	Ortho Cresol Novolac Resin	29690-82-2		4.8804	mg
			Supplier	Carbon Black (C)	1333-86-4		0.2324	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		39.9728	mg
			Supplier	Phenolic Resin (Novolac)	9003-35-4		1.3944	mg
Plating	1.09389	mg	Supplier	Tin (Sn)	7440-31-5		1.0939	mg
Wire Bond - Cu	0.93258	mg	Supplier	Copper (Cu)	7440-50-8		0.9326	mg