Contact Name  Title - Contact  Product-Env-Stewards  Product Enviro Compliance  Authorized Representative*  Product-Env-Stewards  Product Enviro Compliance  NA  Product-Env-Stewards@onsemi.com  Phone - Representative*  Phone - Representative*  Email - Representative*  Email - 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  Unit	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*  Company unique ID  Unique ID Authority  Response Date*  2025-08-31  2025-08-31  Contact Name  Title - Contact*  Product Enviro Compliance  NA  Product-Env-Stewards  Product-Env-Stewar	752-21.1											ials and Mf	g Informat	ion	
nsemi   Contact Name   Title - Contact   Phone - Contact*   Product-Env-Stewards onsemi.com	upplier Informa	ntion													
Title - Contact Name Product Env-Stewards Product Enviro Compliance Product Env-Stewards Product Enviro Compliance Product Enviro Compliance Product Enviro Compliance Product Enviro Compliance Product Env-Stewards Product Enviro Compliance Product Enviro Compliance Product Env-Stewards Product Enviro Compliance Product Enviro Compliance NA Product Env-Stewards Product Enviro Compliance NA Product Env-Stewards Product Enviro Compliance NA Product Env-Stewards Nanufacturing Site Version N	Company name* Company unique ID					Unique ID Authority					Response Date*				
Product-Env-Stewards	onsemi											2025-08-31			
Authorized Representative*  Product-Env-Stewards Product Enviro Compliance Requester Item Number Representative* Requester Item Number Reflective Date Reflective Date Reflective Date Representative* Requester Item Number Reflective Date Requester Item Number Reflective Date Reguester Item Number Requester	Contact Name		Title - Contact			I	Phone - Contact*				Email - Contact*				
Product Envi-Stewards  Requester Item Number  Mfr Item Number  Manufacturing Site  Weight*  UOM  Unit  LITEONFG  224.155  mg  Each  Manufacturing Proccess Information  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	Product-Env-Stewar	ds		Product Enviro Compliance				NA				Product-Env-Stewards@onsemi.com			
Requester Item Number	uthorized Represen	tative*	Title - Representative			I	Phone - Representative*			Email - Representative*					
FOD8173SD 4PB TR T&R VDE 2025-08-31 LITEONFG 224.155 mg Each  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	Product-Env-Stewar	ds		Product Enviro Compliance				NA				Product-Env-Stewards@onsemi.com			
Manufacturing 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  Comments	Requester	Requester Item Number Mfr Ite		m Number Mfr Item Name			Effectiv		Version	ı İ	Manufacturing Site	V	Veight*	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  260  Comments			FOD8173	BSD	4PB TR T&R VDE	I.		2025-08-31		I	LITEONFG	2	24.155	mg	Each
Matte Tin (Sn) - annealed CU Alloy 1 260 C 30 seconds 3				arminal Raca	Alloy	STD 020 MSI	Pating	Dank Drog	ease Rody	Camparatu	ra May Time at Dack	Tamparati	ura Numb	per of Paflow Cyc	lac
Comments					Alloy J-S	31D-020 MSL	Kanng		ess Body					bei of Kerlow Cyc	108
	•	(Sii) - aimealeu	C	U Anoy	1			200		IC	30	second	18 3		
ver 1 - maximum ume at peak temperature during soldering is 10-50 seconds		no at neals temperature	duning col	doring is 10.3	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	neous Material Weight Unit of Measure Level Substance		Substance	CAS		Weight	Unit of Measure	
Coupling Gel	0.74	mg	Supplier	Methylhydrogen Siloxane, Trimethylsiloxy-terminated	63148-57-2		0.037	mg
			Supplier	Filler (SiO2)	68909-20-6		0.111	mg
			Supplier	Dimethyl Siloxane	68083-19-2		0.592	mg
Die	0.099	mg	В	Gallium Arsenide (AsGa)	1303-00-0		0.033	mg
			Supplier	Silicon (Si)	7440-21-3		0.066	mg
Die Attach	0.085	mg	Supplier	Silver (Ag)	7440-22-4		0.0697	mg
			Supplier	Phenolic Resin (Novolac)	9003-35-4		0.0153	mg
Lead Frame	55.77	mg	Supplier	Sulfur (S)	7704-34-9		0.0084	mg
			Supplier	Carbon (C)	7440-44-0		0.0558	mg
			Supplier	Silver (Ag)	7440-22-4		0.0084	mg
			Supplier	Manganese (Mn)	7439-96-5		0.1394	mg
			Supplier	Silicon (Si)	7440-21-3		0.0084	mg
			Supplier	Iron (Fe)	7439-89-6		55.5246	mg
			Supplier	Copper (Cu)	7440-50-8		0.0167	mg
			Supplier	Phosphorus (P)	7723-14-0		0.0084	mg
Mold Compound-Black	100.0	mg	В	Brominated Bisphenol A Diglycidyl Ether	40039-93-8		2	mg
			В	Antimony Trioxide (Sb2O3)	1309-64-4		1.5	mg
			Supplier	Carbon Black (C)	1333-86-4		0.5	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		71	mg
			Supplier	Ortho-Cresol Novolac Resin	29690-82-2		17.5	mg
			Supplier	Phenolic Resin (Novolac)	9003-35-4		7.5	mg
Mold Compound-White	63.2	mg	Supplier	Ortho Cresol Novolac Resin	29690-82-2		12.64	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		44.24	mg
			Supplier	Phenolic Resin (Novolac)	9003-35-4		6.32	mg
Plating	4.21	mg	Supplier	Tin (Sn)	7440-31-5		4.21	mg
Wire Bond - Au	0.051	mg	Supplier	Gold (Au)	7440-57-5		0.051	mg